



Biodiversity Net Gain Assessment

Land opposite 41 Arthur Lane

Ainsworth

February 2025

Prepared for: Mr Spillard

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This document is to be read in conjunction with:

- The Statutory Biodiversity Metric Calculation Tool– 41 Arthur Lane
- The Statutory BNG Habitat Condition Assessment – 41 Arthur Lane



EXECUTIVE SUMMARY

- On 5th February 2025 a site visit to inform the Biodiversity Net Gain Assessment was undertaken on land opposite 41 Arthur Lane, Ainsworth, Bolton.
- The site area comprises modified grassland with some tall forb, artificially unvegetated unsealed surface and developed land comprising buildings.
- The development will result in the loss of all the vegetation on site.
- The proposals will include the creation of 0.036ha of vegetated garden.
- There will be a 15.80% increase in Habitat Units. Watercourse Units and Hedgerow Units are not applicable.

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1. Introduction

1.1 Application Site

- 1.1.1 This report details a Biodiversity Net Gain Assessment of land at opposite 41 Arthur Lane, Ainsworth, Bolton, BL2 5PR. Ordnance Survey grid reference (centre of site): SD75771080.
- 1.1.2 Mr Spillard commissioned Verity Webster Ltd to undertake a Biodiversity Net Gain Assessment in order to inform the proposals for the site.

1.2 Objectives

- 1.2.1 The objectives of the Biodiversity Net Gain Assessment are to determine:
- Potential for enhancement or compensation (offsetting) on the site for protected species, habitats of conservation interest and overall biodiversity with the aim of achieving 10% net gain in biodiversity.

1.3 Proposals

- 1.3.1 The proposals comprise the demolition of the existing buildings and construction of a new dwelling with associated landscape.

1.4 Ecologist

- 1.4.1 The Ecological Assessment was undertaken by Verity Webster. Verity is a Chartered Ecologist and a full member of the Chartered Institute of Ecology and Environmental Management.
- 1.4.2 Verity has worked as an ecological consultant since 2007. She has undertaken Ecological Assessments and protected species surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes and method statements when necessary.

1.5 Landscape Design and Ecologist Limitations

- 1.5.1 This document includes recommendations for measures to achieve Biodiversity Net Gain (BNG). These recommendations do not comprise a landscape design or planting prescriptions as provided by a Landscape Architect and the ecologist has no Design Liability associated with these recommendations. This document includes measures to achieve BNG based upon Proposed Site Plan, 41 Arthur Lane, Ainsworth, Bolton GS-11-05-24-B.



2. Site Location and Description

2.1 Site Location

- 2.1.1 The survey site is located in a rural location of Ainsworth, Bolton approximately 50m west of the B6196 Arthur Lane.
- 2.1.2 Houses with gardens lie to the north and along Arthur Lane to the south and open countryside extends to the west, south and east and beyond housing to the north comprising arable and grazed pasture with scattered plot of woodland and waterbodies. See Figures 1 and 2.

2.2 Site Description

- 2.2.1 The survey site is roughly triangular, and supports three structures, artificially unvegetated unsealed surface and modified grassland with some tall forb.
- 2.2.2 There is a row of willow (*Salix* sp.) along the southern boundary, which are under 7.5cm DBH.
- 2.2.3 See UK Habitat Classification Plans, Figure 3 and 4.



Figure 1: Ordnance survey map showing the location of the proposed development site.

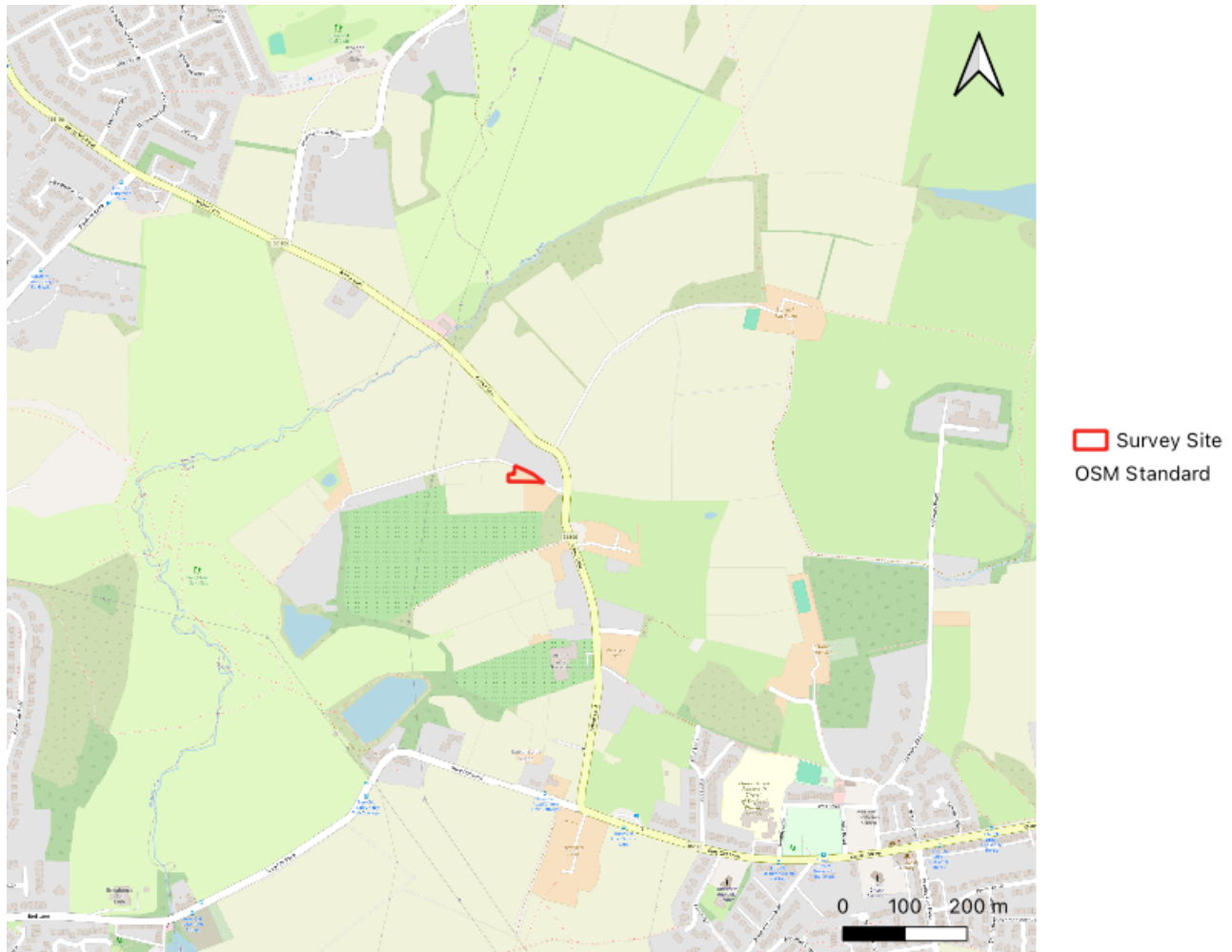




Figure 2: Aerial image showing the proposed development site and immediate surroundings





3. Legislation

3.1 Planning Policy and Legislation

- 3.1.1 In England, biodiversity net gain is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This is referred to as biodiversity net gain in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.
- 3.1.2 Under the statutory framework for biodiversity net gain, every grant of planning permission is deemed to have been granted subject to a general biodiversity gain condition to secure the biodiversity gain objective. This objective is to deliver at least a 10% increase in relation to the pre-development biodiversity value of the development granted permission. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits (Gov.Uk Biodiversity Net Gain, 2023).
- 3.1.3 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.
- 3.1.4 The National Planning Policy Framework (NPPF, 2021) encourages Local Planning Authorities to conserve and enhance biodiversity.

Chapter 15, Para 180 of NPPF states: *"The planning system 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....*
- 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".*

Para 181 states: *"Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Para 185 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- a) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."*

Para 186 states that *"when determining planning applications, local authorities should apply the following principles:*

- a) if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"*

- 3.1.5 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.



4. Methodology

4.1 Site Survey

- 4.1.1 A site visit was undertaken on 5th February 2025 to inform the Biodiversity Net Gain Metric and Assessment. Habitats on site were assessed and described in accordance with UK Habitat Classification (UK Hab Ltd, 2023) and a list of conspicuous species recorded. The condition of the habitats was determined using the condition sheets provided for the Statutory Metric (DEFRA, 2023).
- 4.1.2 The Ecological Assessment was undertaken by Verity Webster BSc MSC CEcol MCIEEM. Verity is a Chartered Ecologist and a full member of the Chartered Institute of Ecology and Environmental Management.
- 4.1.3 Verity has worked as an ecological consultant for over 17 years. She has undertaken Ecological Assessments and protected species surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes and method statements when necessary.

4.2 Biodiversity Net Gain Assessment

- 4.2.1 Biodiversity Offsetting was developed by Defra. The pilots of the study were first published in 2012.
- 4.2.2 The Biodiversity Calculator is a system created by Defra to quantify change in biodiversity of a site in biodiversity units.
- 4.2.3 *The Biodiversity Offsetting Pilots: Guidance for Developers* (Defra, 2012) details the original metric for calculating biodiversity loss or gain as a result of development proposal.
- 4.2.4 *The Statutory Biodiversity Metric* (DEFRA, 2023), *Condition Assessments* (DEFRA, 2023), *The Statutory Metric Use Guide* (DEFRA, 2024) and associated biodiversity metric principles were used to inform the assessment and the habitat condition and calculate potential change in biodiversity within the survey site.
- 4.2.5 To determine strategic significance of the habitats at baseline and post-development, the relevant documentation was considered including Local and Neighbourhood Plans, Priority Habitats, Local Biodiversity Action Plans and Local Ecological Networks. When available the relevant Local Nature Recovery Strategy will be utilised for this purpose.
- 4.2.6 The Mitigation Hierarchy and the Biodiversity Net Hierarchy and was used to inform recommendations about habitat retention, loss, enhancement and creation as per the Biodiversity Net Gain: Good Practice principles for development (CIRIA C776a, 2019).



Biodiversity Net Gain Principles (Table 4, p. 19, The Statutory Metric User Guide, 2024)

Principle 1 – The metric assessment should be completed by a competent person.

Principle 2 – The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licencing processes, for example woodlands.

Principle 3 – This biodiversity metric should be used in accordance with established good practice guidance and professional codes.

Principle 4 – This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.

Principle 5 – Biodiversity units are a proxy for biodiversity and should be treated as relative values.

Principle 6 – This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.

Principle 7 – Habitat interventions need to be realistic and deliverable within a relevant project timeframe.

Principle 8 – Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.

Principle 9 – This biodiversity metric does not enforce a minimum habitat size ration for compensation of losses. Proposals should aim to:

- Maintain habitat extent – supporting more, bigger, better and more joined up ecological networks.
- Ensure that proposed or retained habitat parcels are of sufficient size for ecological function.

4.3 Limitations

4.3.1 The survey work was undertaken in February 2025. The species list constructed is not comprehensive given that some species that may be present may not be visible at this time of year. However, given the habitat types present, the survey undertaken is considered sufficient to inform the BNG Assessment.



5. Biodiversity Net Gain Assessment

5.1 Baseline condition and potential impacts on Biodiversity

Offsetting and the Biodiversity Calculator

5.1.1 The baseline condition of the habitat and the predicted change as a result of the proposals has been assessed with the use of the Biodiversity Offset principals.

5.1.2 Biodiversity offsetting principal: What is it?

“Using the biodiversity offsetting approach means than an offset provider delivers quantifiable amount of biodiversity benefit to offset the loss of the biodiversity resulting from the development. The losses and gains are measured in the same way, even if the habitats concerned are different. In the biodiversity offsetting pilot, the measurement is done in **‘biodiversity units’**, which are the product of the **size of an area, the distinctiveness and the condition** of the habitat it comprises. The assessment of biodiversity units lost and gained can be calculated” (Defra, 2012).

5.1.3 The Biodiversity Calculator is a system created by Defra to quantify change in biodiversity of a site in biodiversity units. The current calculator is known as Statutory Biodiversity Metric (Gov.UK Statutory Biodiversity Metric Tool, 2023).

5.1.4 This quantitative assessment will be considered in relation to the other qualitative ecological functions of the site in order to assess the impact (i.e. functionality for protected species), but is a useful tool to show predicted or potential loss of habitat, change in condition and enhancement (net gain).

Habitats at Baseline

5.1.5 The survey area supports hard standing and a building with mown modified grassland, artificial unvegetated unsealed surface and sparsely vegetated land with tall forb vegetation. There are is a non-native ornamental hedgerow along the southwest boundary. Mature trees around the wider site boundary do not lie within the survey area.

5.1.6 The UK Habitat classifications are as follows:

- Modified grassland g4 with secondary codes ‘tall forb’ and 103 ‘horse grazed’
- Developed land/sealed surface (buildings) u1b5
- Artificial unvegetated unsealed surface u1c

6.1.2 **The line of willow trees along the southern boundary is not recorded for the metric as the trees are under 7.5cm DBH.**



Modified grassland g4, 16, 103

g4 16 103 (tall forb, horse grazed)

- 6.1.3 The species composition of the grassland on site is based upon the site visit undertaken on 5th February 2025 and from data obtained during a site visit in October 2022 when a Preliminary Roost Assessment was undertaken.
- 6.1.4 Species present comprise cock's-foot grass (*Dactylus glomerata*), Yorkshire fog (*Holcus lanatus*), rye grass (*Lolium perenne*) with occasional herbs including creeping buttercup (*Ranunculus repens*) dock (*Rumex obtusifolius*) and white clover (*Trifolium repens*).
- 6.1.5 There are patches of tall forb habitat comprising dock, common nettle (*Urtica dioica*) and willowherb (*Epilobium* sp.) species.
- 6.1.6 It is likely that herbs would be more frequent in the summer months, but given the dominance of the palatable grass species present (the grass cover is over 75%), this stand is classified as modified grassland.
- 6.1.7 Some works have recently taken place on site and for this reason the area of the modified grassland is based upon Google Earth imagery, the grassland present on site on 5th February and knowledge of the site in October 2022 when a site visit was undertaken for a Preliminary Roost Assessment.



Modified grassland with some tall forb in 2025



Species poor, horse grazed modified grassland

Artificial unvegetated unsealed surface u1x

- 6.1.8 This comprises disturbed, bare ground from access.



Showing artificially unvegetated unvegetated unsealed surface in 2022.



- 6.1.9 Google Earth Imagery from 2020 shows a high level of disturbance at the site with a significantly higher proportion of bare ground than in the present day. For this reason a proportionate approach to record the modified grassland on site for the BNG metric has been undertaken by including a higher proportion of grassland than was present in 2020.

Figure 3: Google Earth image of the survey site from 2020

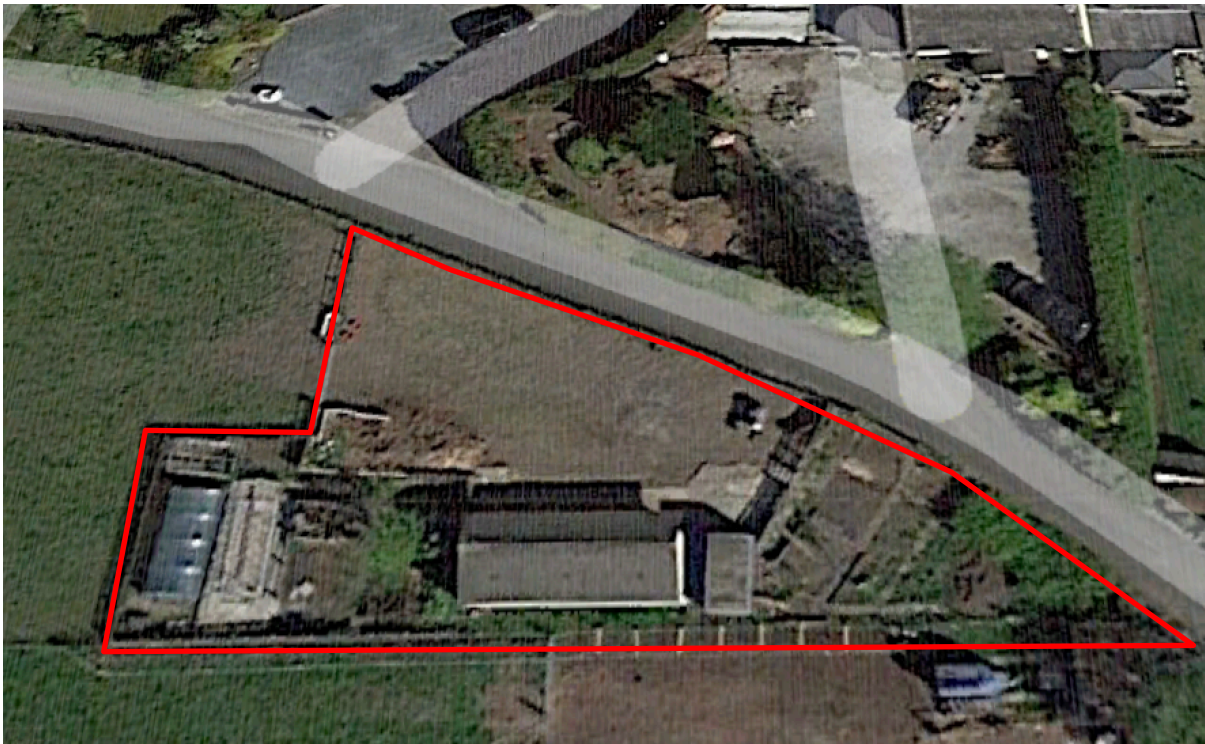
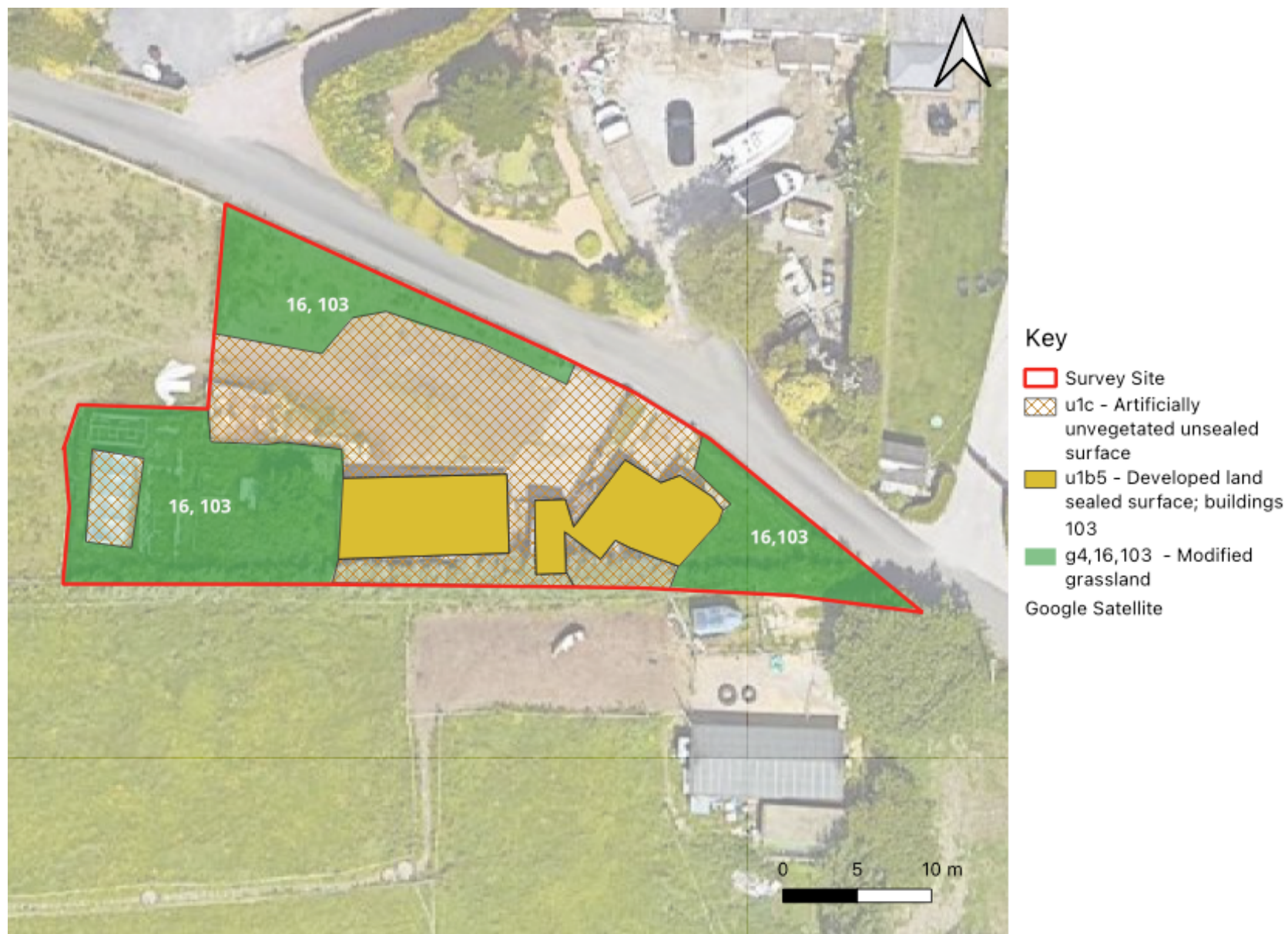


Figure 3: The Survey Site – UK Habitat Classification Plan



Distinctiveness of the Habitat and Trading Rules

5.1.7 Under the Biodiversity Calculator principals each habitat is categorised into a distinctiveness band.

5.1.8 The distinctiveness of the habitat is based upon parameters such as species richness, diversity, rarity (at local, regional, national and international scales) and the degree to which a habitat supports species rarely found in other habitats (Treweek *et al*, 2010).

- Modified grassland is considered to have LOW distinctiveness.
- Artificial unvegetated surface is considered to have VERY LOW distinctiveness

Trading Rules

5.1.9 Habitats of low distinctiveness, if lost, must be compensated for with the same distinctiveness or better habitat.

Habitat Condition Assessment

5.1.10 The condition the habitat on site can be categorised as low, moderate or good and is based upon the Habitat Condition Assessment Sheets within the Statutory Biodiversity Metric.

5.1.11 The modified grassland is considered to be poor, because there are fewer than 6 vascular plant species per m².

Strategic Significance

5.1.12 The strategic significance of the habitat present is based upon the value of the habitat in the wider landscape. Consideration is given to local and neighbourhood plans, priority habitats, local nature reserves and local ecological networks.

5.1.13 Modified grassland is not in local policy and is not of conservation value. For this reason it has been recorded as 'not in local strategy/no local strategy'.



5.2 Achieving Biodiversity Net Gain

- 5.2.1 The EU is committed to halt the loss of biodiversity and the degradation of ecosystem services by 2020. The Biodiversity Strategy sets out 6 targets and 20 specific actions geared towards this overall objective. Action 7 is to ensure no net loss of biodiversity and ecosystem services.
- 5.2.2 The 'mitigation hierarchy' is included with current planning policy, aiming to halt the loss of biodiversity. The National Planning Policy Framework, consolidating planning guidance states that *'if significant harm cannot be avoided, adequately mitigated, or as a last resort, compensated for, planning permission should be refused'*.
- 5.2.3 Defra's biodiversity offsetting pilot was developed to address this requirement and ensure development, economic growth and biodiversity conservation are compatible (British Ecological Society, 2013).
- 5.2.4 Biodiversity net gain, as a good practice principal, has been developed by Ciria, CIEEM and IEMA (BNG, 2016). At the very least developments should aim for no net loss as part of the proposals.
- 5.2.5 The Headline Results in the Statutory Biodiversity Metric show the overall net change in Biodiversity Units as a result of the development and creation of new habitat.

Habitat Lost and Trading Rules

- 5.2.6 All the modified grassland will be lost as a result of the proposals. Habitat of the same distinctiveness or better habitat is required to compensate for this loss.

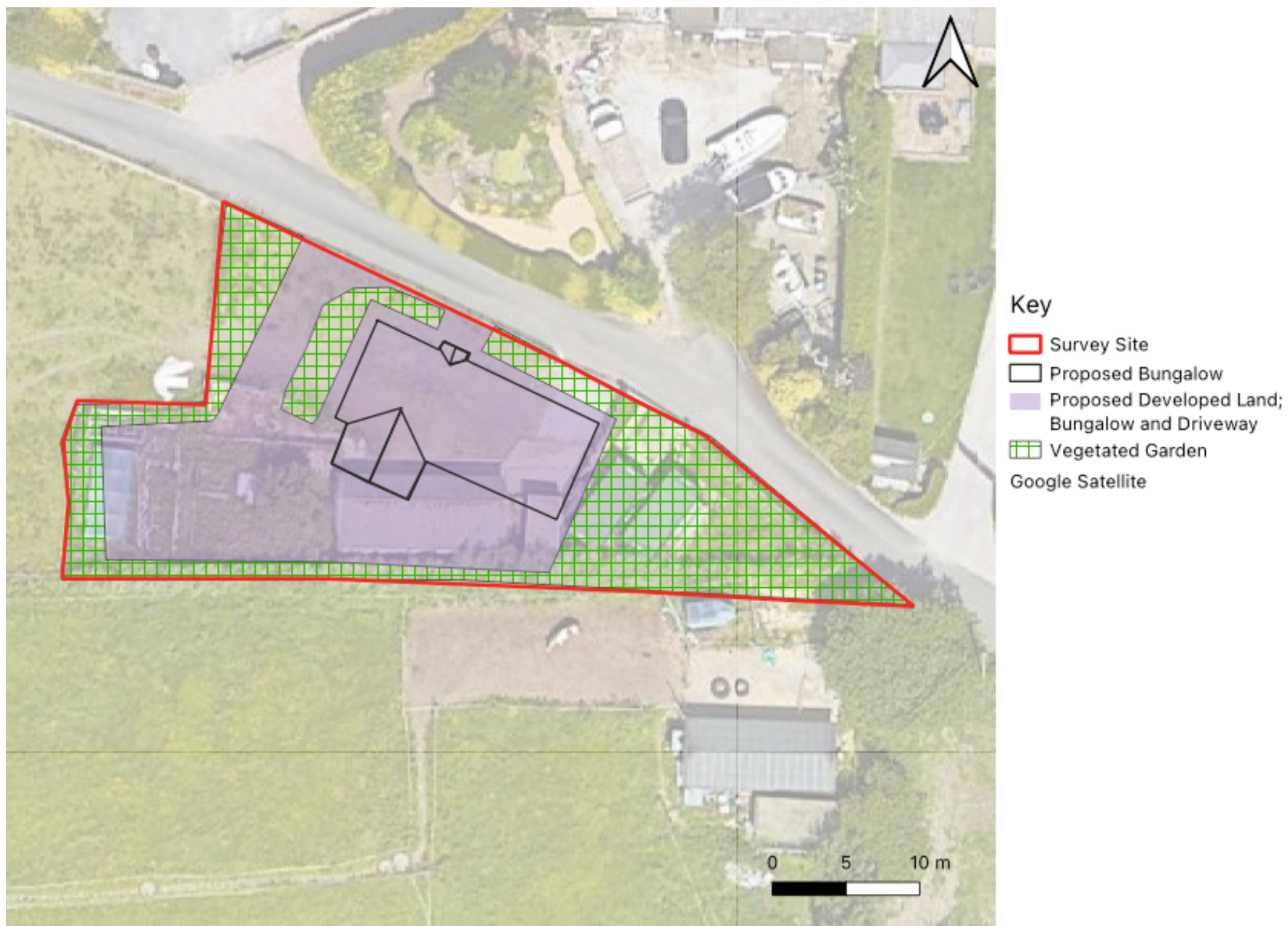
Area habitats to be created

- 5.2.7 The following habitats are to be created on site:

- **0.0360ha of vegetated garden will be created on site.**

- 5.2.8 See Figure 4. There is no statutory requirement to manage vegetated garden.

Figure 4: The Survey Site – Proposed Habitat Creation



5.3 Percentage Change in Biodiversity Units

Baseline Habitat Units: 0.07

Habitat Units Change: 0.01

Total percentage change in Habitat Units: 15.80%

- 5.3.1 The Statutory Biodiversity Metric shows there will be an increase of 15.80% biodiversity net gain in Habitat Units as a result of the proposals. There is no requirement for watercourse or hedgerow units.



6. References

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