

Land adjacent to Bluegates Farm

BNG

Report for Katie Carling

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Summary of Key Findings

Hawthorn Ecology was commissioned by Katie Carling in August 2025, to produce a Biodiversity Net Gain (BNG) Assessment to accompany a planning application for the development at land adjacent to Bluegates Farm, Ashwell, Hertfordshire (henceforth referred to as 'the site'). The main findings are as follows:

- The site comprised a grass field used for pasture.
- The site is not subject to any statutory or non-statutory nature conservation designations.
- The current biodiversity value of the site was calculated as 0.21 habitat area units. No linear or watercourse habitats were present.
- The current proposals on site comprise the construction of a stable building. Trees will be planted to ensure a net gain in biodiversity. The biodiversity value of the current landscaping proposals is predicted to be 0.24 habitat area units.
- Overall, across the planned development there is a net increase of 0.03 habitat area units, resulting in a net percentage change of +14.06% for habitat area units as long as the requirements detailed in Section 5 of this report are adhered to.
- Recommendations for site management are detailed in Section 5 of this report.

1 Introduction

BACKGROUND TO COMMISSION

- 1.1 Hawthorn Ecology was commissioned by Katie Carling in August 2025 to produce a Biodiversity Net Gain (BNG) Assessment, to demonstrate the change in biodiversity value of the site as a result of the proposed development of land adjacent to Bluegates Farm, Ashwell, Hertfordshire. This assessment provides specialist advice on how the proposed works will impact biodiversity, including identification of opportunities for net gain.

SCOPE OF REPORT

- 1.2 This report has been written to assess the potential impact of the proposed development on biodiversity, and whether the proposed plans will meet the target of a net gain for biodiversity. In line with current best practice (Natural England, 2023), this is specifically in relation to the habitats present.
- 1.3 This assessment has been completed in line with the established mitigation hierarchy (as set out in BS42020:2013 and CIEEM, 2019), whereby impacts are first avoided, then mitigated or reduced and, as a last resort, compensated for.
- 1.4 Recommendations for creating new habitats on site to meet the target for biodiversity net gain are provided where required. Net gains are those that are additional to measures required to mitigate for identified impacts.

SITE CONTEXT AND STATUS

- 1.5 The proposed development site is approximately 0.10 hectares (ha) in size and is centred on Ordnance Survey National Grid reference TL 25816 40373 and is located to the north of the village of Ashwell in Hertfordshire. The area immediately surrounding the site comprises pasture, arable land and farm buildings.
- 1.6 The site comprised a grass field used for pasture.

DEVELOPMENT PROPOSALS

- 1.7 Development proposals include the construction of a stable building which will result in the loss of an area of modified grassland.

2 Planning Policy

NATIONAL PLANNING POLICY

- 2.1 The revised National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2021) requires local authorities to contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity. To protect and enhance biodiversity and geodiversity, plans should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- 2.2 The Environment Bill was passed into law in November 2021, becoming the Environment Act 2021 (Environment Act, 2021). The Environment Act 2021 aims to halt the decline of nature by 2030, mandates Biodiversity Net Gain for developments in England only and is likely that it will become law in 2023 upon implementation of secondary legislation.
- 2.3 This section does not provide further detail on the Environment Act 2021 as secondary legislation, through which it will be implemented, has not been determined and it remains to be seen how and when the various elements will be enacted at a national and local level.
- 2.1 The following local planning policies from the North Herts Local Plan 2011-2031 (North Herts Council, 2022) have been considered during the BNG assessment.

Policy SP12: Green infrastructure, landscape and biodiversity

“We will accommodate significant growth during the plan period whilst ensuring the natural environment is protected and enhanced. We will:

- a) Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;
- b) Consider and respect landscape character, scenic beauty and locally sensitive features, particularly in relation to the Chilterns Area of Outstanding Natural Beauty;
- c) Protect, enhance and manage designated sites in accordance with the following hierarchy of designations and features:
 - Internationally designated sites
 - Nationally designated sites

- Locally designated sites;
- Non-designated sites that include important habitats and species

d) Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity; and

e) Protect other open spaces and support provision of new and improved open space.”

3 Methodology

BIODIVERSITY NET GAIN CALCULATION

- 3.1 The Biodiversity Net Gain Assessment has been based on the Biodiversity Net Gain Good Practice Principals for development (Baker *et al.*, 2019), and The Statutory Biodiversity Metric - Draft User Guide (Natural England, 2023b), and calculated using The Statutory Biodiversity Metric Calculation Tool (Natural England, 2023a). Using this approach, the value of a site is quantified in Biodiversity Units, calculated based on extent and quality of the habitats present.
- 3.2 Habitat biodiversity unit scores are influenced by:
- distinctiveness - the rarity and importance of the habitat to biodiversity at a national scale;
 - condition - the quality of a habitat at a point in time based on management, disturbance and other environmental factors; and
 - strategic significance - whether the location of the development has been identified locally as significant for nature.
- 3.3 Information on strategic significance is obtained through strategic documents for biodiversity such as supplementary planning documents, green infrastructure plans, nature recovery strategies, biodiversity opportunity areas, biodiversity action plans and local wildlife sites.
- 3.4 The factors listed above are attributed numerical scores and multiplied by the extent of the habitat in hectares (ha) (with the area obtained from mapping software QGIS) to calculate the Biodiversity Unit score for each habitat parcel.
- 3.5 Linear habitats, including hedgerows, are assessed separately to those that represent areas. Instead of area measures, these habitats are measured in length (kilometres). Measurements are obtained from QGIS. The number of units are calculated in the same way to habitats areas, multiplying the length by weighted scores for distinctiveness, condition, connectivity and strategic importance.
- 3.6 When calculating Biodiversity Units for proposed habitats, negative multipliers are also implemented to account for difficulty factors associated with habitat establishment, temporal delays and off-site risk. These are automatically scored within The Statutory Biodiversity Metric Calculation Tool (Natural England, 2023a).
- 3.7 The information provided by a site walkover on 5th September 2025 has been used to inform the assessment for habitats present prior to the development, and information provided by the design team and client has been used to inform the assessment of habitats proposed.

ASSUMPTIONS AND LIMITATIONS

- 3.8 Habitats to be created on site are accounted for in the UK Habitat Classification System (UKHab Ltd, 2023). Professional opinion has informed this process to ensure that the calculator presents a realistic picture pre and post development.
- 3.9 This assessment is based upon details provided by Inigo Architecture which may be subject to change prior to the planning process. Should changes occur, the Biodiversity Net Gain calculation and report would need to be updated.

4 Baseline conditions and on-site compensation

EXISTING SITE

On-site habitats

- 4.1 The site is not deemed to have strategic significance due to the lack of inclusion of the area within any local policy maps.
- 4.2 The site comprised a modified grassland field used for pasture. These habitats are shown in Appendix 1, Figure 1.

Baseline Calculation

- 4.3 The biodiversity value of the habitats on site prior to construction (baseline) is shown in Table 4.1 below. Full details of the calculations can be found within the Statutory Biodiversity Metric Calculation Tool spreadsheet (Hawthorn Ecology, 2025).
- 4.4 Accordingly, the biodiversity value of the site prior to development has been calculated as 0.21 total habitat units.

Table 4.1. Biodiversity unit score prior to development - area

Habitat	Area (ha)	Condition	Strategic Significance	Biodiversity Unit
Modified grassland	0.1036	Poor	Area not in local strategy	0.21
Total				0.21

ENSURING BIODIVERSITY NET GAIN THROUGH COMPENSATION

- 4.5 The current proposals, presented in proposed habitat map (Appendix 2, Figure 1), include the construction of a stable building within the grassland. Three trees will be planted to ensure a net gain in biodiversity.

Post-development Calculation

- 4.6 A calculation has been provided to determine the biodiversity value for the proposed habitat areas at the site as shown in Tables 4.2 below, details of the proposed habitats and recommendations are provided in Section 5.
- 4.7 The biodiversity units provided on site by the created and retained habitat areas in the current landscaping plans is 0.24. This calculation is shown in full in The Statutory Biodiversity Metric Calculation Tool spreadsheet (Hawthorn Ecology, 2025).
- 4.8 As such, the proposed development is predicted to result in a net gain in in biodiversity of 0.03 habitat area units, resulting in a net percentage change of +14.06% for habitat area units.

Table 4.2. Biodiversity unit score post-development based on current landscape plans¹ - area

Habitat	Area (ha)	Targeted condition	Strategic Significance	Biodiversity Unit
Modified grassland (retained)	0.09952	Poor	Area not in local strategy	0.20
Building	0.00408	N/A	Area not in local strategy	0.00
Tree	0.0122	Moderate	Area not in local strategy	0.04
Total				0.24

¹ Where Biodiversity Units do not add up to the exact total score, this is due to a rounding artifact and how urban trees are included within the total score. Scores presented here are the same as presented in the calculator

5 Discussion and Recommendations

ON SITE COMPENSATION

- 5.1 The below elements should be included within the final landscaping design with the aim of ensuring that the proposed habitats result in a biodiversity net gain.

OUTLINE MANAGEMENT REQUIREMENTS

Trees

- 5.2 In order to achieve the targeted condition of moderate the three proposed trees will need to meet at least three of the following criteria:

- The tree is a native species
- The tree canopy is predominantly continuous (individual trees automatically pass this criterion)
- The tree is mature
- There is little or no evidence of an adverse impact on tree health by human activities
- Natural ecological niches for vertebrates and invertebrates are present
- More than 20% of the tree canopy area is oversailing vegetation beneath

Wildlife Planting

- 5.3 Current proposed landscaping plans on site include areas of vegetated garden. It is recommended that wildlife planting should be integral to the soft landscape plans and should include native species and/or species of recognised value to wildlife. The Royal Horticultural Society (RHS) provides lists of such species². The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals and continue to accommodate those already utilising the site. Where possible, larger shrubs should be under-planted to create greater structure and cover for wildlife. The use of block planting of single species should be avoided in favour of a higher diversity of plant types per square metre.

² For example The Royal Horticultural Society (RHS) Plants for Pollinators Scheme
<https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/plants-for-pollinators>

Good Horticultural Practice

- 5.4 It is recommended that sustainable horticultural practices are employed to minimise off-site ecological impacts. These include:
- all native plant material should be sourced from suppliers who have adopted Flora Locale's (2012) Code of Practice for collectors, growers and suppliers of native flora;
 - avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended);
 - the use of peat-free composts and soil conditioners to reduce the loss of important peat bogs;
 - feeding of plants using organic based fertilisers and improving the soil structure by incorporating organic material, preferably composted municipal waste;
 - the use of drought tolerant plants and mulches to reduce evaporation and the amount of mains water needed for horticulture; and
- 5.5 Minimising the use of pesticides (herbicides, insecticides, and fungicides) to prevent cumulative fatal effects to animals via the food chain. Where use is unavoidable, non-residual chemicals should be applied.

References

Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity Net Gain Good Practice Principles for Development. CIRIA, London

BSBI (2020) BS42020 : 2013 Biodiversity : Code of Practice for Planning and Development.

CIEEM (2019). Biodiversity Net Gain, Good practice principles for development. Chartered Institute of Ecology and Environmental Management, Winchester.

Hawthorn Ecology (2025) Land adjacent to Bluegate Farm. The Statutory Biodiversity Metric Calculation Tool. Unpublished Report.

Ministry of Housing, Communities & Local Government (2024) National Planning Policy Framework. MHCLG. London. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> last accessed 16/04/2025

Natural England (2023a) The Statutory Biodiversity Metric Calculation Tool. Available at: <https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development>.

Natural England (2023b) The Statutory Biodiversity Metric - Draft User Guide. Available at: <https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development>

North Herts Council (2022) North Herts Local Plan 2011-2031 [online] available from <https://www.north-herts.gov.uk/north-herts-local-plan-2011-2031> last accessed 05/09/2025

UK Government (2021). *Environment Act*. Available at: <https://bills.parliament.uk/bills/2593/publications>

UKHab Ltd (2023). The UK Habitat Classification. Available at: www.ukhab.org

Appendix 1 : Maps

Figure 1: Location of site

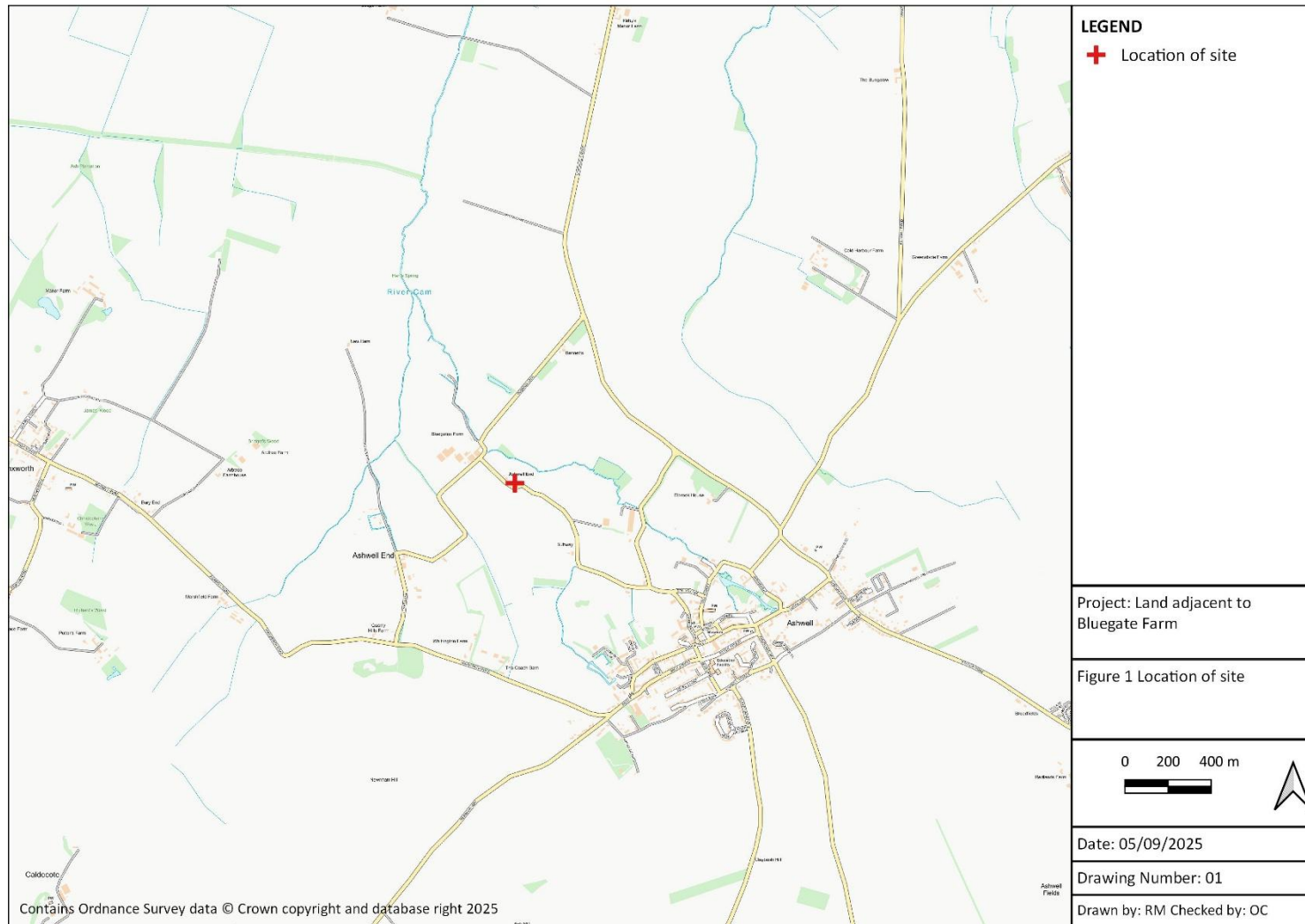


Figure 2: Extent of site boundary

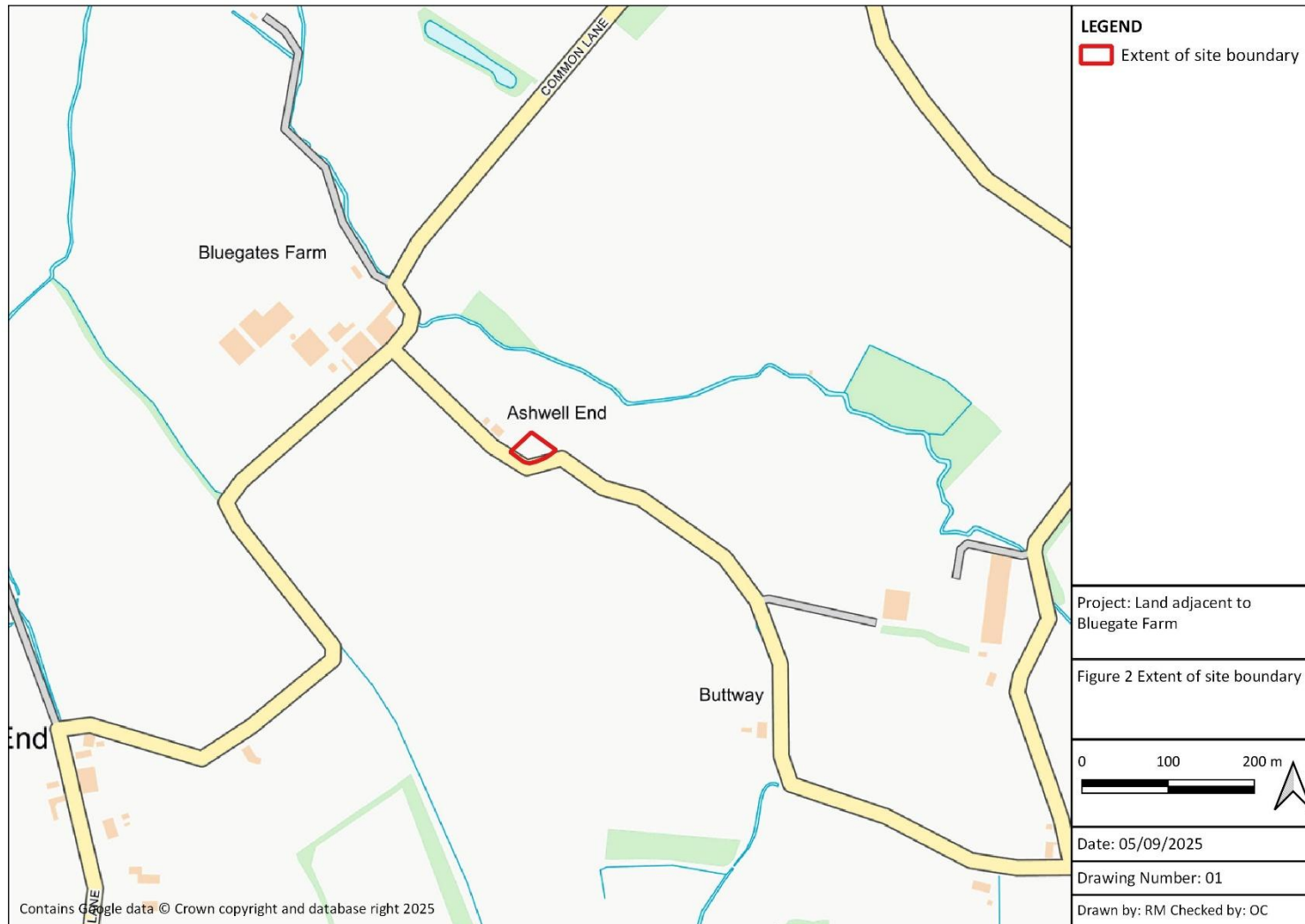
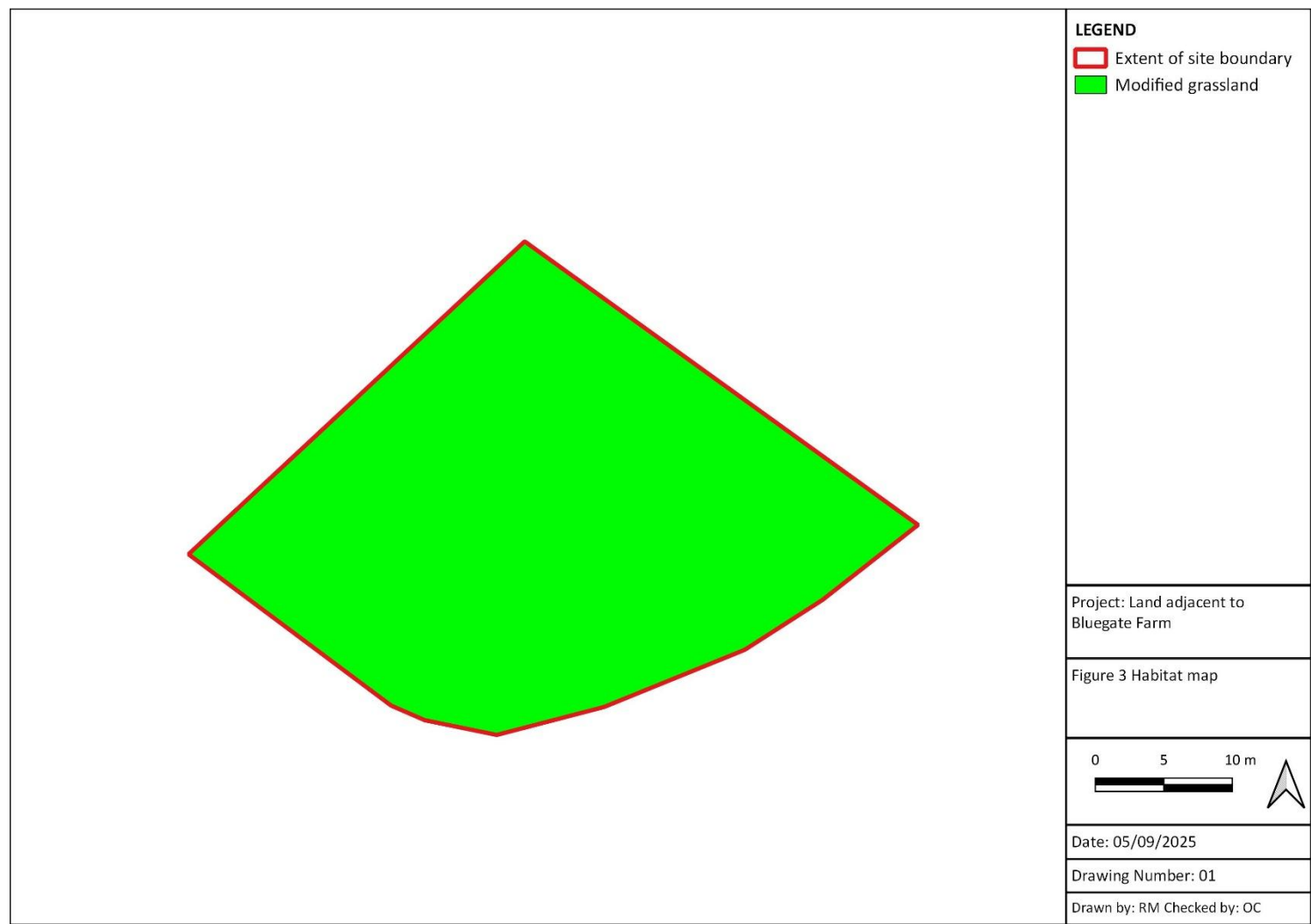


Figure 3: Habitat map



Appendix 2: Proposed habitats

Figure 1: Proposed habitats

