Proposed Outbuilding, Moorhouse Farm, Moorhouse Lane, Birkenshaw, BD11 2AY

Biodiversity Net Gain Assessment

Prepared on behalf of

Stamford Geomatics Ltd

Final Report

16 April 2025

Proposed Outbuilding, Moorhouse Farm, Moorhouse Lane, Birkenshaw, BD11 2AY

Biodiversity Net Gain Assessment

Document Control

Client:	Stamford Geomatics Ltd
Date:	16 April 2025
Status:	Final Report
Report Prepared for Issue by:	Elizabeth Davies BSc (Hons) MCIEEM

Disclaimer

This report has been prepared, and is only valid for the named client, for the project described. The information which we have prepared and provided is in accordance with CIEEM's Code of Professional Conduct. Liz Ecology Ltd confirms that the opinions expressed are our true and professional bona fide opinions. The report is in accordance with the agreement under which our services were performed.

Liz Ecology Ltd accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purpose which it was commissioned. This report does not constitute legal advice. If a legal opinion is required, the advice of a qualified legal professional should be sought.

The content of the report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third party has not been independently verified by Liz Ecology Ltd unless otherwise stated in the report.

Provided no significant changes are made to the proposals or on the site subsequent to the report's issue; this report can be considered valid for 18 months from the date of issue, in line with CIEEM's Advice Note on The Lifespan of Ecological Reports and Surveys (2019).

As part of membership to our professional body (CIEEM) we are required to provide our biological results to applicable biological record centres. As such, it is our intention to supply biological data collected as part of this assessment to the relevant centre unless directly instructed in writing not to do so by the client.

Proposed Outbuilding, Moorhouse Farm, Moorhouse Lane, Birkenshaw, BD11 2AY

Biodiversity Net Gain Assessment

NON-TECHNICAL SUMMARY

- Liz Ecology Ltd was commissioned by Stamford Geomatics Ltd to conduct a Biodiversity Net Gain Assessment of the Proposed Outbuilding, Moorhouse Farm, Moorhouse Lane, Birkenshaw, BD11 2AY. This survey was conducted to support a planning application for the site for proposed construction of an outbuilding with associated access.
- The purpose of this report is to identify the net percentage change in biodiversity on-site post-development and to aim for a minimum of a 10% Biodiversity Net Gain (BNG).
- The current National Planning Policy Framework (NPPF) sets out that planning should provide biodiversity net gains where possible. Mandatory biodiversity net gain set out in the Environment Act 2021 came into force on 12th February 2024 for all developments except small sites. Small sites came into force 2nd April 2024. This requires a minimum of 10% Biodiversity Net Gain using the Statutory Biodiversity Metric.
- The development site is approximately 0.264ha and consists of bare ground. The baseline habitat units are 0.5.
- Based on the current proposals, it is predicted that the scheme will have a net gain of 12.05% habitat units. The trading rules are met and a 10% net gain has been achieved. The measures to ensure the net gain will be incorporated into the general management measures of the site.

Proposed Outbuilding, Moorhouse Farm, Moorhouse Lane, Birkenshaw, BD11 2AY

Biodiversity Net Gain Assessment

Contents

APPENDICES

1. INTRODUCTION

1.1 Liz Ecology was commissioned by Stamford Geomatics Ltd to conduct Biodiversity Net Gain assessment of the land at Proposed Outbuilding, Moorhouse Farm, Moorhouse Lane, Birkenshaw, BD11 2AY (Grid reference: SE 198 289).

1.2 This survey was conducted to support a planning application for the site for proposed construction of an outbuilding and associated access.

1.3 The aim of this report is to identify the net percentage change in biodiversity on site post development and where possible to seek a minimum of 10% Biodiversity Net Gain (BNG) in accordance with the Environment act 2021 and Biodiversity Net Gain policy from North York Moors National Park using Defra's Biodiversity Metric calculations.

Site description

1.4 The development site is approximately 0.264 ha and consists of bare ground.

1.5 The site is located in the village of Birkenshaw, to the east of Drighlington and the southeast of Bradford. The site is located on the fringes of an urban area, within the existing paddock area for horses. The site is relatively isolated due to lack of hedgerows and connecting features in the wider landscape.

Brief

1.6 To conduct a Biodiversity Net Gain (BNG) assessment using DEFRA metric version 4.0 to demonstrate, where possible, a minimum of 10% net gain.

Relevant Planning Policy and Legislation

1.7 In England, Biodiversity Net Gain (BNG) is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). All planning permissions granted in England will have to deliver at least 10% Biodiversity Net Gain (BNG) to be maintained for a period of at least 30 years. The concept seeks measurable improvements for biodiversity by creating or enhancing habitats in association with development.

1.8 Mandatory BNG came into force on 12th February 2024 for all developments except exemptions and small sites, and small sites came into force 2nd April 2024 (residential 1-9 units on a site less than one hectare, or number of dwellings is unknown, and the site is less than 0.5 hectare; or for non-residential for floor space less than 1,000m2 or site less than one hectare). Exceptions include developments of less than 25m2 habitat or 5m for linear habitats (hedgerows and watercourses), householder applications and small-scale self-build.

1.9 The planning authority for the site is Kirklees Metropolitan Council.

1.10 The site will be assessed to aim to provide a minimum of 10% biodiversity net gain, in accordance with the Government mandatory requirement for 10% biodiversity net gain in England through the Environment Bill from 2nd April 2024, and local planning policy.

2. METHODOLOGY

Assessing Strategic Significance

2.1 A desk study was conducted to collate baseline data about ecological sites within the zone of influence of the proposed development site, following guidelines set out by the Charted Institute of Environmental and Ecological Management (CIEEM, 2017). This data-gathering exercise was undertaken to obtain any available information relating to statutory nature conservation sites, ecological networks, local plans and priority habitats to help establish the strategic significance of the site. Sources of information used are shown in Table 1.

Table 1: Summary of information sources used for the desk study

Organisation/source	Information sought
MAGIC	Locations of and citations for all national statutory wildlife sites, including SSSI, and all international sites including SAC, SPA or Ramsar sites within 5 kilometres of the site. Priority Habitats within 300m.
Kirklees Metropolitan Council	Local Plan, evidence base, and polices map

2.2 This evidence was reviewed and used to assess the strategic significance of the site, and/or individual habitats and whether it lies within an ecological network for the area.

Baseline Assessment

2.3 A baseline botanical assessment was undertaken by Elizabeth Davies, qualified ecologist, on 3rd April 2025 before works commenced on site in mostly clear, still and dry weather conditions. The survey employed techniques based on the UK Habitat Classification System. Botanical information was collected, focussing on the dominant and/or key indicator species for each habitat, to enable allocation of habitats to hierarchy levels 3 and/or 4. Where relevant priority habitats were also identified. The conditions of the habitats on the site were assessed in line with the technical sheets supplied alongside DEFRA Metric 4.0.

2.4 The UK habitats map was digitised using QGIS. The mapped habitats were measured using the derived areas, and habitat areas are provided in hectares. Linear features were measured using the derived length and the measurements provided in kilometres.

Biodiversity Net Gain

2.5 Biodiversity Net Gain complements and works with the biodiversity mitigation hierarchy set out in the National Planning Policy Framework paragraph 180a. To achieve a net gain in a way that is consistent with the mitigation hierarchy and reflects the 'spatial-hierarchy' preference for local enhancements, the following steps should be followed:

(1) Aim to avoid or reduce biodiversity impacts through site selection and layout;

(2) Enhance and restore biodiversity on-site;

(3) Create or enhance off-site habitats, either on their own land or by purchasing biodiversity units on the market; and

(4) As a last resort, to prevent undue delays, purchase statutory biodiversity credits from the UK Government where they can demonstrate that they are unable to achieve biodiversity net gain through the available on-site and off-site options.

2.6 On completion of the fieldwork the habitat information was mapped and areas were imported into the DEFRA Biometric version 4.0 calculation tool. The metric calculates the baseline biodiversity units for the site based on the following factors:

- Area
- Habitat distinctiveness
- Habitat condition
- Strategic significance

2.7 Once inputted the metric provides biodiversity units for the proposed habitats based on the following factors:

- Area
- Habitat distinctiveness
- Habitat target condition
- Strategic significance
- Time habitat is created
- Time to target condition
- Difficulty of creation

2.8 The difference between the baseline units and proposed units is then used as a measure of change and is used to assess the number of biodiversity units achieved. Habitats, hedgerows and rivers are inputted as separate factors, with each requiring net gains.

Biodiversity Gain Mitigation Hierarchy

2.9 The Biodiversity Gain Hierarchy and its effect for the purpose of the statutory framework for biodiversity net gain is set out in Articles 37A and 37D of the Town and Country Planning (Development Management Procedure) (England) Order 2015. This hierarchy (which does not apply to irreplaceable habitats) sets out a list of priority actions:

- first, in relation to onsite habitats which have a medium, high and very high distinctiveness (a score of four or more according to the statutory biodiversity metric), the avoidance of adverse effects from the development and, if they cannot be avoided, the mitigation of those effects; and
- then, in relation to all onsite habitats which are adversely affected by the development, the adverse effect should be compensated by prioritising in order, where possible, the enhancement of existing onsite habitats, creation of new onsite habitats, allocation of registered offsite gains and finally the purchase of biodiversity credits.

Limitations

2.10 Whilst every effort has been made to accurately map the habitats on site there may be discrepancies associated with the projected coordinate reference system. The National Grid transformation, however, is considered to be the most accurate with an accuracy level of less than one metre.

2.11 It is acknowledged that the condition assessments of the habitat on site were assessed at a sub-optimal time of year. Therefore, the condition assessments were completed with a precautionary approach.

3. BASELINE CONDITIONS

3.1 The results of the Baseline Assessment are presented below. A UK Habitat survey map is shown in Appendix II. The map illustrates the location and extent of the sites surveyed, along with additional notable features.

Strategic Significance

3.2 The site is part of a designated greenbelt on the local plan. The site is relatively isolated within the wider landscape due to the location on an urban fringe and lack of connectivity within the vegetation on site. The works area is comprised primarily of an existing paddock area, which is comprised entirely of bare ground due to the number of horses grazing in the paddock. It is considered to have high strategic significance, (Location ecologically desirable in local plan).

3.3 On-Site Habitats

3.4 The following were recorded on site, and are described below:

- Bare ground

Bare Ground

3.5 There majority of the site is considered to be bare ground. Species recorded include ribwort planting and creeping bent. The ground is very compacted from use by horses, and has very few species present.

3.6 The ground is considered to be of low distinctiveness and is in poor condition.

Summary

3.7 Below in table 2 is a summary of the baseline habitats, areas, condition assessment and distinctiveness.

Table 2: Summary of baseline habitats

Habitat	Biodiversity Units	Area (ha)	Required action to meet trading rules
Bare ground	0.05	0.0264	Same distinctiveness or better habitat required

4. BIODIVERSITY NET GAIN METRIC

On site biodiversity gains

4.1 Approximately 0.0064ha bare ground will be enhanced to good condition other neutral grassland. This area will be fenced from the area which horses will have access to and be over sown with a variety of species including pollinators. The ground will be subject to management to remove the effects of compaction from the horses prior to the planting. There will be diversity encouraged within the structure of the habitat to enable multiple species to utilise the habitat once it has been established, and bare ground will be minimal.

4.2 The calculations have been based off the current landscaping plans. The biodiversity metric calculated a net change in habitat units of 12.05% for the site. Table 4 below summarises the biodiversity metric results.

Table 4: DEFRA Biodiversity metric results scenario 1

On-site baseline	Habitat units	0.5
	Hedgerow units	0
On-site post intervention	Habitat units	0.6
	Hedgerow units	0
Total net change %	Habitat units	+12.05
	Hedgerow units	0
Trading rules satisfied	Yes/No	Yes

4.3 The measures to create and maintain the proposed habitats will be incorporated into the routine management of the site due to the small areas proposed for enhancement.

5. REFERENCES

CIEEM, CIRIA, IEMA (2016) Biodiversity Net Gain. Good practice principles for development.

CIEEM, CIRIA, IEMA (2019) Biodiversity Net Gain. Good practice principles for development. A practical guide. CIRIA C776a. London, 2019.

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

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

Department for Communities and Local Government (2005), *Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.*

DEFRA (2023) Biodiversity Metric Calculation tool (spreadsheet) (Biodiversity Metric 4.0)

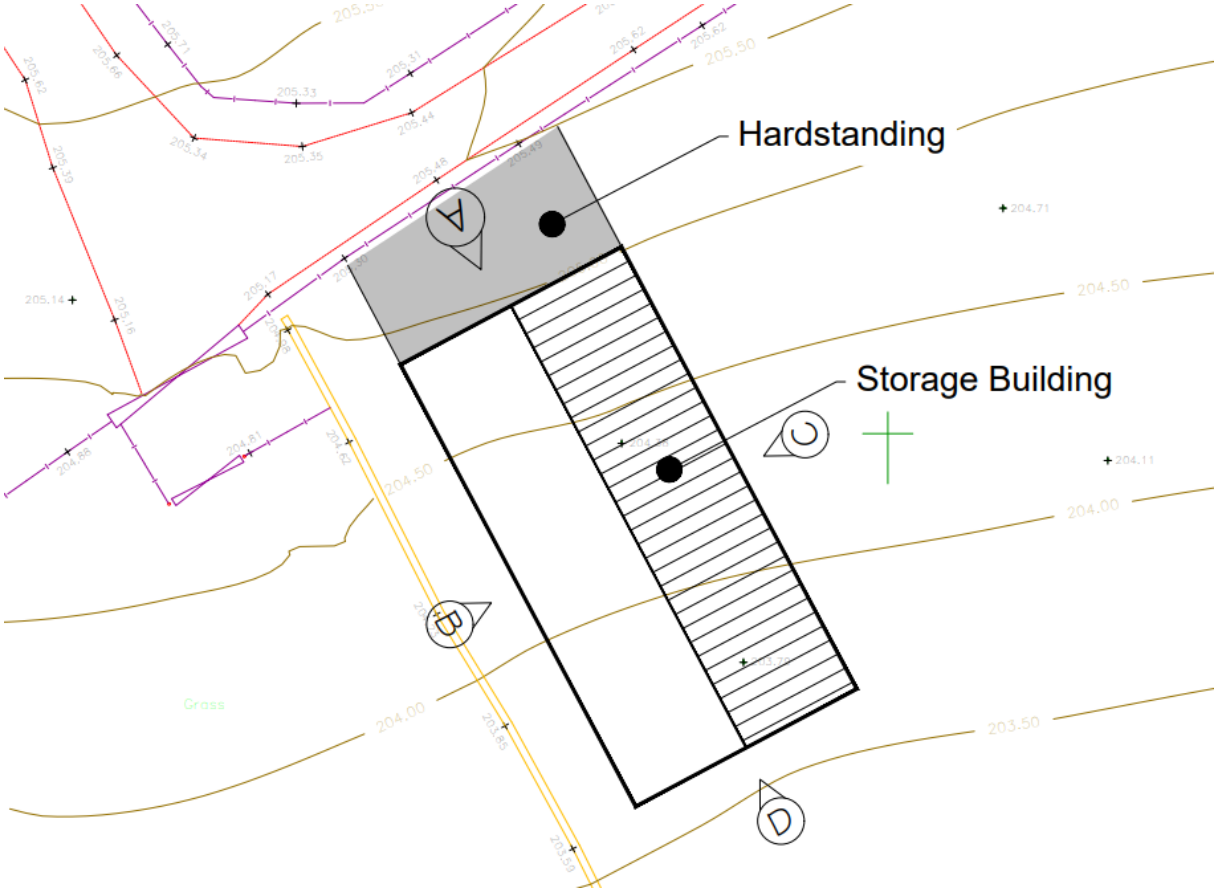
DEFRA (2023) Biodiversity Metric 4.0 User guide

DEFRA (2023) Biodiversity Metric 4.0 and SSM: Technical Annex1 (habitat condition assessments)

Ministry of Housing, Communities and Local Government (2021), *National Planning Policy Framework.*

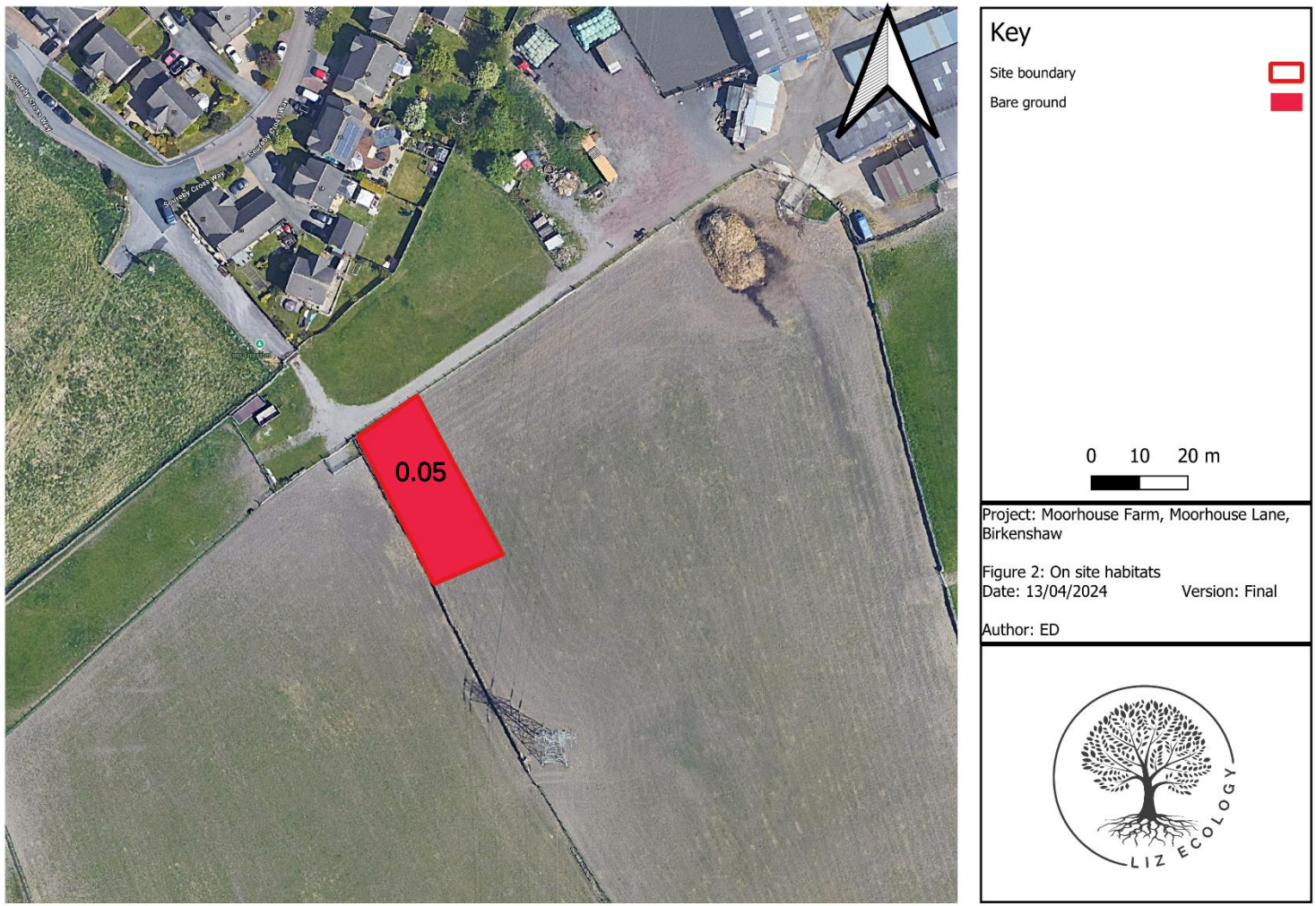
Multi-Agency Geographical Information for the Countryside (MAGIC) Website

Appendix I
Proposed site layout



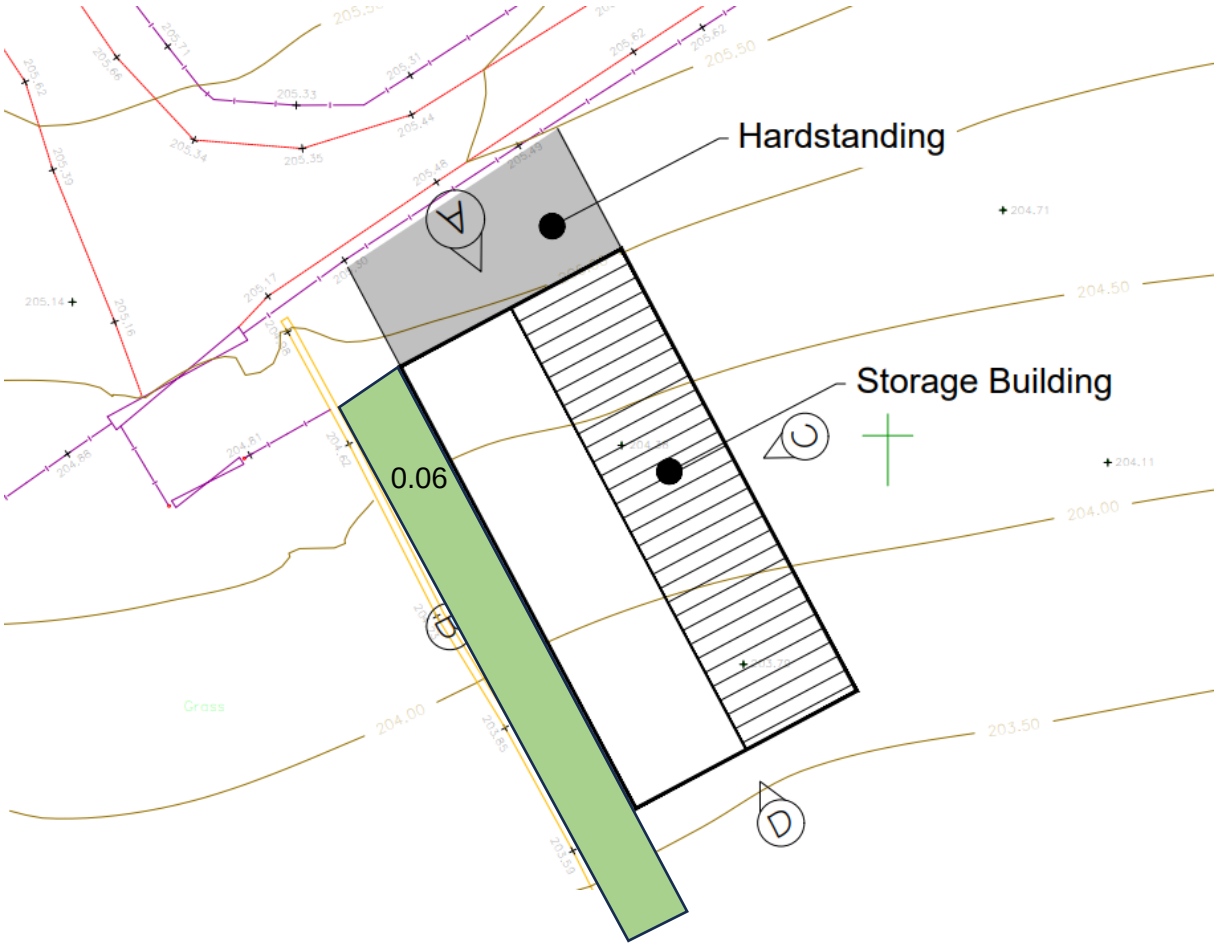
Appendix II

Current on-site habitat map (survey date 3rd 2025)



Appendix III

Post development on-site habitat map



Key:

Area to be enhanced to good quality other neutral grassland

Appendix V
Photographs

Photograph 1: General view of site

Photograph 2: General view of site