

BIODIVERSITY NET GAIN ASSESSMENT SUMMARY

**LAND WEST OF OLD MANOR FARM,
SOUTH OF LOWER ROAD, BEDHAMPTON**

NOVEMBER 2022

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1.0 INTRODUCTION

1.1 Background

A Biodiversity Net Gain matrix assessment has been undertaken to provide information on proposed biodiversity mitigation and enhancement measures that can be put in place for the development proposals at to the west of Old Manor Farm, south of Lower Road, Bedhampton.

1.2 Planning Policy

The Environment Act 2021, which received royal assent in November 2021 provides legislation relating to biodiversity net gain for development, and this is being phased into law over the next two years.

The updated National Planning Policy Framework (NPPF, 2021) states (paragraph 174) that:

“Planning Policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.”

1.3 Methodology

The DEFRA Biodiversity Metric 3.1 Calculation Tool has been used to determine a quantifiable number of biodiversity units produced during the operational stage of a project. The post-construction/operational value is compared to the baseline biodiversity (pre-construction) value to determine if the proposals will result in a net gain or net loss in biodiversity.

The following documents submitted as part of the Outline Planning Application have been used to inform this report:

- Ecological Assessment (Aluco Ecology, 2021) – to assess baseline/pre-intervention habitats;
- Illustrated Masterplan (Mosaic, 2021) 1217 V5 – to assess habitat creation/post intervention habitats;
- Design and Access Statement (Mosaic & Bargate Homes, 2021) – to assess habitat creation/post intervention habitats.

The assessment has been undertaken by Aluco Ecology Ltd, with a site visit to classify habitats according to the UKHab criteria (Butcher et al, 2020) was undertaken with numerous site visits between November 2013 to March 2022. The matrix assessment is provided as an excel accompanying this document.

2.0 BIODIVERSITY NET GAIN RESULTS

2.1 Headline Results

The Matrix has provided the following headline results:

On-site baseline	<i>Habitat units</i>	7.40
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	13.44
	<i>Hedgerow units</i>	0.09
	<i>River units</i>	0.00
On-site net % change (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	81.57%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	6.04
	<i>Hedgerow units</i>	0.09
	<i>River units</i>	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	81.57%
	<i>Hedgerow units</i>	100.00%
	<i>River units</i>	0.00%
Trading rules Satisfied?	Yes ✓	

2.2 Baseline Metric Assessment

In undertaking the net gain assessment the following habitats are present on site:

- Built linear Features. There is 0.4ha of access roads and pathways, which are part of the currently in process development to the west of the site. This site is subject to planning permission and is in the process of being built, so the habitats here are assessed as their proposed end result – built linear features;
- Arable Farmland Cereal Crop – Areas of grassland on site are classified under this habitat type, as cereal crops, which is further described in the Ecological Appraisal (Aluco Ecology, 2022);

- Tussocky Arable field margins. – A small area of arable field margin on two boundaries unmanaged as tussocky grassland.
- In terms of the site's strategic significance, given the review of the site by Solent Waders and Brent Goose Strategy in 2022 (for example see Aluco Ecology, 2022), the assessment has not put the site within a local strategy (the conclusions of this assumption do not make a significant difference to the final numbers in the matrix).

2.3 Created & Enhanced Habitats

The following measures are incorporated into the scheme design to ensure that the project provides biodiversity gain. These are outlined in the Design & Access Statement, the Ecological Assessment and the Illustrative Masterplan for the site, which represents the created habitats post intervention plan for the biodiversity net gain assessment. As the development is an Outline Application, the full details of planting and post construction habitat creation and management are not finalised. The following assessment provides a guide for measures that have been outlined and can be created as part of a detailed Application.

On this basis a number of cautious assumptions have been made, including the built development ratio of 70/30% split of dwellings to gardens, and a number of area percentages for treatment of the informal open space of the site. Where such assumptions have been made, they are noted in the assessor comments in the matrix.

The following semi-natural habitats are to be provided:

- Creation of new areas of grassland. It has been assumed 55% of the informal open space will be treated as either a tall low intervention management grassland or a hay meadow grassland with suitable management prescriptions provided (see Aluco Ecology, 2021). The grasslands could achieve moderate condition with suitable management. Species diversity will depend upon following suitable steps during creation, and suitable species mixes to develop grasslands over arable soils. This will need to be set out in a detailed Landscape & Ecology Management Plan (LEMP);
- Creation of areas of modified grassland. It has been assumed as a worst-case scenario that 20% of the informal open space will be treated as modified grassland – and managed as amenity grassland, regularly cut with limited ecological habitat management. This could achieve at least a moderate condition as a modified grassland.
- Creation of mixed scrub planting. This is in planted blocks around the grassland areas to provide diversity of habitats through the open space, and also along the southern boundary for screening. The habitat can reach moderate condition where managed as a semi-natural habitat, allowed to develop naturally, planted adjacent to existing native trees/shrubs around the boundaries and hay meadow and tall grasslands, and should as minimum contain at least 3 native woody species to allowed to grow with varying height.
- Creation of semi-natural open SUDS features. This area is intended to be planted with a damp grassland species mix. The management of this area should be set out in a LEMP, which includes prescriptions for the SUDS to be managed to provide additional semi-natural habitats.

- Allowing for more formal elements to the open space – including gravel pathways and allotment or orchard planting (which the detailed development could allow for semi-natural habitat depending upon the detail for this latter feature).
- New hedgerow planting along the northern boundary, which is currently open. A native species rich hedge is assumed in this location.
- Urban Trees. Details on the number and type of urban trees are not provided at the Outline stage and the number used in the BNG assessment is based on the Illustrative Masterplan, taking into account potential for planting around the main built development. As a precaution the trees are assessed as small and of poor condition, but there is potential in detailed design to provide higher quality and higher scoring trees as part of the design.

2.4 Additional Biodiversity Net Gain proposals

In addition to the habitats to be created as part of the scheme the following measures are also proposed:

- Provision of bird and bat boxes suitably located by an ecologist (see Aluco Ecology, 2021).

2.5 Management

The habitat creation and management measures should be set out in a detailed Landscape and Ecology Management Plan (LEMP), which will need to detail habitat creation and ongoing management during the lifetime of the BNG assessment. Outline management principles are set out in the Ecological Assessment (Aluco Ecology, 2021), including potential planting mixes, which are suitable for the local area.

The condition assessments for proposed habitats are based on potential outcomes for habitats, with suitable funding and habitat creation detailed in a LEMP.

The provision of a LEMP and planting plans, for a detailed development can be subject to a suitably worded condition as part of an Outline Planning Permission. At the detailed stage an update to the BNG assessment will ensure that a minimum Biodiversity Net Gain score can be achieved. With the open space areas provided as part of the proposals, there should be sufficient options to ensure that a future development scheme will demonstrate a net gain.

3.0 SUMMARY

The BNG assessment sets out the existing site baseline, and then proposals for new land use and habitats on site. The potential habitat creation and management of the site and particularly the informal open space areas is assessed. The assessment is based on an illustrative scheme, and assumptions made are based on a reasonable assessment of potential outcomes, considering potential management proposals and ecological processes based on the existing land use.

The BNG provides a substantial net gain, which is based on the large area of informal open space that would be provided as part of the proposals, and that a large proportion of this informal open space can be managed to create varied semi-natural habitats. The amount of informal open space provided by the scheme suggests that even on a worst-case scenario relating to new habitat creation and management treatment of the open space, there would be opportunity to provide a minimum 10% net gain as required by upcoming legislative requirements in the Environmental Act.

4.0 REFERENCES

Aluco Ecology (2021) Land west of Old Manor Farm, South of Lower Road, Bedhampton, Ecological Assessment. September 2021

Aluco Ecology (2022) Land West Of Old Manor Farm, South Of Lower Road, Bedhampton Information For Habitats Regulations Assessment, May 2022

Butcher, B, Carey, P, Edmonds, R, Norton, L, and Treweek, J. (2020) The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/>

Mosaic (2021) Illustrative Masterplan 1217 V5 23/06/21

Mosaic & Bargate Homes (2021) Land west of Old Manor Farm, Bedhampton, Design and Access Statement, September 2021

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