

Biodiversity Enhancement Strategy (BES)

for

8a Dunheved Road North

Croydon

CR7 6AH



Prepared by Nick Clayton (BSc Hons) ACIEEM

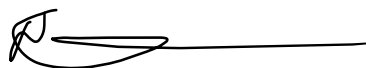
TSA Ecology – March 2024

Table of Contents

1. Introduction	4
2. Purpose of Plan	5
3. Site Description	6
4. Ecological Features	7
5. Enhancements	9
FAUNA	9
Appendix A.....	12
Site Plan and Resources	12

DOCUMENT CONTROL

Document Title:	Biodiversity Enhancement Strategy (BES), March 2024
The Client:	Heaven Estate Agents Ltd.

	Status ISSUE	Date of issue 28/03/2024
Author	Nick Clayton BSc (Hons) ACIEEM	
Reviewer	Tony Stones BSc, MSc, MCIEEM Ecologist	A J Stones.

1. Introduction

TSA Ecology was commissioned by Heaven Estate Agents Ltd. to prepare a Biodiversity Enhancement Strategy for the development at 8a Dunheved Road North, Croydon CR7 6AH, hereafter referred to as 'The Site'.

Planning application 23/00679/FUL for the proposed development includes construction of two residential units, gardens, a permeable paved driveway, and associated soft and hard landscaping. The new dwellings are proposed to incorporate a green roof. The proposed development requires the removal of tall ruderal, some dense scrub and a small number of scattered trees.

2. Purpose of Strategy

This strategy has been prepared to fulfil Condition 8:

"Prior to the commencement of above ground works, a Biodiversity Enhancement Strategy for protected and Priority species shall be submitted to and approved in writing by the local planning authority. The content of the Biodiversity Enhancement Strategy shall include the following:

- a) Purpose and conservation objectives for the proposed enhancement measures;*
- b) detailed designs to achieve stated objectives;*
- c) locations of proposed enhancement measures by appropriate maps and plans;*
- d) persons responsible for implementing the enhancement measures;*
- e) details of initial aftercare and long-term maintenance (where relevant).*

The works shall be implemented in accordance with the approved details prior to occupation and shall be retained in that manner thereafter.

Reason: To enhance protected and Priority species & habitats and allow the LPA to discharge its duties under the s40 of the NERC Act 2006 (Priority habitats & species)."

The strategy considers ecological features relevant to the site and development, sets out how retained features will be managed, and the locations, specifications and management of enhancements.

The plan was produced with reference to:

- a) Preliminary Ecological Appraisal. Claire Munn BSc (Hons) MSc MCIEEM, Associate Director (Ecology), David Archer Associates, 23/06/2022;
- b) Reptile Survey Report, 8a, Dunheved Road North, Croydon, CR7 6AH. Tony Stones, Principal Ecologist, TSA Ecology, 01/10/2022; and
- c) Construction and Environmental Management Plan (CEMP): Biodiversity, 8a, Dunheved Road North, Croydon, CR7 6AH. OB, December 2023.

Drawings 361-0102, 361-0251, 361-0252, 361-0253, 361-0450, 361-0451.

3. Site Description

The site is approximately 0.1 ha in size, comprises tall ruderals, dense scrub and scattered trees of low to moderate biodiversity value, and hardstanding of negligible biodiversity value.

The tall ruderals and dense scrub consist of low species diversity and structure, and are of negligible importance. The scattered trees around the Site add structure and are considered of importance at the Site level only.

4. Ecological Features

Ecological features relevant to the development as identified and mapped within the PEA Report (David Archer Associates, 2022) and Reptile Report (TSA Ecology, 2022) are summarised below.

Tall Ruderal and Dense Scrub

“The tall ruderals and dense scrub provide the habitat structure that reptiles, most likely slow-worms *Anguis fragilis* typically require. Suitable habitat is present in the adjacent gardens to support slow-worms in particular. The site therefore holds moderate potential for reptiles, with slow-worms the most likely species to be present in this urban area.” (David Archer Associates, 2022).

This moderate potential was assessed by a presence/absence reptile survey following the methodology in Herpetofauna Workers Manual (Gent and Gibson, 1998) and the Froglife Advice Sheet 10 – Reptile Survey (Froglife 1999) during the 2022 season by TSA Ecology.

“Habitat suitable for reptile occupation (foraging, basking and cover) was noted within the site, in particular the rank grassland and the bramble. However, due to the small size and isolated nature of the site, the loss of any potential suitable areas of habitat for reptiles through development is therefore considered to be negligible, in terms of the limited value of this habitat for any reptiles which might be present. Reptiles were not recorded during the seven survey visits on the application site. From these results, it can be concluded that the presence of reptiles onsite can reasonably be discounted. It is, therefore, concluded that these species provide no statutory constraints to the proposed development of the site and no further survey or mitigation is necessary (TSA Ecology, 2022).

Trees and Bats

“Two mature sycamore trees with low suitability for roosting bats during the active season were recorded within the site boundary due to holes, cracks and fissures present on the trunks and / or limbs of the trees and dense ivy coverage TN 2 and TN 3. Other trees

surveyed on site are of negligible suitability for roosting bats during both the active and hibernation seasons as they lack suitable features.” (David Archer Associates, 2022).

Birds

“Bird interest (nesting / foraging) is likely to be confined to the dense scrub and scattered trees. The site therefore holds high potential for widespread species of nesting bird. The site overall is, however, considered to hold negligible potential for bird species listed as Annex I (Birds Directive) and / or Schedule 1 (WCA). The small nature of the site, lack of connectivity to open areas of fields or water, and heavy levels of disturbance mean that the site has negligible potential for notable wintering bird species and assemblages.” (David Archer Associates, 2022).

Terrestrial Mammals

“Some areas of habitat had high potential for hedgehogs, including the tall ruderals for foraging and margins of the dense scrub areas for shelter. Suitable habitat is present in the adjacent gardens and surrounding landscape” (David Archer Associates, 2022).

5. Enhancements

The on-site enhancement habitats proposed for incorporation into the design scheme aim to support the species present, or considered likely to be present, within this suburban area, and encourage further use of the site by these species. The species concerned are commoner breeding bird species (e.g. blue and great tit, robin, dunnock, blackbird, wren etc.) the more widely distributed bat species (typically many of the pipistrelle species), and invertebrate species (bees, wasps and butterflies).

HABITATS

New Hedgerow

Native hedgerow is to be planted along the northern, western and eastern site boundaries to increase habitat connectivity both to and around the site. To the north and the west, this will comprise locally-sourced hawthorn *Crataegus monogyna* base, with added native fruit and berry-bearing species as hazel *Corylus avellana*, crab apple *Malus sp.*, blackthorn *Prunus spinosa*, guelder rose *Viburnum opulus* and spindle *Euonymus europaeus*. This will benefit birds, bats, small mammals and invertebrates. The eastern hedge will be of native hornbeam (17 m in total over two hedgerow lengths), with the rationale included within the proposed design drawing (see Appendix A).

New Green Roofs

New green roofs are to be incorporated into the new building design at four locations (4 x 2.5 m²), with two on the main building, one on the bin store and one on the cycle storage shed. These will all comprise wildflower turf WFT-Roof 34 and will benefit overall invertebrate diversity.

FAUNA

Birds

Bird boxes are to be installed on site to encourage nesting birds onto the site, with two Schwegler bird boxes (1 x general bird box, and 1 x SP sparrow terrace, or suitable long-lasting alternatives) to be installed onto the new buildings at least 3 m above the ground (if possible), avoiding direct sunlight (not directly south-facing) and prevailing wind.

The boxes are to be of a design that gives access for checking and cleaning, annually in autumn. They are to be installed under the supervision of an ecologist or suitably experienced

person, in order to fine-tune the best location for each box once planting and landscaping has been completed.

1 x nest box 25 mm entrance hole (suited to Blue Tits, and other small birds).

1x sparrow terrace nest box (suitable for colonisation by house sparrows).

Bats

Bat boxes are to be incorporated into the building design.

Three bat boxes are proposed, to be located on the west and south-facing aspects (see Enhancement Plan figure). These boxes aim to support a range of bat species, and particularly those species associated with urban / suburban habitats, such as pipistrelle, brown long-eared and Leislars.

Terrestrial Mammals - Hedgehog

To enable foraging and commuting hedgehog to continue to pass through the Site. Should fences be installed after occupation, gaps should be made to enable hedgehog to continue to pass into the gardens.

Hedgehog Holes (Hole 13 cm x 13 cm minimum) to be installed into each close-boarded boundary fence, between plots at ground level, to enable hedgehog to pass through unobstructed.

Invertebrates

4 x insect houses to be placed on top of the new green roofs. Invertebrates in general will benefit from habitat creations of new roofs and new hedgerows on site.

6. Responsible Persons

The responsible party for implementing the enhancement works will be Salman Gillani, Director, Heaven Estate Agents Ltd.

Appendix A

Resources

Item	Notes
Double sparrow terrace	https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box?bkfno=210670
Hedgehog holes	https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/
Hedgehog home	https://www.britishhedgehogs.org.uk/hedgehog-homes/ https://homeandroost.co.uk/blog/hedgehog-house-guide/
Wetland wildflower seeds	https://www.wildflower.co.uk/products/wildflower-seed-mixtures/80-20-wildflower-meadows-seed-mixtures/lw6-wetland-pond-edge-80-20.html
Wildflower seed mix	https://www.wildflower.co.uk/products/wildflower-seed-mixtures/80-20-wildflower-meadows-seed-mixtures/