

Land at Millom School, Salthouse Road, Millom LA18 5AB

## PRELIMINARY ASSESSMENT OF BIODIVERSITY NET GAIN

October 2024

ERAP (Consultant Ecologists) Ltd Reference: 2023-044b

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## Document Control

| Survey Type:                                                                    | Surveyors                                              | Survey Date(s)                  |
|---------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------|
| UK Habitat Classification Survey (including Condition Assessments of habitats). | Brian Robinson                                         | 19 <sup>th</sup> September 2024 |
| Reporting                                                                       | Personnel                                              | Date                            |
| <b>Author</b>                                                                   | Brian Robinson B.Sc. (Hons) MCIEEM<br>Senior Ecologist | 14 <sup>th</sup> October 2024   |
| <b>Signature(s)</b>                                                             |                                                        |                                 |
| <b>Checked by</b>                                                               | Rachel Brown B.Sc. (Hons)                              | 15 <sup>th</sup> October 2024   |
| <b>Revised and issued by</b>                                                    | Brian Robinson B.Sc. (Hons) MCIEEM                     | 15 <sup>th</sup> October 2024   |
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| <b>Version Number</b>                                                           | 1                                                      |                                 |

## 1.0 INTRODUCTION

### 1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Cohesion Consult Ltd to carry out an assessment of Biodiversity Net Gain (BNG) at Land at Millom School, Salthouse Road, Millom LA18 5AB (hereafter the 'site'). The Ordnance Survey (OS) grid reference at the centre of the Millom School site is SD 17445 80567.
- 1.1.2 The assessment was requested in connection with a planning application proposing the redevelopment of areas within the Millom School site.
- 1.1.3 The proposals will occur at five areas within the Millom School site (three of which are adjoining). **Table 1.1** present the area and change of use proposed at each of the locations.

**Table 1.1: Locations at Which Works are Proposed**

| Area Reference             | Central OS Grid Reference | Total Area (hectares) | Change of Use Proposed                                                                                                                                   |
|----------------------------|---------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Change of Land Use A and E | SD 17393 80507            | 0.3444                | Demolition of existing building and removal of amenity grassland for new building with fenced service yard, footpaths, car parking and amenity grassland |
| Change of Land Use B       | SD 17397 80395            | 0.1825                | Extended hard standing playground area and artificial playing field access                                                                               |
| Change of Land Use C       | SD 17270 80471            | 0.1604                | Demolition of disused building and grounds and provision of additional car parking                                                                       |
| Site Compound Area         | SD 17352 80570            | 0.4516                | Area of grassland to be used temporarily for a site compound during works before being revegetated                                                       |
| <b>Total</b>               |                           | <b>1.1389</b>         |                                                                                                                                                          |

- 1.1.4 It has been considered suitable, in this instance, to determine the baseline value of the habitats at the areas to be affected by the works only; it is considered that determine the value of the whole school area would disproportionately overvalue the baseline habitats within the site.
- 1.1.5 This BNG assessment has been prepared to provide an assessment of the biodiversity value of the baseline of the site, an assessment of the value of post-development habitats based on the site proposals and landscape strategy, and provides guidance in relation to the requirements to attain a net gain in accordance with *Biodiversity Net Gain: Good Practice Principles for Development* (CIEEM, 2016).
- 1.1.6 This report also advises on how compliance with Chapter 15, paragraph 186(d) of the *National Planning Policy Framework* (NPPF) (Department for Levelling Up, Housing and Communities, 2023)<sup>1</sup> can be achieved, which states '*opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate*'.

<sup>1</sup> Hereafter the NPPF

## 1.2 Site Description

- 1.2.1 An aerial image of the site and areas to be affected by the proposed development is appended at **Figure 1**.
- 1.2.2 The total area of the areas to be affected (including the proposed site compound area) is **1.1389 hectares**<sup>2</sup>.
- 1.2.3 The habitats present within the site are described and assessed in *2023-044b Millom School, Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2024), hereafter referred to as the 'ecology report'.
- 1.2.4 A summary of the habitats present within the site is presented at **Section 3.1** of this report.

## 1.3 Proposed Development Description

- 1.3.1 The assessment has been requested to inform a planning application for the proposed redevelopment at the site. The proposals are presented at *Millom Activity Centre: Proposed Site Plan Drawing No. 24015-2001 Revision P01* (Architects Plus, 2024), hereafter the 'proposals plan'.

## 1.4 Scope of Study

- 1.4.1 This report has been prepared to accompany a completed assessment of BNG using *The Statutory Biodiversity Metric Calculation Tool* (Natural England, 2023). The completed Microsoft Excel spreadsheet assessment is presented as a separate document, named '*ERAP Ltd 2023-044b Millom School Statutory Biodiversity Metric 14.10.24*', hereafter referred to as the 'BNG Metric'.
- 1.4.2 It is intended that this report provides a transparent assessment to demonstrate the calculation of net gain, based on the reasonable parameters assumed for the proposals (refer to **Section 2.3**). This approach has been applied on a number of other sites ERAP (Consultant Ecologists) Ltd has assisted with and has been accepted by the relevant Local Planning Authorities (LPA) and their ecological advisors to enable a planning application to progress.

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<sup>2</sup> As measured by ERAP (Consultant Ecologists) Ltd; detail on the methods used to measure the area of the site are presented at **Section 2.0**. It has been considered suitable in this instance, given the sometimes small areas of habitat within the site, to provide habitats in hectares to 4 decimal places (i.e. m<sup>2</sup> accuracy).

## 2.0 METHOD OF SURVEY

### 2.1 Habitat Assessment and Mapping

#### Baseline Habitats

- 2.1.1 A Phase 1 Habitat Survey including an assessment in accordance with the UKHab and condition assessments of the habitats present was carried out by Brian Robinson B.Sc. (Hons) MCIEEM on 19 September 2024. The weather was dry and sunny with a light air (Beaufort scale 1) and an air temperature of 20°C.
- 2.1.2 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using the 'Tree Constraints Plan' presented in *Millom School, Salthouse Road, Millom, Cumbria LA18 5AB: Arboricultural Impact Assessment Ref BTC2691* (Bowland Tree Consultancy Ltd, 2023), hereafter the 'AIA report', and *ESRI World Imagery* as base plans. The Tree Constraints Plan presented in the AIA report has been provided to ERAP (Consultant Ecologists) Ltd as a .pdf file, which has been inputted to QGIS and spatially referenced to match ESRI World Imagery.
- 2.1.3 Each of the habitats within the site has been assessed in accordance with the UKHab to determine each habitat type present. This has allowed a reliable classification of habitats in accordance with those used by the BNG Metric.
- 2.1.4 The UKHab has been designed to function at two scales: fine scale (25m<sup>2</sup> or 5 metres length) and large scale (400m<sup>2</sup> or 20m<sup>2</sup> length). It has been considered for the purposes of this survey (where the UKHab has been used to inform the BNG calculation of a relatively small area) that a finer scale of 5m<sup>2</sup> is appropriate for the classification of habitats.
- 2.1.5 A plan showing the baseline habitats present within the site in accordance with UKHab symbology is appended at **Figure 2**.
- 2.1.6 Condition Assessments for each of the habitats present within the site have been completed in accordance with *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology* (Natural England, November 2023) and are appended at **Section 7.1**.

#### Post-development Habitats

- 2.1.7 The post development habitats have been calculated using *Millom Activity Centre: Proposed Site Plan Drawing No. 24015-2001 Revision P01* (Architects Plus, 2024). This plan has been provided to ERAP (Consultant Ecologists) Ltd as a .pdf which has been inputted to QGIS and spatially referenced to match the Tree Constraints Plan and ESRI World Imagery.
- 2.1.8 A plan showing the proposed habitats (including the initial recommendations for compensation) in accordance with UKHab symbology is appended at **Figure 3**. Target condition assessments for each of the proposed habitats are appended at **Section 7.2**.

## 2.2 Survey and Reporting Limitations

- 2.2.1 All measurements have been either estimated whilst on site or measured using QGIS.
- 2.2.2 A detailed landscaping scheme has not been provided for the site. As described at **Section 4.0** below, this report provides a detailed assessment of the ecological value of the baseline habitats (in accordance with the BNG Metric) prior to development and a preliminary assessment of the ecological value of the site post development in accordance with the proposed habitats outlined at the proposals plan.

## 2.3 Evaluation Methods and Rules Applied

### Habitats and Assessment

- 2.3.1 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Where suitable, the ecological value of the habitats present have been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).
- 2.3.2 QGIS has been used to calculate the total area / length of each baseline habitat present within the site and the area / length of the proposed habitats at the site.
- 2.3.3 Each habitat and individual trees have been assessed to determine whether they are 'irreplaceable habitat', defined in NPPF as '*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen*'. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2023) document has also been referred to.
- 2.3.4 Existing individual trees have been measured using the Diameter at Breast Height (DBH) calculations presented in the AIA report inputted into the tree calculation tool provided by the BNG Metric. Proposed urban trees have been assessed to be of the 'small' size category in accordance with current guidance.

### Relevant Guidance

- 2.3.5 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration.

### Assumptions

- 2.3.6 Reasonable assumptions have been made in relation to the condition assessments for the proposed habitats at the site; the proposed condition assessment for each habitat is appended at **Section 7.2**. Long-term management of the proposed habitats is required to secure the proposed condition.

## 3.0 SURVEY RESULTS

### 3.1 Site Description

3.1.1 Refer to **Figure 2**. The areas of the site at which development is proposed comprise the following (note all tree references are in accordance with the AIA report):

- Areas of Bramble scrub, tall-herb, other neutral grassland, amenity grassland, vegetation colonising hard standing, ornamental shrubs, hard standing, buildings and trees T19, T20, T21, T22 and G11, located at the former bungalow and its grounds; and
- Areas of amenity grassland, hard standing and buildings associated with the remainder of the site. A single hedgerow is located at the area of amenity grassland at the southern end of the site associated with Change of Land Use B.

### 3.2 Assessment of Baseline Habitats

3.2.1 **Tables 3.1 to 3.3** provide a summary of the habitats present, their condition assessment result and their area within the site. Condition assessments for each habitat are appended at **Section 7.2**.

3.2.2 Note that there is no equivalent habitat for individual trees in Phase 1 Habitat Survey terminology.

**Table 3.1: Summary of Baseline Area Based Habitats within the Site**

| Habitat Reference                                         | UK Habitat Classification Type                                                            | BNG Habitat Equivalent               | Phase 1 Habitat Equivalent                         | Condition Assessment Result | Area (ha)* |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------|-----------------------------|------------|
| <b>Habitat 01:</b><br>Bramble scrub                       | h3d Bramble scrub with the secondary codes 203 mature tree and 518 neglected.             | Heathland and shrub - Mixed scrub    | A2.1 Dense continuous scrub                        | Condition Assessment N/A    | 0.0018     |
| <b>Habitat 02:</b><br>Tall forbs                          | g3 neutral grassland with the secondary code 16 tall forbs.                               | Sparsely vegetated land - Tall forbs | B6 Poor semi-improved grassland                    | Poor                        | 0.0040     |
| <b>Habitat 03:</b><br>Other neutral grassland             | g3c other neutral grassland with the secondary code 32 scattered trees                    | Grassland - Other neutral grassland  | B6 Poor semi-improved grassland                    | Poor                        | 0.0532     |
| <b>Habitat 04:</b><br>Amenity grassland 1                 | g4 modified grassland with the secondary codes 108 frequently mown and 32 scattered trees | Grassland - Modified grassland       | J1.2 Cultivated/disturbed land - amenity grassland | Poor                        | 0.3669     |
| <b>Habitat 05:</b><br>Amenity grassland 2 (playing field) | g4 modified grassland with the secondary code 108 frequently mown.                        | Grassland - Modified grassland       | J1.2 Cultivated/disturbed land - amenity grassland | Poor                        | 0.3023     |



| Habitat Reference                                        | UK Habitat Classification Type                                                                                                     | BNG Habitat Equivalent                           | Phase 1 Habitat Equivalent                                    | Condition Assessment Result | Area (ha)*    |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------|-----------------------------|---------------|
| <b>Habitat 06:</b><br>Vegetation colonising hardstanding | u1b developed land; sealed surface with the secondary codes 81 ruderal or ephemeral, 82 vacant or derelict land and 518 neglected. | Urban - Vacant or derelict land                  | J1.3<br>Cultivated/disturbed land – ephemeral/short perennial | Moderate                    | 0.0110        |
| <b>Habitat 07:</b><br>Ornamental shrubs                  | u1 built up and urban areas with the secondary codes 516 active management and 847 introduced shrub.                               | Urban - Introduced shrub                         | J1.4 Introduced shrub                                         | Condition Assessment<br>N/A | 0.0016        |
| <b>Habitat 08:</b><br>Long jump run up                   | u1b developed land; sealed surface with the secondary code 821 artificial sports pitches.                                          | Urban - Developed land; sealed surface           | J4 Bare ground                                                | N/A - Other                 | 0.0079        |
| <b>Habitat 09:</b><br>Long jump landing area             | u1c artificial unvegetated, unsealed surface with the secondary code 821 artificial sports pitches.                                | Urban - Artificial unvegetated, unsealed surface | J4 Bare ground                                                | N/A - Other                 | 0.0050        |
| <b>Habitat 10:</b><br>Hardstanding                       | u1b6 other developed land.                                                                                                         | Urban - Developed land; sealed surface           | J4 Bare ground                                                | N/A - Other                 | 0.3240        |
| <b>Habitat 11:</b><br>Buildings                          | u1b5 buildings.                                                                                                                    | Urban - Developed land; sealed surface           | J5 - Other habitat - individual buildings                     | N/A - Other                 | 0.0612        |
| <b>Total:</b>                                            |                                                                                                                                    |                                                  |                                                               |                             | <b>1.1389</b> |

**Table 3.2: Summary of Individual Trees within the Site**

| Habitat Reference                                           | UK Habitat Classification Type | BNG Habitat Equivalent        | Size Category and Condition Assessment Result | Area (ha) <sup>3</sup> |
|-------------------------------------------------------------|--------------------------------|-------------------------------|-----------------------------------------------|------------------------|
| <b>Habitat 12.1</b><br>T19                                  | 200 tree over g3c              | Individual trees – urban tree | Medium – Good                                 | 0.0163                 |
| <b>Habitat 12.2</b><br>T21                                  | 203 mature tree over g4.       | Individual trees – urban tree | Medium – Moderate                             | 0.0163                 |
| <b>Habitat 12.3</b><br>T20, T22, G11.01, G11.02 and G11.03. | 200 tree over g3c              | Individual trees – urban tree | Small - Moderate                              | 0.0204                 |
| <b>Total:</b>                                               |                                |                               |                                               | <b>0.0530</b>          |

<sup>3</sup> Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

**Table 3.3: Summary of Baseline Hedgerow Habitats within Site**

| Habitat Reference               | UK Habitat Classification Type                                                                             | BNG Habitat Equivalent                  | Phase 1 Habitat Equivalent               | Condition Assessment Result | Length (km) |
|---------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------|-------------|
| <b>Habitat 13</b><br>Hedgerow 1 | h2a5 species-rich native hedgerow with the secondary codes 516 active management and 116 flailed hedgerow. | Hedgerow - Species-rich native hedgerow | J2.1.1 Intact hedge, native species-rich | Good                        | 0.12        |
| <b>Total</b>                    |                                                                                                            |                                         |                                          |                             | <b>0.12</b> |

3.2.3 The baseline BNG score for the site is provided at **Section 5.0**, below.

## 4.0 POST DEVELOPMENT HABITATS

### 4.1 Consideration of Target Condition Assessments

4.1.1 Reasonable assumptions have been made for each of the retained and proposed habitats as specified on the proposals plan; Target Condition Assessments are presented at **Section 7.2**. A long-term habitat management plan with an appropriate monitoring regime is required to secure the condition of these habitats in the long-term.

4.1.2 Note that, in the absence of a formal landscape strategy for the site, assumptions have been made demonstrating how a 10% net gain can be attained at the site; this report must be updated following the completion of a formal landscape strategy for the site.

### 4.2 Consideration of Proposed Habitats

4.2.1 The proposals plan demonstrates that the site will be developed to new buildings and hardstanding with areas of amenity grassland. Consultation with the client it has been recognised that the area to be used as a site compound will provide land suitable for enhancement following the completion of the works.

4.2.2 Hedgerow 1 will be retained. It has been calculated that a 0.03 kilometres length of species-rich hedgerow will be required to attain a net gain at the site. At least 40 individual trees will be required to attain an overall net gain and meet trading rules, due to the trees which are to be lost to facilitate development.

4.2.3 It is recommended that the area used as compound is managed to a mixture of scrub and wildflower grassland (i.e. other neutral grassland managed to a 'Good' condition, with additional tree planting to an appropriate scale to compensate for the loss of trees associated with the proposed development.

**Table 4.1: Summary of Area-based Habitats to be Created at the Site**

| Habitat Type                                   | BNG Equivalent Habitat                 | Target Condition | Area (ha)*    |
|------------------------------------------------|----------------------------------------|------------------|---------------|
| <b>Habitat A</b><br>Mixed scrub                | Heathland and shrub – Mixed scrub      | Poor             | 0.0038        |
| <b>Habitat B</b><br>Wildflower grassland       | Grassland – Other neutral grassland    | Moderate         | 0.3798        |
| <b>Habitat C</b><br>Proposed amenity grassland | Grassland – Modified grassland         | Poor             | 0.0304        |
| <b>Habitat D</b><br>Hardstanding               | Urban – Developed land, sealed surface | N/A - Other      | 0.5190        |
| <b>Habitat E</b><br>Buildings                  | Urban – Developed land, sealed surface | N/A - Other      | 0.2067        |
| <b>Total</b>                                   |                                        |                  | <b>1.1389</b> |

**Table 4.2: Summary of Individual Trees to be Created at the Site**

| Habitat Reference                                       | BNG Habitat Equivalent     | Target Condition | Area (ha) <sup>4</sup> |
|---------------------------------------------------------|----------------------------|------------------|------------------------|
| <b>Habitat F</b><br><i>Urban trees (40, small size)</i> | <i>Urban – urban trees</i> | Moderate         | 0.1629                 |
| <b>Total</b>                                            |                            |                  | <b>0.1629</b>          |

**Table 4.3: Summary of Hedgerow Habitats to be Retained and Created at the Site**

| Habitat Type                     | BNG Equivalent Habitat                  | Target Condition | Length (km) |
|----------------------------------|-----------------------------------------|------------------|-------------|
| <b>Retained Habitats</b>         |                                         |                  |             |
| <b>Habitat 13:</b><br>Hedgerow 1 | Hedgerow - Species-rich native hedgerow | Good             | 0.12        |
| <b>Proposed Habitats</b>         |                                         |                  |             |
| <b>Habitat G</b><br>New hedgerow | Hedgerow - Species-rich native hedgerow | Moderate         | 0.03        |
| <b>Total</b>                     |                                         |                  | <b>0.15</b> |

<sup>4</sup> Small urban trees have a diameter at breast height (DBH) of up to 30cm, medium urban trees have a DBH of 30 to 60cm, large urban trees have a DBH of 60 to 90cm and very large trees have DBH of more than 90cm. Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

## 5.0 HEADLINE RESULTS, EVALUATION AND CONCLUSION

5.1 The headline results of the BNG Calculator are presented at **Table 5.1** below.

**Table 5.1: Results of Statutory Biodiversity Metric Calculation Tool**

|                                                 |                   |        |        |
|-------------------------------------------------|-------------------|--------|--------|
| <b>On-site Baseline</b>                         | Habitat units     | 2.10   |        |
|                                                 | Hedgerow units    | 1.44   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>On-site Post Intervention</b>                | Habitat units     | 3.11   |        |
|                                                 | Hedgerow units    | 1.64   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>On-site net change (units % percentage)</b>  | Habitat units     | 1.01   | 48.09% |
|                                                 | Hedgerow units    | 0.20   | 13.95% |
|                                                 | Watercourse units | 0.00   | 0.00%  |
| <b>Off-site Baseline</b>                        | Habitat units     | 0.00   |        |
|                                                 | Hedgerow units    | 0.00   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>Off-site Post Intervention</b>               | Habitat units     | 0.00   |        |
|                                                 | Hedgerow units    | 0.00   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>Off-site net change (units % percentage)</b> | Habitat units     | 0.00   | 0.00%  |
|                                                 | Hedgerow units    | 0.00   | 0.00%  |
|                                                 | Watercourse units | 0.00   | 0.00%  |
| <b>Combined Net Unit Change</b>                 | Habitat units     | 1.01   |        |
|                                                 | Hedgerow units    | 0.33   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>Spatial Risk Multiplier (SRM) Reductions</b> | Habitat units     | 0.00   |        |
|                                                 | Hedgerow units    | 0.00   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>Total Net Unit Change</b>                    | Habitat units     | 1.01   |        |
|                                                 | Hedgerow units    | 0.20   |        |
|                                                 | Watercourse units | 0.00   |        |
| <b>Total Net % Change</b>                       | Habitat units     | 48.09% |        |
|                                                 | Hedgerow units    | 13.95% |        |
|                                                 | Watercourse units | 0.00%  |        |

| Unit Type         | Target | Baseline Units | Units Required | Unit Deficit | Comment                                                  |
|-------------------|--------|----------------|----------------|--------------|----------------------------------------------------------|
| Habitat units     | 10%    | 0.00           | 0.00           | 0.00         | No additional area habitat units required to meet target |
| Hedgerow units    | 10%    | 0.00           | 0.00           | 0.00         | No additional area habitat units required to meet target |
| Watercourse units | 10%    | 0.00           | 0.00           | 0.00         | No additional area habitat units required to meet target |

5.2 The above demonstrates that net gain can be achieved at the site via the creation of wildflower grassland, mixed scrub, tree planting and hedgerow planting. This has been calculated prior to the provision of a landscape design scheme for the site.

5.3 If a landscape design scheme and revised BNG assessment demonstrates that net gain cannot be attained at the site then the following options are available (a combination of the approaches outlined below may be appropriate):

- 
- a. A redesign of the site to minimise impacts and establish enhancement of retained areas where possible;
  - b. Enhancement of off-site habitats to compensate for the loss of units associated with the proposed development; and
  - c. Agreeing a biodiversity payment for the loss of habitat units associated with the site with a habitat bank or other similar provider.
- 5.4 It is recommended that any such approach is only finalised following the completion of the site design and a landscape planting plan (and a revised BNG Assessment) to ensure that the final calculation represents an accurate assessment of the habitat unit change at the site.
- 5.5 Note that any habitats managed within the site and any off-site compensatory habitats to be enhanced by the client will be subject to a long-term habitat management plan.
- 5.6 It is essential that, in addition to the result of the BNG Metric, the assessment of biodiversity net gain takes into account the measures to be accommodated and implemented at the site to secure gains and betterment for biodiversity that the BNG Metric cannot take account of.
- 5.7 At this site it is advised that the following measures are also considered as part of the assessment of biodiversity net gain:
- a. Incorporation of opportunities for roosting bats at the new properties as, although the habitats are suitable for use by foraging bat species such as *Pipistrellus* species, there are no significant opportunities for roosting bats (particularly maternity roosts) at the site currently (this is considered to provide additionality);
  - b. Incorporation of opportunities for use by nesting birds at the developed site including in both the public open space by landscape planting and at the new buildings.
  - c. Eradication / control of invasive plant species from the site including the Montbretia; and
  - d. Preparation and implementation of a Landscape and Ecological Management Plan (or similar) to secure long-term management of the retained and created habitats in accordance with conservation targets and objectives.

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## 7.0 APPENDIX: CONDITION ASSESSMENTS AND FIGURES

### 7.1 Condition Assessments of Baseline Habitats

7.1.1 No Condition Assessment is required for Habitat 01 (Bramble scrub), Habitat 07 (Introduced shrubs), and Habitats 08, 09, 10 and 11 (buildings and hard standing).

**Table 7.1: Condition Assessments for Habitat 02: Tall Forbs**

| Habitat Reference                                                                                                                            | A | B | C | Total No. of Criterion Passed | Condition Assessment Result |
|----------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|-------------------------------|-----------------------------|
| Habitat 02: Tall forbs                                                                                                                       | X | X | ✓ | 1                             | Poor                        |
| <b>If only 3 core Criteria Assessed</b>                                                                                                      |   |   |   |                               |                             |
| <b>Good:</b> Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C.                                   |   |   |   |                               |                             |
| <b>Moderate:</b> Passes 2 core criteria; OR Passes 3 core criteria but does not meet the requirements for Good condition within criterion C. |   |   |   |                               |                             |
| <b>Poor:</b> Passes 1 or fewer of core criteria                                                                                              |   |   |   |                               |                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Condition Assessment Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>A.</b> Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>B.</b> The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>C.</b> Invasive non-native plant species listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended) and others which are to the detriment of native wildlife (using professional judgement) <sup>2</sup> cover less than 5% of the total vegetated area. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement<br><i>Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than &lt;5% cover).</i><br>Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website: Home » NNSS (nonnativespecies.org) and Natural England Access to Evidence page should also be checked for up-to-date information: Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk).<br><i>For green roof habitat types only</i> – Buddleia ( <i>Buddleja davidii</i> ) should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years. |

**Table 7.2: Condition Assessments for Habitat 03: Other Neutral Grassland**

| Habitat Reference                       | A | B | C | D                                                                                              | E | F | Total No. of Criterion Passed | Condition Assessment Result |
|-----------------------------------------|---|---|---|------------------------------------------------------------------------------------------------|---|---|-------------------------------|-----------------------------|
| Habitat 03: Other neutral grassland     | X | ✓ | X | ✓                                                                                              | X | X | 2                             | Poor                        |
| <b>Acid Grassland Types</b>             |   |   |   | <b>Non-acid Grassland Types</b>                                                                |   |   |                               |                             |
| <b>Good:</b> passes 5 criteria          |   |   |   | <b>Good:</b> passes 5 or 6 criteria, including essential criteria A and additional criterion F |   |   |                               |                             |
| <b>Moderate:</b> passes 3 or 4 criteria |   |   |   | <b>Moderate:</b> passes 3 to 5 criteria, including essential criterion A                       |   |   |                               |                             |
| <b>Poor:</b> passes 2 or fewer criteria |   |   |   | <b>Poor:</b> passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F |   |   |                               |                             |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>A.</b> The grassland is a good representation of the 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). Professional judgement should be used alongside the UKHab description.<br/> <i>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><b>B.</b> Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p><b>C.</b> Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens. For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p><b>D.</b> Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p><b>E.</b> Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area (species are listed below).<br/>         If any invasive non-native plant species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended) are present, this criterion is automatically failed. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement.<br/> <i>Species indicative of sub-optimal condition for this habitat type include:</i> Creeping Thistle, Spear Thistle, Curled Dock, Broad-leaved Dock, Common Nettle, Creeping Buttercup, Greater Plantain, White Clover, Cow Parsley. There may be additional relevant species local to the region and / or site.</p> |
| <p><b>Additional Group – non-acid grassland types only</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p><b>F.</b> There are 10 or more vascular plant species per m<sup>2</sup> present, including forbs that are characteristic of the habitat type (species referenced at Criterion ‘E’ cannot contribute towards this count).<br/> <i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



**Table 7.3: Condition Assessments for Habitats 04 and 05: Amenity Grassland 1 and 2**

| Habitat Reference                                                                          | A | B | C | D | E | F | G | Total No. of<br>Criterion<br>Passed | Condition Assessment<br>Result <sup>1</sup> |
|--------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|-------------------------------------|---------------------------------------------|
| Habitat 04: Amenity grassland 1                                                            | X | X | ✓ | X | ✓ | ✓ | ✓ | 4 (fails A)                         | Poor                                        |
| Habitat 05: Amenity grassland 2                                                            | X | X | ✓ | ✓ | ✓ | ✓ | ✓ | 5 (fails A)                         | Poor                                        |
| <b>Good:</b> Passes 6 or 7 criteria including essential criterion A                        |   |   |   |   |   |   |   |                                     |                                             |
| <b>Moderate:</b> Passes 4 or 5 criteria including essential criterion A                    |   |   |   |   |   |   |   |                                     |                                             |
| <b>Poor:</b> Passes 3 or fewer criteria OR passes 4 to 6 criteria, but failing criterion A |   |   |   |   |   |   |   |                                     |                                             |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>A.</b> There are 6 to 8 vascular plant species per m2 present, including at least 2 forbs (this may include those listed in below). Note - this criterion is essential for achieving Moderate or Good condition.</p> <p>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 below), 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.</p> <p><i>Plant Species:</i> Creeping Thistle (<i>Cirsium arvense</i>), Spear Thistle (<i>Cirsium vulgare</i>), Curled Dock (<i>Rumex crispus</i>), Broad-leaved Dock (<i>Rumex obtusifolius</i>), Common Nettle (<i>Urtica dioica</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Greater Plantain (<i>Plantago major</i>), White Clover (<i>Trifolium repens</i>) and Cow Parsley (<i>Anthriscus sylvestris</i>).</p> |
| <p><b>B.</b> Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>C.</b> Any scrub present accounts for less than 20% of total grassland area (some scattered scrub such as Bramble may be present).</p> <p>Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>D.</b> Physical damage 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>E.</b> Cover of bare ground between 1% and 10%, including localised areas, for example, rabbit warrens.</p> <p>For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p><b>F.</b> Cover of Bracken less than 20%.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>G.</b> There is an absence of invasive non-native species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended).</p> <p>This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**Table 7.4: Condition Assessments for Habitat 06: Vegetation Colonising Hardstanding**

| Habitat Reference                                                                                                                            | A | B | C | Total No. of Criterion Passed | Condition Assessment Result |
|----------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|-------------------------------|-----------------------------|
| Habitat 06: Vegetation colonising hard standing                                                                                              | ✓ | ✓ | X | 2                             | Moderate                    |
| <b>If only 3 core Criteria Assessed</b>                                                                                                      |   |   |   |                               |                             |
| <b>Good:</b> Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C.                                   |   |   |   |                               |                             |
| <b>Moderate:</b> Passes 2 core criteria; OR Passes 3 core criteria but does not meet the requirements for Good condition within criterion C. |   |   |   |                               |                             |
| <b>Poor:</b> Passes 1 or fewer of core criteria                                                                                              |   |   |   |                               |                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Condition Assessment Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>A.</b> Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>B.</b> The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>C.</b> Invasive non-native plant species listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended) and others which are to the detriment of native wildlife (using professional judgement) <sup>2</sup> cover less than 5% of the total vegetated area. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement<br><i>Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than &lt;5% cover).</i><br>Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website: Home » NNSS (nonnativespecies.org) and Natural England Access to Evidence page should also be checked for up-to-date information: Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk).<br><i>For green roof habitat types only</i> – Buddleia ( <i>Buddleja davidii</i> ) should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years. |

**Table 7.5: Condition Assessments for Habitat 12: Individual Trees**

| Tree Reference | Common Name | UKHab Description              | Ancient or Veteran? | DBH (cm) | BNG Size Category | A | B | C | D | E | F | Condition Assessment Result |
|----------------|-------------|--------------------------------|---------------------|----------|-------------------|---|---|---|---|---|---|-----------------------------|
| T19            | Sycamore    | 200 tree over g3c.             | No                  | 42       | Medium            | X | ✓ | ✓ | ✓ | ✓ | ✓ | Good - 5 conditions met     |
| T20            | Rowan       | 200 tree over g3c.             | No                  | 21       | Small             | X | ✓ | X | ✓ | ✓ | ✓ | Moderate - 4 conditions met |
| T21            | Wild Cherry | 203 mature tree over g4.       | No                  | 47       | Medium            | X | ✓ | ✓ | ✓ | X | ✓ | Moderate - 4 conditions met |
| T22            | Crab Apple  | 203 mature tree over g4 & 108. | No                  | 29       | Small             | ✓ | ✓ | X | ✓ | X | ✓ | Moderate - 4 conditions met |
| G11.01         | Beech       | 200 tree over g3c.             | No                  | 19       | Small             | ✓ | ✓ | X | ✓ | X | ✓ | Moderate - 4 conditions met |
| G11.02         | Beech       | 200 tree over g3c.             | No                  | 19       | Small             | ✓ | ✓ | X | ✓ | X | ✓ | Moderate - 4 conditions met |
| G11.03         | Beech       | 200 tree over g3.              | No                  | 19       | Small             | ✓ | ✓ | X | ✓ | X | ✓ | Moderate - 4 conditions met |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Condition Assessment Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>A.</b> The tree is a native species (or more than 70% within the block are native species)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>B.</b> Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>C.</b> The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from:<br><i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk).<br>Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E. |
| <b>D.</b> 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.                                                                                                                                                                                                                                                                                                                                                      |
| <b>E.</b> Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>F.</b> More than 20% of the tree canopy area is oversailing vegetation beneath                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Table 7.6: Condition Assessments for Habitat 13: Hedgerow 1**

| Habitat Reference                                                                                                                                                                    | A1 | A2 | B1 | B2 | C1 | C2 | D1                                                                                                                                                                                       | D2 | E1  | E2  | Total No. of Group Failures | Total No. of Criteria Failures | Condition Assessment Result |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|-----|-----------------------------|--------------------------------|-----------------------------|
| Habitat 13: Hedgerow 1                                                                                                                                                               | ✓  | ✓  | ✓  | ✓  | ✓  | x  | ✓                                                                                                                                                                                        | ✓  | N/A | N/A | 0                           | 1                              | Good                        |
| <b>Hedgerows Without Trees</b>                                                                                                                                                       |    |    |    |    |    |    | <b>Hedgerows With Trees</b>                                                                                                                                                              |    |     |     |                             |                                |                             |
| <b>Good:</b> No more than 2 failures in total; AND no more than 1 in any functional group.                                                                                           |    |    |    |    |    |    | <b>Good:</b> No more than 2 failures in total; AND no more than 1 failure in any functional group.                                                                                       |    |     |     |                             |                                |                             |
| <b>Moderate:</b> No more than 4 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition). |    |    |    |    |    |    | <b>Moderate:</b> No more than 5 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition). |    |     |     |                             |                                |                             |
| <b>Poor:</b> Fails a total of more than 4 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).           |    |    |    |    |    |    | <b>Poor:</b> Fails a total of more than 5 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).               |    |     |     |                             |                                |                             |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A1. Height:</b><br>>1.5m average along length<br>The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees.<br>Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of 4 years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).                                                                        | <b>A2. Width:</b><br>>1.5m average along length.<br>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.<br>Outgrowths (e.g. Blackthorn suckers) are only included in the width estimate when they >0.5 m in height.<br>Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of 4 years (if undertaken according to good practice)                                                     |
| <b>B1. Gap - hedge base.</b><br>Gap between ground and base of canopy is less than 0.5m, for more than 90% of length (unless line of trees).<br>This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (e.g. a Hazel dominated hedgerow or where the hedgerow is affected by shading from other vegetation such as woodland, see page 65 of <i>Hedgerow Survey Handbook</i> ).                                  | <b>B2. Gap - hedge canopy continuity.</b><br>Gaps make up less than 10% of total length and no canopy gaps are greater than 5m. Gates and access points are not subject to the greater than 5m criterion.<br>This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).<br>Access points and gates contribute to the overall 'gappiness', but are not subject to the greater than 5 m criterion (as this is the typical size of a gate). |
| <b>C1. Undisturbed ground and perennial vegetation.</b><br>More than 1m width ground with perennial herbaceous vegetation for more than 90% of the hedgerow length, as measured from outer edge of the hedgerow, and is present on at least 1 side of the hedgerow.<br>This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion | <b>C2. Nutrient-enriched perennial vegetation.</b><br>Plant species indicative of nutrient enrichment of soils do not dominate more than 20% cover of the ground area of undisturbed ground.<br>The indicator species used are nettles ( <i>Urtica</i> spp.), Cleavers ( <i>Galium aparine</i> ) and docks ( <i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.                                                                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Condition Assessment Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>D1. Invasive and neophyte species.</b><br/> More than 90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.<br/> Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.</p> | <p><b>D2. Current damage.</b><br/> More than 90% of the hedgerow or undisturbed ground is free of damaged caused by human activities.<br/> This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.<br/> This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).</p>                               |
| <p><b>Additional group – ONLY if trees are present</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>E1. Tree Class</b><br/> There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient<sup>8</sup>), and there is on average at least one mature, ancient or veteran tree present per 20 to 50m of hedgerow. This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.</p>                                                                                                                                                                                                                                             | <p><b>E1. Tree health</b><br/> At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.<br/> This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.</p> |

## 7.2 Target Condition Assessments of Created Habitats

7.2.1 No Condition Assessment is required for Habitats D or E (the hardstanding and new buildings). It is recommended that Hedgerow 1 is retained at its current condition (i.e. Good) in accordance with **Table 7.6**.

**Table 7.7: Condition Assessments for Habitat A, Mixed Scrub**

| Habitat Reference      | A | B | C | D | E | Total No. of Criterion Passed | Condition Assessment Result             |
|------------------------|---|---|---|---|---|-------------------------------|-----------------------------------------|
| Habitat A: Mixed Scrub | X | X | ✓ | X | X | 1                             | Poor                                    |
|                        |   |   |   |   |   |                               | <b>Good:</b> passes 5 criteria          |
|                        |   |   |   |   |   |                               | <b>Moderate:</b> passes 3 or 4 criteria |
|                        |   |   |   |   |   |                               | <b>Poor:</b> passes 2 or fewer criteria |

### Condition Assessment Criteria

**A.** The scrub is a good representation of the habitat type – the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). Professional judgement should be used alongside the UKHab description.

At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover, except Hazel (*Corylus avellana*), Common Juniper (*Juniperus communis*), Sea Buckthorn (*Hippophae rhamnoides*) or Box (*Buxus sempervirens*), which can be up to 100% cover.

Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed.* [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).

**B.** Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.

See gov.uk standing advice on ancient and veteran species. Available from *Keepers of time: ancient and native woodland and trees policy in England* (publishing.service.gov.uk) and *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions* (www.gov.uk).

**C.** There is an absence of invasive non-native plant species<sup>4</sup> (as listed on Schedule 9 of *Wildlife and Countryside Act 1981* (as amended)) and species indicative of sub-optimal condition<sup>6</sup> make up less than 5% of ground cover.

This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat is split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

**D.** The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.

**E.** There are clearings, glades or rides present within the scrub, providing sheltered edges.

**Table 7.8: Condition Assessments for Habitat B: Wildflower Grassland**

| Habitat Reference                       | A | B | C | D                                                                                              | E | F | Total No. of Criterion Passed | Condition Assessment Result |
|-----------------------------------------|---|---|---|------------------------------------------------------------------------------------------------|---|---|-------------------------------|-----------------------------|
| Habitat B: Wildflower grassland         | ✓ | ✓ | X | X                                                                                              | ✓ | ✓ | 5                             | Moderate                    |
| <b>Acid Grassland Types</b>             |   |   |   | <b>Non-acid Grassland Types</b>                                                                |   |   |                               |                             |
| <b>Good:</b> passes 5 criteria          |   |   |   | <b>Good:</b> passes 5 or 6 criteria, including essential criteria A and additional criterion F |   |   |                               |                             |
| <b>Moderate:</b> passes 3 or 4 criteria |   |   |   | <b>Moderate:</b> passes 3 to 5 criteria, including essential criterion A                       |   |   |                               |                             |
| <b>Poor:</b> passes 2 or fewer criteria |   |   |   | <b>Poor:</b> passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F |   |   |                               |                             |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>A.</b> The grassland is a good representation of the 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). Professional judgement should be used alongside the UKHab description.</p> <p><i>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>B.</b> Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p><b>C.</b> Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens. For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>D.</b> Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>E.</b> Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area (species are listed below).</p> <p>If any invasive non-native plant species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended) are present, this criterion is automatically failed. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement.</p> <p><i>Species indicative of sub-optimal condition for this habitat type include:</i> Creeping Thistle, Spear Thistle, Curled Dock, Broad-leaved Dock, Common Nettle, Creeping Buttercup, Greater Plantain, White Clover, Cow Parsley. There may be additional relevant species local to the region and / or site.</p> |
| <p><b>Additional Group – non-acid grassland types only</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><b>F.</b> There are 10 or more vascular plant species per m<sup>2</sup> present, including forbs that are characteristic of the habitat type (species referenced at Criterion ‘E’ cannot contribute towards this count).</p> <p><i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**Table 7.9: Condition Assessments for Habitat C: Amenity Grassland**

| Habitat Reference                                                                          | A | B | C | D | E | F | G | Total No. of Criterion Passed | Condition Assessment Result <sup>1</sup> |
|--------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|-------------------------------|------------------------------------------|
| Habitat C: Amenity grassland                                                               | X | X | ✓ | X | X | ✓ | ✓ | 3                             | Poor                                     |
| <b>Good:</b> Passes 6 or 7 criteria including essential criterion A                        |   |   |   |   |   |   |   |                               |                                          |
| <b>Moderate:</b> Passes 4 or 5 criteria including essential criterion A                    |   |   |   |   |   |   |   |                               |                                          |
| <b>Poor:</b> Passes 3 or fewer criteria OR passes 4 to 6 criteria, but failing criterion A |   |   |   |   |   |   |   |                               |                                          |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>A.</b> There are 6 to 8 vascular plant species per m2 present, including at least 2 forbs (this may include those listed in below). Note - this criterion is essential for achieving Moderate or Good condition.</p> <p>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 below), 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.</p> <p><i>Plant Species:</i> Creeping Thistle (<i>Cirsium arvense</i>), Spear Thistle (<i>Cirsium vulgare</i>), Curled Dock (<i>Rumex crispus</i>), Broad-leaved Dock (<i>Rumex obtusifolius</i>), Common Nettle (<i>Urtica dioica</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Greater Plantain (<i>Plantago major</i>), White Clover (<i>Trifolium repens</i>) and Cow Parsley (<i>Anthriscus sylvestris</i>).</p> |
| <p><b>B.</b> Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>C.</b> Any scrub present accounts for less than 20% of total grassland area (some scattered scrub such as Bramble may be present).</p> <p>Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>D.</b> Physical damage 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>E.</b> Cover of bare ground between 1% and 10%, including localised areas, for example, rabbit warrens.</p> <p>For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p><b>F.</b> Cover of Bracken less than 20%.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>G.</b> There is an absence of invasive non-native species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended).</p> <p>This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |



**Table 7.10: Condition Assessments for Habitat F, Individual Urban Trees**

| Tree Reference                   | A | B | C | D | E | F | Size Category | Total No. of Criterion Passed | Condition Assessment Result             |
|----------------------------------|---|---|---|---|---|---|---------------|-------------------------------|-----------------------------------------|
| Habitat F: New trees (40 trees). | ✓ | ✓ | X | ✓ | X | ✓ | Small         | 4                             | Moderate                                |
|                                  |   |   |   |   |   |   |               |                               | <b>Good:</b> Passes 5 or 6 criteria     |
|                                  |   |   |   |   |   |   |               |                               | <b>Moderate:</b> Passes 3 or 4 criteria |
|                                  |   |   |   |   |   |   |               |                               | <b>Poor:</b> Passes 2 or fewer criteria |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A.</b> The tree is a native species (or more than 70% within the block are native species)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>B.</b> Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>C.</b> The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from:<br><i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk).<br>Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E. |
| <b>D.</b> 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.                                                                                                                                                                                                                                                                                                                                                      |
| <b>E.</b> Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>F.</b> More than 20% of the tree canopy area is oversailing vegetation beneath                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Table 7.11: Condition Assessments for Habitat G, New Hedgerow**

| Habitat Reference                                                                                                                                                                    | A1 | A2 | B1 | B2 | C1 | C2 | D1                                                                                                                                                                                       | D2 | E1  | E2  | Total No. of Group Failures | Total No. of Criteria Failures | Condition Assessment Result |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|-----|-----------------------------|--------------------------------|-----------------------------|
| Habitat G: New Hedgerow                                                                                                                                                              | X  | X  | ✓  | ✓  | ✓  | x  | ✓                                                                                                                                                                                        | ✓  | N/A | N/A | 0                           | 1                              | Moderate                    |
| <b>Hedgerows Without Trees</b>                                                                                                                                                       |    |    |    |    |    |    | <b>Hedgerows With Trees</b>                                                                                                                                                              |    |     |     |                             |                                |                             |
| <b>Good:</b> No more than 2 failures in total; AND no more than 1 in any functional group.                                                                                           |    |    |    |    |    |    | <b>Good:</b> No more than 2 failures in total; AND no more than 1 failure in any functional group.                                                                                       |    |     |     |                             |                                |                             |
| <b>Moderate:</b> No more than 4 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition). |    |    |    |    |    |    | <b>Moderate:</b> No more than 5 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition). |    |     |     |                             |                                |                             |
| <b>Poor:</b> Fails a total of more than 4 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).           |    |    |    |    |    |    | <b>Poor:</b> Fails a total of more than 5 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).               |    |     |     |                             |                                |                             |

| Condition Assessment Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A1. Height:</b><br>>1.5m average along length<br>The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees.<br>Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of 4 years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).                                                                        | <b>A2. Width:</b><br>>1.5m average along length.<br>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.<br>Outgrowths (e.g. Blackthorn suckers) are only included in the width estimate when they >0.5 m in height.<br>Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of 4 years (if undertaken according to good practice)                                                     |
| <b>B1. Gap - hedge base.</b><br>Gap between ground and base of canopy is less than 0.5m, for more than 90% of length (unless line of trees).<br>This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (e.g. a Hazel dominated hedgerow or where the hedgerow is affected by shading from other vegetation such as woodland, see page 65 of <i>Hedgerow Survey Handbook</i> .                                   | <b>B2. Gap - hedge canopy continuity.</b><br>Gaps make up less than 10% of total length and no canopy gaps are greater than 5m. Gates and access points are not subject to the greater than 5m criterion.<br>This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).<br>Access points and gates contribute to the overall 'gappiness', but are not subject to the greater than 5 m criterion (as this is the typical size of a gate). |
| <b>C1. Undisturbed ground and perennial vegetation.</b><br>More than 1m width ground with perennial herbaceous vegetation for more than 90% of the hedgerow length, as measured from outer edge of the hedgerow, and is present on at least 1 side of the hedgerow.<br>This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion | <b>C2. Nutrient-enriched perennial vegetation.</b><br>Plant species indicative of nutrient enrichment of soils do not dominate more than 20% cover of the ground area of undisturbed ground.<br>The indicator species used are nettles ( <i>Urtica</i> spp.), Cleavers ( <i>Galium aparine</i> ) and docks ( <i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.                                                                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Condition Assessment Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>D1. Invasive and neophyte species.</b><br/> More than 90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.<br/> Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.</p> | <p><b>D2. Current damage.</b><br/> More than 90% of the hedgerow or undisturbed ground is free of damaged caused by human activities.<br/> This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.<br/> This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).</p>                               |
| <p><b>Additional group – ONLY if trees are present</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>E1. Tree Class</b><br/> There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient<sup>8</sup>), and there is on average at least one mature, ancient or veteran tree present per 20 to 50m of hedgerow. This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.</p>                                                                                                                                                                                                                                             | <p><b>E1. Tree health</b><br/> At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.<br/> This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.</p> |



7.3 Figures

Figure 1: Aerial Image of the Site

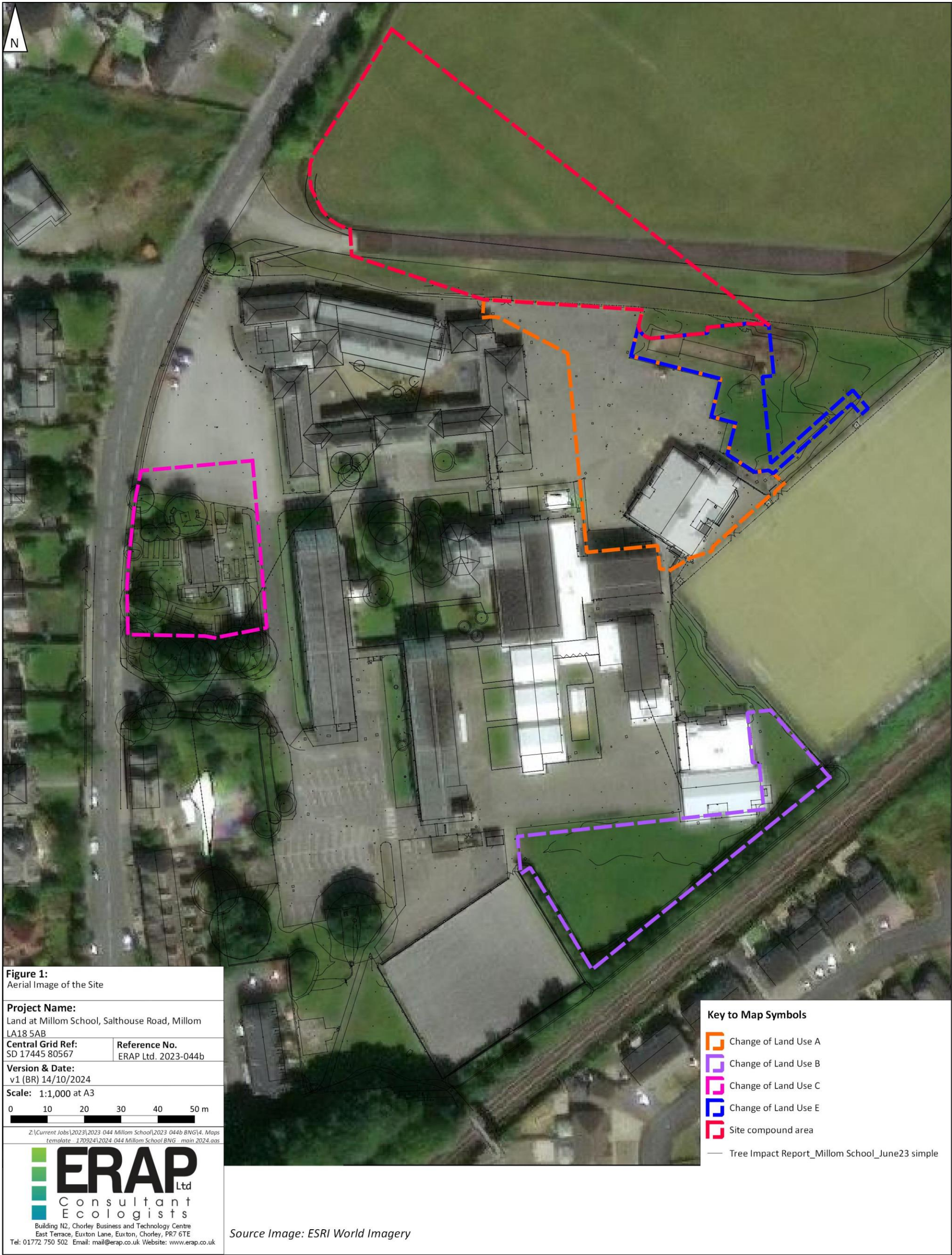




Figure 2: UKHab Plan Showing Baseline Habitats

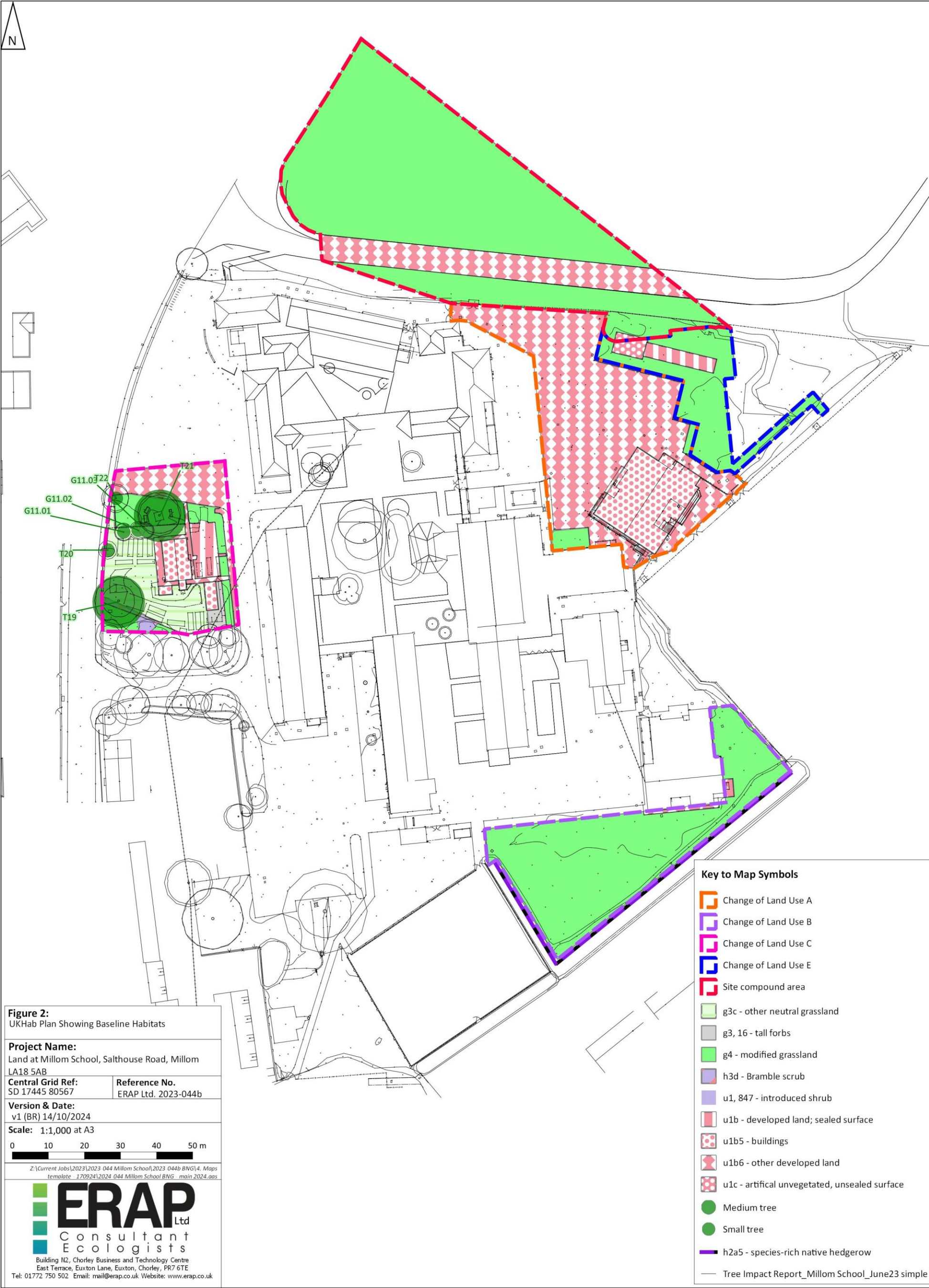




Figure 3: UKHab Plan of the Proposed Development and Recommended Habitat Creation to Attain a Net Gain

