



**South Gillingham Consortium**

**South Gillingham, Dorset**

**Reptile Presence / Likely Absence Survey**

**November 2017**

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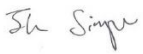

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## Executive Summary

Contents	Summary
<b>Site Location and Proposals</b>	The site is located to the south of the town of Gillingham in Dorset, centred on OS grid reference ST819488. It covers an area of approximately 91.8 ha and is divided into three areas. Park Farm, the eastern area is located to the east of Shaftesbury Road. West of Shaftesbury Road lies Ham Farm, the central area. West of Ham Farm lies Newhouse Farm, the western area.
<b>Previous Reports / Surveys</b>	The Ecology Solutions and SLR surveys carried out at the site in 2011 recorded low populations of slow worm, common lizard and grass snake on site (Ecology Solutions, 2012; SLR, 2012).
<b>This Survey(s)</b>	WYG was commissioned by South Gillingham Consortium in April 2017 to complete a reptile presence / likely absence survey at the Site. This involved seven visits from 17 <sup>th</sup> July 2015 to 29 <sup>th</sup> September 2015 in suitable weather conditions.
<b>Results</b>	Froglife guidelines (1999) suggest that at present the site has a good population of slow-worms and low population of grass snakes. Although common lizard were not recorded in 2015, a low population was recorded in 2011. As such it is assumed that a low population may still be present on site.
<b>Recommendations</b>	<p>Large areas of open space on site will be retained and enhanced for biodiversity. Additional scrub, hedgerow and species-rich grassland margin will be planted, and 10 hibernacula will also be created.</p> <p>A reptile translocation will be completed for each stage of development involving the installation of reptile exclusion fencing, followed by capture of reptiles and release within the retained open space.</p> <p>A supervised destructive search will be completed post-translocation to make sure no reptiles remain.</p> <p>A post-development management and monitoring regime will be carried out to measure the success of the mitigation and, if necessary, guide corrective action or changes to management.</p>



## **1.0 Introduction**

### **1.1 Background**

WYG was commissioned by South Gillingham Consortium in April 2015 to complete a reptile presence / likely absence survey at a site in South Gillingham (hereafter referred to as 'the site'). Following the completion of an extended Phase 1 habitat survey in March 2015 reptile presence / likely absence surveys were recommended within areas of suitable habitat.

### **1.2 Site Location**

The site is located to the south of the town of Gillingham in Dorset, centred on OS grid reference ST819488. It covers an area of approximately 91.8 ha and is divided into three areas. Park Farm, the eastern area is located to the east of Shaftesbury Road. West of Shaftesbury Road lies Ham Farm, the central area. West of Ham Farm lies Newhouse Farm, the western area. To the north of Ham Farm lies the residential area of Ham Common. West of Ham Common runs the River Lodden, with the Lodden Lakes beyond, which forms the northern boundary of Newhouse Farm. To the south and west of the site lie agricultural areas including both pasture and arable fields, with hedgerow networks. The northern and eastern boundary of Park Farm comprises Fern Brook, with further agricultural areas beyond.

Park Farm comprises a matrix of habitats including improved grassland pasture grazed by horses, sheep and cattle, species-poor hedgerows with mature trees, broadleaved plantation woodland, neutral semi-improved grassland, bare ground and buildings. Ham Farm comprises a matrix of improved grassland pasture grazed by cattle, neutral semi-improved grassland, broadleaved plantation woodland, species-poor and species-rich hedgerows with mature trees and bare ground. Newhouse Farm comprises a matrix of improved grassland pasture grazed by cattle, species-poor hedgerows with mature trees and bare ground. There are six ponds located on site, a running ditch within Newhouse Farm and two watercourses flowing along the northern boundary of Newhouse Farm and the north and east boundaries of Park Farm.

### **1.3 Development Proposals**

The site has been identified within Policy 17 of the emerging North Dorset Local Plan 2011-2026. Development proposals are for up to 1800 residential dwellings with associated schools, new access roads open space and sustainable urban drainage. The masterplan framework for the site includes a significant buffer of approximately 100m from the River Lodden and Fern Brook as well as numerous other features of ecological interest.



## **1.4 Survey & Reporting Objectives**

The aims of the survey work and the subsequent report presented herein were to:

- Determine if reptiles continue to be present at the site;
- Determine the population size class of reptiles if confirmed to be present;
- Provide an appraisal of the implications created by the potential presence of reptiles at the site;
- Establish if any potential effects on reptiles resulting from the development are permissible;
- Ensure that the required level of survey work and information is present to inform a method statement, should one be necessary; and
- Provide preliminary advice on mitigation strategies against any adverse affects on local reptile population(s) which may arise as a result of the proposed development.



## 2.0 Planning Policy & Legislation

### 2.1 National Planning Policy

The National Planning Policy Framework was adopted in March 2012. Section 11 of the NPPF, Conserving and Enhancing the Natural Environment replaces Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation. However, government Circular 06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. The NPPF also states that 'planning policies should promote the protection of priority species populations linked to national and local targets'.

### 2.2 Local Planning Policy

Policy 1.37 of the North Dorset District-Wide Local Plan 2011 includes a requirement to **protect and** enhance the continuity and integrity of landscape features which are of major importance for wildlife. Development will be expected to fully consider nature conservation. Where development is permitted, the following should be taken into account:

- (i) Important woodland, wetlands, trees, hedgerows, watercourses, ponds, geological features and other major natural features and habitats are retained;
- (ii) Compensatory provision is made for replacement habitats/features of quality where the loss of existing habitats and/or features is unavoidable;
- (iii) Habitat features, attractive to wildlife including those which meet the needs of particular species, are, where appropriate, incorporated in the development;
- (iv) Full provision is made for the future management of retained and newly created wildlife features.

Under 1.137 of Policy 1.37 it states; 1.137 when considering relevant development proposals the Council will seek and act on the advice of wildlife conservation bodies, in order to safeguard the habitats of protected species or determine appropriate mitigatory works such as the provision of alternative nesting and roosting boxes.



## 2.3 Legislation

All six species of reptiles native to the UK are protected under the Wildlife and Countryside Act 1981 (as amended) and benefit from various levels of protection. The adder (*Vipera berus*), grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*) receive protection under Section 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to:

- Intentionally or recklessly kill or injure these animals; and
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell individual reptiles.

The smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) are listed in Annex IVa of the EC Habitat and Species Directive and in Annex II of the Bern Convention. They are also listed in Schedule 5 of Section 9 of the Wildlife and Countryside Act 1981 (as amended) and in Schedule 2 of the Conservation of Habitats and Species Regulations 2012. As a result it is an offence to:

- Intentionally or recklessly kill or injure these animals;
- Deliberately disturb these animals;
- Take or destroy their eggs;
- Damage, destroy or disturb or impede access to breeding or shelter sites used by these species; and
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell individual reptiles.



## **3.0 Methodology**

### **3.1 Desk Study**

Information was gathered from the Dorset Environmental Records Centre, the ecological records centre for Dorset, regarding the presence of nature conservation designations and protected and notable species within 2 km of the boundary of the proposed development site. In addition, a search for designations was made using the Multi Agency Geographic Information for the Countryside database (MAGIC).

#### **3.1.1 Previous Reports**

The Ecology Solutions and SLR surveys carried out at the site in 2011 recorded low populations of slow worm, common lizard and grass snake on site (Ecology Solutions, 2012; SLR, 2012).

### **3.2 Field Surveys**

In accordance with the guidance outlined in the Herpetofauna Workers' Manual (Joint Nature Conservation Committee - JNCC, 2003), Advice Sheet 10 – Reptile Survey (Froglife, 1999) surveys were undertaken to establish the presence or likely absence of reptile species. This involved seven visits from 17<sup>th</sup> July 2015 to 29<sup>th</sup> September 2015 in suitable weather conditions.

200 clearly numbered artificial refugia (sections of bituminised roofing felt) were placed across the site in areas considered to have habitat suitable for reptiles (see Figure 2). The only suitable habitat for reptiles comprises the boundary vegetation and within the plantation woodland. The refuges were then left undisturbed on the site for four weeks prior to survey; to allow for reptiles on the site to find and utilize. Each refuge was then first checked for basking individuals from a distance before being slowly approached and searched for sheltering reptiles. Terrestrial habitat between artificial refugia was also searched for reptile species on each visit. The location of each reptile sighting was then recorded to allow for analysis of population distributions across the site.

As a guideline it is recommended that the optimal time to survey reptiles is between 8:30am to 11:00am and between 16:00pm and 18:30pm and when air temperature is between 9°C and 18°C. Strong rain and wind are deemed unsuitable (Froglife, 1999). As reptile activity is heavily dependent on weather conditions the following conditions were recorded during each survey: air temperature, wind levels, rain levels, and the cloud cover.



### **3.3 Limitations**

Surveys were completed according to the relevant guidelines, and all areas of the site were accessible. Therefore, there are considered to be no limitations to the survey effort (Refer to Figure 1). However, the survey only provides a snapshot of data across the survey period rather than full information on population numbers.

An update site assessment was completed in March 2017 which confirmed that there had been no significant change in conditions on site. Therefore, the results of this survey are considered to remain valid until the commencement of 2019 survey season (March/April 2019). If works have not commenced by this time, an update site assessment should be completed to determine if an update survey is required. An update site assessment should also be completed if there is any change in site conditions or operation.



## 4.0 Baseline Conditions

### 4.1 Desk Based Study

The data provided by DERC included one record of a reptile which was for a grass snake (*Natrix natrix*) located 150m to the north of the site.

### 4.2 Site Survey

#### 4.2.1 Weather Conditions

**Table 1:** Survey Weather Conditions

Survey	Date	Time	Air Temperature (°C)	Rain	Wind Speed	Cloud Cover (%)
1	17/06/15	07:20	13.9	None	Slight	100
2	26/06/15	07:30	15.2	None	Slight	60
3	29/06/15	08:50	14.3	None	Slight	70
4	31/06/15	09:00	15	None	Slight	10
5	04/08/15	09:00	16.2	None	Slight	5
6	17/08/15	08:30	15.9	None	Slight	100
7	29/09/15	08:30	11	None	Slight	20

### 4.3 Survey Results

**Table 2:** Site Survey Results



Survey	Date	Records			
		Species	Adult	Juvenile	Mat No.
1	17/06/15	Slow worm	1	-	107
		Slow worm	1	-	135
		Slow worm	2	-	136
		Slow worm	1	-	147
		Slow worm	1	-	127
		Slow worm	-	1	91
2	26/06/15	Slow worm	-	2	91
		Slow worm	2	-	127
		Slow worm	1	-	156
3	29/06/15	Slow worm	1		33
		Slow worm	1		45
		Slow worm	2		41
		Slow worm		1	71
		Slow worm		2	91
		Slow worm	1		131
		Slow worm	1		130
		Slow worm	1		147
		Slow worm		1	155
		Slow worm	1		156
		Slow worm	3		92
4	31/06/15	Slow worm	1		33
		Grass snake		1	41
		Slow worm		1	73
		Slow worm		1	91
		Slow worm	1		92
		Slow worm	2		125
		Slow worm	1		136
5	04/08/15	Slow worm	1		33
		Slow worm	1		45
		Slow worm	1		71
		Slow worm	3		91
		Slow worm	2		92
		Slow worm	1		156
6	17/08/15	Slow worm		1	33
		Grass snake	1		41
		Slow worm	2		45
		Slow worm	1		71
		Slow worm		1	91
		Slow worm	3		92
		Slow worm	1		130
		Slow worm	1		155
		Slow worm	1		156
7	29/06/15	Slow worm	1		41



## 5.0 Constraints & Opportunities

### 5.1 Constraints

Adult and juvenile slow worms and an adult grass snake were recorded during the reptile presence / likely absence survey. Slow worms were recorded on all seven survey occasions, with a maximum count of 11 adult recorded on 29<sup>th</sup> August 2015. A breeding population was also confirmed as juvenile slow worms were also recorded during five of the seven survey visits. One adult grass snake was recorded on 17<sup>th</sup> August 2015.

Analysis of the results follows the guidelines set out in the Froglife (1999) document and in Table 3 below.

**Table 3:** Reptile Population Estimate

Species	Low population Score 1	Good population Score 2	Exceptional population Score 3
Adder	< 5	5 - 10	> 10
Grass snake	< 5	5 - 10	> 10
Common Lizard	< 5	5 - 20	> 20
Slow worm	< 5	5 - 20	> 20

NB. Figures in the table refer to maximum number of adults seen by observation and/or under mats, placed at a density of 10 per hectare, by one person in one day.

Froglife guidelines (1999) (Table 4 above) suggest that at present the site has a good population of slow-worms and low population of grass snakes. Although common lizard were not recorded in 2015, a low population was recorded in 2011. As such it is assumed that a low population may still be present on site. As these species are protected from killing and injury under the Wildlife and Countryside Act 1981, mitigation will be required prior to construction commencing to protect reptiles.

### 5.2 Impacts

Given the confirmed presence of reptiles on site, there is potential for adverse effects in the absence of suitable mitigation.



### **5.2.1 Habitat Loss**

Although a significant long-term loss of habitat is not anticipated due to the designed-in mitigation, which includes large areas of open space to be managed as rough grassland, the construction phase will result in the temporary loss of habitat used by foraging, commuting and basking reptiles.

### **5.2.2 Killing/Injury**

There is the potential for individuals to be killed or injured during construction should they enter this area. There is also potential for killing or injury during the clearance of those areas of suitable habitat to be lost (such as hedgerow crossings) or by construction traffic or materials storage encroaching on areas of suitable habitat to be retained.

Given that reptiles have been recorded on the site, reptile mitigation will need to be implemented at the site to meet the requirements of the NPPF and prevent a breach of the Wildlife and Countryside Act 1981 (as amended). The proposed options regarding a mitigation programme are explained below.

## **5.3 Recommendations**

### **5.3.1 Habitat Loss**

Areas of grassland to the north of the site will be retained and enhanced for biodiversity as part of the proposed development. Part of this enhancement will benefit reptiles in the form of additional scrub and hedgerow planting to provide refuge and hibernation opportunities, and management of grassland to create rough, tussocky grassland suitable for reptiles. A minimum of 10 hibernacula will also be created within the open space to provide additional enhancements. Following these works a significant loss of suitable reptile habitat is not anticipated.

### **5.3.2 Killing/Injury**

Reptiles will be translocated out of the working area to the large expanse of informal open space which will be enhanced as discussed above. The translocation will be based on the advice of the JNCC's Herpetofauna Workers' Manual guidelines. It will involve the installation of reptile exclusion fencing around each phase of the works area, trapping reptiles present using artificial refugia and moving them to the receptor area.

The installation of fencing will be completed under the supervision of an ECoW during the reptile active season, which runs from March to October inclusive. The translocation exercise will then also



be completed during this period. Although a medium population of slow worm was recorded across the whole site, the translocation is likely to take place in phases, with each only affecting a low number of animals. As such the translocation for each phase is likely to involve 30 days' translocation in suitable weather conditions. A judgement on the conclusion of the capture stage of the translocation will be made by the ecologist; this is usually accepted after five consecutive visits to a site in suitable conditions without encountering any target species.

Following this, areas to be developed will be subject to a destructive search under the supervision of an ECoW in suitable weather conditions. In the event that any reptiles are found, they will be translocated to the receptor area.

The translocation will be followed by long-term management of created habitat and a period of post-development monitoring to measure the success of the mitigation and, if necessary, guide corrective action or changes to management.



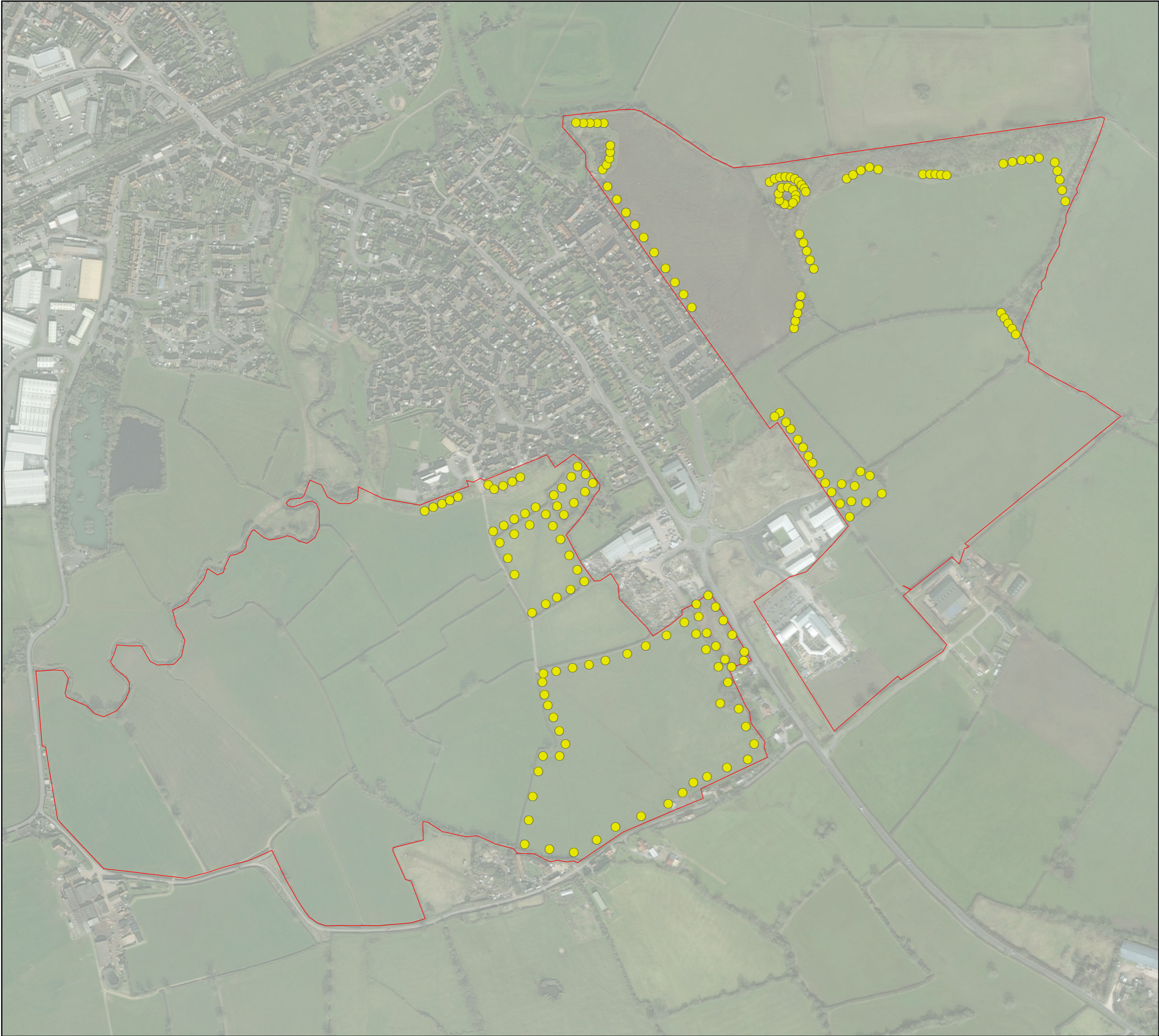
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- Ecology Solutions (2012). Ham Farm, Gillingham, Dorset: Ecological Assessment.
- Froglife, (1999). Advice Sheet 10: Reptile Survey.
- Gent, T. & Gibson, S. (2003). *Herpetofauna Workers' Manual*. JNCC, Peterborough.
- SLR (2012). Park Farm, Gillingham: Protected Species Surveys Report.
- WYG (2017). South Gillingham, Dorset Extended Phase 1 Habitat Survey Report.



## **FIGURES**

### **Figure 1 – Reptile Mat Location Plan**



Rev	Date	Notes
A	14/11/17	Initial map production

Legend

- Site boundary
- Reptile Mat

0 50 100 200 Metres



Reptile Mat Location Plan

Gillingham

Scale at A3: 1:5,750	Project No: A106314	Drawing No: Figure 1	Revision: A
Drawn by: Ben Blowers	Drawn date: 17/11/2017	Approved by: David West	

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