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**Client:** Lovell Homes  
**Project:** Novartis Phase 1 & 2  
**Report:** Reptile Survey Report

## QUALITY ASSURANCE

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## 1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd (Greengage) was commissioned by Lovell Homes to undertake a Reptile Presence/ Likely-Absence Survey of a site known as Novartis Phase 1 & 2, in Horsham, West Sussex, hereafter referred to as 'the site'.

This report has been produced to inform a planning submission for the site which seeks the retention and change of use of the current building on-site, and erection of multiple resident units (with associated infrastructure).

The site extends to approximately 2.63 hectares (ha), during the initial site visit in November 2024 the following habitats were identified: sparsely vegetated urban land, developed land; sealed surface, building, other standing water bramble scrub, dense scrub, other neutral grassland, modified grassland, other woodland - mixed - mainly conifer, other native hedgerow and willow scrub. The existing building is located adjacent to the site's eastern boundary, hereafter referred to as "the former Novartis building".

Previous survey of the site in 2018 and 2022 confirmed the presence of slow worm *Anguis fragilis* and common lizard *Zootoca vivipara* on the site.

Greengage undertook an updated Preliminary Ecological Appraisal (PEA)<sup>1</sup> of the site in November 2024 which re-confirmed the sites suitability to support reptiles, mainly through the presence of areas of rough grassland (other neutral grassland) and scrub.

As such, Greengage completed an updated presence/likely absence survey in 2025. The survey comprised distribution of 55 Refugia ('mats') across suitable habitat on the site, which were then checked for reptile presence on seven occasions between 3rd April 2025 - 15th May 2025. This 2025 survey identified 'low' populations<sup>2</sup> of common lizard and slow worm.

Common lizard and slow worm are protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended)<sup>3</sup>. Therefore, to maintain the favourable conservation status of these species, a translocation of individuals to an off-site receptor site is required.

A suitable reptile receptor site has been identified through liaison with Horsham District Council Parks and Countryside team. This site is known as Chennelsbrook Castle, an area of public open space located approximately 1.6km north of the site. An assessment of any existing reptile population at Chennelsbrook Castle is to be undertaken, and enhancement of the receptor site required to ensure it has carrying capacity to support the donor population.

A program of capture and release will be undertaken over the course of autumn 2025 and Spring 2026. Further detail on the methodology and timing of the required translocation can be found within Section 5.0 of this report.

The proposed Novartis Phase 1&2 development site features areas of suitable reptile habitat which are to be created e.g. wildflower meadow. These should be further enhanced by provision of log piles, rockeries, hibernacula and compost piles, to support any future reptile populations on the site.

## 2.0 INTRODUCTION

Greengage Environmental Ltd (Greengage) was commissioned by Lovell Homes to undertake a Reptile Presence/ Likely-Absence Survey of a site known as Novartis Phase 1&2, in Horsham, West Sussex, hereafter referred to as 'the site'.

This report has been produced to inform a planning submission for the site which seeks the retention and change of use of the current building on-site, and erection of multiple resident units (with associated infrastructure).

The Reptile Presence/ Likely-Absence Survey, consisting of seven visits, was undertaken between 3<sup>rd</sup> April 2025 and 15<sup>th</sup> May 2025. An initial Preliminary Ecological Appraisal (PEA)<sup>1</sup> carried out by Greengage in November 2024 identified the potential for reptiles to be present and provided the ecological context for the surveys.

## 2.1 SITE DESCRIPTION

The site extends to approximately 2.63 hectares (ha) and is centred on National Grid Reference TQ 17809 31816, OS Co-ordinates 517809, 131816.

The site is comprised primarily of developed land; sealed surface, with one large existing building located adjacent to the site's eastern boundary which contains a courtyard hereafter referred to as "the former Novartis building". The courtyard included a pond, surrounded by bramble scrub, dense scrub, modified grassland and individual trees. Two large patches of sparsely vegetated urban land were located towards the centre of the site, both of which were which boarded by large patches of bramble scrub. Multiple areas of other neutral grassland were located throughout the site, positioned around the centre of the site, and in the northeast and southwest corners of the site. Two patches of willow scrub were located adjacent to the western site boundary, with an area of modified grassland located towards the northwest corner. At the entrance to the site along the western boundary, a small patch of other woodland - mixed - mainly conifer was present to the south, with bramble scrub to the north bordered by another native hedgerow. Individual trees were located through the site, with the highest density located along the northern boundary of the site.

The site is located in the centre of Horsham and therefore situated in an urban setting, primarily surrounded by residential buildings and gardens. Parsonage road and Wimblehurst road run along the northern and western boundaries of the site respectively, with a railway line running adjacent to the southern boundary, with an additional railway line located in close proximity to the east of the site.

Fragmented priority woodland is found throughout Horsham with the closest found in Horsham Park approximately 480 metres (m) south of the site boundary. Warnham Local Nature Reserve (LNR) is located approximately 665 m northwest of the site boundary, with a golf course located directly south of the LNR. Large areas of ancient woodland can be found within the wider area, with the closest located in approximately 850 m north of the site boundary. Multiple parcels of different priority habitats are located between 1 km to 2 km from the site boundary. These include woodland pasture and

parks, good quality semi-improved grassland (non priority), ancient replacement woodland, and lowland meadows which are all classified as priority habitats.

## 2.2 ECOLOGICAL BACKGROUND

### 2018-2022

An initial Ecological Appraisal by Hampshire County Council originally produced in 2015 and updated in 2018/2019<sup>4</sup> surveyed across the whole Novartis site, incorporating what is now known as Novartis Phase 1&2 and Novartis Phase 3.

Surveys for reptiles were conducted in 2018, and the reptile presence/ likely absence surveys confirmed slow worm *Anguis fragilis* and common lizard *Zootoca vivipara* in Novartis Phase 1&2.

A subsequent PEA was then produced by Ecology & Habitat Management Ltd<sup>5</sup> in 2022 which assessed the site. The Phase 1 habitats survey undertaken as part of the PEA identified the habitats of building, hardstanding, bare ground, semi-improved grassland, scrub, introduced shrub, and scattered tree across the site. Further reptile surveys were conducted in 2022 across both the Phase 1&2 and Phase 3 sites to confirm presence/ likely absence. Reptiles were recorded across both phases, with specific records pertaining to the site located in the central and along the western, northern and southern boundaries. A 'good' population of common lizard and a 'low' population of slow worms were recorded.

### 2024

In November 2024 Greengage completed an updated PEA<sup>1</sup> of the site. which re-confirmed the sites suitability to support reptiles. Pieces of smashed concrete and rubble were spread across the site with mosaics of low growing vegetation, bare ground, grassland, and scrub habitats. These provided a combination of suitable habitats for reptile basking across the site. No significant areas suitable for hibernation, such as rubble piles, were identified on the site, although the larger pieces and densities of broken concrete and rubble potentially offer some limited suitability.

As part of the PEA<sup>1</sup>, a review of data provided by Sussex Biodiversity Records Centre (SxBRC). And recorded within a 2km radius of the site, was completed. A total of reptile records were returned between 2014 and 2024. Three species including slow-worm, common lizard and grass snake *Natrix natrix* were returned within the desk study. The records found closest to the site were 700 m northwest in Warnham Local Nature Reserve and related to all records returned between 2014 and 2024.

Based on the results of the previous reptile surveys in 2018 and 2022, and the continued suitability of the site as determined by the 2024 PEA, an updated reptile presence/ likely absence survey was recommended in line with Natural England and Froglife Guidelines<sup>2</sup>.

### 3.0 METHODOLOGY

A presence/ likely absence survey for reptiles was completed between 3<sup>rd</sup> April 2025 and 15<sup>th</sup> May 2025 with the survey sufficient to detect all species of reptiles including those most likely to be present, particularly slow worm, common lizard, and grass snake. This was carried out in accordance with Natural England and Froglife Guidelines<sup>2</sup>, which are summarised below.

N.B. it should be noted that the presence/ likely absence survey was completed in tandem with survey effort on Novartis Phase 1&2, the neighbouring development.

Refugia ('mats') were constructed of approximately 1m x 0.5m square felt sheeting as recommended by Froglife and the Herpetofauna Groups of Britain and Ireland (HGBI) for reptile surveys. Froglife guidelines recommend between 5 – 10 mats per ha of suitable habitat. The site in total is approximately 2.63ha, to ensure that any reptiles were recorded, mats were laid across most of the site, including all suitable habitat. A total of 55 mats were placed across the site, locally sited in the most appropriate position for use by basking/sheltering reptiles, this exceeds the recommended 5-10 mats per ha of suitable habitat. Appendix A shows the placement of these mats across the site.

The density of refuge mats varied depending on the suitability of the area of habitat being surveyed. Reptiles are poikilothermic and are therefore dependent upon ambient temperatures to regulate their own body temperature. As such they will hide under the mats and use the heat generated from them to raise their own body temperature to a level where they become more active for foraging and other activities.

Seven survey visits were carried out, following the mats being distributed on the 19<sup>th</sup> March 2025, to determine the presence/ likely absence of reptile species on the site and establish a population size from the data. Mats were allowed to 'bed in' for two weeks following distribution. Typically, up-to seven visits are deemed necessary for presence/likely absence surveys.

During each visit, the mats were checked visually from a distance to determine whether reptiles were basking on their surface. The mats are then carefully approached and lifted to check for reptiles sheltering beneath them.

Between mats the site was also walked carefully and slowly in an attempt to detect reptiles that may be basking away from the artificial refugia supplied. Other potential refugia/basking sites present within the site were visually checked in addition to the mats during the walkovers.

#### 3.1 TIMING AND WEATHER CONDITIONS

Visits to the site were made between 08:35 and 13:50 when weather conditions were favourable in accordance with good practice<sup>2</sup>.

Weather during the survey visits was conducive for surveying for reptiles, being dry and warm or mild, although some days were overcast. Froglife guidelines<sup>2</sup> recommend that ideal temperatures for reptile surveys are between 9°C and 18°C. Temperatures ranged from approximately 11°C to 19°C during the survey period.

Survey visits occurred with 48 hours between each survey visit.

All auxiliary data can be found in Appendix B.

## 3.2 SURVEYORS

Survey visits were carried out by Barnaby Hicks, Oliver Hamilton, Ben Newbury and Harry Jobanputra.

Barnaby Hicks, Assistant Consultant, has an undergraduate degree in Biological Sciences (BSc Hons) and is a Qualifying member of CIEEM with two years' experience of ecological survey and assessment. Barnaby has experience in conducting habitat surveys, Biodiversity Net Gain (BNG) assessments and PEAs.

Oliver Hamilton, Graduate Consultant, has a degree in Zoology (BSc Hons) and 2 years' experience in ecological surveying. Oliver assists in a variety of field surveys and related reports such as PEAs and Protected Species Reports, providing recommendations on biodiversity enhancements.

Ben Newbery, Consultant, has an undergraduate degree in Zoology (BSc Int.) and an MSc in Biodiversity and Conservation, with over three years' experience in ecological survey and assessment. Ben's experience spans PEAs, BNG and bat-surveying, with botanical identification being a particular interest.

Harry Jobanputra, Graduate Consultant, has an MSc in Ecology and Data Science and one years' experience in ecological surveying and assessment. His experience includes bat activity and emergence/re-entry, great crested newt eDNA and reptile surveys.

Jess Cole, Senior Consultant, who designed this the reptile presence/ likely absence survey and wrote this report, has a BSc degree in Ecology (Hons) and is an Associate member of CIEEM. Jess holds a Natural England Great Crested Newt Licence and has over eight years' experience in ecological survey and assessment.

Francesca Thorley, Senior Consultant, who reviewed this report has an undergraduate degree in Geography (BSc Hons) and a Master's degree in Biodiversity and Conservation (MSc), holds a Natural England Great Crested Newt Licence, is Certified to undertake River Condition Assessments and is an Associated Member of CIEEM. Francesca has over seven years' experience in the commercial sector.

Mitch Cooke, Director, who verified this report, has a degree in Ecology (Hons), an MSc in Environmental Assessment and Management, and is a Full member of CIEEM with over 35 years' experience in ecological survey and assessment. Mitch has set up and developed ecological and environmental teams for nearly 20 years and has undertaken and managed numerous ecological surveys and assessments. He is the Director at Greengage and manages the team.

This report was written by Jess Cole, reviewed by Francesca Thorley and verified by Mitch Cooke who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;

- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

### 3.3 LIMITATIONS TO SURVEY

Reptiles are generally secretive animals and are often difficult to locate by virtue of their behaviour and habitat selection; it is therefore often difficult to prove absence. During surveys it is possible to unsettle basking reptiles by walking through nearby habitat. Therefore, binoculars were used to search for basking animals from a safe distance as well as the artificial refuge search to increase confidence in the survey.

One survey visit (on 26th April 2025) reached 19°C during the end of the survey, this is not considered to be a significant breach in the guidance and, therefore, not a significant constraint to survey.

## 4.0 RESULTS

Table 4.1 below shows count data from survey visits 1-7 at the site with the peak counts highlighted in red. During the survey period, slow worm and common lizard were recorded at the site.

Locations of where individuals were found can be seen within Appendix A.

Table 4.1 Overview of Reptile Survey Results at the site

	Visit 1			Visit 2			Visit 3			Visit 4			Visit 5			Visit 6			Visit 7		
	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile
Common lizard	0	0	0	2	0	2	2	0	4	0	0	3	0	0	2	0	1	0	1	0	0
Slow Worm	0	0	0	0	2	0	0	3	2	2	2	3	2	1	2	2	1	0	3	1	10

Juveniles are not considered in peak counts and therefore, the peak count for common lizard identified during the survey is two and for slow worm is four. No other reptile species were found during the survey.

Table 4.2 indicates the population size categories as per the Froglife guidelines<sup>2</sup>.

Table 4.2 Key Reptile Register Scoring System

	Low Population Score 1	Good Population Score 2	Exceptional Population Score 3
Common lizard	<5	5-20	>20
Slow worm	<5	5-20	>20

This register was designed to provide a basic evaluation of the size and importance of reptiles on a site and the scoring system enables an estimation of low, good or exceptional population size. The figures refer to the maximum number of reptiles observed under the mats by one observer on one day.

Therefore, as per Table 4.2 the population of common lizard and slow worm at the site based on the survey undertaken is 'low'.

In context of the survey effort being undertaken on Novartis Phase 3, the neighbouring site, Table 4.3 below gives the combined results of the reptile presence/ likely absence survey.

Table 4.3 Overview of the Presence/ Likely absence Survey Results at Phase 1&2 and Phase 3 combined

	Visit 1			Visit 2			Visit 3			Visit 4			Visit 5			Visit 6			Visit 7		
	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile	Female	Male	Juvenile
Common lizard	0	0	0	2	1	5	2	1	8	1	1	10	0	0	4	2	3	0	2	0	1
Slow Worm	0	0	1	0	2	0	0	4	2	2	2	4	2	1	2	2	1	0	3	4	10

The peak count for common lizard identified during the survey across both phases is five and for slow worm is seven. Therefore, as per Table 4.2 the population of common lizard and slow worm across both phases combined is considered to be 'good'.

## 5.0 MITIGATION & RECOMMENDATIONS

Reptiles are protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended)<sup>3</sup>, meaning they are protected against intentional killing and injury and against sale, transporting for sale etc.

Therefore, in light of the presence of reptiles on the site, mitigation will be required in advance of site clearance to ensure no reptiles are injured or killed. Given the size of the population, a reptile translocation is considered the only feasible means of mitigation which would preserve the favourable conservation status of the species.

### 5.1 TRANSLOCATION METHODOLOGY

#### Preparation of the Receptor Site

A suitable reptile receptor site has been identified through liaison with Horsham District Council Parks and Countryside team. This site is known as Chennelsbrook Castle, an area of public open space located approximately 1.6km north of the site.

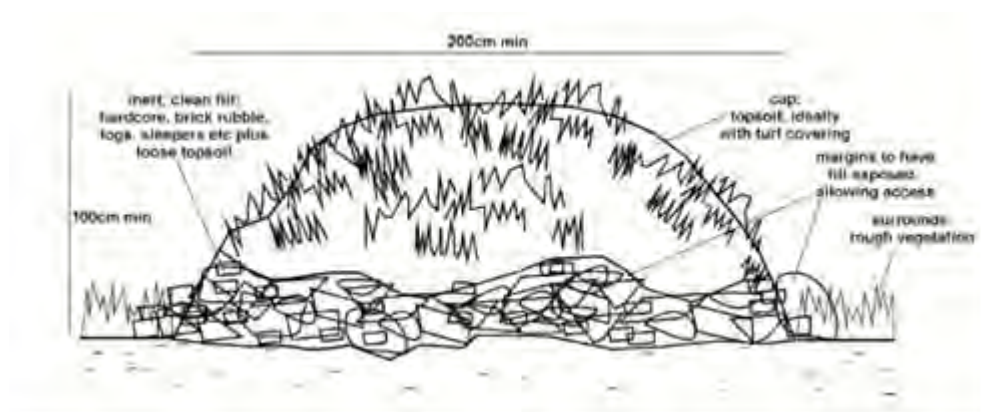
An assessment of any existing reptile population at Chennelsbrook Castle has been undertaken, as well as the enhancement of the receptor site, to understand the existing population and to ensure it has carrying capacity to support the donor population. The receptor site has an existing 'low' population of slow worm and common lizards and therefore the enhancements are being made to increase the carrying capacity accordingly. The results of this exercise will be reported upon separately within documentation detailing the details and results of the translocation exercise upon completion.

Records of reptiles at Chennelsbrook Castle have also been provided by the Parks and Countryside team, show that there are known populations of grass snake, slow worm and common lizard on site. These records date from between 2014-2020.

In light of this information the following enhancement of the site are being implemented to sufficiently increase the carrying capacity of the receptor site:

- Installation of 1no. reptile hibernacula - the hibernacula will be at least 2m in length x 1m in width and 1m in height. The hibernacula will comprise a mixture of logs and inert hardcore (bricks, flint, rubble) topped with soil and turf covering. A suggested design is shown below in Plate 5.1 (taken from the Natural England Great Crested Newt Mitigation Guidelines<sup>6</sup>).
- Installation of 2no. loggers - these will comprise log sizes ranging from ~10cm up to ~40cm diameter with approximately one third of the logs buried. Wood from broadleaved trees such as oak and beech, and from fruiting trees such as apple and pear where possible should be used; and
- Clearance of some bramble scrub on site to create open grassland habitat suitable for reptile basking.

Plate 5.1 Reptile hibernacula design



## Preparation and Clearance of the Donor Site

To prepare the donor site, i.e. the site, for the translocation exercise and to ensure that reptiles cannot re-enter the site once caught, temporary reptile fencing will be installed around the site. The fencing will be installed following a toolbox talk.

### Toolbox talk

Prior to the commencement of works to prepare the donor site a Suitably Qualified Ecologist (SQE) will provide a tool box talk to the fencing team. The talk will include:

- A summary of survey findings with regard to reptiles and the site;
- The legal protection afforded to reptiles;
- A description of the mitigation measures that need to be implemented and followed at all times;
- Signs to look at for with regards to reptiles including a description of common lizard and grass snake; and
- Actions that will need to be taken should evidence of a reptile be found or their presence suspected.

A record of this talk will be kept and all attendees will be asked to sign that they have understood the measures discussed. A subsequent toolbox talk will be provided to any new site members and/or at the start of a new work phase/stage.

### Exclusion Fencing

#### *Habitat Clearance of Proposed Fence Line*

To minimise the impact of the installation of the fence line on any reptiles the proposed fence will be supervised by an SQE who will perform fingertip searches along the fence line, walking ahead of the machinery. The fence installation will be completed on days when reptiles are active, and able to move away from the works of their own volition, (spring-Autum inclusive) and will commence no earlier than 10am.

In the unlikely event that any reptiles are found during this exercise, they will be hand caught by the SQE and moved to the receptor site.

### *Fencing Installation*

Reptile exclusion fencing will be erected around the development boundary of both Phase 1&2 and Phase 3. Approximate location of the fencing is shown in Plate 5.2 below.

Plate 5.2 Approximate fencing location



Fencing must provide a barrier to movement of reptiles and will therefore measure no less than 50cm in height, be sunk at least 30 centimetres (cm) into the substrate and carefully backfilled to prevent ingress/egress. Fencing should be topped by a small outwards-facing overhang to prevent reptiles from entering. The fencing will comprise the use of either 1000-gauge polythene sheeting or plastic panel installed with wooden posts every 1.5 metres (m). An example of which is given in Plate 5.2 below.

Plate 5.3 Example of reptile fencing on site



Areas where vehicular access to the development site is required should be identified and gates installed to allow vehicles to enter without damaging the fencing.

Exclusion fencing will be maintained for the duration of construction works and checked by an SQE, or a designated site member, regularly (one per month) to ensure it remains intact and prevents reptiles from re-entering the works area.

## Reptile Capture and Translocation

### Distribution of Refugia

To aid translocation, artificial refuges comprising 1 m x 0.5 m square felt sheeting will be installed within the enclosed habitat to be removed and left to bed in for a period of one week. 300 matts will be used which is double the number used during the presence/likely absence survey.

This volume of refugia exceeds mitigation guidelines<sup>8</sup> in order to make the translocation rate of the reptiles as efficient as possible.

### Translocation

As the site along with the adjacent development on Novartis Phase 3, has been found to support 'good' populations of common lizard and slow worm a minimum capture period of 60 suitable days will be undertaken. Capture will then cease once 5 consecutive capture free days have been achieved under suitable conditions or on the completion of a total of 60 suitable capture days, whichever occurs sooner.

Suitable days for capture are defined as having temperatures between 9-18°C and being dry, sunny and calm (although sunny spells between rain showers are acceptable).

During each capture period an experienced SQE will walk a predetermined transect route covering all suitable reptile habitat and the artificial refuges. Any reptiles encountered will be carefully captured by hand and placed within a cloth bag or bucket for transference to the receptor area (translocated), where they will be released immediately adjacent to suitable shelter e.g. a log pile or hibernaculum.

The walked transects will be timed to occur during key periods of the day when reptiles are more likely to be basking (typically morning and late afternoon/early evening). Additional checks may be carried out if the weather is appropriate (i.e. between rain showers).

Selective habitat manipulation may be undertaken to increase the effectiveness of reptile capture. Areas of suitable habitat, particularly those that would be difficult to trap out, would be strimmed (to a height of no lower than 150mm) or cleared using hand tools under the direct supervision of an ecologist, with all arisings (i.e. vegetation, logs, clean rubble) immediately removed from site. Depending on the duration of the translocation, this exercise may need to be repeated several times.

Following the translocation (after 5 consecutive capture free days or on the completion of a total of 60 suitable capture days, whichever occurs sooner) the habitats will be subject to a hand search and destructive clearance under supervision by an SQE following best practice methodology<sup>8</sup>.

### Timing

Translocation visits should only be undertaken during months when reptiles are active, with April, May and September being the most productive months.

Greengage propose split the translocation between Autumn 2025 and Spring 2026 with capture dates commencing in September and running into October, until the first frost arrives.

There would then be a pause over winter (November - February inclusive), with recommencement in March when daytime temperatures become suitable once again (9-18°C with no overnight frost).

The installation of fencing will be in Spring 2026 ahead of the main translocation exercise and, the fence would need to be periodically examined each month to ensure no breaches that would compromise the effectiveness of the exercise and allow reptiles to re-enter the site.

### Monitoring of Receptor Site

In order to ensure the success of the translocation, monitoring visits of the receptor site may be required over several years. Given the size of the translocated population, it is recommended that three years of monitoring would be suitable.

## 5.2 ECOLOGICAL ENHANCEMENT

Across the site within the proposed development, habitats with suitability to support reptiles will be created including:

- Other neutral grassland (wildflower meadow);
- Rain gardens; and
- Native hedgerow.

These habitats and the site should be further enhanced by provision of log piles, rockeries, hibernacula and compost piles, to support any future reptile populations on site. The specifications for these features and their locations should be determined along site an SQE and be subject to planning condition.

## 6.0 SUMMARY & CONCLUSION

Greengage was commissioned by Lovell Homes to undertake a Reptile Presence/ Likely-Absence Survey of a site known as Novartis Phase 1&2, in Horsham, West Sussex.

Greengage completed a presence/likely absence survey in 2025. The survey comprised distribution of 55 Refugia ('mats') across suitable habitat on the site, which were then checked for reptile presence on seven occasions between 3rd April 2025 - 15th May 2025. This survey identified 'low' populations<sup>2</sup> of common lizard and slow worm.

Common lizards and slow worm are protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended)<sup>3</sup>. Therefore, in order to maintain the favourable conservation status of these species, a translocation of individuals to an off-site receptor site is required.

A suitable reptile receptor site has been identified through liaison with Horsham District Council Parks and Countryside team. This site is known as Chennelsbrook Castle, an area of public open space located approximately 1.6km north of the site. An assessment of any existing reptile population at Chennelsbrook Castle has been undertaken, and enhancement of the receptor site required to ensure it has carrying capacity to support the donor population.

A program of capture and release will be undertaken over the course of autumn 2025 and Spring 2026. Further detail on the methodology and timing of the required translocation can be found within Section 5.0 of this report.

The proposed Novartis Phase 1&2 development site features areas of suitable reptile habitat which are to be created e.g. wildflower meadow. These should be further enhanced by provision of log piles, rockeries, hibernacula and compost piles, to support any future reptile populations on the site.

## APPENDIX A REFUGIA AND REPTILE RECORD LOCATIONS

# NORVARTIS PHASE

## 1, 2 & 3

- Site Boundary
- Reptile Mats



Title: Reptile Matt Locations

Drawn by: Barnaby Hicks  
Date: 08/10/2025

Reviewed by: Jess Cole  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



# NORVARTIS PHASE 1, 2 & 3

□ Site Boundary

Number of Individuals Recorded

Common Lizard Female

○ 1

● 4

Title: Common Lizard Female Records

Drawn by: BH  
Date: 08/10/2025

Reviewed by: JC  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



# NORVARTIS PHASE 1, 2 & 3

□ Site Boundary  
Number of Individuals Recorded  
Common Lizard Juvenile

- 1
- 2
- 3
- 5

Title: Common Lizard Juvenile Records

Drawn by: BH  
Date: 08/10/2025

Reviewed by: JC  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



# NORVARTIS PHASE 1, 2 & 3

□ Site Boundary

Number of individuals Recorded

Common Lizard Male

● 1

Title: Common Lizard Male Records

Drawn by: BH  
Date: 08/10/2025

Reviewed by: JC  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



# NORVARTIS PHASE 1, 2 & 3

□ Site Boundary

Number of Individuals Recorded

Slow worm Female

○ 1

● 4

Title: Slow Worm Female Records

Drawn by: BH  
Date: 08/10/2025

Reviewed by: JC  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



# NORVARTIS PHASE 1, 2 & 3

□ Site Boundary

Number of Individual Records

Slow worm Juvenile

- 1
- 4
- 10

Title: Slow Worm Juvenile Records

Drawn by: BH  
Date: 08/10/2025

Reviewed by: JC  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



# NORVARTIS PHASE 1, 2 & 3

□ Site Boundary

Number of Individuals Recorded

Slow worm Male

- 1
- 2
- 4

Title: Slow Worm Male Records

Drawn by: BH  
Date: 08/10/2025

Reviewed by: JC  
Date: 08/10/2025

Project number: 552977 & 552979  
Sources: Google Satellite Imagery



## APPENDIX B AUXILLARY DATA

Table B.1 Auxiliary Data

Survey Visit Number	Survey Date	Survey Duration	Weather Conditions
1	03/04/2025	11:30 - 13:30	Start: 16°C End: 17°C Clear 1/8 Wind (Beaufort Scale): 4 Dry, no rain
2	07/04/2025	11:20 - 13:50	Start: 14°C End: 16°C Clear 0/8 Wind (Beaufort Scale): 2 Dry, no rain
3	10/04/2025	10:25 - 11:45	Start: 9°C End: 10°C Clear 1/8 Wind (Beaufort Scale): 2 Dry, no rain
4	14/04/2025	10:35 - 12:50	Start: 13°C End: 14°C Clear 7/8 Wind (Beaufort Scale): 2 Dry, no rain
5	16/04/2025	11:15 - 13:10	Start: 11°C End: 13°C Clear 3/8 Wind (Beaufort Scale): 2 Dry, no rain
6	28/04/2025	08:35 - 11:15	Start: 13°C End: 19°C Clear 0/8 Wind (Beaufort Scale): 1 Dry, no rain
7	14/05/2025	09:45 - 11:45	Start: 12°C End: 13°C Clear 0/8 Wind (Beaufort Scale): 1

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Survey Visit Number	Survey Date	Survey Duration	Weather Conditions
			Dry, no rain

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## APPENDIX C LEGISLATION AND PLANNING POLICY

### C.1 LEGISLATION

All species of reptile native to the UK are protected to some degree under national and/or international legislation, which provides mechanisms to protect the species, their habitats and sites occupied by the species.

Sand lizards and smooth snakes are European protected species and are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981<sup>9</sup> and Regulation 39 of the Habitats Regulations 1994<sup>10</sup> (and 2017)<sup>11</sup>. However, these species are rare and highly localised. Their occurrence is not considered as relevant in this instance, as the ranges and specialist habitats of these species do not occur at this site.

The remaining widespread species of native reptiles (adder, grass snake, slow worm and viviparous lizard) are protected under part of Section 9(1) and all of Section 9(5) of the Wildlife and Countryside Act 1981. They are protected against intentional killing and injury and against sale, transporting for sale etc. The habitat of these species is not protected. However, in terms of development, disturbing or destroying reptile habitat during the course of development activities while reptiles are present is likely to lead to an offence under the Wildlife and Countryside Act 1981. It is therefore important to identify the presence of these species within a potential development site. If any of these species are confirmed, all reasonable measures must then be taken to ensure the species are removed to avoid the threat of injury or death associated with development activities.

Each species of native reptile has specific habitat requirements, but general shared features include a structurally diverse habitat that provides for shelter, basking, foraging and hibernating.

### C.2 POLICY

#### National

##### National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2024<sup>12</sup> sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: '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'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

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## Regional

### West Sussex Planning Policy

#### *Climate Change Resilience*

No formal environmental strategy is included however key points within this document include increasing access to nature, prioritising natural flood solutions and increasing opportunities for BNG to promote the following:

- Green tourism;
- Natural capital investment funding when available
- Sustainable businesses
- Sustainable business growth
- Green innovation amongst business

## Local

### Horsham District Planning Framework (2015)<sup>13</sup>

#### *Policy 25 - The Natural Environment and Landscape Character*

The natural environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which:

1. Protects, conserves and enhances the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintains settlement separation;
2. Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District;
3. Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible; and,
4. Conserve and where possible enhance the setting of the South Downs National Park.

#### *Policy 26 - Countryside Protection*

In addition, proposals must be of a scale appropriate to its countryside character and location. Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, and/or conserves, and/or enhances, the key features and characteristics of the landscape character area in which it is located, including;

1. The development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change;
2. The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features; and,
3. The landform of the area.

### *Policy 27 Settlement Coalescence*

Landscapes will be protected from development which would result in the coalescence of settlements. Development between settlements will be resisted unless it can be demonstrated that:

1. Proposals contribute to the conservation, enhancement and amenity of the countryside, including where appropriate enhancements to the Green Infrastructure network or provide opportunities for quiet informal recreation.

### *Policy 31 Green Infrastructure and Biodiversity*

1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.
2. Development proposals will be required to contribute to the enhancement of existing biodiversity and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.
3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required.
4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:
  - i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)
  - ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
  - iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.
5. b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:
  - i. The reason for the development clearly outweighs the need to protect the value of the site; and,
  - ii. That appropriate mitigation and compensation measures are provided.

6. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

### *Policy 33 Development Principles*

In order to conserve and enhance the natural and built environment developments shall be required to:

1. Presume in favour of the retention of existing important landscape and natural features, for example trees, hedges, banks and watercourses. Development must relate sympathetically to the local landscape and justify and mitigate against any losses that may occur through the development.

### *Draft Horsham District Local Plan 2019-2036*

#### *Policy 27 - The Natural Environment and Landscape Character*

The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats, will be protected against inappropriate development. The Council will expect development proposals to be landscape led from the outset so that they clearly inform the design and layout. Proposals will also be required to:

1. Protect, conserve and enhance the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintain settlement separation;
2. Maintain and enhance the Green Infrastructure Network, the Nature Recovery Network and, where practicable, help to address any identified deficiencies in the District;
3. Maintain and enhance the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and secure net gains in biodiversity;
4. Incorporate SUDS into a scheme in an optimal location for their purpose whilst also securing landscape enhancements and good quality spaces. Proposals will be expected to provide details to demonstrate that the whole life management and maintenance of the SUDS are appropriate, deliverable and will not cause harm to the natural environment and/or landscape; and,
5. Where applicable, conserve and, where possible, enhance the setting of the South Downs National Park and the High Weald Area of Outstanding Natural Beauty.

#### *Policy 28 - Countryside Protection*

Outside built-up area boundaries and unclassified settlements, the rural character and undeveloped nature of the countryside will be protected against inappropriate development. Any proposal must be essential to and justify its countryside location, and must meet one of the following criteria:

- a. Support the needs of agriculture or forestry
- b. Enable the extraction of minerals or the disposal of waste;
- c. Provide for quiet informal recreational use; or,

- d. Enable the sustainable development of rural areas.

In addition, all proposals must be appropriately integrated within the landscape and be of a scale appropriate to its countryside character and location. Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, conserves, and seeks to enhance, the key features and characteristics of the landscape character area in which it is located, including;

- e. The development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change;
- f. The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features; and,
- g. the landform of the area; and,
- h. Where relevant, the designated South Downs National Park 'International Dark Sky Reserve' (IDSR).

### *Policy 29 - Settlement Coalescence*

Landscapes will be protected from development which would result in the coalescence of settlements in order to protect local identity and a sense of place. Development between settlements will be resisted unless it can be demonstrated that:

- i. c. Proposals respect the landscape and contribute to the enhancement of their countryside setting, including, where appropriate, enhancements to the Green Infrastructure network, the Nature Recovery Network and/or provide opportunities for quiet informal countryside recreation.

### *Policy 31 - Green Infrastructure and Biodiversity*

1. Development will be supported where it can demonstrate that it maintains and enhances the existing network of green infrastructure, the Nature Recovery Network, natural capital and biodiversity. Proposals that would result in the loss of existing green infrastructure or part of the Nature Recovery Network will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.
2. Proposals will be expected to retain and enhance existing fresh water features, hedgerows, trees and deciduous woodland and the provision of additional hedgerow and tree planting will be sought subject to appropriate consideration of local and wider context, habitats and species.
3. Where the felling of a tree is necessary, for example due to disease, replacement planting with a suitable species and location to retain the link with the wider network of habitats and Green Infrastructure, will be required.
4. Development proposals will be expected to remove invasive species and will be required to contribute to the enhancement of existing biodiversity and deliver, as a minimum, a 10% net gain through the delivery of appropriate on-site biodiversity net gain or, where this is not practicable, to off-set the delivery to the Nature Recovery Network.

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5. Proposals should create and manage appropriate new habitats, taking into account pollination, where practicable. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity, and where appropriate the Nature Recovery Network, through the creation of green spaces, and linkages between habitats to create local and regional ecological networks and allow the movement of wildlife through development sites.
  6. Particular consideration will be given to the hierarchy of sites and habitats in the District as follows:
    - a. Special Protection Area (SPA) and Special Areas of Conservation (SAC)
    - b. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
    - c. Local Wildlife Sites (LWS), Local Nature Reserves (LNRs) and any areas of Ancient woodland, traditional orchards, local geodiversity or other irreplaceable habitats not already identified in a & b above.
  7. Where development is anticipated to have a direct or indirect adverse impact on sites or features of importance to nature conservation, development will be refused unless it can be demonstrated that:
    - a. The objectives of a site's designation, where applicable, and integrity of the area will not be undermined;
    - b. The reason for the development clearly outweighs the need to protect the value of the site; and,
    - c. That appropriate mitigation and compensation measures are provided.
  8. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a Habitats Regulation Assessment to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

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## REFERENCES

- <sup>1</sup> Greengage Environmental Ltd (2024) Preliminary Ecological Appraisal (PEA). 552979jh06Dec24FV03\_PEA
- <sup>2</sup> Froglife (1991). Advice Sheet 10 An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.
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- <sup>11</sup> UK Government, (2010); The Conservation of Habitats and Species Regulations 2010 No. 490. TSO, London.
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- GOV.UK. (2024). National Planning Policy Framework. [online] Available at:  
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- <sup>13</sup> Horsham District Council (2015) Horsham District Planning Framework (excluding South Downs National Park) [Online]  
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