Homes England

Land at Shafton, Barnsley

Reptile Survey Report

October 2017

Arndale Court, Headingley, Leeds, West Yorkshire, LS6 2UJ

Tel: 0113 278 7111

Email: ecology@wyg.com

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Prepared by:		Jonathan Siberry Grad CIEEM **Assistant Ecologist**
Checked By:		Luke Verrall Grad CIEEM **Consultant Ecologist**
Verified By:		Rachel Kerr MCIEEM CEnv **Associate Ecologist**

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Executive Summary

Contents	Summary
Site Location and Proposals	• The site is located in Shafton, Barnsley, and has a central Ordnance Survey Grid Reference (OSGR) of SE 39370 10881. • The site is approximately 1.3ha in area and comprises grassland, dense scrub, tall ruderal, scattered trees and hedgerow. • The proposed development is for residential development of 48 dwellings and associated landscaping. The final layout of the proposed development is yet to be determined
Previous Reports / Surveys	• A Preliminary Ecological Appraisal of the site was undertaken by a third party during January 2015 (MEC, 2015) which identified records of grass snake in the wider landscape and suitable habitat for reptiles, including grass snake, on site.
This Survey	• Reptile surveys were commissioned to determine if reptiles are present or likely absent on site. • 30 artificial refugia (bituminous tiles) were placed on site and left to 'bed in' for two-weeks followed by a hand search survey of refugia for the presence / absence of reptiles on subsequent visits to the site. • Seven visits were undertaken to search for reptiles during the months of May, June and September 2017.
Results	• No reptiles were recorded during the survey on site. • A red fox and evidence of red fox was recorded on site.
Recommendations	• No further surveys recommended. • Appropriate working methods should be employed in relation to reptiles during the works. • A red fox was recorded on site and their potential presence on site should be considered prior to commencement of works. • The details of this report are considered to remain valid for a period of 2 years from the date of the final reptile survey (i.e. September 2019). If works are delayed beyond September 2019, then the validity of this data should be reviewed to determine whether further updates are necessary.

1.0 Introduction

1.1 Background

WYG was commissioned by the Homes England (formerly Homes and Communities Agency) in May 2017 to undertake reptile surveys at Land at Shafton, Barnsley, (hereafter referred to as 'the site') to support a planning application for residential development of the site. An extended Phase 1 habitat survey of the site was undertaken by a third party in January 2015 (MEC, 2015), which identified potential for the site to support reptiles. The purpose of the reptile surveys was to provide baseline information on the presence / likely absence of reptiles within the site.

This report has been written by Jonathan Siberry Grad CIEEM and should be read with reference to the attached Report Conditions.

1.2 Site Location

The site is bounded by High Street on its south-western boundary and residential properties associated with Poplar Avenue on its north-western boundary. Residential properties associated with Park View line the north-eastern boundary of the site and playing fields associated with Shafton Primary School form the south-eastern site boundary.

The central Ordnance Survey Grid Reference (OSGR) of the site is SE 39370 10881 and the site is approximately 1.3ha in area.

The site is comprised of grassland, dense scrub, tall ruderal, scattered trees and hedgerow. The extent of the site is shown in the Site Location Plan (Figure 1).

1.3 Proposed Development

The proposed development is for residential development of 48 dwellings and associated landscaping. The final layout of the proposed development is yet to be determined

1.4 Survey Objectives

The aims of the reptile presence/absence survey and this report were to:

- 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 assessment of likely reptile constraints to the proposed development; and
- Provide advice on avoidance, mitigation and compensation measures, if required.

2.0 Planning Policy & Legislation

An outline of relevant national and local planning policy and wildlife legislation is provided below.

2.1 National Planning Policy

Following the publication of the National Planning Policy Framework (NPPF) in March 2012, *Planning Policy Statement 9* (PPS9)*: Biodiversity and Geological Conservation* (2005) has been withdrawn. However, *ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System* (the guidance document that accompanied PPS9 is still valid, and where more detailed guidance is required than is given within the NPPF, local planning authorities will continue to rely on ODPM 06/2005.

This guidance requires local planning authorities to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.

In the case of European Protected Species such as great crested newts, planning policy emphasises that strict statutory provisions apply (including the *Conservation of Habitats and Species Regulations 2010 (as amended)*), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species it is necessary that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005 which states that:

'*The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat*.'

General guidance of relevance within the body of the NPPF includes the following statements:

"The planning system should contribute to and enhance the natural and local environment by:

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *recognising the wider benefits of ecosystem services;*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including*

by establishing coherent ecological networks that are more resilient to current and future pressures"

"Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged."

"When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- *if significant harm 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.*"

2.2 Local Planning Policy

The Barnsley Core Strategy was formally adopted by Barnsley Metropolitan Borough Council in September 2011. The Core Strategy sets out the key elements of the planning framework for Barnsley and the approach to its long term physical development. The relevant polices are outlined below:

CSP 33 Green Infrastructure

We will protect, maintain, enhance and create an integrated network of connected and multi-functional Green Infrastructure assets that:

- *provides attractive environments where people want to live, work, learn, play, visit and invest*
- *meets the environmental, social and economic needs of communities across the borough and the wider City Regions*
- *enhances the quality of life for present and future residents and visitors*
- *helps to meet the challenge of climate change*
- *enhances biodiversity and landscape character*
- *improves opportunities for recreation and tourism*
- *respects local distinctiveness and historical and cultural heritage*
- *maximises potential economic and social benefits*

At a strategic level Barnsley's Green Infrastructure network includes the following corridors which are shown on the Green Infrastructure Diagram 5:

- *River Dearne Valley Corridor*
- *River Dove Valley Corridor*
- *River Don Valley Corridor*
- *Dearne Valley Green Heart Corridor*
- *Historic Landscape Corridor*

The network of Green Infrastructure will be secured by protecting open space, creating new open spaces as part of new development, and by using developer contributions to create and improve Green Infrastructure.

We will produce a Green Infrastructure Strategy for Barnsley which will be informed by the Leeds City Region and South Yorkshire Green Infrastructure Strategies.

CSP 35 Green Space

We will work with partners to improve existing green space to meet the standards in our Green Space Strategy. Green space refers to any land within or close to towns and village that has or could have demonstrable value for recreation or wildlife.

- *We will only allow development proposals that result in the loss of green space where:*
- *an assessment shows that there is too much of that particular type of green space in the area which it serves and its loss would not affect the existing and potential green space needs of the borough; or*
- *an appropriate replacement green space of at least an equivalent community benefit, accessibility and value is provided in the area which it serves; or*
- *the development is for small scale facilities needed to support or improve the proper function of the green space*

We will assess the need for green space against the standards in our Green Space Strategy.

CSP 36 Biodiversity and Geodiversity

Development will be expected to conserve and enhance the biodiversity and geological features of the borough by:

- *protecting and improving habitats, species, sites of ecological value and sites of geological value with particular regard to designated wildlife and geological sites of international, national and local significance, ancient woodland and species and habitats of principal importance identified in Section 74 of the Countryside and Rights of Way Act 2000 and in the Barnsley Biodiversity Action Plan*
- *maximising biodiversity and geodiversity opportunities in and around new developments*

- *conserving and enhancing the form, local character and distinctiveness of the river corridors of the Dearne and Dove as natural floodplains and important strategic wildlife corridors*

Development which may harm a biodiversity or geological feature will not be permitted unless effective mitigation and/or compensatory measures can be ensured.

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 helvetica*, slow-worm *Anguis fragilis* and common lizard *Zootoca vivipara* receive partial or full 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 Regulations 2010. 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.

2.4 Barnsley Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations

and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Barnsley LBAP was first published in 2002 and revised in 2009. The plan lists a number of priority habitats and species that are afforded action plans to prevent or revert their decline and increase biodiversity across the area.

Reptiles do not have a species action plan under the LBAP. However, they are associated with hedgerows which have a Habitat Action Plan within the LBAP.

3.0 Methods

3.1 Desk Study

The current ecological appraisal of the site (MEC. 2015) was reviewed and the National Biodiversity Network (NBN) Atlas was searched for records of reptiles within 2km of the site.

3.2 Field Surveys

In accordance with recognised guidance outlined in the Herpetofauna Workers' Manual (Gent, T. & Gibson, S., 2003), Advice Sheet 10 – Reptile Survey (Froglife, 1999) and the Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring (Hill *et al.*, 2005) surveys were undertaken to establish the presence or absence of reptile species within areas of the site considered suitable to support reptiles. This involved seven visits, undertaken in suitable weather conditions.

The surveys were undertaken by WYG Assistant Ecologist Jonathan Siberry Grad CIEEM who is experienced in conducting reptile surveys.

Two weeks prior to the first site visit, 30 artificial refugia (sections of bituminised roofing felt) were placed on site throughout areas of suitable reptile habitat. The refugia were then left undisturbed for two-weeks to allow the mats to bed in, and for reptiles on the site (if present) to have time to find and utilise the refugia. The locations of reptile refugia are considered to provide a representative sample of the suitable reptile habitat onsite and are shown in Figure 2.

During the site visits, each refuge was first checked for basking individuals from a distance before being slowly approached and searched for sheltering reptiles. Terrestrial habitat between artificial refugia was also visually searched for reptiles on each visit.

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 9ºC and 18ºC. Heavy rain and strong wind are deemed unsuitable (Froglife, 1999). As reptile activity is heavily dependent on weather conditions the following conditions were recorded during each survey: time, air temperature, wind levels, rain levels, and the cloud cover.

The dates and weather conditions during each site visit are provided in Table 1 below.

Table 1 Dates and weather conditions during reptile surveys

Survey	Date	Air Temperature (°C)	Rain	Wind (Beaufort)	Cloud Cover (%)
1	26.05.17	15	0	1	0
2	02.06.17	16	0	3	80
3	16.06.17	16	0	3	90
4	23.06.17	14	0	3	90
5	13.09.17	12	0	4	25
6	15.09.17	10	0	1	100
7	22.09.17	10	0	0	0

3.3 Limitations

Full access to the site was available and it is considered that the surveys sufficiently covered the suitable habitat present on site. All surveys were undertaken within the optimum survey period (i.e. April – June, inclusive, and September) during suitable weather conditions. A two-week bedding period was also observed and therefore, this is not considered to be a limitation on the surveys.

The details of this report will remain valid for a period of two years from the date of the survey, after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be are any changes to the red line boundary or development proposals which this report was based on.

4.0 Baseline Conditions

4.1 Desk Study

A search of the NBN Atlas returned no records of reptiles within 2km of the site.

4.1.1 Previous Reports

A preliminary ecological appraisal (PEA) of the site was conducted in January 2015 (MEC, 2015). The habitats identified on site comprised poor semi-improved grassland, dense scrub, tall ruderal, scattered trees, standing water and a hedgerow.

The data search undertaken for the PEA identified records of grass snake within 2km of the site. These records were present in Rabbit Ings Country Park, located approximately 1.2km north-west of the site. The report also highlighted the presence of a disused railway approximately 230m east of the site, which has the potential to support reptiles. The disused railway provides connectivity to Rabbit Ings Country Park via Hemp Dyke

4.2 Field Survey

No reptiles were recorded during the seven visits made to the site.

Evidence of red fox was found on site and included:

- Sighting of red fox (26.05.17); and
- Red fox scat and possible feeding remains (13.09.17).

However, it should be noted that the possible feeding remains (pigeon remains) could be associated with domestic cats, which were also recorded on site.

5.0 Constraints and Opportunities

5.1 Reptiles

No reptiles were observed within the site during the surveys and reptiles are therefore considered likely to be absent from the site.

The proposed development is considered unlikely to have any impact on reptiles and no further surveys with respect to reptiles are recommended.

However, as reptiles have been found to reside in the wider area, it is recommended that appropriate working methods are employed in relation to reptiles during the works. A toolbox talk should be delivered to contractors prior to commencement of works on site to provide information about reptiles and to explain what should be done in the event of finding any reptiles on site.

If reptiles are found during development it is recommended that work should stop immediately and an ecologist contacted for advice.

5.2 Other Species

Red fox and further evidence of fox was recorded on site during the survey visits. All wild mammals are protected under the Wild Mammals (Protection) Act 1996. This act makes it an offense for any person to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering. It is therefore recommended that the site is checked by an ecologist to confirm the absence of fox dens/dependent young, prior to works, to prevent inappropriate harm.

6.0 Summary of Recommendations

- Reptiles are considered likely to be absent from the site and no further surveys with respect to reptiles are recommended.
- Given the presence of reptiles in the wider area though appropriate working methods should be employed in relation to reptiles during the works. A toolbox talk should be delivered to contractors prior to commencement of works onsite.
- If reptiles are found during development it is recommended that work should stop immediately and an ecologist contacted for advice.
- A red fox was recorded on site and their potential presence on site should be considered prior to commencement.

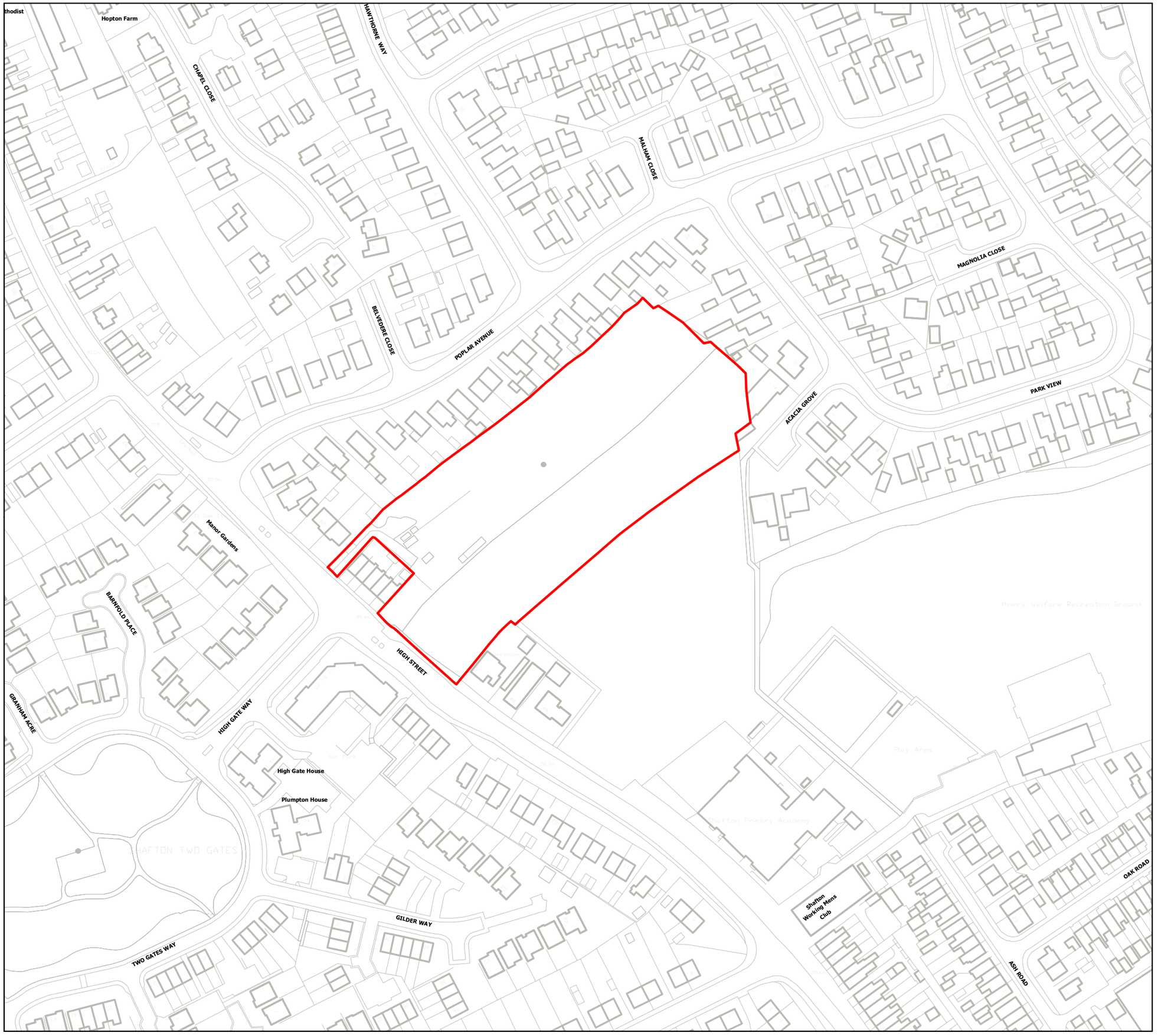
The details of this report are considered to remain valid for a period of 2 years from the date of the final reptile survey (i.e. September 2019). If works are delayed beyond September 2019, then the validity of this data should be reviewed to determine whether further updates are necessary.

7.0 References

- Froglife (1999) *Advice Sheet 10: Reptile Survey*
- Gent, T. & Gibson, S. (2003) *Herpetofauna Workers' Manual*. Joint Nature Conservation Committee.
- Hill, D.A., Fasham, M., Tucker, G., Shewry, M. & Shaw, P. (eds) (2005) *Handbook of Survey Methods: Survey, Evaluation and Monitoring*. Cambridge University Press, UK.
- Middleton Ecological Consultancy (2015) *High Street, Shafton, Barnsley: Preliminary Ecological Site Appraisal*, Issued January 2017

FIGURES

Figure 1 – Site Location Plan



Rev	Date	Notes
A	05/10/17	Initial map production

Legend

Site Boundary

0 12.5 25 50 75 100 Metres

Site Location Plan

Land at Shafton, Barnsley
Homes and Communities Agency

Scale at A3:	Project No:	Drawing No:	Revision:
1:3750	A090070-332	Figure 1	A

Drawn by:	Drawn date:	Approved by:
Jonathan Siberry	05/10/2017	Luke Verrall

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Figure 2 – Reptile Refugia Locations

Rev	Date	Notes
A	05/10/2017	Initial map production

Legend

- Site Boundary
- Tile Locations

0 5 10 20 30 40 Metres

N

Reptile Refugia Locations

Land at Shafton, Barnsley
Homes and Communities Agency

Scale at A3:	Project No:	Drawing No:	Revision:
1:1300	A090070-332	Figure 2	A

Drawn by:	Drawn date:	Approved by:
Jonathan Siberry	05/10/2017	Luke Verrall

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