



ROFFEY HOMES LTD

Manor Nursery, Angmering, West Sussex

- Reptile Presence / Absence Survey Report

Planning Issue

Prepared by	GS
Checked by	JJ
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SUMMARY

Lizard Landscape Design and Ecology has been commissioned By Roffey Homes Ltd to undertake a *Reptile Population Class Assessment Presence / Absence Survey* of the land proposed for development at Manor Nursery, Angmering, West Sussex (*Grid Reference: TQ 076 042 – hereafter referred to as ‘the site’*).

The surveys were recommended within the Preliminary Ecological Appraisal undertaken by Lizard Landscape Design and Ecology on the 12th September 2017, due to habitats on-site being identified as having the potential to support protected species of reptiles. This report outlines the results of the reptile survey and has been prepared by George Sayer (*BSc(Hons) PgDip, Assistant Ecologist – Lizard Landscape Design and Ecology*). The report has been reviewed by Joe Jackson; (*Director; Landscape Architect BA (Hons) LA DipLA CMLI; Lizard Landscape Design and Ecology*).

21 no. artificial reptile refugia were laid out around the area on 12th September 2017 and allowed to settle for 14 days prior to commencement of the survey. 07 no. site visits were conducted, where the number, species, age and sex of any reptiles present was recorded. Debris piles on-site considered suitable as reptile refugia were checked during the surveys, and repeated walkovers of the site were used to search for active reptiles.

No reptiles were recorded during the survey undertaken during 2017. The site was until recently a busy commercial nursery and garden centre, and the habitats with reptile potential have developed since its closure. It is therefore likely that the suitable reptile habitats on the site are too immature to have been colonised by reptiles.

The survey strongly suggests that the site area potentially affected by development is not of value to the *Favourable Conservation Status* of reptiles within the vicinity. Moreover, the results suggest that reptiles should not be an ecological constraint to these development proposals. There is a ‘negligible’ risk of killing and / or injuring reptiles during the construction process.

The survey was undertaken during the late summer / early autumn, and within suitable weather conditions; it is therefore considered very unlikely that the results could represent a false negative. Small populations of reptiles can be difficult to identify, however the negative results obtained should provide adequate reassurance that development can proceed without legislative contravention of legal framework protecting reptiles within England and Wales (*The Wildlife and Countryside Act 1981*).

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned to undertake a Reptile Population Class Assessment Presence / Absence Survey of the land proposed for development at Manor Nursery, Angmering, West Sussex (*Grid Reference: TQ 076 042 – hereafter referred to as ‘the site’*).

1.2 The surveys were recommended within the Preliminary Ecological Appraisal undertaken by Lizard Landscape Design and Ecology on the 12th September 2017, due to habitats on-site being identified as having the potential to support protected species of reptiles. This report outlines the results of the reptile survey and has been prepared by George Sayer (*BSc(Hons) PgDip, Assistant Ecologist – Lizard Landscape Design and Ecology*). The report has been reviewed by Joe Jackson; (*Director; Landscape Architect BA (Hons) LA DipLA CMLI; Lizard Landscape Design and Ecology*).

Site Description

1.3 The site consists of a former nursery and garden centre. The majority of the buildings, grow beds and glasshouses on the site have been demolished. This has resulted in large areas of hard surface, and bare ground now colonised by tall ruderal and scattered scrub vegetation. The boundaries are lined with mature introduced shrubs, dense scrub and trees. The site is fenced to other aspects and is fully enclosed.

- 1.4 The site is approximately 15.90 metres above sea level and measures approximately 1.1 ha. The site is bordered to the east by the A280 road and embankment; to the west by the grounds of an adjacent large residential property; to the north by the access road, and to the south by a recent residential development. Soils on site are described as freely draining, slightly acid loamy soils.
- 1.5 The site is located to the east of the village of Angmering, which itself is in an agricultural setting just north of the A27, and outside of the heavily built-up coastal plain. The local area contains a mixture of land uses, dominated by arable agriculture to the east and north, and residential areas to the west and further south. The site is approximately 2.7 km from the south coast.

Survey Rationale

- 1.6 The development scheme proposes the removal and disturbance of areas of suitable reptile habitat throughout the site; without suitable mitigation this could result in a contravention of *The Wildlife and Countryside Act 1981 (As Amended)*. The habitats on-site considered to hold potential for reptiles consist of: semi-improved grassland, tall ruderal and scattered scrub vegetation to the north of the site; semi-improved grassland and tall ruderal vegetation to the south-east of the site; and tall ruderal vegetation surrounding the hard surfaces. The habitats are recorded within *Figure No. 01 – Location of Artificial Reptile Refugia*.

Development Proposals

- 1.7 The development proposals consist of the construction of a residential development of 32 no. dwellings. The works would include new soft landscape planting areas and open space. The existing hard surfaced access road would be upgraded and extended through the site. The proposals would require the removal of the majority of the habitats on-site, although it has been recommended to retain the boundary vegetation where possible, in particular treelines which would be of amenity and ecological value.

Widespread Reptiles & Legislation

- 1.8 The common or viviparous lizard (*Lacerta vivipara*) has a wide range over most of Europe. Its body can reach 7.0 cm in length and can have very variable patterns and colour. Slow worm (*Anguis fragilis*) is also found over most of Europe; it can reach lengths of up to 50.0 cm and is typically brown, grey, or reddish, with females frequently having a dorsal stripe. Grass snake (*recently re-described as* *Natrix helvetica*) may reach up to 120.0 cm in length and is thick-bodied – many have a distinct yellow-black bordered collar around the neck. Adders (*Vipera berus*) have a characteristic diamond pattern along their backs.
- 1.9 Adders, grass snakes, common lizards and slow worms are protected against killing, injury or sale under *The Wildlife and Countryside Act 1981*. Developments that could predictably kill or injure reptiles could result in an offence. Furthermore, these species are targets of UK and Local Biodiversity Action Plans and listed as *Species of Principle Importance* under *Section 41* of the *Natural Environment and Rural Communities Act 2006*. This obligates local authorities to have regard to the purpose of conserving biodiversity, with particular emphasis on targeted species.

2.0 SCOPE OF THE SURVEY

- 2.1 The aim of the reptile survey was:
- *To identify the presence / absence of reptile species within the site as a whole;*
 - *To estimate population size classes for said populations; and;*
 - *To advise mitigation for reptiles within the proposed development scheme.*

3.0 METHODOLOGY

- 3.1 21 no. artificial reptile refugia (*roofing felt; 0.50 x 1.0 m²*) were laid out around the area on 12th September 2017 and allowed to settle for 14 days prior to commencement of the survey.
- 3.2 07 no. site visits were conducted, where the number, species, age and sex of the reptiles present were recorded.
- 3.3 Surveys were undertaken during recommended times (*08:00–11:00 and 16:00–18:30*) with suitable weather conditions for surveying reptiles (*guidelines recommend temperatures 9–18°C with intermittent or hazy sunshine during warm days*). Weather conditions recorded at each survey visit are shown in Table No. 1 below.

Table No. 1 - Details of Weather Conditions during the Reptile Surveys

Survey	Date of Visit	Time	Weather
01	26/09/2017	10:30	16°C, 1/8 cloud, Wind F2.
02	02/10/2017	10:00	15°C, 1/8 cloud, Wind F3 dry and sunny with rain previous night.
03	03/10/2017	09:30	14.5°C, 1/8 cloud, Wind F1, dry and mild.
04	05/10/2017	10:30	14°C, 4/8 cloud, Wind F5, sunny intervals with rain prior to survey.
05	12/10/2017	10:30	15°C, Sunny, cloud 2/8, Wind F1.
06	17/10/2017	15:30	15°C, Sunny, cloud 2/8, Wind F0.
07	25/10/2017	16:30	17°C, Sunny, cloud 1/8, Wind F0.

- 3.4 Debris piles on-site considered suitable as reptile refugia were checked during the surveys, and repeated walkovers of the site were used to search for active reptiles.

3.5 Evaluation Methodology

- 3.5.1 Despite its withdrawal, *Natural England Technical Information Note TIN102* still provides a valuable resource tool to allow the comparison and evaluation of reptile populations on site. A population size class category has been derived using guidance provided by the *Key Reptile Site Register Mechanism (Froglife – Advice Sheet 10)*, designed to promote the protection of key reptile areas.
- 3.5.2 The criteria for key reptile site selection include:
- 1) *supports 3 or more reptile species;*
 - 2) *supports 2 snake species;*
 - 3) *supports an exceptional population of one species (see Table No. 02);*
 - 4) *supports an assemblage of species scoring at least 4 (see Table No. 02);*
 - 5) *supports a local rarity or even adder with low population score.*
- 3.5.3 The population size classes used in this instance are provided in *Froglife – Advice Sheet 10* and displayed in Table No. 02.

Table No. 02 – Population Scores for Selection of Key Reptile Sites

Species	'Low' Score 1	'Good' Score 2	'Exceptional' Score 3
Adder	< 5	5 – 10	> 10
Grass Snake	< 5	5 – 10	> 10
Common Lizard	< 5	5 – 20	> 20
Slow Worm	< 10	5 – 20	> 20

- 3.5.4 Figures in Table No. 02 refer to the maximum number of reptile adults seen by observation and / or under refugia by one person during one survey visit with artificial refugia placed at a maximum density 10/ha.

4.0 RESULTS

4.1 Background Information

- 4.1.1 There are very few records of reptiles within the local area. Widespread reptiles might still be assumed to be present in suitable habitat such as field margins and roadside verges within the local landscape.

4.2 Field Survey

- 4.2.1 No reptiles of any species were recorded during the reptile survey undertaken during September-October 2017.
- 4.2.2 In addition to the refugia surveys undertaken during September-October 2017, a number of spot searches of the site were undertaken on the same days as refugia surveys. These involved searching piles of debris and rubbish on the site which were deemed suitable for reptiles. These searches uncovered no reptiles or evidence of reptiles.

Constraints and Limitations

- 4.2.3 No major constraints or limitations were encountered during the survey. The site contained a number of piles of debris and rubbish which would have been suitable for reptiles; this minor limitation was countered through spot searches for reptiles. The fact that no reptiles were found under undisturbed refugia or during spot searches suggests that there are no reptiles present within the site.
- 4.2.4 The time of year during which the surveys were undertaken is generally considered '*suitable*' rather than '*optimal*'; special attention was therefore paid to timing and weather conditions of surveys, to ensure that reptiles would be encountered should they be present.

5.0 EVALUATION

- 5.1 No reptiles were recorded during the survey undertaken during September and October 2017. The survey strongly suggests that the site area potentially affected by development is not of value to the *Favourable Conservation Status* of reptiles within the vicinity. Moreover the results suggest that reptiles should not be an ecological constraint to these development proposals. There is a '*negligible*' risk of killing and / or injuring reptiles during the construction process.

- 5.2 Small populations of reptiles can be difficult to detect, but the negative results obtained should provide adequate reassurance that development can proceed without legislative contravention of legal framework protecting reptiles within England and Wales (*The Wildlife and Countryside Act 1981*).
- 5.3 The survey was undertaken during the late summer and early autumn during suitable weather conditions. It is therefore considered very unlikely that the results could represent a false negative.
- 5.4 The site was until recently a busy commercial nursery and garden centre, and the habitats with reptile potential have developed since its closure. It is therefore likely that the suitable reptile habitats on the site are too immature to have been colonised by reptiles.

6.0 REFERENCES

Griffiths, R. A. and Inns, H. (1998): Surveying - Herpetofauna Workers' Manual

Gent, A. H. & Gibson, S. D. (Eds.): Joint Nature Conservation Committee, Peterborough, Pp. 1–6

www.arc-trust.org: Herptile Conservation Trust and Froglife Merged in 2009

Guidelines from Froglife (Factsheet 10): Froglife; 1999

Natural England Technical Information: Note TIN102; Natural England; 2011

Appendix No. 1 – Full Survey Report

ROFFEY HOMES LTD
MANOR NURSERY, ANGMERING, WEST SUSSEX
REPTILE PRESENCE / ABSENCE SURVEY REPORT
LLD1275-ECO-REP-002-Reptile Survey Report-Rev00-23_10_17

Appendix No.1 – Reptile Artificial Refugia Survey Full Results

Site: Manor Nursery, Angmering

Client: Roffey Homes Ltd

Surveyor: GS/LM

Visit GS	Date	Time	°C	Weather	Tile No.	Species	Ad/J
01	26/9/17	10.30	16	1/8 cloud, Wind F2.	No reptiles		

Visit LM	Date	Time	°C	Weather	Tile No.	Species	Ad/J
02	02/10/17	10:00	15	1/8 cloud, Wind F3 dry and sunny with rain previous night.	No reptiles		

Visit GS	Date	Time	°C	Weather	Tile No.	Species	Ad/J
03	03/10/17	09:30	14.5	1/8 cloud, Wind F1, dry and mild.	No Reptiles		

Visit LM	Date	Time	°C	Weather	Tile No.	Species	M/F/J
04	5/10/17	10.30	14	4/8 cloud, Wind F5, sunny intervals with rain prior to survey.	No reptiles		

Visit GS	Date	Time	°C	Weather	Tile No.	Species	Ad/J
05	12/10/17	10:30	15	Sunny, cloud 2/8, Wind F1.	No reptiles		

Visit GS	Date	Time	°C	Weather	Tile No.	Species	Ad/J
06	17/10/17	15:30	15	Sunny, cloud 2/8, Wind F0.	No reptiles		

Visit	Date	Time	°C	Weather	Tile No.	Species	Ad/J
07	25/10/17	16:30	17	Sunny, cloud 1/8, Wind F0.	No reptiles		

SW = Slow Worm; CL = Common Lizard; CT = Common Toad;
 GS = Grass Snake; M = Male; F = Female; Ad = Adult; Im = Immature;
 J = Juvenile.