



Land to the Rear of 53 - 57 Frogmore Lane Ecological Assessment

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For **Driftstone Developments Ltd**

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1.0 INTRODUCTION

1.1 Background

This document outlines the results of a Phase I and subsequent reptile survey carried out by Ecosupport Ltd between September and October 2017 in support of a planning application on behalf of Driftstone Developments Ltd. The survey was required after the initial walkover identified suitable habitat for reptiles and taking the presence of Slow Worms (*Anguis fragilis*) on the adjacent development into consideration.

1.2 Site Description, Location & Proposals

The site itself comprises parts of the rear gardens of No's 53 – 57 Frogmore Lane, Waterlooville PO8 9QL. The site is bounded on all aspects by residential housing and gardens (Fig 1). As per Fig 1 below the proposed scheme will entail the development of 4 bungalows with access via Frogmore Lane.

Figure 1. Proposed development plot with access via Frogmore lane.



1.3 Legislation & Policy Context

1.3.1 Relevant legislation

The Wildlife & Countryside Act 1981 (as amended) is the primary piece of legislation by which biodiversity in the UK is protected. The most relevant areas of the Act to development related activities are:

- The protection of certain species listed in Schedule 5, which prohibits killing, injury, disturbance, damage and / or destruction of breeding sites and / or resting places and sale (it should be noted that all parts of this protection do not apply to all Scheduled species).

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies to have regard to the conservation of biodiversity. This means that Planning Authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post- 2010 Biodiversity Framework*.

1.3.2 Planning policy

Government policy with respect to the protection of biodiversity is laid out in the National Planning Policy (NPPF) (Department for Communities and Local Government 2012). This places an onus on development to minimise impacts to biodiversity and where possible to provide net biodiversity gain. The NPPF provides guidance to Local Authorities in how to conserve and enhance biodiversity through local Planning Policies and when assessing Planning Applications.

2.0 METHODS

2.1 Phase I Survey

2.1.1 Habitats

The Phase I survey was conducted by Adam Jessop (senior ecologist with 6+ years experience) during late September 2017. Identification of suitable habitats and features to support protected species was undertaken during the initial Phase I walk over survey. This was carried out through a visual assessment of the site following the methodology outlined within the Joint Nature Conservation Committees (JNCC) *Phase I Habitat Survey Handbook* (2010).

2.1.2 Assessment of bat roost potential

An assessment was made of the suitability the buildings on site to support roosting bats based on the presence of any Potential Roost Features (PRFs). This involved the use of 8 x 42 close focus binoculars and a high-powered torch (where required) for a more detailed inspection of any features along with an internal inspection of the accessible loft spaces. The survey conformed to current best practice guidance as described *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) and was undertaken by Adam Jessop (NE class level 2 bat licence number 2015-13366-CLS-CLS).

2.2 Reptile Survey

A reptile survey was carried out between September & October 2017 following best practice methodology described in a number of sources (Griffiths & Inns 1998, Froglife 1999, Sewell et al., 2013). 20 artificial refugia comprising of bitumen roofing felt were distributed throughout all suitable habitats around the site. Seven visits to the site were subsequently undertaken during suitable weather conditions during which all the refugia were checked for the presence of reptiles in combination with a visual observation transect (see **Table 1** for results).

2.3 Limitations

There were not considered to be any significant limitations on the results of the surveys conducted in support of this document with all relevant works carried out at the appropriate times of year as defined by best practice guidelines.

3.0 BASELINE DATA

3.1 Vegetation Survey Results

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2010). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise:

- Improved grassland;
- Scattered shrubs and trees
- Hard standing; and
- Buildings;

3.1.1 Improved grassland

This is the dominant habitat type on site with all garden areas support well managed improved amenity grassland in places. This was of typically low botanical diversity supporting common lawn species including Annual meadow Grass (*Poa annua*), Daisy (*Bellis perennis*), Perennial Rye Grass (*Lolium perenne*), Self Heal (*Prunella vulgaris*), Cocks Foot (*Dactylis glomerata*) and lawn moss (**Fig 2**). Areas adjacent to the scrub /. Shrubs however were more unmanaged supporting a more tussocky structure.

Figure 3. Managed amenity grassland and bounding shrubs / scrub.



3.1.2 Scattered shrubs and scrub

Parts of the boundaries of the gardens support scattered shrubs and scrub with species noted including Leylandii, Ash saplings (*Fraxinus excelsior*), Laurel, Sycamore (*Acer pseudoplatanus*), Norway Spruce (*Picea abies*), Ivy (*Hedera helix*) and Bramble (*Rubus fruticosus* sgg).

3.1.3 Hard standing

An area of tarmac hard standing is currently located between numbers 55 and 57 (which will act as the site entrance) along with a small patio area to the rear of another property.

3.1.4 Buildings

A garage and two sheds are located on site. These have been described in greater detail in the below section in respect of any bat roosting potential.

3.2 Bats Roost Assessment

3.2.1 Buildings

The main built structure to be impacted upon is a garage associated with 55 Frogmore Lane. This was of redbrick wall construction with a flat roof (Fig 3). No PRFs were noted and it was subsequently considered to be of **Negligible** roost potential. The other two buildings were a shed and summer house, with both of these of wooden tongue and groove supporting single skin shallow pitched felt lined roofs. Both of these buildings were also considered to be of **Negligible** roost potential.

Figure 4. Google aerial image of the site with buildings outlined in red.



3.2.2 Trees

With all trees on site shrubby, they were not of a suitable size or age to be conducive to the establishment of PRFs and all can therefore be considered to be of **Negligible** roost potential.

3.3 Status of Reptiles on Site

The results of the reptile presence / absence survey undertaken on site are provided below in **Table 1**.

Table 1. Results of the updated reptile survey. AF = Adult Female, AM = Adult Male, Yr = Yearling, Juv = Juvenile, SW = Slow Worm (*Anguis fragilis*).

Date (2017)	Time	Temp (°C)	Cloud Cover (%)	Wind (Beaufort)	Reptiles	Total
25 th Sept	13:25	14	100	1	3 AF	3 SW
26 th Sept	15:30	18	100	0	1 AM, 2 AF, 1 Juv, 1 Yr	5 SW
28 th Sept	16:44	15	50	1	3 AF, 1 AM, 1 Juv	5 SW
4 th Oct	12:30	15	30	0	1 AF, 1 AM, 2 Yr, 2 Juv	6 SW
5 th Oct	15:30	15	0	2	2 AF, 1 AM, 4 Juv, 1 Yr	8 SW
9 th Oct	12:01	16	70	1	3 AF, 1 AM, 2 Juv	6 SW
12 th Oct	10:21	17	0	0	1 AF, 2 Juv	3 SW

With a maximum count of 8 Slow Worms (all within the unmanaged grassy habitat adjacent to the scrub / shrubs) this would indicate that there is a **LOW** population present according to the assessment criteria outlined within the Herpetofauna Groups of Britain and Ireland (HGBI) *Evaluating local mitigation / translocation programmes: Maintaining best practice and lawful standards* (1998).

3.4 Valuation

In order to inform the assessment of impacts from the proposed development, it is necessary to evaluate the ecological features or resources in nature conservation terms. The value of the reptile population on site has been estimated following the IEEM guidelines on Ecological Impact Assessment (IEEM, 2006), which use a geographical scale to describe the value of an ecologically important feature.

Based on the presence of a low population of Slow Worms the site is considered to be of **LOCAL** value for reptiles.

4.0 POTENTIAL IMPACTS TO REPTILES WITHIN THE DEVELOPMENT SITE

The IEEM guidelines (2006) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment.

4.1 Habitat Loss

The proposals will result in the permanent loss of approximately 100 m² of suitable reptile habitat comprising of unmanaged scrub and unmanaged rough grassland adjacent to the existing scrub / shrubs (NB if the garden areas are left unmanaged for enough time to become potentially suitable for Slow Worms, the habitat loss calculations may need to be updated).

4.2 Impacts to Individuals

Within the proposed area of impact, as a low population of Slow Worms is present site clearance, plant machinery movements and clearance of ground vegetation would likely harm/kill reptiles. Reptiles are protected under the Wildlife & Countryside Act 1981 (as amended).

5.0 RECOMMENDATIONS

5.1 Reptiles

Based on the current proposals and taking into account the likely presence of Slow Worms within gardens adjoin the site, a *in situ* relocation will first be explored where by the reptiles will be retained within a strip along the western boundary of the site within new garden areas (**Fig 5**). If however it will not be feasible to use this approach (if the loss of useable garden space for example causes an issue along with the difficulty in controlling appropriate management), an off site receptor may need to be explored (the area used for the adjacent site at Portsdown Hill will still have carrying capacity if a agreement can be reached with the land owners). The specifics of the reptile mitigation should be secured via an appropriate condition of any planning permission granted.

Figure 5. An example of the area that could be used to retain the reptile population (red shading) *in situ* if permeability is included within garden fencing.



5.2 Designated Sites

As the site is within 3 km of the Solent area SPA (and consequently falls within the 5.6 km 'disturbance zone' as identified within the Solent Disturbance and Mitigation Project), a contribution of £181.00 (index linked) per dwelling will be required to offset 'likely significant effects' from increased visitor pressure.

5.3 Nesting Birds

In order to avoid disturbance of nesting birds or damage to their nests, clearance of the trees and shrub should be undertaken outside of the bird-nesting season (typically March –

August, dependant on weather). If this is not possible, the area to be cleared should be thoroughly checked by an ecologist immediately prior to clearance. If any active nests are found they should be left undisturbed with a suitable buffer of undisturbed vegetation (ca. 3m) until nestlings have fledged.

5.4 Bat Boxes

Four bat boxes will be integrated into each gable end of the proposed new dwellings as close to the eaves at the apex of the roof as possible. The bat boxes available from Ibstock can be considered suitable as they are available in a variety of different construction materials and are self contained requiring no maintenance.

6.0 REFERENCES

Collins, J., (ed) 2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition)

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