

Biodiversity

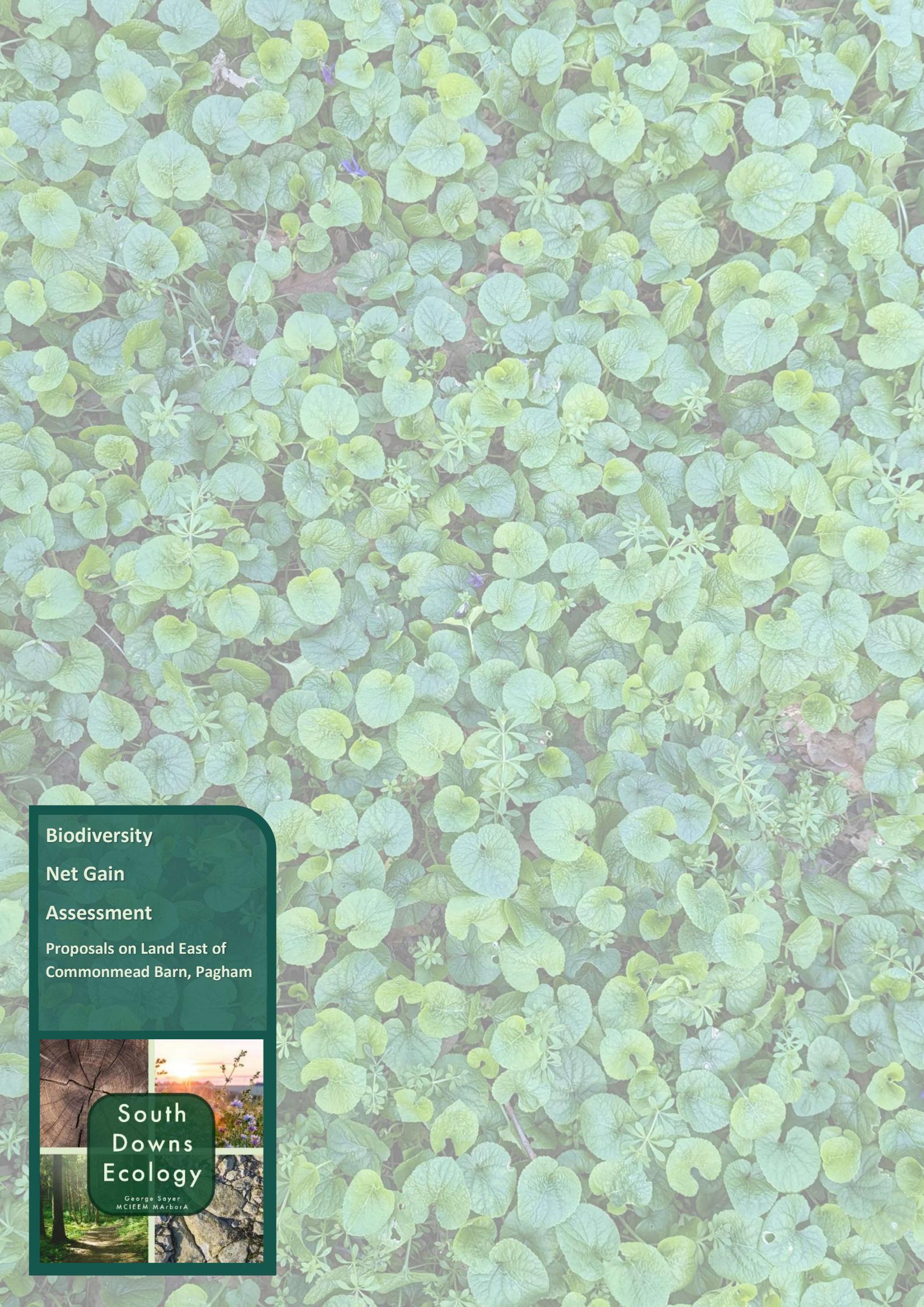
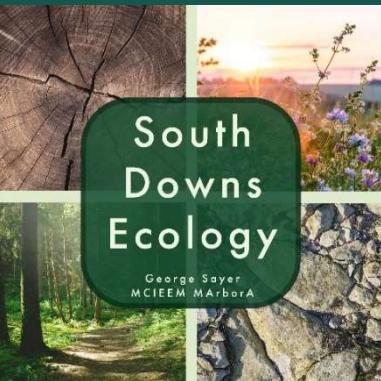
Net Gain

Assessment

Proposals on Land East of
Commonmead Barn, Pagham

South
Downs
Ecology

George Sayer
MCIEEM MARbora



Biodiversity Net Gain Assessment

Proposals on Land East of Commonmead Barn, Pagham

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Summary

The applicant, Mr Phillips has commissioned a Biodiversity Net Gain Assessment of proposals for a new residential development on land east of Commonmead Barn, Pagham.

The existing site consists of a small paddock largely of modified grassland, surrounded by hedgerows and lines of trees.

The proposals are for construction of 2 new dwelling in the site.

A quantitative assessment of the ecological impact of the proposals has been undertaken through use of the Natural England statutory Metric (2025). The calculation is completed to confirm whether the proposals accord with the National Planning Policy Framework (2024), Arun Local Plan Policies, and the Environment Act (2021) within which a 10% net gain will be required.

The proposals would result in a 25.99% net loss in habitat area units and a 55.56% loss in hedgerow units on-site. The proposals would need to purchase 0.08 habitat area units of any type of habitat, and 0.03 hedgerow units of any hedgerow type to achieve the 10% gain. A theoretical scenario of how this would be achieved is provided. Assuming that such off-site units are purchased, the proposals are confirmed to result in biodiversity gains in accordance with local and national policy and relevant legislation.

No watercourses are present on or adjacent the site.

1.0 Introduction

- 1.1 The applicant, Mr Phillips has commissioned a Biodiversity Net Gain Assessment of proposals for a new residential development on land east of Commonmead Barn, Pagham.
- 1.2 The following report details the rationale, methodology, calculation, and management required as part of this assessment. This assessment has been carried out by George Sayer (BSc(Hons) Environmental Sciences, PgDip Endangered Species Recovery, MCIEEM, MArborA).

Site Description and Surrounding Area

- 1.3 The site consists of a rectangle of grassland and access driveway onto Pagham Road, sited west of the Pagham Road and north of Nyetimber in Pagham. The proposal site covers c.0.22 Ha.
- 1.4 The site is located on the northern edge of the built up area of Pagham, which leads into Bognor Regis. To the immediate east is a large development underway on Hook Lane, with another development approved south-west on Pagham Road. The surroundings are mixed; arable land dominates to the north and west, and low-rise residential development, mostly of bungalows and chalets but increasingly houses form the south and east. The A27 runs east-west c.1.3 km south. Within 500.0 m is a single farm pond on the adjacent land to the west, and a larger farm pond 265.0 m west.

Proposals

- 1.5 The proposals are for construction of a new residential development of 2 dwellings. The dwellings would be accessed from the south-east and would require the redevelopment of the entire site.

2.0 Scope of Assessment

1. *Assess the current baseline habitat and linear value of the site*
2. *Assess the likely habitat and linear features retained, removed and enhanced*
3. *Calculate the change in habitat and linear biodiversity value*
4. *Provide recommendations for management to ensure habitats proposed are achieved*

2.1 This appraisal and assessment is deemed to be relevant for a maximum of one year due to the possibility of changes in the habitats on-site and the methodology used to calculate Biodiversity Net Gain. Should the site conditions, methodologies or proposals alter, the ecologist should be consulted to confirm that the assessment is still valid.

3.0 Legislative Background

Legislation and Policy

- 3.1 In England, BNG is mandatory from 12 February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of 10%.
- 3.2 The National Planning Policy Framework (NPPF, 2024) Paragraph 187 states:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

 - (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - (c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - (d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;;
 - (e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - (f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 3.3 BNG is already required under policy ENV DM5 of the Arun Local Plan which states all development schemes should, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site.

4.0 Methodology

Assessment Method

4.1 The Biodiversity Net Gain Assessment within this report was carried out by George Sayer (BSc(Hons) PgDip MCIEEM MArborA) in September 2025.

Site Assessments

4.2 The site was subject to a site survey in August 2025 conforming to the UK Habitat Classification system v2.01 (UKHab Ltd 2023) and the habitats assessed in accordance with the Natural England Statutory Biodiversity Metric: User Guide (2025). Where required, existing and proposed habitat condition was assessed using the Statutory Biodiversity Metric Condition Assessments (2025). The assessment was undertaken by George Sayer MCIEEM MArborA, who has been conducting such assessments since 2020.

Calculations

4.3 All calculations were carried out using the current Natural England Statutory Biodiversity Metric: User Guide (2025), available online: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.

4.4 Calculations were undertaken to the nearest 5 square metres. Linear habitats were measured to the nearest 5 linear metres. All off-site trees and hedges are proposed for retention and as such are not included.

4.5 Areas of ruderal habitat identified within the Ecological Impact Assessment (GS178.CommonmeadBarn.EIa.V5) have been included as part of the grassland as these now form a fairly continuous area of equal value.

4.6 There is a ditch off-site to the north; in accordance with current guidance, this has been assessed as part of the adjacent hedge/treeline and as such is not included as part of the watercourse assessment. No watercourses are impacted or within the zone of influence of the proposals.

4.7 The Site Baseline Habitat Plan (GS178.CommonmeadBarn.SBHP.V1) details which habitats and hedges are included within the assessment.

4.8 No degradation is known to have occurred at the site. The site is mown regularly. No irreplaceable habitats have been identified on the site and no priority habitats are present on-site. Given the above considerations, the habitats on-site have been fairly valued and it is unlikely that any habitats have been under-valued. The site is not part of any strategic wildlife corridor or enhancement network zone. For this reason, all habitats are considered to be of *low strategic significance*.

4.9 A summary of the results is included below; the full metric spreadsheet and condition assessments accompany this report as Excel documents.

5.0 Summary of Baseline and Proposed Ecological Conditions

Area Habitats

5.1 The existing site is formed of the following habitats:

- 0.1075 ha of poor condition modified grassland
- 0.04 ha of artificial unvegetated, unsealed surface (track, marquees)
- 0.0055 ha of developed land (containers, shed)
- 0.057 ha of developed land (Access road)

5.2 It has been determined that 0.026 ha of the modified grassland would remain fundamentally unchanged; areas might be removed and replaced within 2 years of development but these areas would become part of gardens as lawns. As such, in accordance with current guidance, 0.026 ha of modified grassland is classed as retained. This is a very conservative estimate with more grassland likely to be retained in reality, and allows for some of the other areas not retained to become vegetated garden. The 0.057 ha of access road would also be retained.

5.3 The proposals would create a further 0.0685 Ha of developed land (buildings, access, parking), and 0.0555 Ha of vegetated garden (other garden areas).

5.4 The original baseline score of 0.22 biodiversity units will decrease to 0.16 units, representing a loss of 25.99%. There is a deficit of 0.08 units which must be resolved to ensure a 10% gain. As these are replacing modified grassland, they can be of any type of habitat unit.

Hedgerows

5.5 The existing site is formed of the following linear habitats:

- 0.045 km of non-native and ornamental hedgerow, poor condition (H1)

5.6 Of this, 0.025 km would be lost and 0.02 km retained.

5.7 This would result in the baseline of 0.05 units decreasing to 0.02 units, a loss of 55.56%. There is a deficit of 0.03 hedgerow units which must be resolved to ensure a 10% gain. As these are replacing ornamental hedgerow, they can be of any type of hedge unit.

Proposed Theoretical Off-site Units

- 5.8 To achieve the 0.08 unit habitat area gain required, a theoretical scenario of creation of 0.011 ha of good condition neutral grassland, within a strategic location of the same LPA/NCA area is suggested. This would result in a 0.08 unit off-site gain, resulting in an overall gain of 13.22%. All trading rules would be satisfied.
- 5.9 To achieve the hedgerow gain, 0.003 km (3m) of species-rich native hedgerow with trees, in good condition and planted in a strategic location within the NCA/LPA would result in a gain of 0.01 units or 12.12%. All trading rules would be satisfied.

7.0 Management

- 7.1 The proposals involve the creation of 'non-significant' habitats on-site of vegetated garden and developed land. As such, a detailed habitat management and monitoring plan would not be required at the conditions stage. The proposed landscape can be secured by condition alone.
- 7.2 Whilst no enhancements within the gardens are included in the metric, tree planting and native hedges between properties would in reality provide a further ecological gain at the site.
- 7.3 Confirmation of the purchase of off-site units and how the enhancement and management will be secured will be secured as a condition.

8.0 Conclusions

- 8.1 The proposals would result in a 25.99% net loss in habitat area units and a 55.56% loss in hedgerow units on-site. The proposals would need to purchase 0.08 habitat area units of any type of habitat, and 0.03 hedgerow units of any hedgerow type to achieve the 10% gain. A theoretical scenario of how this would be achieved is provided.
- 8.2 Assuming that such off-site units are purchased, the proposals could therefore satisfy the requirements of Arun Local Plan Policies, NPPF (2024) and the requirements of the Environment Act (2021).

9.0 References

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2024) Guidelines for Ecological Impact Assessment, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Natural England (2025) The Statutory Biodiversity Metric Calculation Tool, Condition Assessments and User Guide. Available Online:
<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides> (accessed 10th July 2025)

UK Hab Ltd. (2023). The Habitat Classification Version 2.01. Available online:
<https://www.ukhab.org>

10.0 Site Habitat Plan – Existing



11.0 Proposed Habitat Plan

