



**Land Adjacent 1 Percy Road,
Cynonville, Port Talbot**

Reptile Survey

October 2024

Acer Ecology

REPORT CONTENTS

- 1. INTRODUCTION 1
 - 1.1. BRIEF AND SITE LOCATION..... 1
 - 1.2. SITE DESCRIPTION..... 1
 - 1.3. PROPOSED WORKS..... 1
 - 1.4. LEGISLATION 1
 - 1.5. SURVEY SCOPE 1
 - 1.6. REPORTING..... 2
- 2. METHODS 3
 - 2.1. FIELD STUDY..... 3
 - 2.2. CONSTRAINTS..... 4
- 3. RESULTS 5
- 4. EVALUATION 6
- 5. ASSESSMENT OF POTENTIAL IMPACTS ON REPTILES 7
- 6. REQUIRED ACTIONS..... 8
- 7. REFERENCES AND BIBLIOGRAPHY 9

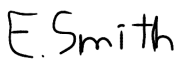
DRAWINGS AND PLANS

- DRAWING 1: PROPOSED DEVELOPMENT WORKS
- PLAN 1: SITE LOCATION
- PLAN 2: LOCATION OF REPTILE ARTIFICIAL COVER OBJECTS

APPENDICES

- APPENDIX 1: SPECIES REQUIREMENTS OF THE COMMON REPTILE SPECIES

Document Verification Table

Land adjacent 1 Percy Road, Cynonville, Port Talbot Reptile Survey				
Revision	Date	Prepared by	Checked by	Verified by
2.0	15 October 2024	Evan Smith Assistant Ecologist 	Paul Hudson MCIEEM Principal Ecologist 	Paul Hudson MCIEEM Principal Ecologist 

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Summary

Site Location	The report presents the findings of a reptile survey of land adjacent to 1 Percy Road. The site is situated within Neath Port Talbot County Borough Council.
Survey Methods	The survey consisted of two different techniques: the use of artificial cover objects and direct observation. Artificial refuges were placed throughout the site on 30th August 2024, in areas considered to be suitable for reptiles. The refugia were then left for two weeks prior to commencing the survey to allow reptiles to grow familiar with, and then utilise, them. The survey consisted of seven separate visits. During each visit the terrestrial habitat was visually checked for reptiles, as well as each artificial cover object. The artificial cover objects or refuges were first checked from a distance for basking reptiles, before being checked below for sheltering individuals.
Survey Results	The results of the survey indicate that the site does not support any reptiles.
Predicted Impacts of Development on Reptiles	Based on the conclusion that the site does not support reptiles, there are anticipated to be no direct or indirect impacts on reptiles.
Required Actions	No further surveys are required and no precautionary timing restrictions on works are necessary. However, it is not possible to rule out reptile use entirely. In the unlikely event that reptiles are encountered during works at the site, all works will cease immediately, and a suitably qualified ecologist will be contacted for advice.

1. Introduction

1.1. Brief and Site Location

Acer Ecology Ltd. were instructed to conduct a reptile survey of land adjacent to 1 Percy Road, Cynonville, Port Talbot, SA13 3HL, within the boundary of Neath Port Talbot County Borough Council (Ordnance Survey Grid Reference centred at: SS 8246 9519)¹. The assessment documents the results of the survey area, which is shown by the red line boundary on Plan 1.

1.2. Site Description

The site proposed for development measures approximately 0.72 ha, and comprises a previous allotment garden which has been uncultivated for approximately 12 months and now mainly comprises species-poor semi-improved grassland. The site is situated in the village of Cynonville, 7km north-east of Port Talbot. It is surrounded by residential dwellings to the north and east with expansive tree-lined fields to the south and west. Afan Argoed Country Park is located 46m north of the site across the A4107. The site is characterised by a gentle gradient which slopes down from 156m south to 146m north above sea level.

1.3. Proposed Works

The proposed development works comprise the construction of two detached dwellings with integral garages. A planning application has not been submitted at the time of writing.

A Proposed Plan can be found in Drawing 1.

1.4. Legislation

There are four widespread species of British reptile - grass snake (*Natrix helvetica*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and common lizard (*Zootoca vivipara*). These species are protected under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. They are given so called 'partial protection', which prohibits the intentional or reckless killing or injuring of individuals of any of the above species. Notes on the habitat preferences of the four common reptile species are contained within Appendix 1.

To ensure compliance with Planning Policy Wales (2021) developments should result in no net loss to the local conservation status of reptiles.

1.5. Survey Scope

The survey comprised a presence/likely absence reptile survey utilising a combination of artificial refugia or artificial cover objects (ACOs) and direct observation whilst walking across the site.

¹ Latitude and Longitude: fairly.cycle.subsystem / what3words: 51.643233 , -3.7000403

1.6. Reporting

The aims of the report are to:

- Outline the methodology used during the survey;
- Determine the presence or likely absence of reptiles at the site;
- Determine the population size class of reptiles if confirmed to be present;
- Provide an interpretation of the findings, in relation to the potential impacts of the development;
- Specify the legal and policy constraints relevant to reptile populations and individual reptiles which may affect the development; and
- Provide an indication of mitigation, compensation and enhancement measures that may be required.

2. Methods

2.1. Field Study

Surveys were undertaken in accordance with the guidance outlined in the Herpetofauna Workers' Manual (Gent and Gibson 2003), Advice Sheet 10 – Reptile Survey² (Froglife, 1999), the Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring (Hill et al., 2005), Reptiles: surveys and mitigation for development projects (Natural England and DEFRA 2015), the Reptile Mitigation Guidelines (Natural England 2011) and Survey Protocols for the British Herpetofauna (Sewell et al., 2013). This involved seven return visits in suitable weather conditions on non-consecutive days during September.

The surveys were undertaken by and Evan Smith³, Charlotte Ingram⁴ and Callum Mills⁵ all of whom have are experienced reptile surveyors.

30 artificial cover objects (ACOs) (comprising sections of bituminised roofing felt, carpet tiles and corrugated bitumen-based roofing felt), measuring approximately 1m x 0.5m (0.5m²) were placed across the site on the 30th August 2024, in areas considered to have habitat suitable for supporting reptiles (i.e. sunny location, against cover and in likely reptile micro-habitat) and in areas deemed least likely to be tampered or interfered with by people. ACOs were put out in the most optimal places, including around the perimeter and through the centre of the field.

The location of the ACOs are shown on Plan 2. The ACOs were then left undisturbed on the site for two weeks prior to commencement of the survey, to allow the reptiles on the site sufficient time to find and start utilising them. Each refuge was then first checked for basking individuals from a distance before being slowly approached and searched for sheltering reptiles. Terrestrial habitat between the ACOs was also searched for reptile species on each visit.

The survey visits were undertaken in accordance with the guidelines (Natural England, 2011)⁶; in in early autumn, when the air temperature is between 9°C and 18°C⁷, which is considered the optimal to survey for reptiles (Froglife, 1999). Heavy rain and wind are deemed unsuitable conditions for reptile surveys (Froglife, 1999). As reptile activity is heavily dependent on weather conditions the following parameters were recorded during each survey visit: air temperature⁸, wind levels, rain levels, and the cloud cover. As recommended in the guidance (Froglife, 1999) surveys were not undertaken on consecutive days.

² The Froglife Guidance is primarily aimed conservation volunteers and not professional survey work.

³ Evan graduated with a degree in Conservation Biology and Ecology from the University of Exeter. Evan is currently working as an Assistant Ecologist and receiving training from Acer Ecology. Further details of his qualifications and experience can be found at <https://www.linkedin.com/in/evan-smith-9b73a719a>

⁴ Charlotte graduated from the University of South Wales with a degree in International Wildlife Biology. She is currently working for Acer Ecology as an Assistant Ecologist.

⁵ Callum graduated with a Bachelors degree in Zoology from the University of Cumbria and a Masters in Endangered Species Recovery and Conservation from Nottingham Trent University.

⁶ Natural England's guidance was used.

⁷ Natural England's Reptile Mitigation Guidelines recommend that the temperature is between 10-20°C.

⁸ Minimum and maximum temperature in the shade was measured during the survey using an ETI digital thermometer.

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Species and life stage and were also recorded, where animals were present, as well as environmental data. Non-target species, such as amphibians and small mammals, utilising the artificial cover objects was also recorded during the surveys.

Estimation of Population Size

Determining the size of a population of reptiles can be difficult without substantial survey effort. Froglife's guidance (1999) recommends that around 20 visits⁹ may be required to assess population size. However, a method of obtaining a broad assessment of population size can be useful for informing impact assessments and mitigation planning.

The reptile population size on site was classified into three classes, based on the maximum number of adult reptiles seen on any one survey visit, as shown in the table below (Froglife 1999 and Natural England (TN102¹⁰)).

Table 1: Reptile Population Size Classes

Reptile Species	Natural England Guidance (TN102)			Froglife Guidance (1999)		
	Small population	Medium population	Large population	Low population	Good population	Exceptional population
Adder	<5	5-10	>10	<5	5-10	>10
Grass snake	<5	5-10	>10	<5	5-10	>10
Common lizard	<5	5-20	>20	<5	5-20	>20
Slow-worm	<10	10-40	>40	<5	5-20	>20

2.2 Constraints

There were no significant constraints to the survey.

⁹ It should be noted that the requirement to undertake 20 surveys on the HGBI guidance to provide a population class is aimed at conservation volunteers and not professional survey work.

¹⁰ It should be noted that these guidelines have been withdrawn in October 2011.

3. Results

Survey Results

The survey results and weather conditions of each survey are summarised below:

Table 2: Survey Weather Conditions

Survey No.	Date	Time	Air Temperature (°C)	Rain	Wind Speed (Beaufort)	Cloud Cover (Oktas)
1	13/09/24	12:06	14	None	3	4/8
2	16/09/24	11:38	16	None	4	1/8
3	24/09/24	17:23	13	None	3	7/8
4	20/09/24	12:00	18	None	3	2/8
5	24/09/24	17:23	13	None	3	7/8
6	27/09/24	14:50	13	None	3	7/8
7	28/09/24	13:15	14	None	3	8/8

Table 3: Survey Results

Survey	Date	Records			Additional Notes
		Species	Adult	Juvenile	
1	13/09/24	N/A	N/A	N/A	N/A
2	16/09/24	N/A	N/A	N/A	N/A
3	24/09/24	N/A	N/A	N/A	N/A
4	20/09/24	N/A	N/A	N/A	N/A
5	24/09/24	N/A	N/A	N/A	N/A
6	27/09/24	N/A	N/A	N/A	N/A
7	28/09/24	N/A	N/A	N/A	N/A

4. Evaluation

The results of the survey indicate that the site does not support any reptile species.

5. Assessment of Potential Impacts on Reptiles

Based on the conclusion that the site does not support reptiles, there are anticipated to be no direct or indirect impacts on reptiles.

6. Required Actions

No further surveys are required and no precautionary timing restrictions on works are necessary.

However, it is not possible to rule out reptile use entirely. In the unlikely event that reptiles are encountered during works at the site, all works will cease immediately, and a suitably qualified ecologist will be contacted for advice.

If development works do not begin within eighteen months to two years of the date of this report, an update survey is likely to be required in accordance with guidance from NRW, CIEEM (2019) and BS 42020:201376, to determine if conditions have changed since those described in this report.

7. References and Bibliography

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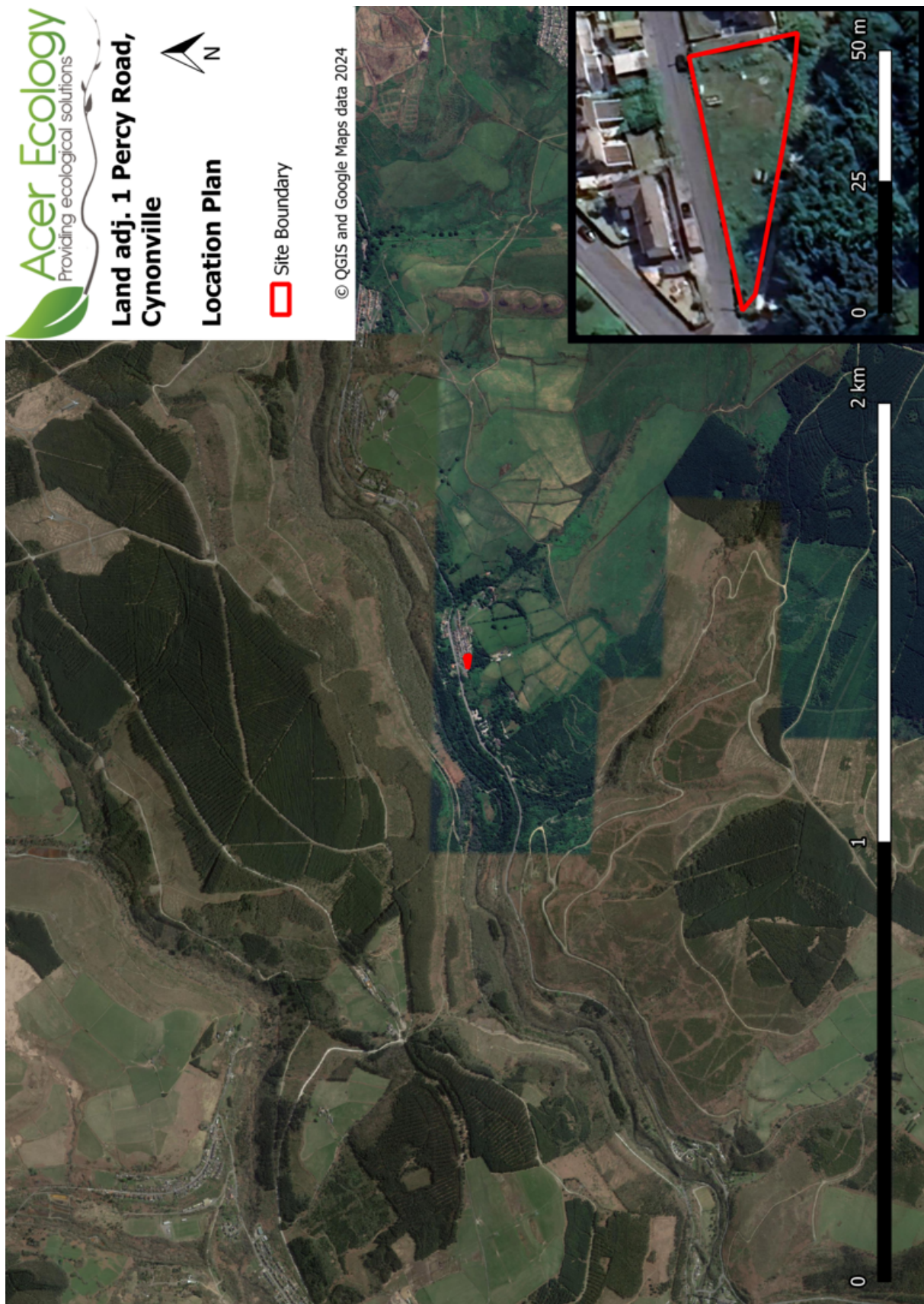
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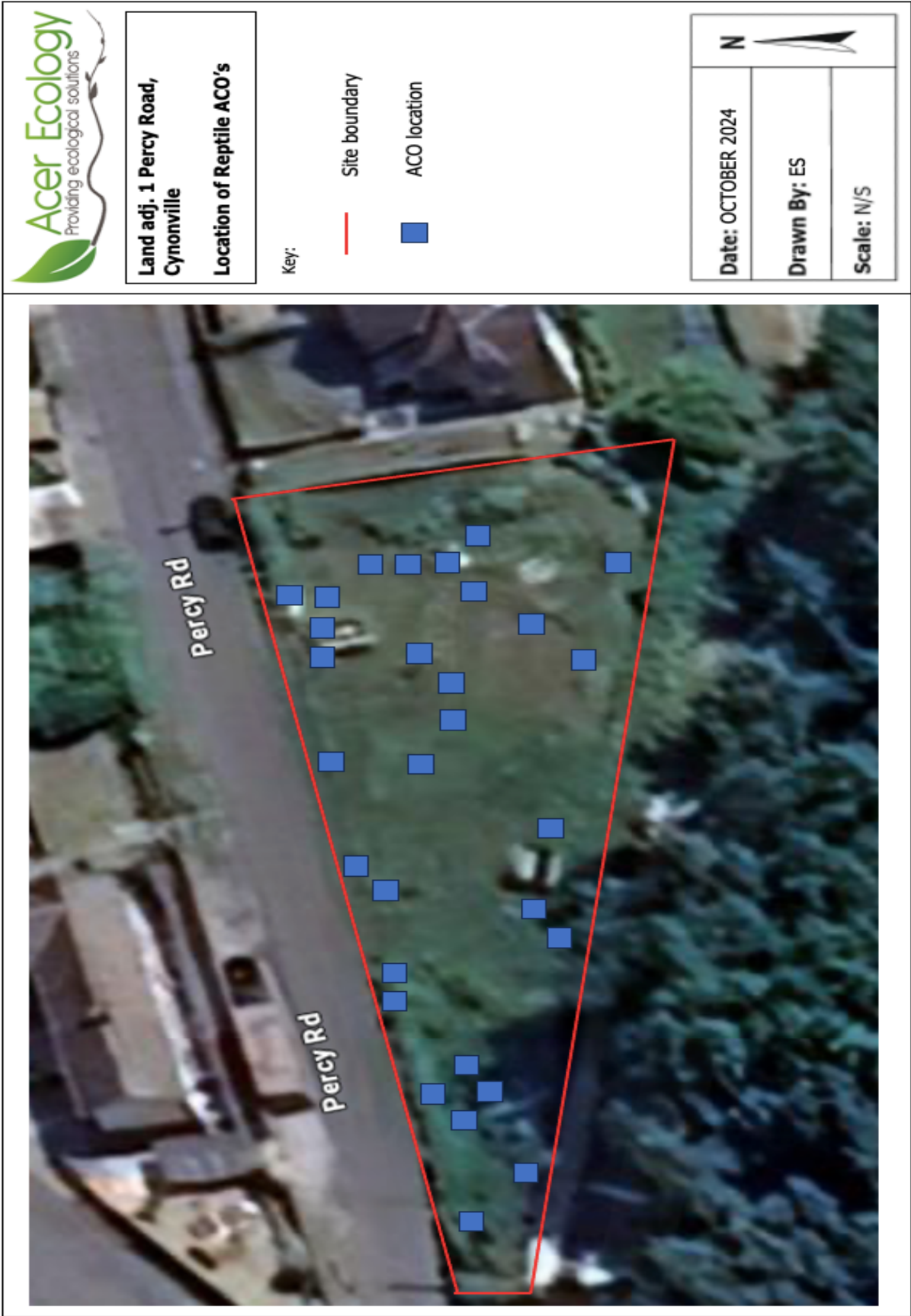
Drawing 1: Proposed Development Works



Plan 1: Site Location



Plan 2: Location of Reptile Artificial Cover Objects



Appendix 1: Species Requirements of the Common Reptile Species

Notes on the habitat requirements of the four common reptile species is given below:

Slow-worms are widespread throughout England and Wales and occur in a variety of habitats including rough grassland, hedgerows, heathland, woodland edges, downs and moorland. They also occur in a wide variety of man-made habitats including railway and road embankments, gardens, churchyards, parks and allotments. Marshy and very arid habitats are usually avoided. Dense vegetation cover combined with sunny areas allowing thermoregulation is ideal. Habitats which allow the animals to burrow such as compost heaps or loose soils encourage their presence and they are often associated with piles of stones, rubble or pieces of tin or plastic (Beebee and Griffiths 2000). They are often found associated with anthills and these structures may also provide a convenient network of underground tunnels.

Common lizards occur in a wide range of habitats including roadside verges, uncultivated field edges, forest rides and glades, cliff edges and scree slopes, artificial embankments along railways and rivers, upland moors, heathlands and coastal sand dunes. Suitable habitat consists of undisturbed ground that is topographically diverse with fairly dense but short vegetation less than 0.5m high, open to the sun and with a few exposed areas that can be used for basking. The soil should be well drained and have adequate artificial cover objects for use in both summer and winter. South-facing slopes are preferred and humid sites often have the highest population densities.

Grass snakes are highly aquatic and are usually associated with ponds, lakes, marshes, streams or ditches. They feed almost entirely on amphibians. They also occur in open woodlands, hedgerows and rough grassland. Drier habitats including heaths and moorlands are sometimes used. They require terrestrial habitat with an abundance of hiding places and access to sunshine. Open patches close to thick cover are frequently used for basking.

Adders occur in a variety of habitats including heathlands, moors, chalk downlands, woodland rides, coastal dunes, rough commons, overgrown quarries, along field edges and railway embankments. The main requirement is undisturbed sunny glades or slopes, usually in the vicinity of some thick cover. South-facing slopes are preferred in upland areas.