







Biodiversity Metrics Report

Land North of Camp Road, Upper Heyford

For

David Wilson Homes Ltd

Report Ref.: DWH001-029-002/001/002

April 2024



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Project Number	Report No.
DWH001-029-002	001

Revision No.	Date of Issue	Author	Reviewer	Approver
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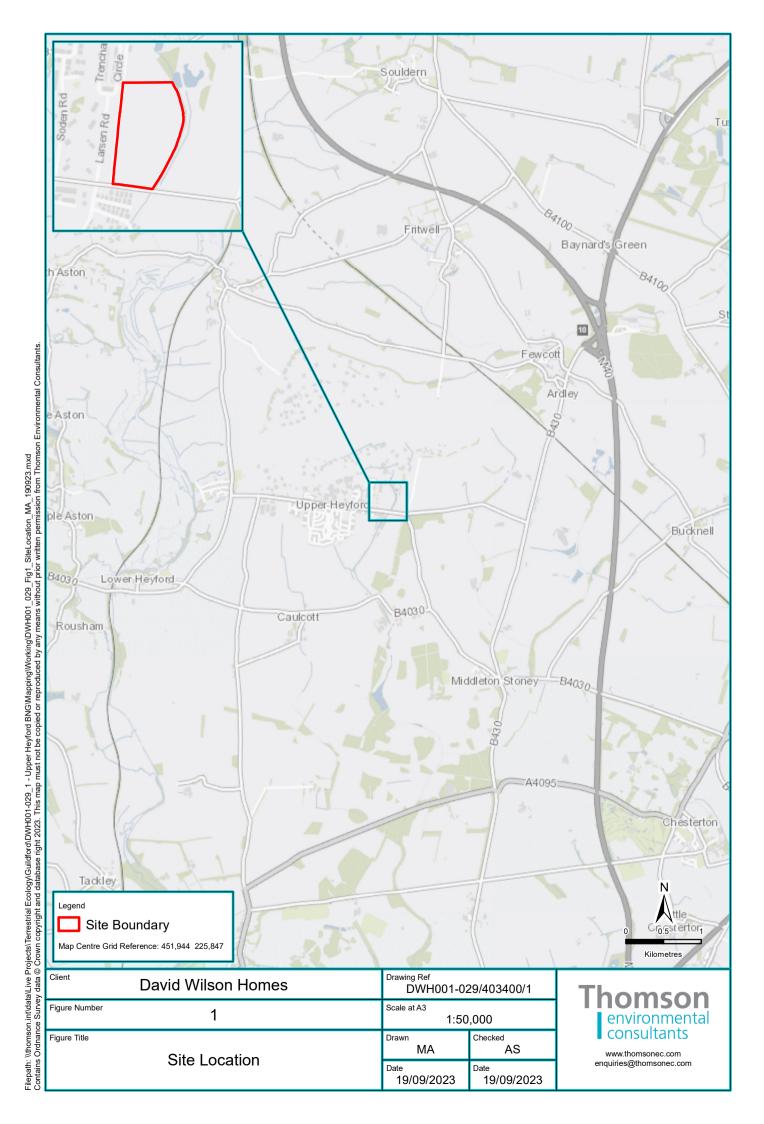


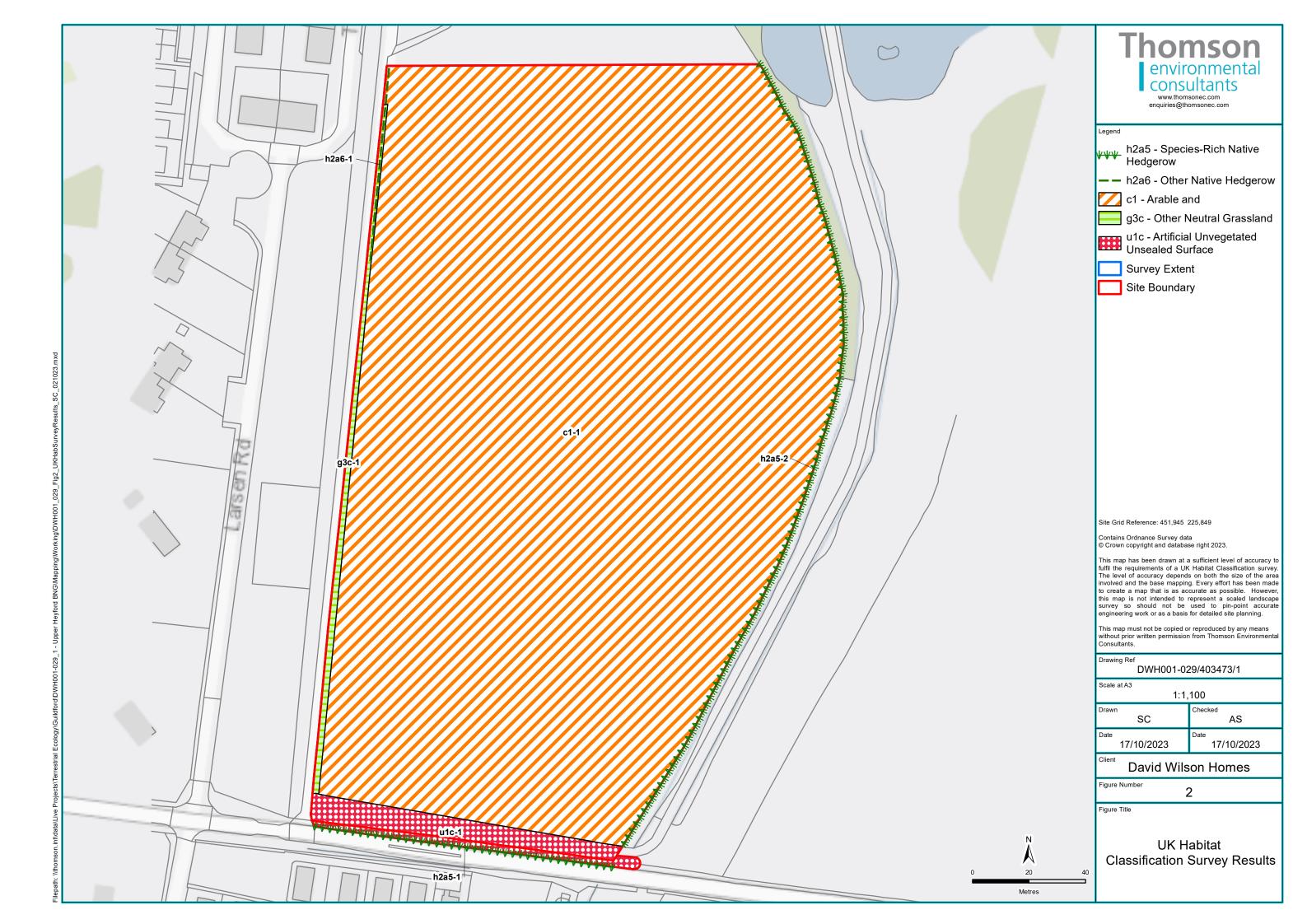
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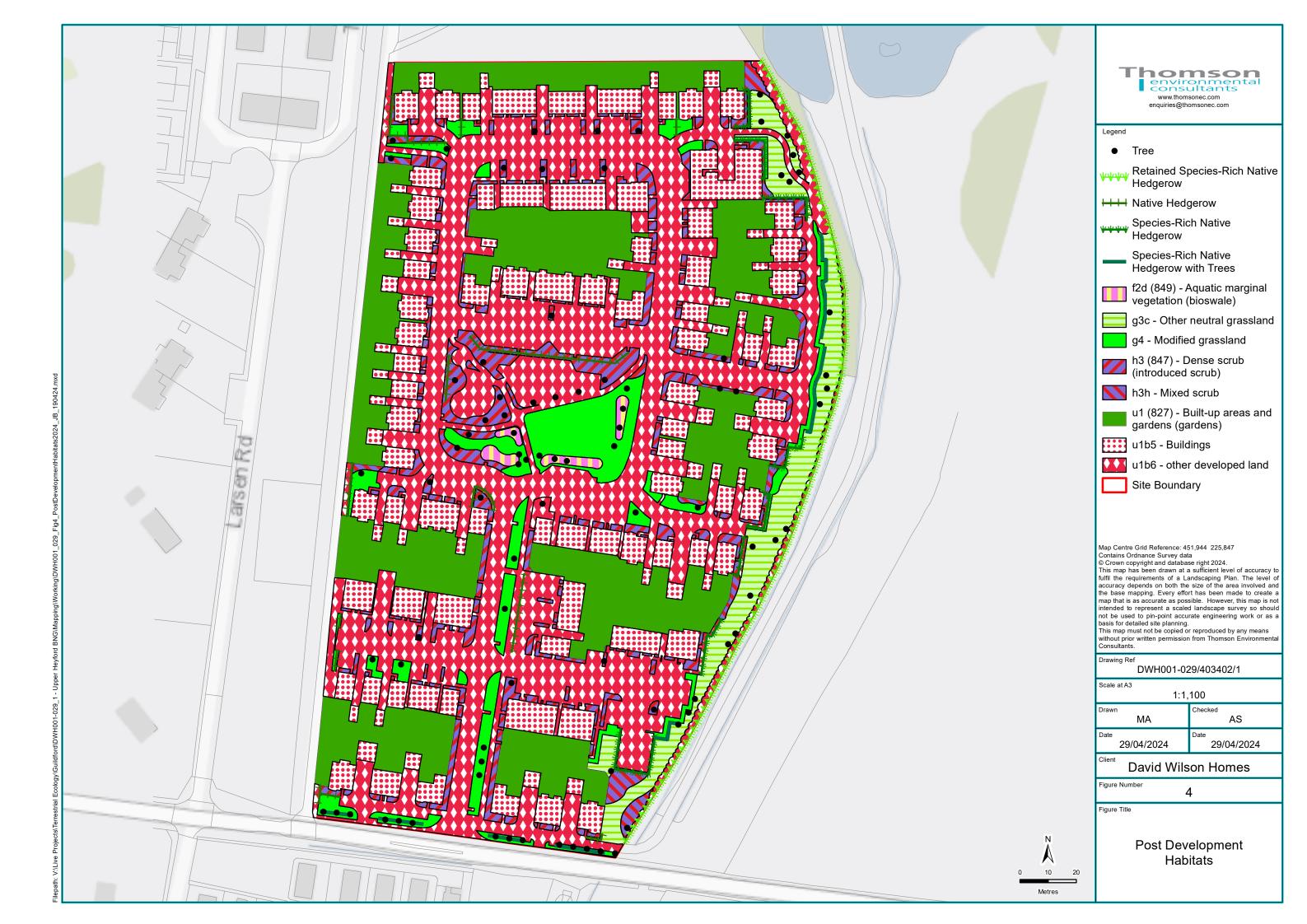
1. Summary

- 1.1.1 Thomson Environmental Consultants has undertaken a biodiversity net gain calculation using the Statutory Biodiversity Metric calculation tool for a residential development on a 4.3 hectare site in Upper Heyford, Bicester, OX25 5BP. The location of the site is shown on Figure 1.
- 1.1.2 A UK Habitat Classification System survey and condition assessment was undertaken in September 2023 to determine the baseline biodiversity value of habitats on site predevelopment. Due to recent habitat changes on the site, where habitats had changed significantly, surveys and assessments undertaken by Aspect Ecology Ltd in 2021 and 2022 were also used to determine the site's biodiversity unit baseline. The 2023 habitat survey results are shown on Figure 2 and the 2021 habitat survey results are shown on Figure 3. The site was found to have a baseline biodiversity value of 27.34 habitat units and 8.76 hedgerow units.
- 1.1.3 Under the current proposals, the development will result in a net loss of 21.39 habitat units (representing a net change of -78.26%) and a net gain of 1.41 hedgerow units (representing a net gain of 16.07%). The current plans do not satisfy the trading rules under Statutory Biodiversity Metric for medium-distinctiveness habitat units.
- 1.1.4 In order for the development to be compliant with the legislation and policy relating to biodiversity net gain, a strategy of offsetting has been agreed Cherwell District Council and biodiversity units will be purchased off-site to offset the net losses on site. To achieve a 10% net gain, an additional 24.13 habitat units will be required to be offset as part of this scheme.
- 1.1.5 In order to satisfy the trading rules for the loss of other neutral grassland, 23.97 habitat units delivered by the development (either on-site or off-site) must be habitats of medium distinctiveness or higher. Additionally, in order to satisfy the trading rules for the loss of bramble scrub, 0.12 habitat units delivered by the development (either on-site or off-site) must be habitats of medium distinctiveness or higher.











2. Introduction

2.1 Overview

- 2.1.1 David Wilson Homes Ltd (DWH) commissioned Thomson Environmental Consultants in September 2023 to undertake a Biodiversity Net Gain (BNG) assessment and report of a site in Upper Heyford.
- 2.1.2 BNG is a way to contribute to the recovery of nature while developing land, aiming to leave habitats in a better state than before. The purpose of the assessment is to quantify the biodiversity losses and gains arising from the proposed development, with the overall aim of achieving >10% net gain as required under the Environment Act 2021.

2.2 Development Background

- 2.2.1 The proposals comprise the construction of 123 residential dwellings and associated hard and soft landscaping, including native shrub planting, ornamental planting, wildflower meadow planting, hedgerow planting and swales. These proposals are hereafter referred to as "the development".
- 2.2.2 The development will be located on 4.3 hectares (ha) area of land north of Camp Road, Upper Heyford, Bicester, OX25 5BP (central grid reference: SP 51944 25847). The area of land affected by the development is hereafter referred to as "the site". The location of the site is shown on Figure 1.
- 2.2.3 DWH is seeking full planning permission from for the development of the site. A previous planning application for the site, submitted in two phases (15/01357/F and 21/03523/OUT), which included BNG calculations, has been submitted for a total of 120 units, and DWH proposes to increase this by three units to 123 units. This BNG report considers the outcome for biodiversity of the proposed development of 123 units.

2.3 Ecology Background

- 2.3.1 A Preliminary Ecological Assessment (PEA) was carried out on the site by Aspect Ecology for Pye Homes in 2021 (Aspect Ecology, 2021a; 2021b) and concluded with recommendations such as hedgerow and tree protection, district level licensing for great crested newts (*Triturus* cristatus) and pollution prevention.
- 2.3.2 Ecological enhancements were also suggested by Aspect Ecology for Pye Homes (2021a; 2021b) including new planting, wildflower grassland, bat boxes, hedgehog nest domes, bird boxes, insect boxes and habitat piles.
- 2.3.3 A BNG assessment report based on the Natural England Biodiversity Metric 3.1 (Panks *et al.*, 2022) was carried out for the site by Aspect Ecology for Pye Homes in 2022 (Aspect Ecology, 2022a; 2022b). A net loss in habitat units for biodiversity was calculated for the site while a net gain was recorded for linear habitat (hedgerows):



- Phase 1 (25.48 baseline units) resulted in a -19.2 (-75.37%) net loss in habitat units and a +3.15 (+58.22%) net gain for linear habitats. A requirement of 21.76 habitat units was recommended to achieve 10% net gain.
- Phase 2 (2.01 baseline units) resulted in a -0.89 (-44.23%) net loss in habitat units and a +1.51 (+133.94%) net gain for linear habitats. A requirement of 1.09 habitat units was recommended to achieve 10% net gain.

2.4 The Brief and Objectives

- 2.4.1 DWH commissioned Thomson Environmental Consultants on 8th September 2023 to undertake an assessment of the site in relation to emerging BNG requirements to understand the options for achieving 10% BNG increase in line with the minimum requirement set out in the Environment Act 2021. The brief comprised:
 - A site visit by a suitably qualified ecologist to map and assess the condition of the habitats
 present on the site to determine the baseline (pre-development) biodiversity value of the site
 using the Statutory Biodiversity Metric calculation tool (Defra, 2023a); and
 - A written report to present the results of the habitat survey and baseline biodiversity value assessment, as well as calculating the post-development units delivered for the development.
- 2.4.2 The objective of the Biodiversity Metrics Report is to identify if the site is suitable for development whilst maintaining compliance with biodiversity requirements established in local plans.
- 2.4.3 Following updates to the site layout, DWH commissioned Thomson Environmental Consultants on 27th March 2024 to update the BNG assessment and report.

2.5 Limitations

- 2.5.1 The baseline habitat survey was carried out on 25th September 2023 which could be considered a sub-optimal time of year for habitat surveying. This is not considered to be a significant limitation, however, as the species recorded at this time were a suitable representation of the habitats present on site and the habitats could still be classified and assessed according to the UK Habitat (UKHab) Classification System methodology and the relevant Natural England Statutory Biodiversity Metric condition assessment criteria.
- 2.5.2 Habitats recorded on site had changed significantly from those reported by Aspect Ecology (2022a; 2022b) due to recent management. Guidance included in the Natural England Joint Publication JP039 (2023a) includes the following to account for degraded sites:

If a habitat has been cleared, destroyed or degraded previously, and an earlier baseline should be used, assessors must use the following approach in the metric:

- Use of pre-degradation habitat type as the site's baseline.
- Note how this habitat type and condition has been determined.



- Account for the time between the habitat loss and compensation through the temporal risk function.
- 2.5.3 A previous baseline for the site is available as reported by Aspect Ecology (Aspect Ecology, 2022a; 2022b) therefore this will be use as the baseline for this report. The previous baseline is shown on Figure 3.
- 2.5.4 It is worth noting that the previous version of this biodiversity metric report was calculated on the basis that h2a5-1 was classified as h2a5 (11). Following a site visit in March 2024, h2a5-1 was reclassified as h2a5 species-rich native hedgerow, instead of the h2a5 (11) species-rich native hedgerow (hedgerow with trees), due to an error in the original baseline assessment. There were no trees in the hedgerow, and there were no signs that there ever had been.
- 2.5.5 Post-development calculations are based on the development boundary and layout as included in the Landscaping Plan (ref: 2099.16 / 01Q). Subsequent changes to this layout or the boundary will result in a requirement to reassess the potential impacts of the development and the requirements for avoidance, mitigation and enhancement.
- 2.6 Surveyors
- 2.6.1 The survey was conducted by Ecological Consultant Charlotte Scrivens BSc (Hons).



3. Legislation and Planning Policy Considerations

3.1 Overview

3.1.1 This section provides an overview of policy and strategies relevant to the production and implementation of this strategy.

3.2 Legislation

- 3.2.1 The Environment Act 2021 provides a framework to improve and protect the natural environment. Section 90a states that 'The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage [10%].'
- 3.2.2 The Act also requires that both on-site and off-site enhancements will need to be maintained for a period of at least 30 years following completion of a development.

3.3 National Planning Policy

- 3.3.1 The National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing & Communities, 2023) sets out the Government's planning policies for England and how these should be applied. In relation to BNG, it states:
 - Paragraph 180: '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.'
 - Paragraph 186: 'When determining planning applications, local planning authorities should apply... opportunities to improve biodiversity in and around developments... as part of their design, especially where this can secure measurable net gains for biodiversity.'

3.4 Local Policy

- 3.4.1 Cherwell's development plan currently comprises:
 - Adopted Cherwell Local Plan 2011 2031 Part 1 (July 2015);
 - Adopted Cherwell Local Plan 2011-2031 (Part 1) Partial Review Oxford's Unmet Housing Need (September 2020);
 - Minerals and Waste Core Strategy (September 2017);
 - 'Made' Neighbourhood Plans in Cherwell District;
 - Saved, retained policies of the Adopted Cherwell Local Plan 1996; and
 - Saved policies from Oxfordshire County Council's Minerals and Waste Local Plan 1996.



- 3.4.2 Decisions on planning applications must be made in line with the development plan, unless there are clear material considerations which dictate why this should not be the case.
- 3.4.3 A Sustainability Appraisal (SA) and Strategic Environmental Assessments (SEA) were incorporated for the Local Plan Part 1 Partial Review and the new Cherwell Local Plan Review 2040 being produced for Cherwell.
- 3.4.4 The survey area is located within the Policy Villages 5: Former RAF Upper Heyford area, an area allocated for development. Policy Villages 5: Former RAF Upper Heyford states that:
 - 'Development Area: 520 ha
 - Development Description: This site will provide for a settlement of approximately 1,600 dwellings (in addition to the 761 dwellings (net) already permitted) and necessary supporting infrastructure, including primary and secondary education provision and appropriate community, recreational and employment opportunities, enabling environmental improvements and the heritage interest of the site as a military base with Cold War associations to be conserved, compatible with achieving a satisfactory living environment. A comprehensive integrated approach will be expected.'
 - 'Proposals must demonstrate that the conservation of heritage resources, landscape, restoration, enhancement of biodiversity and other environmental improvements will be achieved across the whole of the site identified as Policy Villages 5.'
 - 'The release of greenfield land within the allocated site Policy Villages 5 will not be allowed to compromise the necessary environmental improvements and conservation of heritage interest of the wider site'
 - 'The conservation and enhancement of the ecological interest of the flying field through appropriate management and submission of an Ecological Mitigation and Management Plan, with biodiversity preserved and Cherwell Local Plan 2011-2031 Part 1 259 Section C Policies for Cherwell's Places enhanced across the site identified as 'Policy Villages 5', and wildlife corridors enhanced, restored or created, including the provision for habitat for great crested newts and ground nesting birds in particular. A net gain in biodiversity will be sought'
 - 'Development should protect and enhance the Local Wildlife Site (including the new extension to the south)'
 - 'Provision of Green Infrastructure links to the wider development area and open countryside'



4. Methodology

4.1 Habitat Survey

- 4.1.1 A survey area was defined as an area of land of approximately 4.3ha that encompassed the land north of Camp Road. The survey area and the site cover the same boundary and are shown in Figure 1 and 2.
- 4.1.2 A survey using the UKHab Classification system (UKHab Ltd., 2023) was conducted throughout the survey area. This is a nationally recognised habitat classification system that is compatible with the Statutory Biodiversity Metric calculation tool for calculating BNG values (Defra, 2023a).
- 4.1.3 The UKHab has five hierarchical levels and includes the identification of priority habitats (Habitats of Principal Importance listed under the Natural Environment and Rural Communities Act 2006) and Annex I habitats as listed under the European Habitats Directive. The five levels are:
 - Level 1 Biomes/major ecosystems (terrestrial, freshwater and coastal);
 - Level 2 Ecosystem types (i.e. woodland, grassland, heathland and scrub);
 - Level 3 Broad Habitats, based on those of the UK Biodiversity Action Plan (UKBAP);
 - Level 4 Habitats, including 46 priority habitats; and
 - Level 5 Habitats, including Annex I habitats.
- 4.1.4 In addition, non-hierarchical secondary codes were used to provide supplementary information. These included mandatory codes for habitat mosaics/complexes, priority and Annex I habitats that occur in multiple primary habitats and habitat origins, plus any additional relevant secondary codes.
- 4.1.5 Prior to the survey, the potential habitats on the site were mapped using aerial imagery and government datasets (such as http://www.magic.gov.uk/) to the highest level of UKHab classification possible, which in most cases was either level 3 or 4.
- 4.1.6 During the field survey, the habitat map was ground-truthed, with all habitats mapped to the highest level possible.
- 4.1.7 Table 4.1 shows the meta-data used for this survey.

Table 4-1: Survey meta-data

Scope and purpose of the survey	Biodiversity Metrics Report
Area surveyed	See Figure 2
Edition of UKHab used	UKHab v2.0-Professional
Minimum Mapping Unit (MMU)	25m² for areas, 5m for linear features
Level of UKHab Primary Hierarchy used	Level 5, where possible



List of Secondary Code groups recorded	All secondary codes
Additional attributes recorded	Habitat condition assessment
Map projection and units	Figure 2
Date of survey	25 th September 2023
Organisation and individual undertaking the survey	Thomson Environmental Consultants, Charlotte Scrivens
References for any existing datasets that have been used	www.magic.gov.uk

- 4.1.8 The dominant and readily identified species of higher plant species from each habitat type within the survey area were recorded and their abundance was assessed on the DAFOR scale:
 - D Dominant;
 - A Abundant;
 - F Frequent;
 - O Occasional; and
 - R Rare.
- 4.1.9 These scores represent the abundance within the defined area only and do not reflect national or regional abundances. Plant species nomenclature follows Stace (2019).
- 4.1.10 Target notes were made for any habitat features which were too small to map or are of particular ecological interest.
- 4.2 Biodiversity Metric

Good Practice Principles for Biodiversity Net Gain

- 4.2.1 The Chartered Institute for Ecology and Environmental Management (CIEEM) has set out ten guiding principles for achieving BNG which must be applied all together, as one approach. The principals are summarised below:
 - Principle 1: Apply the mitigation hierarchy. Do everything possible to first avoid and then
 minimise impacts on biodiversity. Only as a last resort, and in agreement with external
 decision-makers where possible, compensate for losses that cannot be avoided. If
 compensating for losses within the development footprint is not possible or does not
 generate the most benefits for nature conservation, then offset biodiversity losses by gains
 elsewhere.



- Principle 2: Avoid losing biodiversity that cannot be offset by gains elsewhere Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset to achieve No Net Loss or Net Gain.
- Principle 3: Be inclusive and equitable. Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.
- Principle 4: Address risks mitigate difficulty, uncertainty and other risks to achieving Net
 Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and
 gains in order to account for any remaining risks, as well as to compensate for the time
 between the losses occurring and the gains being fully realised.
- Principle 5: Make a measurable Net Gain contribution. Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
- Principle 6: Achieve the best outcomes for biodiversity. Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when:
 - i. Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses
 - ii. Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation
 - iii. Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels
 - iv. Enhancing existing or creating new habitat
 - v. Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
- Principle 7: Be additional. Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
- Principle 8: Create a Net Gain legacy. Ensure Net Gain generates long-term benefits by:
 - i. Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity
 - ii. Planning for adaptive management and securing dedicated funding for long-term management
 - iii. Designing Net Gain for biodiversity to be resilient to external factors, especially climate change
 - iv. Mitigating risks from other land uses
 - v. Avoiding displacing harmful activities from one location to another
 - vi. Supporting local-level management of Net Gain activities
- Principle 9: Optimise sustainability Prioritise BNG and, where possible, optimise the wider environmental benefits for a sustainable society and economy.



• Principle 10: Be transparent. Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Biodiversity Metric Calculation Methodology

- 4.2.2 The metric calculates the biodiversity value by multiplying the area (hectares), distinctiveness (habitat type), condition (quality) and strategic significance (local significance for biodiversity) of each habitat parcel. To calculate the BNG units which may be achieved post-development, risk multipliers are also introduced to account for difficulty of habitat creation (delivery/risk factor) and time for created habitats to reach target condition (time to target factor). The calculations were carried out using the Statutory Biodiversity Metric calculation tool (Defra, 2023a).
- 4.2.3 The baseline BNG unit calculation in this report represents the biodiversity value of the site as it was recorded in 2022 by Aspect Ecology (2022a; 2022b) for habitats identified during the site visit that have been cleared, destroyed, or degraded. This follows guidance (Natural England Joint Publication JP039, 2023a) regarding degraded habitats and applies a discounting rate used for temporal risk of 1 year (0.965) (Natural England Joint Publication JP039, 2023b). The anticipated future BNG units for the site, following habitat creation and enhancement, have also been determined. The net change in BNG units was then calculated by subtracting the number of baseline BNG units from the future number of post-development/enhancement BNG units to get the number of BNG units that will be created or lost by the proposed works. If this number is positive, the development/enhancements have achieved BNG. If the number is negative, there is a loss.
- 4.2.4 Area based habitats, hedgerow habitats and river habitats are considered separately in the tool to account for the differences in their ecological values and functions.

Baseline Formula

- 4.2.5 The baseline biodiversity value calculation represents the pre-development biodiversity value of the site as it was at the time that the baseline habitat survey was undertaken.
- 4.2.6 To calculate the baseline biodiversity value, habitat distinctiveness and condition are given numerical 'scores' which are multiplied, together with hectares or kilometres of habitat. The formula for calculating baseline biodiversity units is as follows:

$$(AxDxQxS) = AHBU$$

Where:

- A = Area (ha) or length (km)
- D = Distinctiveness
- Q = Condition
- S = Strategic significance
- AHBU = Area or length-based habitat biodiversity units



Habitat Distinctiveness

- 4.2.7 Each habitat parcel is assigned a multiplier based on the habitat distinctiveness. This includes 'consideration of species richness and rarity; the extent to which the habitat is protected by designations; and the degree to which a habitat supports species rarely found in other habitats' (Defra, 2023b).
- 4.2.8 Habitats such as hard standing and buildings are assumed to have very low distinctiveness and are not included.

Condition Weighting

4.2.9 To enable the calculation of BNG units, an assessment of the condition of each habitat was made, in the field, in accordance with the statutory biodiversity metric condition assessments (Defra, 2023c). These sheets provide a series of condition assessment criteria, specific to each habitat type. Once all applicable criteria have been assessed, a condition score of good, moderate or poor is applied, based on the scoring instructions provided within the condition sheets.

Strategic Significance

- 4.2.10 The location of habitat parcels is factored into the calculation based on whether the location has been identified locally as significant for nature conservation within plans and strategies.
- 4.3 Post-development Formula

Habitat Creation

4.3.1 The first formula covers habitat creation:

$$((AxDxQxS)x(RxT)x(S)) = AHBU$$

Where:

- A = Area (ha) or length (km)
- D = Distinctiveness
- Q = Condition
- R = Difficulty/risk factor
- T = Time to target factor
- S = Strategic significance
- AHBU = Area or length-based habitat biodiversity units

Habitat Retention and Enhancement

4.3.2 The second formula is used to calculate habitat retention and enhancement. This is where a habitat is retained but the condition is improved. This is calculated as follows:

$$(((APxDPxQP) - (ABxDBxQB))x(RxT)) + (ABxDBxQB)x(S) = AHBU$$



4.3.3 If some habitat is retained, but the condition remains the same, then the following formula applies:

$$(APxDPxQP) - (ABxDBxQB)$$

In both cases:

- A = Area (ha) or length (km)
- D = Distinctiveness
- Q = Condition
- R = Difficulty/risk factor
- T = Time to target factor
- S = Strategic significance
- P = Post-development
- B = Baseline
- AHBU = Area or length-based habitat biodiversity units
- 4.3.4 Distinctiveness, condition and strategic significance are all scored as for the baseline calculations. Anticipated post-development condition assessments are provided in Appendix 1.

Difficulty/Risk Factor

4.3.5 The risk associated with the creation or enhancement of a given habitat is assigned a difficulty multiplier to account for the uncertainty and risk of failure inherent in any action to create new habitat due to the unique physical and ecological features of every site.

Time to Target Factor

4.3.6 The time scale of the creation/enhancement of habitats is assigned a temporal risk multiplier (0-30 years +) to compensate for the fact that there will not be an instant change in habitats or conditions and there may be a biodiversity deficit until the habitat has matured.



5. Current Habitat Survey Results

5.1 Background

- 5.1.1 The purpose of this section is to provide habitat descriptions and condition assessments for the habitats recorded on the site during the most recent site visit. The current habitats on site are shown on Figure 2.
- 5.2 Habitat Description and Condition Assessment
- 5.2.1 The following UKHab habitat types were identified, with secondary codes given in brackets:
 - c1 (10, 517, 600, 612) Arable and horticulture (scattered scrub, recent management, ploughed, fence);
 - g3c (801) Other neutral grassland (road verge or island);
 - h2a5 (11, 50) Species-rich native hedgerow (Hedgerow with trees, ditch);
 - h2a5 Species-rich native hedgerow;
 - h2a6 (516) Other native hedgerow (active management); and
 - u1c (839) Artificial unvegetated, unsealed surface (track).
- 5.2.2 These habitats are described below.

c1 (10, 517, 600, 612) Arable and Horticulture (Scattered Scrub, Recent Management, Ploughed, Fence)

- 5.2.3 This parcel comprises an arable field that has been recently ploughed (c1-1 on Figure 2).
 Wooden fences divide the field into section with scattered scrub in the form of bramble (*Rubus fruticosus* agg.) and young sycamore trees (*Acer pseudoplatanus*) growing on these fences.
- 5.2.4 This habitat does not require a condition assessment and is classified as Condition Assessment N/A.

g3c (801) Other Neutral Grassland (Road Verge or Island)

- 5.2.5 A grass verge along a road adjacent to site and the arable field (g3c-1 on Figure 2). Species recorded included occasional false oat grass (*Arrhenatherum elatius*) and cock's foot (*Dactylus glomerata*). Forbs included abundant dandelion (*Taraxacus officinalis* agg.), white clover (*Trifolium repens*), occasional thistle (*Cirsum* sp.), common ragwort (*Jacobaea vulgaris*), and rare common nettle (*Urtica dioica*).
- 5.2.6 The condition of the habitat was assessed as Poor, as the habitat passes three of six criteria for this habitat type and fails criterion A.



h2a5 Species-Rich Native Hedgerow

- 5.2.7 A well-established hedgerow is present at the south of the site (h2a5-1 on Figure 2). Woody species included abundant hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*), rare oak (*Quercus robur*), and occasional spindle (*Euonymus europaeus*), wild privet (*Ligustrum vulgaris*), willow (*Salix* sp.), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*) and dog rose (*Rosa canina*). Other species included abundant bramble and common ivy (*Hedera helix*), with ground flora including frequent cock's foot (*Dactylus glomerata*), and common nettle, occasional willowherb (*Epilobium* sp.), false oat grass, and cow parsley (*Anthriscus sylvestris*).
- 5.2.8 The condition of the habitat was assessed as Good, as the habitat passes eight out of 10 criteria for this habitat type, failing criteria C2 (nutrient enriched perennial vegetation) and D2 (current damage).

h2a5 (11, 50) Species-Rich Native Hedgerow (Hedgerow with trees and ditch)

- 5.2.9 A hedgerow with trees runs along the eastern boundary (h2a5-2 on Figure 2) of the site and includes dominant hawthorn, frequent elm (*Ulmus sp.*), occasional ash, sycamore, hazel (*Corylus avellana*) and dog rose. Other species included abundant bramble, and common ivy, with ground flora including abundant cock's foot, and common nettle, frequent cow parsley (*Anthriscus sylvestris*), and rare mugwort (*Artemisa vulgaris*), herb robert (*Geranium robertianum*) and dock (*Rumex* sp.). A wet ditch runs at the base of the hedgerow, but lies outside the red line boundary.
- 5.2.10 The condition of the habitat was assessed as Good, as the habitat passes eight out of 10 criteria for this habitat type, failing criteria C2 (nutrient enriched perennial vegetation) and D2 (current damage).

h2a6 (516) Other Native Hedgerow (Active Management)

- 5.2.11 A species poor hedgerow is located in the north west of the site (h2a6-1 on Figure 2). The hedgerow contains willow, hawthorn, beech (*Fagus sylvatica*) and blackthorn.
- 5.2.12 The condition of the habitat was assessed as Moderate, as the habitat passes four out of eight criteria for this habitat. The hedgerow fails criteria A1 (height), A2 (width), C1 (undisturbed ground and perennial vegetation), and D2 (current damage), which includes two attributes in one functional group.

u1c (839) Artificial Unvegetated Unsealed Surface (Track)

- 5.2.13 An access track containing vegetation such as ribwort plantain (*Plantago lanceolata*) and dandelion (*Taraxacum officinale* agg.) is present in the south of the site (u1c-1 on Figure 2).
- 5.2.14 This habitat does not require a condition assessment and is classified as Condition Assessment N/A.



6. Baseline Habitats

6.1 Background

- 6.1.1 The purpose of this section is to note the habitats on site prior to their alteration for which the baseline will be calculated from that included in Aspect Ecology (2022a; 2022b) reports. The habitats used for the baseline are shown on Figure 3.
- 6.2 Habitat Description and Condition Assessment
- 6.2.1 The following UKHab habitat types were noted for the parcel habitats currently corresponding to c1-1:
 - h3d (612) Bramble scrub (fence);
 - g3c (81, 103) Other neutral grassland (ruderal or ephemeral, horse grazed); and
 - g4 (103) Modified grassland (horse grazed).
- 6.2.2 These habitats are described in detail within the Aspect Ecology PEA reports (2021a; 2021b) and BNG assessment reports (2022a; 2022b). A brief description and the habitat conditions are provided below.

h3d (612) - Bramble Scrub (Fence)

- 6.2.3 The habitat is described as: "Areas of bramble scrub associated with the post and rail fences."
- 6.2.4 This habitat does not require a condition assessment and is classified as Condition Assessment N/A.

g3c (81, 103) Other Neutral Grassland (Ruderal/Ephemeral, Horse Grazed)

- 6.2.5 The habitat was "considered to be other neutral grassland due to the species per m²." The field was horse grazed with a uniformly short sward height of 2cm in the centre and a longer sward height at the edges and there was "a single small area of tall ruderal vegetation to the southeast and a farm track at the south".
- 6.2.6 The condition of the other neutral grassland habitat was assessed as Moderate, as it passed five of seven criteria for this habitat type. The habitat failed criteria C and E. The small patch of tall ruderal vegetation was assessed as being in Poor condition as it passed only one criterion for this habitat type.

g4 (103) Modified Grassland (Horse Grazed)

6.2.7 The habitat was "classified as modified grassland, and as it supports less than 6 species per m^2 ."



6.2.8 The condition of the habitat was assessed as Poor, as it passed four of six criteria for this habitat type. The parcel failed criteria A, B and E.



7. Biodiversity Metric

7.1 Background

- 7.1.1 The full workings of the assessment and calculations are provided within the Statutory Biodiversity Metric calculation tool, shown in Appendix 2.
- 7.1.2 The pre-development layout is shown on Figure 3 and the post-development layout is shown on Figure 4.

7.2 Biodiversity Net Gain

7.2.1 The headline results of the BNG assessments are provided in Table 7-1 below. Overall, the development will result in a loss of 21.39 habitat units (-78.26%) but a net gain of 1.41 hedgerow units (+16.07%). The current plans do not satisfy the trading rules regarding habitats, as there is insufficient medium distinctiveness habitats to offset what has been lost. Guidance on how to fulfil the trading rules is provided in

7.2.2

7.2.3 Table 7-3.

Table 7-1 Headline biodiversity net gain results

	Baseline Units	Post-Development Units	Net Change
Habitats	27.34	5.94	-21.39 (-78.26%)
Hedgerow	8.76	10.17	+1.41 (16.07%)

7.2.4 As shown above, the proposed development will deliver a net loss of habitat units on site. Therefore, in order to achieve a 10% gain, this development will need to provide off-site habitat creation to obtain the required units and to satisfy the trading rules. As shown in Table 7-2, an additional 24.13 habitat units will need to be delivered to achieve 10% net gain.

Table 7-2 Units required to achieve 10% net gain

	Baseline Units	Baseline Units +10%	Post- Development Units	Additional Units Required to Achieve 10% Net Gain
Habitats	27.34	30.07	5.94	24.13

7.2.5 Table 7-3 outlines which habitat units are required in order to fulfil the trading summary.



Table 7-3 Units required to fulfil trading summary

Habitat / Hedgerow / Watercourse	Habitat Distinctiveness	Trading Rule	Number of Units Required
Other neutral grassland	Medium	Same broad habitat or higher distinctiveness habitat required	23.97
Bramble Scrub	Medium	Same broad habitat or higher distinctiveness habitat required	0.12



8. Conclusion

8.1.1 A BNG calculation was undertaken for a residential development on an area of land north of Camp Road, Upper Heyford. In line with Natural England guidance, the baseline units were calculated using the PEA and BNG assessments undertaken by Aspect Ecology for Pye Homes in 2021 and 2022, respectively, and the UKHab survey undertaken by Thomson Environmental Consultants in September 2023. Under the current proposals, the development will result in a net loss in habitat units but a net gain of hedgerow units. The current plans do not satisfy the trading rules regarding the habitat units. DWH will need to provide off-site habitat creation, in agreement with Cherwell District Council, to obtain the required units and to satisfy the trading rules to ensure the development is compliant with legislation and policy relating to BNG.



References

Aspect Ecology Ltd (2021a) Land off Larsen Road, Upper Heyford Updated Ecological Appraisal, September 2021.

Aspect Ecology Ltd (2021b) Land south of Heyford Frange, Letchmere Farm, Upper Heyford, Oxfordshire Ecological Appraisal. October 2021.

Aspect Ecology Ltd (2022a) Land off Larsen Road, Upper Heyford Biodiversity Net Gain Assessment. December 2022.

Aspect Ecology Ltd (2022b) Land south of Heyford Grange, Letchmere Farm, Upper Heyford, Oxfordshire Biodiversity Net Gain Assessment. December 2022.

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

Department for Environment Food & Rural Affairs (Defra, 2023a) Statutory biodiversity metric: calculation tool.

Department for Environment Food & Rural Affairs (Defra, 2023b) Statutory biodiversity metric: user guide. February 2024.

Department for Environment Food & Rural Affairs (Defra, 2023c) Statutory biodiversity metric condition assessments.

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Institute of Environmental Assessment (1995) Guidelines for Baseline Ecological Assessment. E & FN Spon, London, England.

Stace, C. (2019) New Flora of the British Isles (fourth edition). C&M Floristics, Middlewood Green, Suffolk.

UKHab Ltd (2023) UK Habitat Classification Version 2.0 (at www.ukhab.org)



Appendix 1 Post-Development Condition Assessment Sheets

Condition Sheets: URBAN Habitat Type- f2d (849) - Aquatic marginal vegetation (bioswale)

Condition	Criterion passed (Yes or No)		
Α	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to liver, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.		
В	The habitat parcel contains different plant species that are beneficial for wildlife, for example sources for a range of invertebrates at different times of year.		Yes
С	Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area ³ .		
Additional	Criterion - must be assessed for Biowale and SuDs habitat types only		
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife.		
E2			
Mumbanat			
numbero	f criteria passed		4
	Assessment Result	Condition Assessment Score	4 Score Achieved ×/√
• Passes a AND • Meets the AND	Assessment Result all 3 core criteria; be requirements for Good condition within criterion C;	Condition Assessment Score Good (3)	
• Passes a AND • Meets the AND • Passes a	Assessment Result all 3 core criteria; be requirements for Good condition within criterion C; all additional criteria relevant to specific habitat type (Group E)		
• Passes a AND • Meets the AND • Passes a	Assessment Result all 3 core criteria; be requirements for Good condition within criterion C;	Good (3)	
• Passes a AND • Meets the AND • Passes a Passes 3 OR	Assessment Result all 3 core criteria; be requirements for Good condition within criterion C; all additional criteria relevant to specific habitat type (Group E)		Score Achieved ×/√



Condition Sheets: GRASSLAND Habitat Type - g3c Other neutral grassland

Condition Ass	sessment Criteria		Criterion passed (Yes or No)
А	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.		Yes
В	Sward height is varied	(at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates nities for insects, birds. and small mammals to live and breed.	Yes
С	Cover of bare ground is	s between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Yes
D	Cover of bracken <i>Pteri</i> than 5%.	dium aquilinum is less than 20% and cover of scrub (including bramble Rubus fruticosus agg.) is less	Yes
Е	from machinery use or than 5% of total area.	ecies indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage storage, damaging levels of access, or any other damaging management activities) accounts for less ive plant species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	Yes
Additional Crit	terion - must be assessed for		
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.		No
Essential crite (Yes or No)	erion for Good condition achie	ved (for non-acid grassland)	No
Number of crit	teria passed		5
Condition Ass	sessment Result	Condition Assessment Score	Score Achieved ×/√
	Passes 5 or 6 criteria, including essential criterion A and additional criterion F. Good (3)		
Passes 3 - 5 c criterion A.	Passes 3 - 5 criteria, including essential criterion A. Moderate (2)		✓
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.		Poor (1)	



Condition Sheets: GRASSLAND Habitat Type - g4 Modified grassland

Condition A	Assessment Criteria		Criterion passed (Yes or No)
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.		
В	Sward height is varied which provide opportu	(at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates nities for insects, birds. and small mammals to live and breed.	No
С	fruticosus agg. may be	counts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus</i> present). b with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.		
E	Cover of bare ground	is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Yes
F	Cover of bracken Pter	idium aquilinum is less than 20%.	Yes
G	There is an absence of	f invasive non-native plant species (as listed on Schedule 9 of WCA).	Yes
Number of	criteria passed		5
Condition A	Assessment Result	Condition Assessment Score	Score Achieved ×/√
Passes 6 or 7 criteria including passing essential criterion A		Good (3)	
Passes 4 or 5 criteria including passing essential criterion A		Moderate (2)	✓
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)		Poor (1)	



Condition Sheets: SCRUB Habitat Type - h3h Mixed scrub

Condition As	ssessment Criteria		Criterion passed (Yes or No)
А	its UKHab description - At least 80% of scrub - There are at least the - No single species co	a good example of its habitat type - the appearance and composition of the vegetation closely matches (where in its natural range). Distriction is native, ree native woody species ² , reprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus</i> norn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be	Yes
В	Seedlings, saplings, y	oung shrubs and mature (or ancient or veteran) shrubs are all present.	No
С		of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of suboptimal s than 5% of ground cover.	Yes
D	The scrub has a well-oradjacent habitat.	developed edge with scattered scrub and tall grassland and or forbs present between the scrub and	No
E	There are clearings, g	lades or rides present within the scrub, providing sheltered edges.	No
Number of c	riteria passed		2
Condition As	ssessment Result	Condition Assessment Score	Score Achieved ×/√
Passes 6 or essential crit	7 criteria including passing terion A	Good (3)	
Passes 4 or essential crit	5 criteria including passing terion A	Moderate (2)	
OR	fewer criteria; criteria (excluding criterion	Poor (1)	1



Condition Sheets: Urban trees

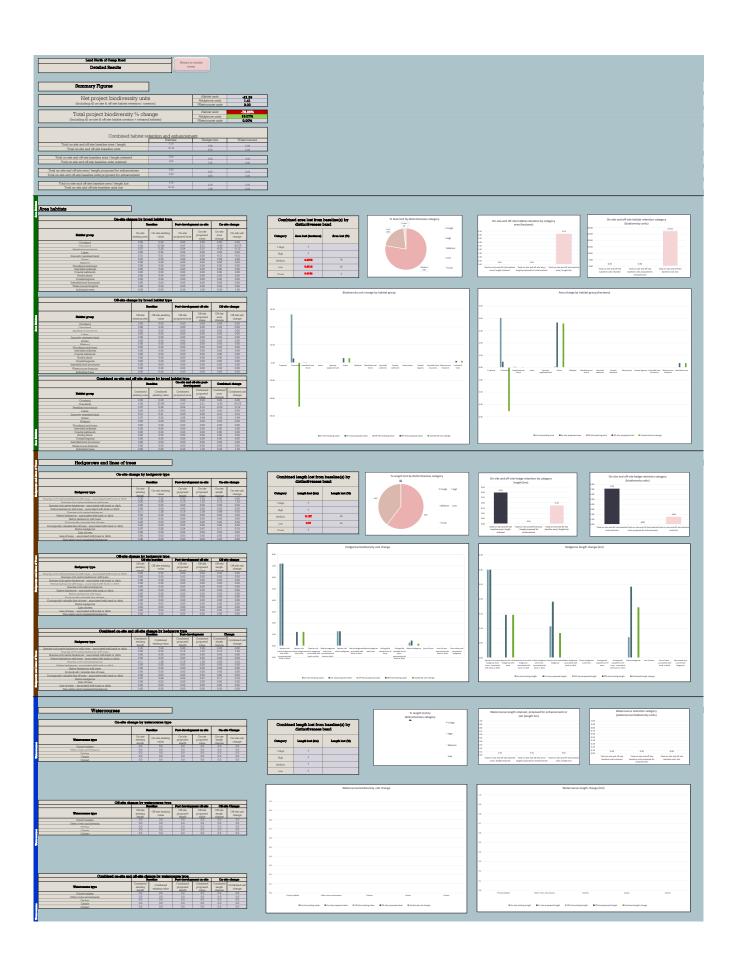
Condition A	Assessment Criteria		Criterion passed (Yes or No)			
Α	The tree is a native s	pecies (or at least 70% within the block are native species).	No			
В			Yes			
С	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion). The tree is mature (or more than 50% within the block are mature). There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark. More than 20% of the tree canopy area is oversailing vegetation beneath.					
D	detrimental agricultur	al activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy	No			
Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose						
F	More than 20% of the tree canopy area is oversailing vegetation beneath.					
Number of	criteria passed		2			
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/√			
Passes 5 c	or 6 criteria	Good (3)				
Passes 3 c	or 4 criteria	Moderate (2)				
Passes 2 c	or fewer criteria	Poor (1)	✓			



Appendix 2: Statutory Biodiversity Metric Calculation Tool

nd North of Camp Road		Return to				
Headline Results		results menu				
Scroll down for final re-	sults A					
501011 G0 W11 101 1111G1 101			Habitat units	27.34		
On-s	site baseline		Hedgerow units	8.76		
On S			Watercourse units	0.00		
			Habitat units	5.94		
	oost-interver		Hedgerow units	10.17		
(Including habitat re	etention, creation & enh	ancement)	Watercourse units	0.00		
			Habitat units	-21.39	-78.26%	On-site net gain is less than target set
	te net chang	е	Hedgerow units	1.41	16.07%	
(ur	nits & percentage)		Watercourse units	0.00	0.00%	
			Habitat units	0.00		
Off-s	site baseline		Hedgerow units	0.00		
			Watercourse units	0.00		
0.60			Habitat units	0.00		
Off-site p	oost-interver	ition	Hedgerow units	0.00		
(Including habitat re	etention, creation & enh	ancement)	Watercourse units	0.00		
			Habitat units	0.00	0.00%]
	te net chang	е	Hedgerow units	0.00	0.00%	
(ur	nits & percentage)		Watercourse units	0.00	0.00%	
Combine (Including all on-site & off-site	d net unit ch		Habitat units Hedgerow units Watercourse units	-21.39 1.41 0.00		
			Habitat units	0.00		
Spatial risk mu	ltiplier (SRM) de	ductions	Hedgerow units	0.00		
			Watercourse units	0.00		
			<u> </u>			
	FIN	AL RESULTS				
			Habitat units	-21.39		
Total n	et unit chan	ge	Hedgerow units	1.41		
(Including all on-site & off-site			Watercourse units	0.00		
			Habitat units	-78.26%	Total net g	ain achieved is less than target set ▲
	net % chang		Hedgerow units	16.07%		
(Including all on-site & off-site	e habitat retention, creat	on & enhancement)	Watercourse units	0.00%		
Tradina	rules satisfi	ed?	No - Check Tradir	ng Summaries 🛦		
Trading						
Trading						
Unit Type	Target	Baseline Units	Units Required	Unit Deficit		
	Target 10.00% 10.00%	Baseline Units 27.34 8.76	Units Required 30.07 9.64	Unit Deficit 24.13 0.00	No selditional h	edgerow units required to meet target 🗸

Input errors/rule breaks present in metric A



Trading Su	ımmary	
Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Same habitat required – bespoke compensation option ▲	Yes √
High	Same habitat required =	Yes √
Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	No ▲
Low	Same distinctiveness or better habitat required ≥	Yes √

Very High Distinctiveness					
Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change	Unit losses
Grassland - Lowland dry acid grassland	Grassland	0.00	0.00	0.00	
Grassland - Lowland meadows	Grassland	0.00	0.00	0.00	
Grassland - Upland hay meadows	Grassland	0.00	0.00	0.00	
Heathland and shrub - Mountain heaths and willow scrub	Heathland and shrub	0.00	0.00	0.00	
Lakes - Aquifer fed naturally fluctuating water bodies	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Calaminarian grasslands	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Limestone pavement	Sparsely vegetated land	0.00	0.00	0.00	
Wetland - Blanket bog	Wetland	0.00	0.00	0.00	
Wetland - Depressions on peat substrates (H7150)	Wetland	0.00	0.00	0.00	
Wetland - Fens (upland and lowland)	Wetland	0.00	0.00	0.00	
Wetland - Lowland raised bog	Wetland	0.00	0.00	0.00	
Wetland - Oceanic valley mire[1] (D2.1)	Wetland	0.00	0.00	0.00	
Wetland - Purple moor grass and rush pastures	Wetland	0.00	0.00	0.00	
Wetland - Transition mires and quaking bogs (H7140)	Wetland	0.00	0.00	0.00	
Woodland and forest - Wood-pasture and parkland	Woodland and forest	0.00	0.00	0.00	
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

Very High Distinctivenes	s Summary
Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses; Like for like not satisfied	0.00

High Distinctiveness					
Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change	Losses not yet accounted i
Grassland - Traditional orchards	Grassland	0.00	0.00	0.00	
Grassland - Floodplain wetland mosaic and CFGM	Grassland	0.00	0.00	0.00	
Grassland - Lowland calcareous grassland	Grassland	0.00	0.00	0.00	
Grassland - Tall herb communities (H6430)	Grassland	0.00	0.00	0.00	
Grassland - Upland calcareous grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Lowland Heathland	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Dunes with sea buckthorn (H2160)	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Unland heathland Heathland and shrub - Unland heathland	Heathland and shrub	0.00	0.00	0.00	
Lakes - High alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Low alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Mari lakes	Lakes	0.00	0.00	0.00	
Lakes - Moderate alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Peat lakes	Lakes	0.00	0.00	0.00	
Lakes - Ponds (priority habitat)	Lakes	0.00	0.00	0.00	
Lakes - Temporary lakes ponds and pools (H3170)	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Coastal sand dunes	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Coastal vegetated shingle	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Inland rock outcrop and scree habitats	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Maritime cliff and slopes	Sparsely vegetated land	0.00	0.00	0.00	
Urban - Open mosaic habitats on previously developed land	Urban	0.00	0.00	0.00	
Wetland - Reedbeds	Wetland	0.00	0.00	0.00	
Woodland and forest - Felled/Replacement for felled woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland beech and yew woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Native pine woodlands	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland birchwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland mixed ashwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland oakwood	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Wet woodland	Woodland and forest	0.00	0.00	0.00	· · · · · · · · · · · · · · · · · · ·
Coastal lagoons - Coastal lagoons	Coastal lagoons	0.00	0.00	0.00	
Rocky shore - High energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral mud	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00	
Coastal saltmarsh - Saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Mussels	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Sabellaria	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Features of littoral sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral muddy sand	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

High Distinctiveness S	ummary
High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses; Like for like not satisfied	0.00

Medium Dis	tinctiveness				
Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change	Cumulative broad habitat chan
Cropland - Arable field margins cultivated annually	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins game bird mix	Cropland	0.00	0.00	0.00	0.00
Cropland - Arable field margins pollen and nectar	Cropland	0.00	0.00	0.00	
Cropland - Arable field marqins tussocky	Cropland	0.00	0.00	0.00	
Grassland - Other lowland acid grassland	Grassland	0.00	0.00	0.00	
Grassland - Other neutral grassland	Grassland	-23.97	0.00	-23.97	-23.97
Grassland - Upland acid grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Blackthorn scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Bramble scrub	Heathland and shrub	-0.26	0.00	-0.26	
Heathland and shrub - Gorse scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hawthorn scrub	Heathland and shrub	0.00	0.00	0.00	-0.12
Heathland and shrub - Willow scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hazel scrub	Heathland and shrub	0.00	0.00	0.00	
	Heathland and shrub	0.15	0.00	0.15	
Lakes - Ponds (non-priority habitat)	Lakes	0.00	0.00	0.00	0.00
Lakes - Reservoirs	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land	0.00	0.00	0.00	0.00
Urban - Cemeteries and churchyards	Urban	0.00	0.00	0.00	0.00
Urban - Biodiverse green roof	Urban	0.00	0.00	0.00	0.00
Individual trees - Urban tree	Individual trees	1.00	0.00	1.00	1.00
Individual trees - Rural tree	Individual trees	0.00	0.00	0.00	1.00
Woodland and forest - Other Scot's pine woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Other woodland; broadleaved	Woodland and forest	0.00	0.00	0.00	0.00
Woodland and forest - Other woodland; mixed	Woodland and forest	0.00	0.00	0.00	
Intertidal sediment - Littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral sand	Intertidal sediment	0.00	0.00	0.00	0.00
Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)	Intertidal hard structures	0.00	0.00	0.00	
		-23.09	0.00	-23.08	

Medium Distinctiveness Summary						
Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	1.00 🗸					
Medium Distinctiveness Broad Habitat losses to be offset by trading up	-24.09 A					
Higher Distinctiveness Surplus Units minus Medium Distinctiveness Broad Habitat Deficit	-24.09 ▲					
Cumulative surplus of units	-23.08 ▲					

Low Distinctiveness

Low Distinctiveness Summary

Cropland - Cereal crops Cropland - Entructurur Cropland - Vibra - Cereal Cropland - Cereal Company Cropland - Vibra - Cereal Company	Cropland Cropland Cropland Cropland Cropland Cropland Cropland Cropland Cropland	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
Cropland - Premover or Cropland - Cropl	Cropland Cropland Cropland Cropland Cropland Grassland	0.00 0.00 0.00 0.00	0.00	0.00
Cropland - Non-cereal crops Cropland - Temporary grass and clover leys Cropland - Winter subbole Cropland - Winter subbole	Cropland Cropland Cropland Grassland	0.00 0.00 0.00	0.00	
Cropland - Temporary grass and clover leys Cropland - Winter stubble	Cropland Cropland Grassland	0.00		
Cropland - Winter stubble	Cropland Grassland	0.00	0.00	0.00
	Grassland			0.00
Grassland - Modified grassland			0.00	0.00
		-0.78	0.00	-0.78 A
Grassland - Bracken	Grassland	0.00	0.00	0.00
Heathland and shrub - Rhododendron scrub Hea	athland and shrub	0.00	0.00	0.00
Lakes - Ornamental lake or pond	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Ruderal/ephemeral Spars	rsely vegetated land	-0.01	0.00	-0.01 A
Sparsely vegetated land - Tall forbs Spars	rsely vegetated land	0.00	0.00	0.00
Urban - Bioswale	Urban	0.06	0.00	0.06
Urban - Bare cround	Urban	0.00	0.00	0.00
Urban - Allotments	Urban	0.00	0.00	0.00
Urban - Facade-bound creen wall	Urban	0.00	0.00	0.00
Urban - Ground based creen wall	Urban	0.00	0.00	0.00
Urban - Ground level planters	Urban	0.00	0.00	0.00
Urban - Other green roof	Urban	0.00	0.00	0.00
Urban - Intensive green roof	Urban	0.00	0.00	0.00
Urban - Introduced shrub	Urban	0.60	0.00	0.60
Urban - Rain garden	Urban	0.00	0.00	0.00
Urban - Actively worked sand pit quarry or open cast mine	Urban	0.00	0.00	0.00
Urban - Sustainable drainage system	Urban	0.00	0.00	0.00
Urban - Vacant or derelict land	Urban	0.00	0.00	0.00
Urban - Vegetated garden	Urban	1.82	0.00	1.82
	oodland and forest	0.00	0.00	0.00
	Coastal saltmarsh	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	ntertidal sediment	0.00	0.00	0.00
	tidal hard structures	0.00	0.00	0.00
	tidal hard structures	0.00	0.00	0.00
	eathland and shrub	0.00	0.00	0.00
reamant and one or other sea Duckhorn scrup	eaumanu and SHIUD	1.69	0.00	1.69

Low Distinctiveness net change in units	1.69	
Cumulative surplus of units	1.69	

Trading Summary						
Distinctiveness Group	Trading Satisfied?					
Very High	Same habitat required =	Yes ✓				
High	Like for like or better	Yes √				
Medium	Same distinctiveness or better habitat required	Yes √				
Low	Same distinctiveness or better habitat required	Yes √				
Very Low	Same distinctiveness or better habitat required	Yes √				

Very High Distinctiveness				
On-site unit change	Off-site unit change	Project-wide unit change		
0.00	0.00	0.00		
_	On-site unit change	On-site unit change Off-site unit change		

High Distinctiveness						
Habitat group	On-site unit change	Off-site unit change	Project wide unit change			
Species-rich native hedgerow with trees	1.23	0.00	1.23 ✓			
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00			
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00			
	1.23	0.00	1.23			

Medium Distinctiveness							
Habitat group On-site unit change Off-site unit change change							
Species-rich native hedgerow	-0.01	0.00	-0.01 ▲				
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00				
Native hedgerow with trees	0.00	0.00	0.00				
Ecologically valuable line of trees	0.00	0.00	0.00				
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00				
	-0.01	0.00	-0.01				

Low Distinctiveness						
Habitat group On-site unit change Off-aite unit change change						
Native hedgerow	0.19	0.00	0.19 ✓			
Line of trees	0.00	0.00	0.00			
Line of trees - associated with bank or ditch	0.00	0.00	0.00			
	0.19	0.00	0.19			

Very Low Distinctiveness					
Habitat group	On-site unit change	Off-site unit change	Project wide unit change		
Non-native and ornamental hedgerow	0.00	0.00	0.00		
	0.00	0.00	0.00		

Very High Dis	stinctiveness Summary
y High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
maining losses; Like for like	0.00

High Distinctiveness Summary				
High Distinctiveness Units available to offset lower distinctiveness deficit	1.23 ✓			
High Distinctiveness losses to be offset by trading up	0.00			
Higher Distinctiveness surplus units minus any high distinctiveness deficit	0.00			

Medium Distinctiveness Summary				
Units available from higher distinctiveness habitats	1.23	✓		
Medium Distinctiveness net change in units	-0.01	Δ		
Cumulative availability of units	1.22	✓		

Low Distinctiveness Summary					
Low Distinctiveness net change in units	0.19	✓			
Cumulative availability of units	1.41	✓			

Very Low Distinctiveness Summary				
0.00				
1.41	✓			
	0.00			

Project Name: Land North of Camp Road Map Reference:
A-1 On-Site Habitat Baseline

Condense / Show Rows

Area habitat summary
Total Net Unit Change -01.00
Total Net District Change -78.80%
Treating habs festilated No - check to thing summaries A

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		Existing area habitets Distinctiveness Condition Strategie significance						Ecological baseline	
Rei	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition.	Strategio significance	Required Action to Meet Trading Rules	Total habitat units
1	Grassland	Modified grassland	No	0.8442	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	1.69
2	Græsland	Other neutral grassland	No	3.1718	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	25.37
3	Sparaely vegetated land	Ruderal/Ephemeral	No	0.007	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.01
4	Heathland and shrub	Bramble scrub	No	0.0654	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	0.26
8	Urban	Developed land; sealed surface	No	0.0743	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00

								Comments									
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost	Bespoke compensation agreed for losses of VHDH or irreplaceable liabitat	User comments	Planning authority comments	Habitat reference number								
		0.00	0.00	0.84	1.69		g4-1 and g4-2										
		0.00	0.00	3.17	25.37		g3c-1										
		0.00	0.00	0.01	0.01		re-1										
		0.00	0.00	0.07	0.26		h3d-1 - h3d-5										
		0.00	0.00	0.07	0.00		ulb-1										



													Post Inio	ryendon hebitete											
_	_				Distinct	700.000	Con	Sittem	ion. Biratogio alguificanca			Temporal multiplier							Difficulty multipliers					Comments	
20cm		Broad Habitet	Proposed Imbilial	Acus (hectsree)	Distinctiveness	Soore	Condition	Secon	Straingle significance	Strategie eignificance	Strategio significance multiplier	Standard time to turget condition (years)	Hebitet orested in advence (years)	Delay in starting habited creation (years)	Standard or adjusted time to target condition	Pinel time to target exacition (years)	Pinel time to turget multiplier	Stendard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty smiliplier applied	Hebitet units delivered.	User comments	Pleasing authority communis	Hubblet references number
1		Urban	Stormie	0.0212	Low	2	Moderate	2	Location ecologically desirable but not in local attategy	Medium strategic zignificance	1.1	1	0	0	Standard time to target condition applied	1	0.965	Medium	Standard difficulty applied	Medium	0.67	0.06	biorwsle with associated planting		
2		Grassland	Other neutral grassland	0.2098	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	5	0		Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low		1.40	wildlower meadow		
8		Grassland	Modified grassland	0.2516	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	4	0		Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low		0.91	amenity grandand		
4		Urban	Introduced shrub	0.3105	Low	2	Condition Assessment NA	- 1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	1	0	۰	Standard time to target condition applied		0.965	Low	Standard difficulty applied	Low		0.60	omamental shrub planting		
8		Heathland and abrub	Mixed acrub	0.0379	Medium	4	Poor	- 1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	- 1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low		0.15	native mixed scrub planting		
8		Urban	Vegetated gurden	0.9444	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied		0.965	Low	Drandard difficulty applied	Low	1	1.02	gwdess		
7		Urban	Developed land; zealed zurface	0.7929	VLow	0	NA - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	0	0		Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low		0.00	buildings		
8		Urban	Developed land; zealed zurface	1.5044	VLow	0	NA - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	0	0		Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low		0.00	hard standing and play area		
		Individual trees	Urban tree	0.3593	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	- 1	10	0		Standard time to target condition applied	30	0.700	Low	Standard difficulty applied	Low		1.00	urban trees planted across the site - 55 in total		

Project Name: Land North	of Camp Road Map Reference:	1	Hedgerow summary									
B-1 On-Sit	e Hedge Baseline		Total Net Unit Change Total Net % Change	1.41								
Condense / Show Columns	Condense / Show Rows	-	Trading Rules Satisfied	Yes√								
Main Menu												

			Existing hedgerow habitats		Distinctivens	Condition	on	Strategio alguificano	Required Action to	Ecological baseline			
	Ref	Hedge number	Habitat type	abitat type Length. (km) Distinctiveness Score Condition. Score St		Strategic algnificance	Strategic significance	Strategio algnificance multiplier	Most Trading Rules	Total hedgerow units			
	1	h2a6-1	Species-rich native hedgerow	0.107	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.28
I	2	h2a5-2	Species-rich native hedgerow with trees - associated with bank or ditch	0.3	V.High	8	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	7.20
	3	h2a6-1	Native hedgerow	0.07	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.28

						Comments									
Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Planning suthority comments	Habitet reference number							
		0.00	0.00	0.11	1.28	previously listed as species rich hedge with trees however an updated site visit in March 2024 identified that there were no trees in the hedgerow, and there were no signs that there ever had been.									
0.3		7.20	0.00	0.00	0.00										
		0.00	0.00	0.07	0.28										

Project Name: Land North of Cump Road Mag Reference:

B-2 On-Sitte Hedge Creation

B-2 Con-Sitte Hedge Creation

Conditions / Zicon Roses

Conditions / Zicon Roses

Name Many

		Proposed habitate		Distinctiveness		Condition		Strategio significance						Difficulty risk multipliers				Hedge units	Comments					
Not	Herr hedge	Habiini type	Longth (km)	Distinctiveness	Socre	Condition	Score	Strategio significance	Strategio alguilicanos	Strategio algnificance multiplier	Standard Time to terget condition (vegas)	Habitat created in advance (years)	Delay in starting habitet creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Pinal time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier ambied	dalivered	User comments	Plenning enthority comments	Habitat reference number
1		Species-rich native hedgerow with trees	0.146	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	1.23			
2		Species-rich native hedgerow	0.191	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	1.28			
3		Native hedgerow	0.242	Low	2	Poor	- 1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.47			