

James Blake Associates Ltd

Our Ref: JBA 19/291 ECO02 AC

18th August 2020

Roger White
For and on behalf of Barratt Homes Southern Counties

Dear Roger

RE: Biodiversity Net Gain Calculation for Land East of Drove Lane, Yapton, West Sussex

James Blake Associates Ltd. was commissioned by Barratt Homes Southern Counties to provide a biodiversity net gain calculation for the proposed development at Yapton, West Sussex (planning application ref: Y/92/17/OUT, Arun District Council). This statement discusses the net gain calculation with reference to the mitigation, compensation and enhancement measures detailed in the '*Habitat and Ecology Enhancement Management Plan*' (Lizard Ecology, 2018 Rev 02).

Background

A biodiversity net gain calculation has been carried out using Defra Biodiversity Metric 2.0 (updated September 2019). For more information on the metric, please see here .

Defra's Biodiversity Metric 2.0 provides a way of measuring and accounting for biodiversity losses and gains resulting from development or land management change. The metric encompasses both area (e.g. grasslands) and linear habitats (such as hedgerows, rivers and streams). Note that enhancements for species, such as bat/bird boxes, reptile hibernacula, hedgehog 'highways' etc. cannot currently be factored into the calculation.

The habitats and linear features currently present on site are used to calculate the baseline biodiversity units; the percentage gain that the proposed development can potentially deliver is estimated using the landscape design for the development.

At present, national policy states '*opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity' (NPPF, 2019).* The figure of 10% net gain is sometimes regarded as the minimum but this is not yet mandatory.

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ARUN DISTRICT COUNCIL Y/78/20/RES

Methodology

The baseline figures for the metric calculation were based on the Ecological Walkover Survey (JBA, 2020). The area measurement for each of the baseline habitat and hedgerow types was made using Defra's MAGIC map, please see here .

The strategic significance of the location was checked against the Green Infrastructure Strategy for Arun Council. The site did not appear to be in or near to a locality mentioned in the Strategy. However, this category can be amended accordingly if the location has been mentioned as ecologically important in a local plan (e.g. BAP plan) or is ecologically desirable (e.g. by reason of proximity or connectivity to stated ecologically valuable areas).

The areas for habitat to be retained and/or created were taken from the soft landscape drawing plans prepared by JBA (JBA, 2020).

The grassland field to the north east will be retained by the development. At present, it has been assumed that this area will not be enhanced for biodiversity and that there will be no change in its ecological interest. If the management will enhance the current biodiversity, the metric can be amended accordingly.

In terms of habitat creation, landscape planting schemes do not always translate directly into ecologically relevant habitat types, so the best fit for the landscape plans was selected from the draw-down menu in the metric. For example, native buffer mix is categorised as mixed scrub.

A value of 'moderate' has been ascribed to the condition of the more biodiverse created habitats as these are unlikely to achieve the same ecologically 'good' condition as their semi-natural equivalents.

The overall score is a loss of 5.4% for habitat units but a 108% gain for hedgerows. The high % gain for hedgerows is due to the retention of most of the existing hedges and the creation of over 400m of new native species-rich hedge. The loss in habitat units is due to the relatively low proportion of open space that will be provided by the proposed development even though this will have an element of native planting.

Evaluation

The loss/gain of habitats/hedgerows is only a part of the proposed enhancements to be delivered by the development. The suggested locations for bird and bat boxes on dwellings and retained mature trees are given in Appendix A. Also shown in Appendix A is the location for log piles/compost heaps to benefit reptiles, hedgehogs etc. The location of hedgehog gaps in fences (13cm x 13cm) are not shown in the drawing but it is anticipated that about 20% of fences will have these installed, connecting with the boundary habitats. Note that the final location of enhancements should be determined during construction by an Ecological Clerk of Works; this figure is for illustrative purposes.

It is considered that with the net positive gain in hedgerows and the provision of species enhancements, the net gain that can potentially be delivered by the development is likely to be positive overall.

Comparison with Lizard Ecology's Plan

The revised JBA landscape scheme overlaps considerably with the Ecology Enhancement Management Plan (Lizard Ecology, 2018). There will be new native hedges, wildflower grasslands and species enhancements. The attenuation basins will be planted with a wet wildflower mix and native trees and shrubs will be planted throughout the site. The number of native species of trees and shrubs has been generally increased from Lizard Ecology's plan.

Lizard Ecology's plan mentions the sowing of different types of seed mix, such as EH1 – Hedgerow Mixture, EL1 – Flowering Lawn Mixture and EM10 – Tussock Mixture, within the open space areas in addition to EM2 – General Purpose Meadow Mixture. Recent landscape plans include the sowing of EM2 seed mix, but the other mixes have not been included. This could presumably be considered, however, small areas of less than 0.01ha (100m^2) could not be included within the metric.

The bat and bird boxes have been selected to accord with the recommendations of Lizard Ecology but the numbers of these have been increased where possible.

Conclusions

It is concluded that the development can potentially deliver a net gain in biodiversity. The positive gain in hedgerows and species enhancements are probably sufficient to overcome the negative deficit in habitats. Further consideration of the habitats can be made which may lessen the deficit.

Yours sincerely,

Dr Alison Collins MCIEEM
Senior Ecologist
James Blake Associates Ltd.

References

Lizard Ecology (2018) *Habitat and Ecology Enhancement Management Plan:* July 2018 Rev 02. LLD1320-ECO-EDS

JBA (2020) *Ecological Walkover Survey:* January 2020

JBA (2020*) Detailed Landscape Proposals for Plots and POS Drawings numbered 01 to 10 REV C.*

National Planning Policy Framework HMSO (February 2019)

Appendix 1 Suggested location for species enhancements (Hedgehog gaps in fences not shown)

