











JAMES BLAKE

ASSOCIATES

Our Ref: JBA 17/316 ECO17a SR

30th June 2023.

On behalf of Vistry Homes Ltd.

Biodiversity Net Gain Calculation for Land at Buntingford West, Buntingford, Hertfordshire

1. Introduction

- 1.1 James Blake Associates Ltd. (JBA) was commissioned by Vistry Homes Ltd. to provide a biodiversity net gain calculation for the proposed development on land at Land at Buntingford West, Buntingford, Hertfordshire (South Hertfordshire District Council).
- 1.2 This statement explains how the net gain calculation was carried out, the assumptions made and the conclusions from the calculations. Only habitats/linear features currently and proposed within the site boundary have been included within the calculations. The proposed landscape plan has been used to make the post-development assessment; this is provided in Appendix A.
- 1.3 The assessment is required due to an Outline planning application (with all matters reserved except for access) for: Development of 350 dwellings, with up to 4,400 sqm of commercial and services floorspace (Use Class E and B8), and up to 500 sqm of retail floorspace (Use Classes E) and other associated works including drainage, access into the site from the A10 and Luynes Rise (but not access within the site), allotments, public open space and landscaping.

2. Background

- 2.1 A biodiversity net gain calculation has been carried out using Defra Biodiversity Metric 4.0 (updated March 2023). For more information on the metric, please see here.
- 2.2 Defra's Biodiversity Metric 4.0 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 'material' enhancements for species, such as bat/bird boxes, reptile hibernacula, hedgehog 'highways' etc. cannot currently be factored into the calculation.
- 2.3 The habitats and linear features currently present within the site boundary are used to calculate the baseline biodiversity units; the percentage gain that the proposed development can

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potentially deliver is calculated using the 'Plan Showing Public Open Space' for the development and assumptions made by the assessor (Appendix A).

2.4 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, 2021). The figure of 10% net gain is sometimes regarded as the minimum but this has now been highlighted as mandatory with the emerging Environment Bill, from end of November 2023.

3. Methodology and Rationale

- 3.1 The baseline figures for the metric calculation were based on the Phase 1 Habitat survey undertaken by JBA in 2020, which was later updated in 2023 (JBA, 2023). The area measurement for each of the baseline habitat types was made using Defra's MAGIC map: for more information about MAGIC, please see here.
- 3.2 Baseline habitats consist of winter wheat arable land (previously non-cereal crop), poor semiimproved grassland and ruderal vegetation associated with the field margins. Other habitats present include; scrub (bramble and mixed), bare ground and hardstanding. Hedgerows and ditches are also present within the site boundaries. All hedgerows are native but species-poor.
- 3.3 Additional off-site habitat totalling 7.6 hectares is available on the adjacent side of the A10 to the site, which is currently arable land. This has also been included within the assessment as off-site habitat.
- 3.4 The strategic significance of the site location was checked against the 'Adopted Local Plan' for East Herts. The location did not appear to be in or near to a locality mentioned in the Strategy.
- 3.5 The areas for habitat to be retained and/or created were taken from the 'Plan Showing Public Open Space' drawing prepared by FPCR Environment and Design Ltd. (2023) (Appendix A).
- None of the arable habitats within the site boundary will be retained; however, the development will provide new habitats in the Public Open Space (POS) area. A total area of 5.93ha of natural and semi-natural greenspace is proposed for the site which will include wildflower grassland, wet wildflower grassland (in the SuDS area), trees and native buffer planting associated with the proposed acoustic fencing and bund. This total area also includes retained existing hedgerows on site. Tree planting will also add biodiversity value to the scheme. Native plant species should be used to create the wildflower, wet wildflower grassland and marginal plug planting.



- 3.7 Amenity grassland will be used within the POS areas for recreational use, and gardens in the residential area with be turfed. Several areas of children's equipped play will be scattered throughout the site, totalling 0.22ha.
- 3.8 Majority of boundary hedgerows will be retained and existing gaps used for access; it has been recommended that the retained hedgerow with trees running through the centre of the site is enhanced to mitigate the small loss of hedgerows for proposed access roads and visibility.

 Appropriate mitigation should be detailed within a Landscape Management Plan or similar.
- 3.9 Similarly, the wet ditch bisecting the large two field areas of the site will also be retained and enhanced to improved it current condition. Additionally native hedgerow will be proposed at suitable locations throughout the development. A number of ornamental shrubs will likely be used in the residential areas.
- 3.10 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.
- 3.11 A value of 'moderate' has been ascribed to the potential condition that could be achieved by wildflower grassland (categorised as 'other neutral grassland' in the metric). 'Other neutral grassland' is described in UKHab (2020) classification as species-rich, semi-improved neutral grassland. A condition score of 'moderate' has been ascribed as there is likely to be minor differences between the created grassland and what is described in the relevant habitat classification for priority grassland habitat.
- 3.12 A condition score of 'moderate' has been ascribed to the wet wildflower grassland (also categorised as 'other neutral grassland') as this will be more species-rich; it is assumed to be plug-planted with native aquatic emergent species in addition to being sown with a native seed mixture suitable for seasonally wet soils.
- 3.13 An 'Ecological Enhancement Area' of 1.22ha is proposed at the edges of the off-site arable land. 1.22ha of this arable land will be converted to a wildlife meadow habitat (classified as 'other neutral grassland') and appropriately managed in order to gain a 'good' value. Details of which will be secured within an appropriate management plan, which can be secured by way of a planning condition or appropriate legal agreement. It should be noted that this is not required to mitigate for the loss of habitats within the site boundary and will be an enhancing measure rather than mitigation, providing landscaping proposals do not change significantly and detailed landscape stage.



4. Evaluation

- 4.1 The on-site BNG score is a gain of 20.81% for habitat units, a 32.08% gain for hedgerows/linear features and a gain of 58.10% for 'river' units. However, with the inclusion of the off-site land, the BNG score for habitat units is increased to 41.98% gain.
- 4.2 It is worth noting that these gains are purely from habitats/hedgerows and therefore 'material' enhancements are not included in this calculation. Although, it is recommended the proposed development includes the following enhancements;
 - Bird and bat boxes to be erected onto new dwellings and retained mature trees (where possible)
 - Hedgehog gaps (13cm x 13cm) to be created in garden fences to ensure small mammal movement is maintained throughout the site.
 - In addition, hibernacula to benefit reptiles, amphibians etc.
- 4.3 Note that the final location of enhancements should be determined during construction by an Ecological Clerk of Works (ECoW).

5. Conclusions

- Based on 'Plan Showing Public Open Space' drawing (FPCR, 2023) (Appendix A) and assessor assumptions, it is concluded that the development can deliver biodiversity net gain of 20.81% for habitat units, a 32.08% gain for hedgerows/linear features and a gain of 58.10% for 'river' units. Off-site land could also be included at the Applicants discretion to increase the overall habitat unit gain to 41.98%.
- 5.2 The development is expected to deliver more of a gain when 'material' enhancements are included such as bird and bat boxes.
- 5.3 Landscape and ecological management plans may be required to secure the potential benefits for biodiversity in perpetuity, which can be secured by way of a planning condition or appropriate legal agreement.

Yours sincerely,

Sam Rigg MCIEEM Ecologist

James Blake Associates Ltd.



References

East Herts Council (2018) East Herts District Plan 2018

James Blake Associates Ltd. (2020) *Preliminary Ecological Appraisal of Land at Buntingford West, Hertfordshire.* On behalf of Vistry Group Ltd.

JBA (2023) Buntingford West, Hertfordshire; Updated Ecological Walkover Survey Report 2023. On behalf of Vistry Group Ltd.

FPCR Environment and Design Ltd. (2023) *Plan Showing Public Open Space of Buntingford West, Buntingford, Hertfordshire.* On behalf of Countryside Partnerships and Vistry Group Ltd. Drawing number: 10537-FPCR-XX-XX-DR-A-0007_P03



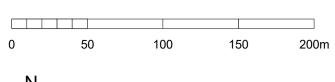
Appendix A. Plan Showing Public Open Space (FPCR, 2023)





IOTES

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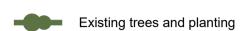




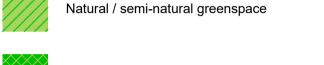
KEY

Application boundary

Land under the control of the applicant

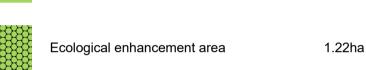


Amenity green space, parks and gardens	1.37ha









Total 15.40ha



Indicative attenuation feature

Indicative acoustic fence on bund with proposed planting

	Average	
Dwellings	occupancy	People
350	2.32	812

	Area per 1000 people	Site requirement	Site provision	Difference between provision & requirement
Children's play and provision for young people	0.25	0.20	0.22	+0.02
Amenity green space, parks and gardens	1.40	1.14	1.37	+0.23
Natural / semi-natural greenspace	3.20	2.60	5.93	+3.33
Allotments	0.30	0.24	0.28	+0.04
Total		4.18	7.80	+3.62

rov	data	description	drn	oble
P01	19/05/2023	First issue.	JMG	KMN
P02	26/05/2023	Title block amended; table amended.	JMG	KMN
P03	14/06/2023	Proposed roundabout added; key amended.	JMG	KMN



Countryside Partnerships and Vistry Homes

Buntingford West, Buntingford, Hertfordshire

PLAN SHOWING PUBLIC OPEN SPACE

scale	drn chk	date created
1:2500 @ A1	JMG KMN	April 2023
project number	status	issue
10537	S3	P03

document number 10537-FPCR-XX-XX-DR-A-1007 Project Code - Originator - Zone - Level - Type - Role - Drawing Number

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