

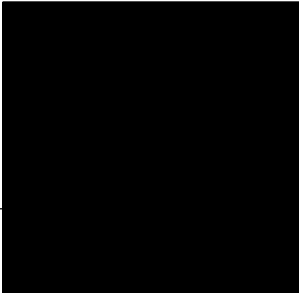
**MKA**  
ECOLOGY

## **Biodiversity Net Gain Plan**

Radcliffe House, The Priory, Hitchin

|                       |                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Site                  | Radcliffe House, The Priory, Hitchin                                                                                             |
| Project number        | 262012                                                                                                                           |
| Client name / Address | Metric and Maker, The McCay Partnership, 24 Capital Business Centre,<br>22 Carlton Road, South Croydon, Surrey, England, CR2 0BS |

| Version number | Date of issue | Revisions |
|----------------|---------------|-----------|
| 1.0            | 13 April 2026 | Original  |

|             |                                                                      |                                                                                    |
|-------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Author      | <i>Robin Pickett</i><br><i>Alfie Bunting</i>                         |  |
| Reviewed by | <i>Liam Price</i>                                                    |                                                                                    |
| Contact     | <i>MKA Ecology Limited, 01763 262211, enquiries@mkaecology.co.uk</i> |                                                                                    |

### Declaration of compliance

The information which we have provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.



We are a Chartered Institute of Ecology and Environmental Management (CIEEM) Registered Practice. All of our ecologists are members of CIEEM and between them carry licences for the majority of protected species.

# CONTENTS

|           |                                                  |           |
|-----------|--------------------------------------------------|-----------|
| <b>1.</b> | <b>EXECUTIVE SUMMARY .....</b>                   | <b>4</b>  |
| <b>2.</b> | <b>INTRODUCTION .....</b>                        | <b>6</b>  |
| 2.1.      | Purpose.....                                     | 6         |
| 2.2.      | Site location and context.....                   | 6         |
| 2.3.      | Proposed development.....                        | 6         |
| <b>3.</b> | <b>METHODOLOGIES .....</b>                       | <b>8</b>  |
| 3.1.      | Statutory Biodiversity Metric .....              | 8         |
| 3.2.      | Biodiversity Net Gain target .....               | 8         |
| 3.3.      | Biodiversity Net Gain assessor .....             | 8         |
| 3.4.      | Baseline Habitat Assessment .....                | 8         |
| 3.5.      | GIS feature unique IDs .....                     | 9         |
| 3.6.      | Habitat degradation statement .....              | 9         |
| 3.7.      | Post-development habitat assessment.....         | 9         |
| 3.8.      | Assessment of habitat quality .....              | 12        |
| 3.9.      | Irreplaceable Habitats .....                     | 13        |
| 3.10.     | River Condition Assessment .....                 | 13        |
| 3.11.     | What can and can't contribute to net gain .....  | 13        |
| 3.12.     | Work phasing .....                               | 14        |
| 3.13.     | Trading Summary.....                             | 14        |
| 3.14.     | Good practice principles and rules for BNG ..... | 14        |
| 3.15.     | Significant enhancements .....                   | 16        |
| 3.16.     | Sharing data .....                               | 16        |
| 3.17.     | Assumptions and constraints .....                | 16        |
| <b>4.</b> | <b>RESULTS AND RECOMMENDATIONS .....</b>         | <b>18</b> |
| 4.1.      | Irreplaceable habitats .....                     | 18        |
| 4.2.      | Baseline habitat assessment .....                | 18        |
| 4.3.      | Baseline hedgerow assessment .....               | 20        |
| 4.4.      | Work duration and phasing.....                   | 22        |
| 4.5.      | Post-development habitat assessment.....         | 22        |
| 4.6.      | Habitat retention .....                          | 22        |
| 4.7.      | Habitat loss .....                               | 22        |
| 4.8.      | Habitat creation.....                            | 22        |

---

|               |                                                                          |           |
|---------------|--------------------------------------------------------------------------|-----------|
| 4.9.          | Post-development hedgerow assessment.....                                | 25        |
| <b>4.9.1.</b> | <b>Hedgerow loss.....</b>                                                | <b>25</b> |
| 4.10.         | Hedgerow creation.....                                                   | 25        |
| 4.11.         | What can and can't contribute to net gain .....                          | 28        |
| 4.12.         | Significant enhancements.....                                            | 28        |
| 4.13.         | Trading rules .....                                                      | 28        |
| 4.14.         | Biodiversity Net Gain outcome.....                                       | 29        |
| 4.15.         | Recommendations .....                                                    | 29        |
| <b>5.</b>     | <b>CONCLUSIONS .....</b>                                                 | <b>31</b> |
| <b>6.</b>     | <b>REFERENCES .....</b>                                                  | <b>32</b> |
| <b>7.</b>     | <b>APPENDICES .....</b>                                                  | <b>33</b> |
| 7.1.          | Appendix 1: Assignment of Statutory Biodiversity Metric multipliers..... | 33        |
| 7.2.          | Strategic significance.....                                              | 33        |
| 7.3.          | Condition.....                                                           | 33        |
| 7.4.          | Habitats.....                                                            | 33        |
| 7.5.          | Baseline habitats .....                                                  | 33        |
| 7.6.          | Created habitats .....                                                   | 35        |
| 7.7.          | Hedgerows.....                                                           | 38        |
| 7.8.          | Baseline hedgerows .....                                                 | 38        |
| 7.9.          | Created hedgerows .....                                                  | 38        |
| 7.10.         | Appendix 2: Quadrat results .....                                        | 40        |
| 7.11.         | Appendix 3: Site photographs.....                                        | 42        |
| 7.12.         | Appendix 4: Biodiversity net gain calculator .....                       | 46        |

# 1. EXECUTIVE SUMMARY

In March 2026 MKA Ecology Limited was commissioned to undertake a Biodiversity Net Gain assessment for Radcliffe House, The Priory, Hitchin. This Biodiversity Net Gain Plan has been prepared to detail how the biodiversity enhancements in the proposed scheme will lead to an overall benefit to biodiversity.

The Site currently comprises modified grassland, introduced shrub, urban trees, non-native hedgerows and developed land and covers a total of 0.71 hectares. It is confirmed that the baseline habitats have not been significantly altered or modified since 30 January 2020 and, as such, it is appropriate to assess the baseline habitats in their current condition. None of the baseline habitats are classed as irreplaceable under The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024). The proposed development involves onsite landscaping enhancements and external alterations to Radcliffe House.

The proposed post-development habitats include modified grassland, other neutral grassland, introduced shrub, vegetated garden, urban trees and a native hedgerow. Due to the nature of the baseline habitats present on the site and the proposals, none of the exemptions to Biodiversity Net Gain apply.

The Statutory Biodiversity Metric (Defra, 2024a) has been used to provide an objective assessment of the potential value of the proposed biodiversity enhancements. The Statutory Biodiversity Metric assesses a proxy value for biodiversity based on habitat types and their areas. These are compared baseline (the existing condition) and after the completion of the proposed development.

It is predicted that the proposed development will lead to a net gain of 43.86% in habitat units at the Site. This net gain is largely due to the planting of 18 new urban trees and the creation of other neutral grassland in poor condition. It is predicted that the proposed development will lead to a net gain of 538.50% in hedgerow units at the Site. This net gain is solely due to the creation of a native hedgerow in poor condition. The trading rules for habitats and hedgerows are all met under the proposals. As at least a 10% increase is predicted in all biodiversity unit types present onsite. Therefore, a biodiversity net gain in line with national and local policy is predicted to be achieved.

It should be noted that the predicted net-gain in biodiversity is reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future. It will be critical to ensure that appropriate management activities are put in place in order to achieve the desired condition of the proposed habitats. It is recommended that measures to ensure the successful creation and long-term management of proposed habitats are outlined in a Habitat Management and Monitoring Plan (HMMP)

for the Site. Significant enhancements should be secured with a legal agreement covering a minimum of 30 years post-development.

## 2. INTRODUCTION

### 2.1. Purpose

This Biodiversity Net Gain (BNG) Plan is submitted for the approval of North Hertfordshire District Council to fulfil the requirements of the LPA and the Environment Act (2021) by showing how a 10% net gain for biodiversity will be achieved onsite.

The purpose of this assessment is to review the baseline biodiversity value of the Site, comparing this to the predicted biodiversity value of the proposed post-development habitats and calculate an overall biodiversity net change for the Site. The primary method of calculating this change will follow the Statutory Biodiversity Metric. The aim of using this method is to demonstrate whether the proposed development, as detailed in the Landscape General Arrangement Plan (Figure 2), will deliver a net gain in biodiversity.

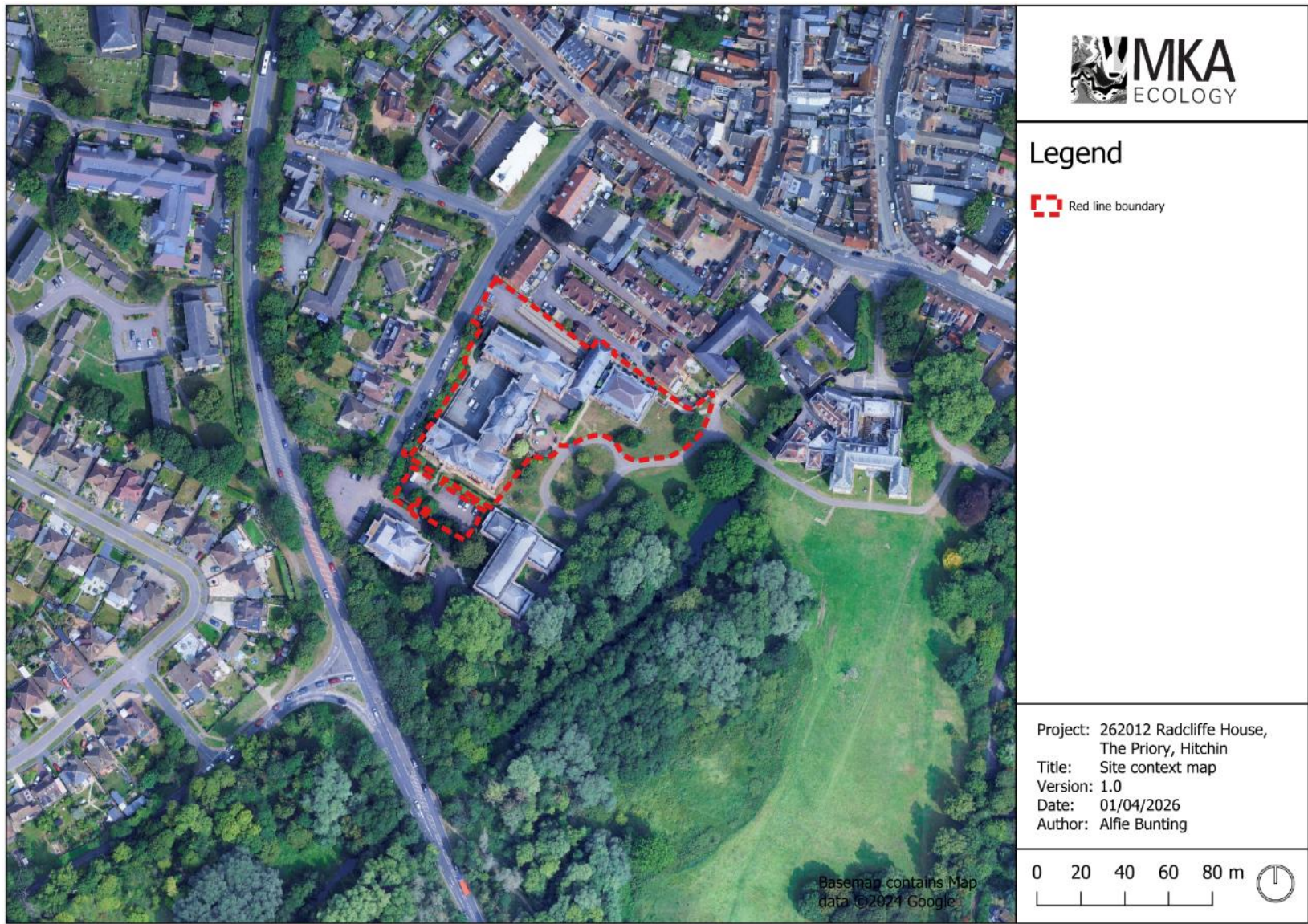
### 2.2. Site location and context

The survey area is shown on the map in Figure 1. Within this report this area is referred to as the Site or Radcliffe House, The Priory, Hitchin. The 0.71ha Site (centred around grid reference TL 18240 28823) is located in the south-west of Hitchin and falls under the jurisdiction of North Hertfordshire District Council. Habitats present include modified grassland, introduced shrub, urban trees, a non-native hedgerow and developed land.

### 2.3. Proposed development

The proposed development involves onsite landscaping enhancements and external alterations to Radcliffe House.

Figure 1: Site boundary and local context



## 3. METHODOLOGIES

### 3.1. Statutory Biodiversity Metric

To establish whether the proposed development will contribute positively to biodiversity we use the Statutory Biodiversity Metric, as required by The Environment Act (2021). This method uses habitat as a proxy for biodiversity and its primary application is to provide planners and developers with a method of establishing how much and what type of habitats should be retained, created and/or enhanced in order to ensure that the proposed development results in a net gain for biodiversity.

### 3.2. Biodiversity Net Gain target

The Environment Act (2021) requires developments to achieved at least a 10% uplift in habitat, hedgerow and watercourse units (if present).

### 3.3. Biodiversity Net Gain assessor

This Biodiversity Net Gain assessment was conducted by Robin Pickett, Ecologist at MKA Ecology Ltd and Alfie Bunting, Consultant Ecologist at MKA Ecology Ltd. Robin and Alfie have 1.5 years' and 3 years' experience conducting Biodiversity Net Gain assessments respectively and both are considered competent assessors under the Statutory Biodiversity Metric requirements. The Biodiversity Net Gain Plan was reviewed by Liam. Liam has over seven years' experience as a consultant ecologist.

The habitat survey and condition assessment was undertaken by Robin and supported by Noel Ellis, Graduate Ecologist at MKA Ecology Ltd. Noel is in his first year of ecological consultancy.

### 3.4. Baseline Habitat Assessment

A Preliminary Ecological Appraisal (PEA) was conducted by MKA Ecology Ltd on 10<sup>th</sup> March 2026 (MKA Ecology Ltd, 2026). This included mapping and assessing the baseline habitat types and conditions present. The Site was found to cover a total of 0.71 hectares and comprised modified grassland, introduced shrub, urban trees, non-native hedgerows and developed land. The habitats present are presented in Figure 3. The areas occupied by each habitat type are detailed in Section 4.2.

A condition assessment of the baseline habitats was conducted at the time of the PEA. Condition assessments evaluate the intra-habitat quality of habitats. More information on how habitat conditions were assigned is provided in Section 4.2.

Please note that any impacts on designated sites and protected species that may result from the development have been addressed in the PEA, which also outlines plans for mitigation and enhancement where required (MKA Ecology Ltd, 2026).

Baseline habitats were mapped and areas calculated using QGIS during the PEA.

### 3.5. GIS feature unique IDs

All habitat features, area habitats, hedgerows, watercourses and individual trees, are assigned a unique ID. This is formed of the following three elements:

- A habitat code
  - Identifies the type of habitat present.
- A scenario code
  - Identifies whether the habitat is present in the baseline or will be present in the post-development scenario.
- A parcel code
  - Differentiates between parcels of the same habitat type within the same phase.

For area habitats the level 2 habitat code within the Statutory Biodiversity Metric is used (e.g. 'G' for grassland or 'H' for heathland and scrub). The habitat code for hedgerows, lines of trees, watercourses and individual trees is 'Hr', 'Lt', 'R' and 'T' respectively. The scenario code for all habitat types is a letter indicating if it is in the baseline (B) or post-development (P) scenario. The parcel codes start from '1' and increase with each feature that shares the same habitat and scenario code (for example, two separate areas of grassland within the baseline).

### 3.6. Habitat degradation statement

It is confirmed that the baseline habitats have not been significantly altered or modified since 30 January 2020 and, as such, it is appropriate to assess the baseline habitats in their current condition.

### 3.7. Post-development habitat assessment

The proposed development involves onsite landscaping enhancements and external alterations to Radcliffe House. Proposed post-development habitats include modified grassland, other neutral grassland, introduced shrub, vegetated garden, urban trees and a native hedgerow. The habitat types and conditions of these areas was predicted based on the expected land use and management of the Site, in collaboration with the wider design team. The rationale for these assessments is presented in Section 4.5 for habitats and Section 4.9 for hedgerows. The habitat areas and hedgerow lengths were provided by the landscaping team. The Landscape General Arrangement Plan for Radcliffe House, The

Priory, Hitchin is presented in Figure 2. This was digitised in QGIS to develop a georeferenced plan. The predicted habitat types are presented in Figure 4.

It is these proposed habitats that will form the basis of the calculation of 'net-change' in biodiversity using the Statutory Biodiversity Metric.

Figure 2. Landscape General Arrangement Plan for Radcliffe House, The Priory, Hitchin (HTA Design LLP, 2026)



### 3.8. Assessment of habitat quality

The Statutory Biodiversity Metric Habitats assesses the biodiversity value of habitats, hedgerows and watercourses based on their size and the three core quality components listed below. Size is assessed as area for habitats and length for hedges and watercourses. Watercourse and riparian encroachment are also components of the watercourse assessment.

- **Distinctiveness:** A measure of the type and importance of a habitat (inter-habitat quality).
- **Condition:** A measure of the present or predicted condition of a habitat type (intra-habitat quality). Typically, condition assessments are based on an assessment against a series of pass/fail criteria within condition sheets covering broad habitat types. The exception to this is watercourses.
- **Strategic significance:** How a habitat is regarded within Local Planning Policy. This is primarily assessed using Local Nature Recovery Strategies.

Distinctiveness is automatically assigned in the Statutory Biodiversity Metric. Details of condition and strategic significance assessments are presented in Section 4.2.

For created and enhanced habitats, hedgerows and watercourses, the three risk factors listed below are also applied to account for the uncertainty inherent within such interventions.

- **Difficulty:** A measure of the difficulty and likelihood of success of interventions/change scenarios. A larger 'handicap' is associated with more difficult interventions.
- **Time to condition:** A measure of the time for a habitat to reach its target state. A larger 'handicap' is paid for those habitats that take longer to reach their target condition.
  - If the creation or enhancement interventions are carried out in advance or after vegetation clearance, additional multipliers or 'handicaps' are applied, respectively. This will not apply in the present case.
- **Spatial risk:** If off-site biodiversity units are required, an additional 'handicap' is applied incentivising close delivery to the development site.

These components and risk factors are combined to give habitat units (for habitats), hedgerow units (for hedgerows) and watercourse units (for watercourses). Each of these unit types are independent and non-tradeable and net gain targets must be delivered on each type of unit present on the Site. In this case, habitat units and hedgerow units are present.

### 3.9. Irreplaceable Habitats

Irreplaceable habitats are those that are either very difficult to recreate or time a significant amount for time recreate (or both). Irreplaceable habitats are defined within the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024, which lists the following habitat types:

- Blanket bog
- Lowland fens
- Limestone pavements
- Coastal sand dunes
- Ancient woodland
- Ancient trees and veteran trees
- Spartina saltmarsh swards
- Mediterranean saltmarsh scrub

The presence of irreplaceable habitats was searched for during the PEA desk study and assessed during the site survey.

Any irreplaceable habitats present must be recorded within the baseline of Biodiversity Net Gain calculations. However, in the event of any loss or deterioration of these habitats bespoke compensation must be agreed with the LPA as the Statutory Biodiversity Metric cannot assess impacts to such habitats. Biodiversity uplift can be delivered through the enhancement of irreplaceable habitats, as long as there are no losses or deterioration of such habitats. However, compensation of irreplaceable habitats cannot be included within Statutory Biodiversity Metric Calculations.

### 3.10. River Condition Assessment

No rivers are present within 10m of the Site and therefore this category is omitted in this assessment.

### 3.11. What can and can't contribute to net gain

At least 10% of a development's biodiversity units must come from interventions that are not required for another purpose, such as habitat creation for mitigation purposes. Such habitat interventions can contribute 'in part' and can contribute to 'no net loss' (i.e. up to 0%), with further interventions required to reach the 10% net gain target. Typically, green infrastructure and sustainable urban drainage features can be counted 'in full' and allow the 10% net gain target. Further guidance has been produced by Defra (2024c). Details of which habitats are counted 'in part' and 'in full' are presented in Section 4.11.

### 3.12. Work phasing

As discussed in Section 3.8, The Statutory Biodiversity Metric includes multipliers incentivising advanced interventions and ‘handicaps’ discouraging delayed interventions, relative to any negative impacts on habitats (typically site clearance). For example, the planting of trees within retained areas of grassland two years prior to the removal trees from elsewhere in the site would be an example of advanced habitat creation. This will help to maintain the ecological value of sites during the construction period when biodiversity value is typically at its lowest. Conversely, delayed habitat creation prolongs the period in which a habitat is absent. An example of this includes the commencement of habitat creation works after the completion of a two-year construction period. The magnitude of the positive or negative multiplier is proportional to the magnitude of the advanced or delayed habitat intervention, respectively. This can apply to habitats, hedgerows and watercourses. Details of work phasing are presented in Section 4.4.

### 3.13. Trading Summary

The Statutory Biodiversity Metric includes a ‘Trading Summary’ which must be satisfied to achieve a positive outcome in the Net Gain assessment (see Rule 1, Table 2). The trading rules ensure that losses are compensated for on a “like for like” or “like for better” basis. Newly created or enhanced habitats should achieve a higher distinctiveness and/or condition than those lost. Trading rules also apply to hedgerows and watercourses. Full guidance can be found in Table 3 of Defra (2024a). The details of the trading rules assessment are presented in Section 4.13.

### 3.14. Good practice principles and rules for BNG

The process of achieving and assessing Biodiversity Net Gain should follow the below principles and rules, as set out within *Biodiversity Net Gain, Good Practice Principles for Development* (Baker *et al.*, 2019) (Table 1) and *The Statutory Biodiversity Metric – User Guide (draft)* (Defra, 2024b) (Table 2).

This Biodiversity Net Gain Plan is in line with British Standard BS8683.

**Table 1: The UK’s good practice principles for biodiversity net gain (Baker *et al.*, 2019)**

| Principle                                                    | In practice                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Apply the mitigation hierarchy                            | Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere. |
| 2. Avoid losing biodiversity that cannot be offset elsewhere | Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve NNL/net gain.                                                                                                                                                                                                                                                                                                                |

| Principle                                     | In practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Be inclusive and equitable                 | Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to net gain. Achieve net gain in partnership with stakeholders where possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 4. Address risk                               | Mitigate difficulty, uncertainty and other risks to achieving net gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between losses occurring and gains being fully realised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5. Make a measurable net gain contribution    | Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6. Achieve the best outcomes for biodiversity | Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: <ul style="list-style-type: none"> <li>• Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses</li> <li>• Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation</li> <li>• Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels</li> <li>• Enhancing existing or creating new habitat</li> <li>• Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity</li> </ul> |
| 7. Be additional                              | Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 8. Create a Net Gain legacy                   | Ensure Net Gain generates long-term benefits by: <ul style="list-style-type: none"> <li>• Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity</li> <li>• Planning for adaptive management and securing dedicated funding for long-term management</li> <li>• Designing Net Gain for biodiversity to be resilient to external factors, especially climate change</li> <li>• Mitigating risks from other land uses</li> <li>• Avoiding displacing harmful activities from one location to another and</li> <li>• Supporting local-level management</li> </ul>                                                                                                                                                                                                                                          |
| 9. Optimise sustainability                    | Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 10. Be transparent                            | Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Table 2: Biodiversity net gain rules (Defra, 2024b)**

| Rule | In practice                                                                                                                                                                                                                                                                                                                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | The trading rules of this biodiversity metric must be followed.                                                                                                                                                                                                                                                                                                                                                         |
| 2    | Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.                                                                                                                                                                                                                              |
| 3    | To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites.<br><br>The tools remove the need for a user to manually calculate the change in biodiversity value.<br><br>The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met. |
| 4    | In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.                                                                                                                                                                                                                                                                       |

### 3.15. Significant enhancements

Significant enhancements are “areas of habitat enhancement which contribute significantly to the proposed development’s BNG, relative to the biodiversity value before development” (Defra, 2024a). This applies to both creation of new habitats and enhancements of existing ones. The maintenance of significant enhancements must be detailed within a Habitat Management and Monitoring Plan (HMMP) and secured within a legal agreement for 30 years.

In the absence of specific guidance on what constitutes a significant enhancement from North Hertfordshire District Council the standing Defra definitions (Defra, 2024a) have been used:

- habitats of medium or higher distinctiveness in the Statutory Biodiversity Metric
- habitats of low distinctiveness which create a large number of biodiversity units relative to the biodiversity value of the site before development
- habitat creation or enhancement where distinctiveness is increased relative to the distinctiveness of the habitat before development
- areas of habitat creation or enhancement which are significant in area relative to the size of the development
- enhancements to habitat condition, for example from poor or moderate to good

The second and forth bullets above require an assessment of what constitutes ‘a large number of biodiversity units’ and ‘significant’ areas of habitat creation or enhancement. ‘A large number of biodiversity units’ is taken to be any intervention that contributes a total number of biodiversity units in excess of 20% of the baseline biodiversity value. ‘Significant’ areas of habitat creation or enhancement is taken to be any such habitat intervention that occupies more than 20% of the total site area.

### 3.16. Sharing data

Relevant ecological data collected during baseline habitat and protected species surveys at the Site will be shared with Herts Environmental Records Centre (HERC).

### 3.17. Assumptions and constraints

Several assumptions are made to enable this Biodiversity Net Gain assessment. The primary assumptions are listed below:

- The net gains in biodiversity that are estimated are reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future.

There were no constraints experienced during the site survey which would influence the baseline assessment of the habitats.

## 4. RESULTS AND RECOMMENDATIONS

### 4.1. Irreplaceable habitats

No irreplaceable habitats are present, and therefore no further discussion of such habitats is required.

### 4.2. Baseline habitat assessment

The habitats present within the Site boundary consist of modified grassland, introduced shrub, urban trees, non-native hedgerows and developed land. The baseline habitats are detailed below and presented in Figure 3.

#### **Modified grassland (GB1)**

##### *Description*

Six parcels of modified grassland are present onsite (Photograph 1, Appendix 3), separated by hardstanding. The grassland parcels are the same in terms of management and species composition and have therefore been treated as one parcel (GB1) for the purpose of this assessment. This grassland has a short sward, low species diversity and is dominated by Perennial Rye-grass *Lolium perenne* and Cock's-foot *Dactylis glomerata*. Dove's-foot Crane's-bill *Geranium molle* and Yarrow *Achillea millefolium* were also identified.

##### *Condition assessment*

The areas of modified grassland were found to have an average 4.6 species per m<sup>2</sup> over five quadrats and failed the core criteria for number of species present per m<sup>2</sup>. Overall, the grassland is considered to be in poor condition. The full rationale for this habitat condition assessment is provided in Appendix 1 with quadrat information in Appendix 2.

##### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

#### **Urban trees (TB1, TB2, TB3, TB4 and TB5)**

##### *Description*

There are five individual urban trees of varying size, age and species present onsite (Photographs 2-3, Appendix 3). These consist of one small Norway Maple (TB4) and four medium Cockspur Thorns *Crataegus sp.* (TB1, TB2, TB3 and TB5).

### *Condition Assessment*

The condition of each tree varied. Of the five assessed trees, four were in poor condition (TB1, TB2, TB3 and TB5) and one was in moderate condition (TB4). The full rationale for this habitat condition assessment is provided in Appendix 1.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

## **Introduced shrub (UB1 and UB2)**

### *Description*

There are nine small parcels of introduced shrub present onsite. Eight of the parcels of introduced shrub consist of ornamental planting beds and have been grouped together as UB1 for the purpose of this assessment. UB1 consists of ornamental and non-native species including Mexican Orange *Choisya ternata* and *Viburnum sp.* (Photograph 4, Appendix 3).

UB2 is a parcel of tall introduced shrub surrounded by modified grassland to the east of the Site. This habitat parcel consists of ornamental and non-native species including Cockspur Thorn and dogwood *cornus sp.* (Photograph 5, Appendix 3).

### *Condition Assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 1 in the Statutory Metric.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

## **Developed land; sealed surface – hardstanding (UB3)**

### *Description*

Hardstanding consisting of footpaths, access roads and car parking, is present onsite.

### *Condition Assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 0 in the Statutory Metric.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

#### **Developed land; sealed surface – building (UB4)**

##### *Description*

Radcliffe House is present within the centre of the Site (Photographs 1 and 6, Appendix 3). Additionally, a small shelter is present to the south-east of Radcliffe house (Photograph 7, Appendix 3).

##### *Condition Assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 0 in the Statutory Metric.

##### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

### **4.3. Baseline hedgerow assessment**

#### **Non-native and ornamental hedgerow (HrB1, HrB2 and HrB3)**

##### *Description*

Three ornamental hedgerows are present onsite. HrB1 consists of Willow-leaved Cotoneaster *Cotoneaster salicifolius* and Ivy *Hedera helix*. HrB2 and HrB3 consist of Yew *Taxus bacata*. Although Yew is native to the UK, single-species and ornamental yew hedgerows are still classified as non-native and ornamental hedgerows for the purpose of the Statutory Metric.

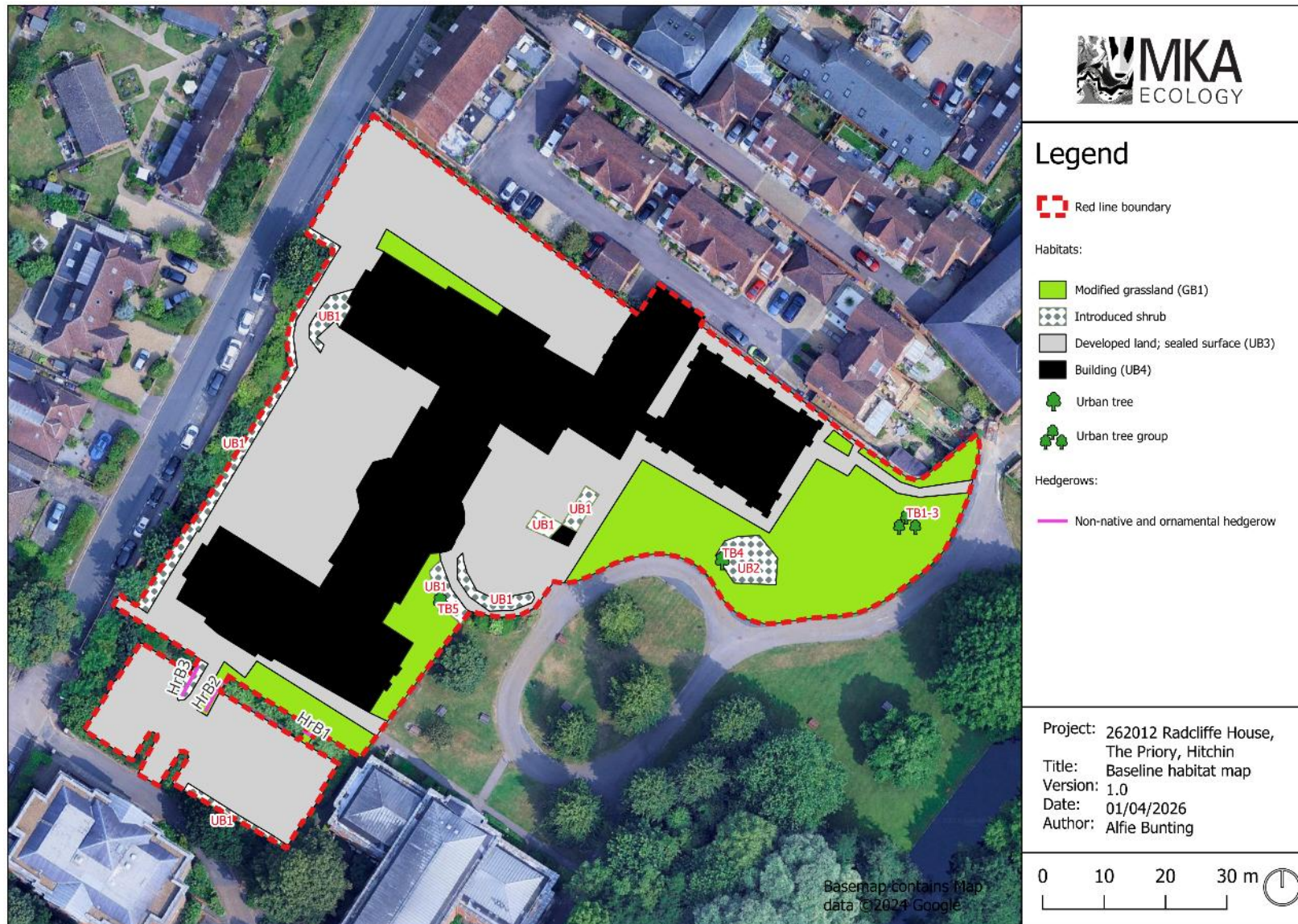
##### *Condition assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 1 in the Statutory Metric.

##### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

Figure 3: Baseline habitats at Radcliffe House, The Priory, Hitchin



#### 4.4. Work duration and phasing

All proposed landscaping is expected to occur within five months of vegetation clearance. This has been rounded to a delay of zero years for the purpose of the BNG calculations.

#### 4.5. Post-development habitat assessment

#### 4.6. Habitat retention

The habitats listed below are to be retained under the proposals. They will be safeguarded during the construction period to maintain their current value. Details of how habitat type and condition will be maintained are included below. Strategic significance will remain the same for retained habitats.

##### **Urban trees**

- ***TB1, TB2, TB3, TB4 and TB5 in Figure 3 and Figure 4***

##### *Description*

The five individual urban trees within the Site boundary will be retained and protected during the proposed development. The trees will all remain oversailing grassland habitat and subject to intensive management.

##### *Condition Assessment*

The trees will be maintained in their existing condition throughout development through the implementation of a buffer zone and fencing around the trees. The exact area of the buffer zones will need to be agreed with an arboricultural consultant and outlined in a CECMP. Full details of the condition assessment are included in Appendix 1.

#### 4.7. Habitat loss

The key habitats to be lost to the development are as follows:

- ***Modified grassland – GB1 in Figure 3***
- ***Introduced shrub – UB1 and UB2 in Figure 3***

#### 4.8. Habitat creation

Details of the habitat type, condition and strategic significance assessments of created habitats are included below. The proposed post-development habitats are presented in Figure 4.

### **Modified grassland (GP1)**

#### *Description*

This habitat corresponds with the parcels labelled as ‘biodiverse lawns’ in the Landscape General Arrangement Plan (Figure 2). The grassland will be created using a turf such as Wildflower Turf Ltd ‘Species Rich Lawn Turf’ or similar. This grassland qualifies as modified grassland because it is expected to contain less than 20% cover of broadleaved herbs and sedges and over 30% cover of Perennial Rye-grass and White Clover *Trifolium repens*.

#### *Condition assessment*

The modified grassland is expected to pass six out of seven criteria and achieve good condition. The full rationale for this habitat condition assessment is provided in Appendix 1.

#### *Strategic significance*

The strategic significance for this habitat is set to ‘low’. The full rationale is detailed in Appendix 1.

### **Other neutral grassland (GP2)**

#### *Description*

This habitat corresponds with the parcels labelled as ‘wildflower meadows’ in the Landscape General Arrangement Plan (Figure 2). The grassland will be created using a seed mix such as Pictorial Meadow ‘Treasure Chest’ or similar. This grassland qualifies as other neutral grassland because it is expected to contain: over 20% cover of broadleaved herbs and sedges; over eight species per m<sup>2</sup>; and less than 30% cover of Perennial Rye-grass and White Clover.

#### *Condition assessment*

The other neutral grassland will contain no grass species and therefore not represent a good example of its habitat type. This is due to most of the indicator species for other neutral grassland being grass species that will not be present. Consequently, this habitat is expected to fail core criteria A and be limited to poor condition. The full rationale for this habitat condition assessment is provided in Appendix 1.

#### *Strategic significance*

The strategic significance for this habitat is set to ‘low’. The full rationale is detailed in Appendix 1.

### **Urban trees (TP1-TP18)**

#### *Description*

The proposals include the planting of 18 new non-native trees. The exact species to be used are not yet confirmed.

### *Condition Assessment*

The non-native trees are each expected to pass two out of six criteria and be limited to poor condition. The full rationale for this habitat condition assessment is provided in Appendix 1.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

## **Introduced shrub (UP1)**

### *Description*

This habitat corresponds with the parcels labelled as 'ornamental planting' in the Landscape General Arrangement Plan (Figure 2). This habitat will consist of a range ornamental and non-native species.

### *Condition Assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 1 in the Statutory Metric.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

## **Vegetated garden (UP2)**

### *Description*

This habitat will consist of modified grassland, ornamental planting and hedgerows within private gardens.

### *Condition Assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 1 in the Statutory Metric.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

## **Developed land; sealed surface – hardstanding (UP3)**

### *Description*

New hardstanding areas created onsite will include footpaths, paving, driveways and car parking.

### *Condition Assessment*

No condition assessment is required for this habitat type, and it is automatically assigned a score of 0 in the Statutory Metric.

### Strategic significance

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

## 4.9. Post-development hedgerow assessment

### 4.9.1. Hedgerow loss

The hedgerows to be lost to the development are as follows:

- **Non-native and ornamental hedgerows – HrB1, HB2 and HrB3 in Figure 3**

## 4.10. Hedgerow creation

Details of the hedgerow type, condition and strategic significance assessments of created hedgerows are included below.

### **Native hedgerow (HrP1)**

#### *Description*

All the proposed new hedgerows will border private gardens. Usually this would mean that they cannot count towards the BNG calculations due to it not being possible to secure hedgerows within private gardens for 30 years. However, in this case it will be possible to secure HrP1 for 30 years because the lease agreement will contain the following:

*'The purchaser acknowledges that any hedgerow, shrubbery or planted boundary (the "Hedgerow") situated between the private garden forming part of the Premises and any adjoining communal or public garden is an integral part of the overall landscaping scheme of the Development. The Tenant shall not, without the prior written consent of the Landlord or Management Company:*

- a) remove, cut down, damage, destroy or otherwise interfere with the Hedgerow;*
- b) replace the Hedgerow with any alternative boundary treatment including (but not limited to) fencing, walls, trellis or planting; or*
- c) undertake any works which would materially affect the height, width, density or health of the Hedgerow.'*

Therefore, HrP1 qualifies to be included within the BNG calculations. HrP1 will be a single-species native hedgerow. The species has not yet been decided but it will be native and not an ornamental garden variety of a native species.

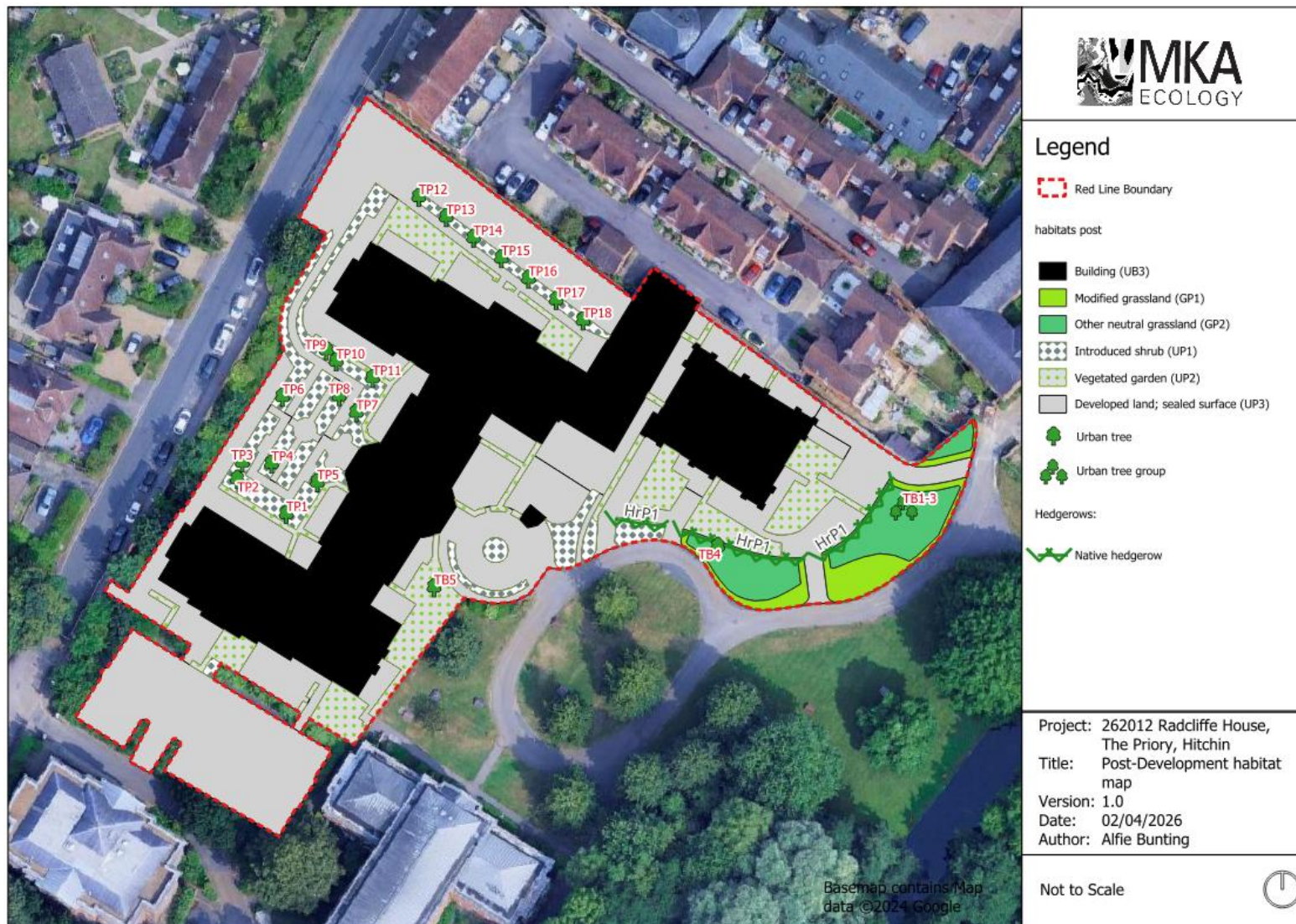
#### *Condition assessment*

The native hedgerow is expected to pass just two out of eight criteria and be limited to poor condition. The full rationale for this habitat condition assessment is provided in Appendix 1.

### *Strategic significance*

The strategic significance for this habitat is set to 'low'. The full rationale is detailed in Appendix 1.

Figure 4: Post-development habitats at Radcliffe House, The Priory, Hitchin



#### 4.11. What can and can't contribute to net gain

All of the habitat and hedgerow interventions can be counted 'in full' towards the net gain target, based on the guidance provided by Defra (2024c). As such, no further breakdown of biodiversity unit contributions is required.

#### 4.12. Significant enhancements

The following interventions are classified as significant enhancements and must therefore be covered by the Habitat Management and Monitoring Plan (HMMP, see Section 4.15) and secured through a legal agreement:

- Other neutral grassland (GP2 in Figure 4)
- Urban Trees (GP3 in Figure 4)
- Native hedgerow (HrP1 in Figure 4)

While not classified as significant enhancements, the delivery of the entire landscape design is required to deliver biodiversity targets. As such, the HMMP should include all habitat retention, creation and enhancement.

#### 4.13. Trading rules

As can be seen in Table 3, the trading rules are satisfied for all biodiversity unit types and distinctiveness categories present within the development.

**Table 3: Trading rules summary**

| Biodiversity unit type | Are trading rules met for the distinctiveness category? |                |
|------------------------|---------------------------------------------------------|----------------|
|                        | Habitat units                                           | Hedgerow units |
| Very high              | Yes                                                     | Yes            |
| High                   | Yes                                                     | Yes            |
| Medium                 | Yes                                                     | Yes            |
| Low                    | Yes                                                     | Yes            |
| Very low               | N/A                                                     | Yes            |

#### 4.14. Biodiversity Net Gain outcome

The overall comparison of biodiversity units is presented in Table 4 below. The Statutory Biodiversity Metric calculator used to derive these figures is provided in Appendix 4. Under the landscape designs shown in Figure 2, net gains in habitat and hedgerow units in excess of the required 10% are predicted.

**Table 4: Results of Statutory Biodiversity Metric calculations**

| Biodiversity unit type | Biodiversity units (baseline) | Biodiversity units (proposed) | Net-change | Net percentage change |
|------------------------|-------------------------------|-------------------------------|------------|-----------------------|
| Habitat units          | 0.615                         | 0.885                         | 0.270      | 43.86%                |
| Hedgerow units         | 0.013                         | 0.085                         | 0.072      | 538.50%               |

The largest number of habitat units are generated by the planting of 18 new urban trees (0.21 units). The second largest number of habitat units are generated by the creation of other neutral grassland (0.13 units). All the hedgerow units are generated by the creation of the native hedgerow.

Bird and bat boxes will also be installed onsite as part of the proposed development. The Statutory Biodiversity Metric has no means to formally account for these enhancements in the net gain assessment. However, they will provide additional value for biodiversity post-development and therefore should be noted.

#### 4.15. Recommendations

The overall net gain in biodiversity units predicted in this assessment is reliant on the successful retention, and creation of habitats and their maintenance for the foreseeable future. It is critical that habitats and hedgerows onsite reach the target condition predicted in this assessment, and this will require careful consideration during both the planning and construction phase. It is particularly important that the urban trees, other neutral grassland and native hedgerow reach target structure and condition for net gain to be achieved.

It is recommended that a Habitat Management and Monitoring Plan (HMMP) is produced for the Site. This will outline measures for the successful creation and management of habitats for a minimum of 30 years to ensure the target conditions for each habitat type is reached as outlined in this assessment.

##### **Recommendation 1**

Produce a Habitat Management and Monitoring Plan (HMMP) for the Site covering a minimum of 30 years post-development.

Significant enhancements are those which contribute significantly to the BNG score of the proposed development. The maintenance of significant enhancements must be secured with a legal agreement (such as a planning obligation or conservation covenant) for at least 30 years. Details of the required management and monitoring of these habitats must be described in detail in the HMMP. The interventions classified as significant enhancements (see Section 4.12) must be secured with a legal agreement covering a minimum of 30 years post-development.

#### **Recommendation 2**

Secure significant enhancements with a legal agreement covering a minimum of 30 years post-development.

Bird boxes and bat boxes will also be included as part of the proposed development. Recommendations for these features are included in the various reports supporting this application.

## 5. CONCLUSIONS

The Site currently comprises modified grassland, introduced shrub, urban trees, non-native hedgerows and developed land and covers a total of 0.71 hectares. It is confirmed that the baseline habitats have not been significantly altered or modified since 30 January 2020 and, as such, it is appropriate to assess the baseline habitats in their current condition. None of the baseline habitats are classed as irreplaceable under The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024). The proposed development involves onsite landscaping enhancements and external alterations to Radcliffe House.

The proposed post-development habitats include modified grassland, other neutral grassland, introduced shrub, vegetated garden, urban trees and a native hedgerow. Due to the nature of the baseline habitats present on the site and the proposals, none of the exemptions to Biodiversity Net Gain apply.

The Statutory Biodiversity Metric (Defra, 2024a) has been used to provide an objective assessment of the potential value of the proposed biodiversity enhancements. The Statutory Biodiversity Metric assesses a proxy value for biodiversity based on habitat types and their areas. These are compared baseline (the existing condition) and after the completion of the proposed development.

It is predicted that the proposed development will lead to a net gain of 43.86% in habitat units at the Site. This net gain is largely due to the planting of 18 new urban trees and the creation of other neutral grassland in poor condition. It is predicted that the proposed development will lead to a net gain of 538.50% in hedgerow units at the Site. This net gain is solely due to the creation of a native hedgerow in poor condition. The trading rules for habitats and hedgerows are all met under the proposals. As at least a 10% increase is predicted in all biodiversity unit types present onsite. Therefore, a biodiversity net gain in line with national and local policy is predicted to be achieved.

It should be noted that the predicted net-gain in biodiversity is reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future. It will be critical to ensure that appropriate management activities are put in place in order to achieve the desired condition of the proposed habitats. It is recommended that measures to ensure the successful creation and long-term management of proposed habitats are outlined in a Habitat Management and Monitoring Plan (HMMP) for the Site. Significant enhancements should be secured with a legal agreement covering a minimum of 30 years post-development.

## 6. REFERENCES

Baker, J., Hoskin, R. & Butterworth., T. (2019) *Biodiversity net gain: Good practice principles for development. Part A. A practical guide*. CIRIA, UK

MKA Ecology Ltd (2026) *Pease House, The Priory, Hitchin - Preliminary Ecological Appraisal*. MKA Ecology Ltd: Cambridge.

Department for Environment, Food & Rural Affairs (Defra) (2024a) *The Statutory Biodiversity Metric – User Guide – February 2024*. Available online at: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides> (Accessed: 25/03/2026)

Department for Environment, Food & Rural Affairs (Defra) (2024b) *Make on-site biodiversity gains as a developer*. Available online at: <https://www.gov.uk/guidance/make-on-site-biodiversity-gains-as-a-developer> (Accessed: 25/03/2026)

Department for Environment, Food & Rural Affairs (Defra) (2024c) *What you can count towards a development's biodiversity net gain*. Available online at: <https://www.gov.uk/guidance/what-you-can-count-towards-a-developments-biodiversity-net-gain-bng> (Accessed: 25/03/2026)

Hertfordshire Nature Recovery Partnership (2025) *Hertfordshire Local Nature Recovery Strategy*. Available online at: <https://www.hertfordshire.gov.uk/about-the-council/how-the-council-works/partnerships/herts-nature-recovery-partnership/local-nature-recovery-strategy.aspx> (Accessed: 25/03/2026)

## 7. APPENDICES

### 7.1. Appendix 1: Assignment of Statutory Biodiversity Metric multipliers

### 7.2. Strategic significance

Strategic significance was set to 'low' for all baseline habitats and newly created habitats. The Site does not fall in a priority area, or comprise priority habitats, formally identified in the Hertfordshire Local Nature Recovery Strategy (Hertfordshire Nature Recovery Partnership, 2025).

### 7.3. Condition

The below tables detail the rationale for the condition assessments made for each habitat type.

### 7.4. Habitats

Full details of habitat condition assessments are presented in the tables below.

### 7.5. Baseline habitats

#### Habitats requiring no condition assessment

| Habitat                                       | Habitat reference | Condition (score)            |
|-----------------------------------------------|-------------------|------------------------------|
| Introduced shrub                              | UB1               | Condition Assessment N/A (1) |
| Introduced shrub                              | UB2               | Condition Assessment N/A (1) |
| Developed land; sealed surface (hardstanding) | UB3               | N/A – other (0)              |
| Developed land; sealed surface (building)     | UB4               | N/A – other (0)              |

#### Modified grassland – GB1

| Condition Assessment Criteria |                                                                                                                                                                                                                 | Pass or fail | Rational for condition criterion assessment                                                                                                                                    |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b>                      | There are 6-8 vascular plant species per m2 present, including at least 2 forbs.<br><b>NB - this criterion is essential for achieving Moderate or Good condition.</b>                                           | x            | Average of 4.6 species per m2. Species present include Perennial Rye-grass, False Oat-grass, Dove's-foot crane's-bill, and Common Chickweed. Full quadrat data included below. |
| <b>B</b>                      | Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed. | x            | The sward is mown to a consistent short length                                                                                                                                 |
| <b>C</b>                      | Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but                                                                                                                       | ✓            | There is no scattered scrub present in the grassland                                                                                                                           |

|   |                                                                                                                                                                                                                                                         |   |                                                                                                     |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------|
|   | scrub accounts for less than 20% of total grassland area.                                                                                                                                                                                               |   |                                                                                                     |
| D | Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. | ✓ | No physical damage evident.                                                                         |
| E | Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).                                                                                                                                 | ✓ | The cover of grass is even, with the presence of anthills creating isolated patches of bare ground. |
| F | Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.                                                                                                                                                                                           | ✓ | No bracken present.                                                                                 |
| G | There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).                                                                                                                                                              | ✓ | No invasive non-native species present in the areas of the grassland.                               |
|   | <b>Condition: Poor</b><br>Passes five of seven criteria but fails essential criterion A.                                                                                                                                                                |   |                                                                                                     |

#### Urban trees – TB1, TB2, TB3 and TB5

| Condition Assessment Criteria |                                                                                                                                                                                                                                                                                         | Pass or fail | Rational for condition criterion assessment                                 | Parcels                  |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------|--------------------------|
| A                             | The tree is a native species (or at least 70% within the block are native species).                                                                                                                                                                                                     | x            | Trees are all non-native species including Cockspur Thorn and Norway Maple. | TB1<br>TB2<br>TB3<br>TB5 |
| B                             | The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).                                                                                         | ✓            | Individual trees automatically pass.                                        | TB5                      |
|                               |                                                                                                                                                                                                                                                                                         | x            | Gaps are present between the canopies within this group of trees.           | TB1<br>TB2<br>TB3        |
| C                             | The tree is mature (or more than 50% within the block are mature).                                                                                                                                                                                                                      | ✓            | Trees are mature.                                                           | TB1<br>TB2<br>TB3        |
|                               |                                                                                                                                                                                                                                                                                         | x            | Tree is not mature.                                                         | TB5                      |
| D                             | 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. | x            | Trees are subject to intensive management due to being in an urban area.    | TB1<br>TB2<br>TB3<br>TB5 |
| E                             | Natural ecological niches for vertebrates and invertebrates are present, such as presence of                                                                                                                                                                                            | x            | No significant ecological niches are present.                               | TB1<br>TB2<br>TB3        |

|                                                                 |                                                                          |   |                                             |                          |
|-----------------------------------------------------------------|--------------------------------------------------------------------------|---|---------------------------------------------|--------------------------|
|                                                                 | deadwood, cavities, ivy or loose bark.                                   |   |                                             | TB5                      |
| F                                                               | More than 20% of the tree canopy area is oversailing vegetation beneath. | ✓ | All five trees oversail modified grassland. | TB1<br>TB2<br>TB3<br>TB5 |
| <b>Condition: Poor</b><br>All trees pass two of seven criteria. |                                                                          |   |                                             |                          |

#### Urban trees – TB4

| Condition Assessment Criteria                                      |                                                                                                                                                                                                                                                                                         | Pass or fail | Rational for condition criterion assessment                            |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------|
| A                                                                  | The tree is a native species (or at least 70% within the block are native species).                                                                                                                                                                                                     | x            | Tree is a non-native Cockspur Thorn.                                   |
| B                                                                  | The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).                                                                                         | ✓            | Individual trees automatically pass.                                   |
| C                                                                  | The tree is mature (or more than 50% within the block are mature).                                                                                                                                                                                                                      | ✓            | Tree is mature.                                                        |
| D                                                                  | 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. | x            | Tree is subject to intensive management due to being in an urban area. |
| E                                                                  | Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.                                                                                                                                                     | x            | No significant ecological niches are present.                          |
| F                                                                  | More than 20% of the tree canopy area is oversailing vegetation beneath.                                                                                                                                                                                                                | ✓            | Tree oversails modified grassland.                                     |
| <b>Condition: Moderate</b><br>Tree passes three of seven criteria. |                                                                                                                                                                                                                                                                                         |              |                                                                        |

## 7.6. Created habitats

#### Habitats requiring no condition assessment

| Habitat                                       | Habitat reference | Condition (score)            |
|-----------------------------------------------|-------------------|------------------------------|
| Introduced shrub                              | UP1               | Condition Assessment N/A (1) |
| Vegetated garden                              | UP2               | Condition Assessment N/A (1) |
| Developed land; sealed surface (hardstanding) | UP3               | N/A – other (0)              |

#### Modified grassland – GP1

| Condition Assessment Criteria | Pass or fail | Rational for condition criterion assessment |
|-------------------------------|--------------|---------------------------------------------|
|-------------------------------|--------------|---------------------------------------------|

|                                                                                                   |                                                                                                                                                                                                                                                         |   |                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                                                                                                 | There are 6-8 vascular plant species per m <sup>2</sup> present, including at least 2 forbs.<br><b>NB - this criterion is essential for achieving Moderate or Good condition.</b>                                                                       | ✓ | The turf (Wildflower Turf Ltd 'Species Rich Lawn Turf' or similar) will contain 25 species and is expected to produce a grassland with an average of over 6 species per m <sup>2</sup> . |
| B                                                                                                 | Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.                                         | x | The sward will be mown to a consistent short length                                                                                                                                      |
| C                                                                                                 | Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area.                                                                                                     | ✓ | The grassland will be managed to prevent the establishment of scrub.                                                                                                                     |
| D                                                                                                 | Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. | ✓ | The grassland will be managed to prevent physical damage.                                                                                                                                |
| E                                                                                                 | Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).                                                                                                                                 | ✓ | The grassland will be managed to keep bare ground between 1% and 10%.                                                                                                                    |
| F                                                                                                 | Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.                                                                                                                                                                                           | ✓ | The grassland will be managed to prevent the establishment of bracken.                                                                                                                   |
| G                                                                                                 | There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).                                                                                                                                                              | ✓ | The grassland will be managed to prevent the establishment of invasive non-native species.                                                                                               |
| <b>Condition: Good</b><br>Expected to pass six of seven criteria including essential criterion A. |                                                                                                                                                                                                                                                         |   |                                                                                                                                                                                          |

### Other neutral grassland – GP2

| Condition Assessment Criteria |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Pass or fail | Rational for condition criterion assessment                                                                                                                                                                                                                                      |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                             | The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description – the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present.<br><br>Note: this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only. | x            | The seed mix (Pictorial Meadow 'Treasure Chest' or similar) will contain no grass species and therefore not represent a good example of its habitat type. This is due to most of the indicator species for other neutral grassland being grass species that will not be present. |
| B                             | Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% of the sward is more than 7cm) creating microclimates which provide opportunities for                                                                                                                                                                                                                                                                                                    | x            | The sward will be mown to a consistent short length                                                                                                                                                                                                                              |

|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                            |   |                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                       | insects, birds and small mammals to live and breed.                                                                                                                                                                                                                                                                                                                                                        |   |                                                                                                                                                                                                                                                        |
| C                                                                                     | Cover of bare ground is between 1% and 5%, including localised areas, for example rabbit warrens.                                                                                                                                                                                                                                                                                                          | x | Areas of bare ground are not expected to be present.                                                                                                                                                                                                   |
| D                                                                                     | Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.                                                                                                                                                                                                                                                          | ✓ | The grassland will be managed to prevent the establishment of bracken or scrub.                                                                                                                                                                        |
| E                                                                                     | Combined cover of species indicative of suboptimal 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.<br><br>If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed. | ✓ | The grassland will be managed to prevent physical damage and the establishment of species indicative of suboptimal condition                                                                                                                           |
| F                                                                                     | There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type.<br><br>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.                                                                                                                                                                         | x | The seed mix (Pictorial Meadow 'Treasure Chest' or similar) will contain 28 species, however, only 16 of these are native species and not garden cultivars. Therefore, a precautionary approach has been taken and the grassland fails this criterion. |
| <b>Condition: Poor</b><br>Passes two of six criteria and fails essential criterion A. |                                                                                                                                                                                                                                                                                                                                                                                                            |   |                                                                                                                                                                                                                                                        |

### Urban trees – TP1-TP18

| Condition Assessment Criteria |                                                                                                                                                                                                                                                                                         | Pass or fail | Rational for condition criterion assessment                                                                            |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------|
| A                             | The tree is a native species (or at least 70% within the block are native species).                                                                                                                                                                                                     | x            | Trees are all proposed to be non-native species.                                                                       |
| B                             | The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).                                                                                         | ✓            | Individual trees automatically pass.                                                                                   |
| C                             | The tree is mature (or more than 50% within the block are mature).                                                                                                                                                                                                                      | x            | These trees are likely to reach maturity; however, this extends beyond the scope of the 30-year HMMP required for BNG. |
| D                             | 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. | x            | Trees will be subject to intensive management due to being in an urban area.                                           |

|                                                                                       |                                                                                                                                     |   |                                                                                                                                                            |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| E                                                                                     | Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark. | x | It is unlikely that these trees will be managed to allow such micro habitats to develop due to health and safety restrictions relating to their locations. |
| F                                                                                     | More than 20% of the tree canopy area is oversailing vegetation beneath.                                                            | ✓ | Trees are all proposed to be oversailing introduced shrub habitat.                                                                                         |
| <b>Condition: Poor</b><br>These 18 trees are expected to each pass just two criteria. |                                                                                                                                     |   |                                                                                                                                                            |

## 7.7. Hedgerows

Full details of hedgerow condition assessments are presented in the tables below.

## 7.8. Baseline hedgerows

### Hedgerows requiring no condition assessment

| Habitat                            | Habitat reference | Condition (score) |
|------------------------------------|-------------------|-------------------|
| Non-native and ornamental hedgerow | HrB1              | Poor (1)          |
| Non-native and ornamental hedgerow | HrB1              | Poor (1)          |
| Non-native and ornamental hedgerow | HrB1              | Poor (1)          |

## 7.9. Created hedgerows

### Native hedgerow – HrP1

| Condition Assessment Criteria |                                                                                                                                                                                                                                                | Pass or fail | Rational for condition criterion assessment                                                                                                                                 |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1                            | Height: Greater than 1.5m average along length                                                                                                                                                                                                 | x            | The hedgerow will be managed to a height of 1.1m.                                                                                                                           |
| A2                            | Width: Greater than 1.5m average along length                                                                                                                                                                                                  | x            | The hedgerow will be managed to a width of 0.8m.                                                                                                                            |
| B1                            | Gap - hedge base: Gap between ground and base of canopy less than 0.5m for more than 90% of length                                                                                                                                             | ✓            | Should be achievable with appropriate management regime and sensitive trimming to ensure no gaps appear at the base of the canopy.                                          |
| B2                            | Gap - hedge canopy continuity: Gaps make up less than 10% of total length and no canopy gaps greater than 5m                                                                                                                                   | ✓            | Should be achievable with appropriate management regime and sensitive trimming to ensure no gaps appear in the canopy. Dead specimens will be replaced.                     |
| C1                            | Undisturbed ground and perennial vegetation: Greater than 1m width of undisturbed ground with perennial herbaceous vegetation for more than 90% of length (measured from outer edge of hedgerow), is present on at least one side of the hedge | x            | Over 10% of the hedgerow borders disturbed ground, such as hardstanding and short-mown grassland, on each side.                                                             |
| C2                            | Undesirable perennial vegetation: Plant species indicative of nutrient enrichment of soils dominate less than 20% cover of the area of undisturbed ground                                                                                      | x            | Although management will attempt to prevent nutrient enrichment, it cannot be guaranteed that this will be successful because the hedgerow is adjacent to a private garden. |

|                                                            |                                                                                                                                                |   |                                                                                                                                                                                                                                              |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D1                                                         | <i>Invasive and neophyte species: More than 90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species</i> | x | Although management will attempt to ensure that there is an absence of invasive non-native and recently introduced plant species, it cannot be guaranteed that this will be successful because the hedgerow is adjacent to a private garden. |
| D2                                                         | <i>Current damage: More than 90% of the hedgerow or undisturbed ground is free of damage caused by human activities</i>                        | x | Although management will attempt to prevent damage by human activities, it cannot be guaranteed that this will be successful because the hedgerow is adjacent to a private garden.                                                           |
| <b>Condition: Poor</b><br>Fails six out of eight criteria. |                                                                                                                                                |   |                                                                                                                                                                                                                                              |

## 7.10. Appendix 2: Quadrat results

### Modified grassland – GB1

#### Quadrat 1

| Species                                   | Percentage cover |
|-------------------------------------------|------------------|
| Perennial Rye-grass <i>Lolium perenne</i> | 60%              |
| Cock's-foot <i>Dactylis glomerata</i>     | 40%              |

#### Quadrat 2

| Species                                        | Percentage cover |
|------------------------------------------------|------------------|
| Perennial Rye-grass <i>Lolium perenne</i>      | 60%              |
| Cock's-foot <i>Dactylis glomerata</i>          | 40%              |
| Common Field-speedwell <i>Veronica persica</i> | 1%               |
| Slender Borage <i>Borago pygmaea</i>           | 1%               |
| Yarrow <i>Achillea millefolium</i>             | 1%               |

#### Quadrat 3

| Species                                   | Percentage cover |
|-------------------------------------------|------------------|
| Perennial Rye-grass <i>Lolium perenne</i> | 60%              |
| Cock's-foot <i>Dactylis glomerata</i>     | 40%              |
| Yarrow <i>Achillea millefolium</i>        | 10%              |

#### Quadrat 4

| Species                                   | Percentage cover |
|-------------------------------------------|------------------|
| Perennial Rye-grass <i>Lolium perenne</i> | 60%              |
| Cock's-foot <i>Dactylis glomerata</i>     | 30%              |
| Yarrow <i>Achillea millefolium</i>        | 30%              |

#### Quadrat 5

| Species                                        | Percentage cover |
|------------------------------------------------|------------------|
| Common Chickweed <i>Stellaria media</i>        | 25%              |
| Common Field-speedwell <i>Veronica persica</i> | 25%              |

| Species                                        | Percentage cover |
|------------------------------------------------|------------------|
| Ribwort Plantain <i>Plantago lanceolata</i>    | 25%              |
| Clover <i>Trifolium sp.</i>                    | 10%              |
| Dove's-foot Crane's-bill <i>Geranium molle</i> | 10%              |
| Sow Thistle <i>Sonchus sp.</i>                 | 10%              |
| Cock's-foot <i>Dactylis glomerata</i>          | 5%               |
| Red Fescue <i>Festuca rubra</i>                | 5%               |
| Yarrow <i>Achillea millefolium</i>             | 1%               |

### 7.11.Appendix 3: Site photographs

**Photograph 1: Modified grassland (GB1) and a section of Radcliffe House (UB1).**



**Photograph 2: Group of three urban trees (TB1-TB3).**



**Photograph 3: Individual urban tree (TB5).**



**Photograph 4: Introduced shrub (UB1).**



**Photograph 5: Tall introduced shrub (UB2).**



**Photograph 6: Radcliffe House (UB1).**



**Photograph 7: Disused shelter (UB1).**



#### 7.12. Appendix 4: Biodiversity net gain calculator

As attachment.



**MKA**  
ECOLOGY

MKA Ecology Limited, New Cambridge House, Bassingbourn Road, Litlington, Cambridgeshire, SG8 0SS

01763 262 211 | [info@mkaecology.co.uk](mailto:info@mkaecology.co.uk) | [www.mkaecology.co.uk](http://www.mkaecology.co.uk)

Company registration no 5858121 | VAT no. 825137440