

# Biodiversity Management Plan

Land to the East of Cote Lane, Thurgoland

Condition 12 of Planning Permission 2016/0340

R-2524-04

December 2018



|                     |                                                                           |
|---------------------|---------------------------------------------------------------------------|
| Report Reference:   | Biodiversity Management Plan<br>Land to the East of Cote Lane, Thurgoland |
| Report Reference:   | R-2524-04A                                                                |
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| Date:               | 11/01/2019                                                                |

The information which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice.

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# Introduction

This Biodiversity Management Plan (The Plan) is produced for Berkeley DeVeer to aid in the discharge 12 of Planning Permission 2016/0340 for the erection of 24 dwellings with means of access and public open space at Land to the East of Cote Lane, Thurgoland, Sheffield, South Yorkshire, S35 7AB. The condition is repeated below.

Condition 12

Prior to commencement of development full details of the mitigation measures identified in the Ecological Survey (Brooks Ecological report ref R-2524-01), including a timetable for their implementation, shall be submitted to and approved in writing by the Local Planning Authority. The development shall be implemented in accordance with the approved details.

Reason: To conserve and enhance biodiversity in accordance with Core Strategy Policy CSP 36.

The Plan is produced in accordance with Chapter 11 of British Standard 42020.

Reports which set out how wildlife interests will be enhanced, restored and maintained go under a variety of names, generated by the planning case officer or their internal consultant. As these names refer to the same output we standardise the name of our reports regardless of what appears in a planning condition as 'Biodiversity Management Plans' (BMPs), a term as referenced in BS42020 Clause D.4.5.

## Supporting Documents

- In producing this plan, the following information sources are referred to:
- Brooks Ecological Report R-2524-01. Preliminary Ecological Appraisal, Cote Lane, Thurgoland (March 2016)
  - Brooks Ecological Report R-2524-02, Bat Survey - Interim Report, Land off Cote Lane, Thurgoland (December 2018)
  - Brooks Ecological Report R-2524-03, Badger Survey, Land off Cote Lane, Thurgoland (December 2018)
  - JRP Associates drawing P17:5149:01 - H, Proposed Site Layout (29.08.18)

## Delivering the Plan

Berkeley DeVeer is responsible for the creation and establishment works for a five-year period.

Berkeley DeVeer will appoint *either* a Specialist Ecological Management Company (SEMC) or a company working under the direction of an Ecological Clerk of Works (ECow) to oversee the delivery of this plan prior to any work commencing on site.

The ECow would be a qualified Ecologist and member of the Chartered Institute for Ecology and the Environment, or be otherwise approved by the LPA.

After year five, this plan will be the responsibility of a Site Management Company.

This plan and the use of an ECow or SEMC will be included in the terms of reference of the Site Management Company and incorporated in their long-term Management Plan.



## Legal and Funding Mechanisms

In-perpetuity management will be secured from the Site Management Company's management fund.

Funds needed to manage the site in perpetuity will be set by the Developer before the Site Management Company is instructed so that it is itemised and budgeted into any tenants' Management Company subscription.

Figure 1 Masterplan



# Opportunities and Themes



## Wildflower meadows

Area of naturalist wildflower meadow, sown and managed within areas of POS, can provide high value habitat for groups such as invertebrates, and create an impressive backdrop to the development.



## Homes for declining birds & bats

New builds often fail to provide opportunities for nesting birds and roosting bats, with the eaves and verges being well sealed.

A wide range of designs are now available on the market which can either be fixed to the masonry, or built discretely into the fabric of new walls.



## Maintaining connectivity for Hedgehog

Hedgehog have seen significant declines over the last few decades, with one of the major factors being habitat loss and fragmentation. Gardens provide excellent hedgehog habitat and by simply providing a means of access into these, new gardens can very quickly once again become home to this enigmatic species.

# Wildflower-rich Grassland

## Rationale

Areas otherwise specified as amenity grass will be seeded with native wildflower-rich seed mixtures. These will create an attractive backdrop to the development, as well as provide a source of shelter, nectar and pollen for a wide range of insect life, and in turn, will attract the animals that prey upon them, such as birds and bats.

## Objectives

- 1. Ensure that the 80% of species germinate and develop
- 2. Ensure that plants can flower
- 3. Ensure that flowering plants attain & remain at no less than 30% of the sward

## Specification

### Mixes

EL1 Flowering Lawn Mixture

Seed mixtures supplied by Emorsgate Seeds . <https://wildseed.co.uk/mixtures> (or approved alternative)

### Preparation

No more than 5cm of topsoil will be spread over the subsoil profile. This will be loose tipped and spread with back actor to avoid compaction, and harrowed to a fine tilth ready for seeding.

### Seeding

Seed according to supplier’s instructions. If soils have been spread before September, any weed growth that has established in the meantime will be sprayed off with glyphosate and a seedbed be re-prepared.

Seed will either be broadcast by hand or by approved lightweight machinery at c. 40Kg /Ha. Following seeding, the area will be lightly rolled to incorporate the seed with the growing substrate.



## Management

### Year 1

Five cuts, collect arisings and remove from site. Use a weed wipe three times in year 1 to kill off weeds - Spear thistle, creeping thistle, broad-leaved dock, clustered dock, wood dock, curled dock, nettle, ragwort and others according to ECoW recommendations. Operative must be proven competent in identifying these in their early stages to prevent killing off sown wildflowers.

### Year two onwards

Cut as normal amenity grass, as specified in the overall landscape maintenance contract. Cutting should not be more frequent than every three weeks. Longer periods (four weeks plus) in mid-summer are advantageous .

## Monitoring

Year 2 Ecologist survey to record relative cover values according to objective 1 and 3.

### Output

ECoW report

### Remedial actions

Localised weed control or over sowing with wildflower seed under the instructions of the ECoW.



# Bird & Bat Boxes

## Rationale

The Site currently lacks opportunities for hole nesting birds and crevice dwelling bats. A provision for 25% (6) bird box and 25% (6) bat box to building ratio will be provided on Site, to enhance the development for nesting birds and roosting bats.

Plans of this nature often fall down and fail to be implemented correctly due to their overcomplicated design. The following scheme has therefore sought to be as simple as possible to ensure the best chances of it being adopted correctly.

A single type of bat box has been selected, which is aimed at the most common bat species (crevice dwellers like pipistrelle) and thus the most likely to be present locally, thus increasing the chances of these boxes being taken up.

Two styles of bird box have been selected, aimed at attracting three of the most declining garden birds; house sparrow, swift and starling.

## Boxes

| Target group | Specification        | No. | Siting              |
|--------------|----------------------|-----|---------------------|
| Bat          | Habibat Bat Box      | 6   | Building - integral |
| Bird         | Manthorpe Swift Box* | 4   | Building - integral |
| Bird         | Starling box         | 2   | Tree                |

\* This box has been specially designed in partnership with major home builders and the RSPB. Although aimed primarily at swift, this box also provides nesting opportunities for House Sparrow and other small birds, such as blue & great tit.

## Location Notes

As shown in figure (below).

Boxes will be positioned as high up on buildings as possible, ideally directly below the eaves.

Bird boxes will not be installed directly above doors or windows.



## Installation

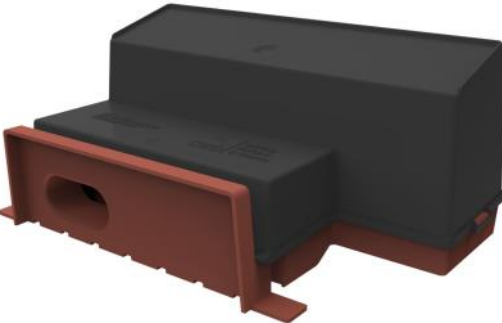
As per supplier instructions.

## When erected?

Integral - during construction  
Tree mounted - prior to sale of first unit

## Verification

Ecological Clerk of Works Certificate



# Hedgehog Provision

## Rationale

Hedgehog have seen significant declines over the last few decades, with one of the major factors being loss of habitat. New gardens provide excellent hedgehog habitat and whereas previously, these gardens were accessible to this species by virtue of hedgerow planting, a change in industry practice to hard borders (fences and walls), have inadvertently excluded hedgehog from this extensive foraging resource. Simply providing a means of access into these new rear gardens can very easily and cheaply increase the amount of habitat available to hedgehog.

## Hedgehog access holes

### Specification

At least one hedgehog access hole (measuring at least **13cm by 13cm** ) will be installed in each new rear garden fence line. These will be either purpose made panels such as those supplied by Jackson Fencing or be cut into standard fences, by contractors, during installation. Where concrete gravel boards are used either purpose built ramps to access holes in the fence panels, or underpasses beneath the boards will be made. These holes will be simply labelled so home owners know why there are there.



### Hedgehog Access Plan

Indicative layout for the new hedgehog access holes in garden fence lines.



# Work Schedule

The work schedule overleaf covers the 5-year establishment period (Developer’s responsibility) and the in-perpetuity period [6+] (Site Management Company’s responsibility).

‘Year 1’ is triggered as soon as any works commence on site. The following actions will be carried out by the site’s landscape maintenance company under the direction of the ECoW where required.

| Task                                | ECoW to direct | ECoW to carry out | Prior to any work | Year 1              | Year 2            | Year 3     | Year 4     | Year 5     | 6+         |
|-------------------------------------|----------------|-------------------|-------------------|---------------------|-------------------|------------|------------|------------|------------|
| Ground forming and soil cultivation |                |                   |                   | Yes                 |                   |            |            |            |            |
| Prepare grassland areas for seeding |                |                   |                   | March-September     | March-September   |            |            |            |            |
| Seed wildflower grassland           |                |                   |                   | September-October   | September-October |            |            |            |            |
| Establish wildflower grassland      | Yes            |                   |                   | April-September     | April-September   |            |            |            |            |
| Manage wildflower grassland         | Yes            |                   |                   | April-Sept          | April-Sept        | April-Sept | April-Sept | April-Sept | April-Sept |
| Hedgehog holes                      |                |                   |                   | During construction |                   |            |            |            |            |
| Erect bird and bat boxes            | Yes            |                   |                   | During construction |                   |            |            |            |            |