

Land at Shinfield Park, Reading

Biodiversity Net Gain Assessment

February 2025

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1 Introduction

1.1 Background and Proposals

- 1.1.1 Aspect Ecology is advising Wrenbridge (FRELD Reading LLP) in respect of the land at Shinfield Park, Reading (hereafter referred to as ‘the site’), which is proposed for redevelopment for flexible employment use (Use Class E(g)(ii)-(iii)/B2/B8) together with associated servicing areas, parking, landscaping and other associated works. To inform the planning application, Aspect Ecology has undertaken a Biodiversity Net Gain (BNG) assessment to determine the level of BNG that can be achieved under the scheme. This work is based on the Statutory Biodiversity Metric tool issued by Defra and informed by associated guidance issued by Defra, in combination with guidance developed by CIRIA, CIEEM and IEMA.

1.2 Biodiversity Net Gain Legislation, Policy and Best Practice

Legislation

- 1.2.1 In England, Biodiversity Net Gain has been mandatory since 12th February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Schedule 7A of the Town and Country Planning Act 1990 (as amended), identifies (Part 2) that planning permissions granted for development in England (with certain exceptions) are deemed to have been granted subject to a condition requiring the submission of a *Biodiversity Gain Plan* prior to commencement of development. The Biodiversity Gain Plan must include details in regard to Biodiversity Net Gain, demonstrating how the development will achieve a gain in calculated biodiversity value of at least 10%.
- 1.2.2 Government advice¹ sets out the information LPAs require in order to consider BNG as part of a planning application, in line with Section 7(1A) of The Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended). In particular, this sets out that planning applications should be accompanied by:
- A statement confirming whether the applicant believes that planning permission, if granted, would be subject to the biodiversity gain condition;
 - In cases where the applicant believes that planning permission, if granted, would be subject to the biodiversity gain condition: -
 - i. the pre-development (‘baseline’) biodiversity value of the on-site habitat on the date of application (or an earlier date) including the completed Metric calculation tool (showing the calculations, the publication date and version of the Metric used to calculate that value);
 - ii. where the applicant wishes to use an earlier date, the proposed earlier date and the reasons for that date;
 - iii. a statement confirming whether the biodiversity value of the on-site habitat is lower on the date of application (or an earlier date) because of the carrying on of activities (‘degradation’);
 - iv. where unauthorised degradation has taken place between 30th January 2020 and the submission of the planning application, the relevant date should be immediately before these activities were carried out;
 - v. a description of any irreplaceable habitat on the land, that exists on the date

¹ <https://www.gov.uk/guidance/biodiversity-net-gain-what-local-planning-authorities-should-do> (updated 08/05/24)

- of application (or an earlier date); and
- vi. a plan drawn to an identified scale (including the direction of north), showing on-site habitat existing on the date of application (or an earlier date), and any irreplaceable habitat.

Good Practice Principles for Development

1.2.3 CIRIA, CIEEM and IEMA have developed a set of principles on good practice to achieve Biodiversity Net Gain², accompanied by a practical guide³. These principles provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature while progressing with sustainable development. They also provide a way for industry to show that projects follow good practice. Ten key principles are identified:

- 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 by gains elsewhere.** Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset to achieve No Net Loss or Net Gain.
- 3) **Be inclusive and equitable.** Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.
- 4) **Address risks.** Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
- 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:
 - Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses
 - Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation
 - Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels

² CIEEM, CIRIA, IEMA (2016) *Biodiversity Net Gain: Good practice principles for development*.

³ CIEEM, CIRIA, IEMA (2019) *Biodiversity Net Gain: Good practice principles for development. A practical guide*.

- Enhancing existing or creating new habitat
 - Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
- 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:
- Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity
 - Planning for adaptive management and securing dedicated funding for long-term management
 - Designing Net Gain for biodiversity to be resilient to external factors, especially climate change
 - Mitigating risks from other land uses
 - Avoiding displacing harmful activities from one location to another
 - Supporting local-level management of Net Gain activities
- 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.

1.3 Statement on Whether Biodiversity Gain Condition Applies and Purpose of this Report

- 1.3.1 Based on the site proposals and habitats present, it is considered that a planning permission, if granted in respect of the proposals, would be subject to the Biodiversity Gain planning condition under the legislation. Accordingly, this report provides a BNG assessment, including details of the existing calculated biodiversity value(s) and associated information, accompanied by a completed Metric calculation tool (Excel workbook) in line with the legislative requirements. In addition, going beyond the scope of the statutory BNG requirements, this report provides an assessment of the likely net change in biodiversity value under the proposed development, and a consideration of how a 10% gain can be delivered.

2 Methodology

2.1 Baseline Habitat Survey

- 2.1.1 The site was surveyed in June 2024 in order to ascertain the general ecological value of the land contained within the boundaries of the site and to identify the main habitats and ecological features present. The site was surveyed based on standard Phase 1 Habitat Survey methodology⁴, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. The site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified. Habitats were classified in accordance with the UK Habitat Classification system, version 2.0⁵, and condition assessed in accordance with the methodology set out in the Metric Technical Annex⁶ and using professional judgement. In line with guidance⁷, the fine scale minimum mapping unit (MMU) of 25sqm or 5m in length has been used where possible / relevant.

2.2 Survey Constraints and Limitations

- 2.2.1 All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons. The Phase 1 habitat survey and condition assessment were undertaken within the optimal survey season, therefore allowing a robust assessment of habitats and botanical interest across the site.

2.3 Biodiversity Net Gain Assessment

- 2.3.1 To quantify the level of BNG that can be delivered under the proposed development, the change in biodiversity value resulting from the scheme has been calculated using the Metric calculation tool, as informed by the associated User Guide⁸. This takes account of the size, distinctiveness and ecological condition of existing and proposed habitat areas to provide a proxy measure of the present and forecast biodiversity value of a site, and therefore determine the overall change in biodiversity value.
- 2.3.2 The pre-development ('baseline') biodiversity value of the on-site habitat has been calculated based on the habitat survey information collected during the baseline habitat survey (see 2.1 above). Going beyond the minimum statutory requirements, the post-development biodiversity value has also been calculated, based on drawing 'RG-L-200 - Landscape Hard and Soft General Arrangement'. A number of assumptions have been made in terms of the landscaping and management proposals, based on comparative developments and what is realistic and feasible under the proposed land uses and landscape space types. Further details of assumptions made in populating the metric are provided in Chapter 5 below.

⁴ Joint Nature Conservation Committee (2010, as amended) '*Handbook for Phase 1 habitat survey: A technique for environmental audit.*'

⁵ UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>)

⁶ Statutory Biodiversity Metric - Technical Annex 1 - Condition Assessment Sheets and Methodology

⁷ The UK Habitat classification User Manual. Version 1.1. 2020

⁸ Defra (Feb 2024) The Statutory Biodiversity Metric – User Guide

2.4 Strategic Significance

2.4.1 Strategic significance refers to the local significance of habitat parcels based on their location and the habitat type. The Metric gives additional unit value to habitat parcels that are mapped within a published Local Nature Recovery Strategy (LNRS) or, where no LNRS has been published, to habitats mapped / listed in alternative documents specified by the Local Planning Authority (e.g. Draft LNRS, Local Plans, Biodiversity Action Plans, Green Infrastructure Strategies, etc.). Strategic significance has been assigned to the pre- and post-development habitats in accordance with the methodology set out in Tables 7 and 8 of the User Guide, as follows:

- High (formally identified in local strategy);
- Medium (location ecologically desirable but not in local strategy);
- Low (area / compensation not in local strategy).

3 Pre-development ('Baseline') Habitats

3.1 Overview

- 3.1.1 A summary of the classification and condition rationale for the pre-development ('baseline') habitats is set out at Table 3.1 below, with pre-development hedgerows set out at Table 3.2 below. Descriptions of the existing habitats are set out in detail within the Ecological Appraisal prepared by Aspect Ecology, dated February 2025.
- 3.1.2 Detailed condition assessment sheets are provided at Appendix 6856/BNG1, with habitat locations depicted on Plan 6856/BNG1.

3.2 Degradation

- 3.2.1 During the survey work undertaken in June 2024, no evidence was recorded to suggest that any activities of the type mentioned in paragraph 6 or 6A of Schedule 7A to the Town and Country Planning Act 1990 (as amended) have occurred since 30th January 2020. Accordingly, the baseline habitat value is considered to be as recorded during the survey work, which remains up to date at the current time in line with standard guidance⁹. A single storm damaged Oak tree was removed from the site in late 2019, after it fell onto the building in the west of the site and other trees adjacent the building were removed at the same time for safety reasons. The timing of removal of the trees predates the 30th January 2020 cut-off date set by the Town and Country Planning Act and therefore does not constitute degradation.

3.3 Irreplaceable Habitats

- 3.3.1 No irreplaceable habitats are present within the site.

3.4 Strategic Significance

- 3.4.1 None of the habitats within the site are mapped within a published LNRS or any specified alternative documents. Therefore, in accordance with the User Guide, no strategic significance has been applied to the pre-development habitats.

Table 3.1. Pre-development Habitats

Habitat	Recorded Condition	Condition Rationale
Other neutral grassland	Poor	The grassland areas pass up to two of the seven condition assessment criteria, excluding Criteria A which is required to achieve good condition. Therefore, the grassland areas achieve 'poor' condition.
Modified grassland	Moderate	The grassland areas pass up to five of the seven condition assessment criteria, excluding Criteria A which is required to achieve good condition. Therefore, the grassland areas achieve 'moderate' condition.
Introduced shrub	N/A	No assessment for the condition of this habitat is required.

⁹ CIEEM (April 2019) On the lifespan of ecological reports and surveys

Lowland mixed deciduous woodland	Moderate	Woodland W5 scored 32 of a possible 39, achieving 'moderate condition'.
Other woodland; broadleaved	Moderate	The woodlands W1-W3 and W6 scored between 27-32 of a possible 39, achieving 'moderate condition'.
Other woodland; broadleaved	Poor	The woodland W4 scored 25 of a possible 39, achieving 'poor condition'.
Mixed scrub	Poor	The scrub areas pass up to two of the five condition assessment criteria. Therefore, the scrub areas achieve 'poor' condition.
Ornamental lake or pond (P1)	Poor	The ornamental pond passed three of the nine condition assessment criteria. Therefore, the pond achieves 'poor' condition.
Developed land; sealed surface: Building and Hardstanding	N/A	This includes all roads, parking and buildings within the site. No assessment for the condition of this habitat is required.
Urban tree	Moderate	Due to the large number of trees present within the site an individual assessment of each tree has not been undertaken. Whilst a number of native trees are present, a large proportion of the trees within the site are non-native / introduced, including the likes of London Plane, Turkey Oak, Horse Chestnut, Indian Bean-tree, Silver Maple, etc. Few of the existing trees are mature; most are semi-mature to early mature. Most of the trees have been subject to regular pruning. Few of the trees provide natural ecological niches. In summary, the majority of trees are likely to be of poor to moderate condition. However, on a precautionary basis, in the absence of individual tree assessments, an average of moderate condition has been used for all trees.

Table 3.2. Pre-development Hedgerows

Habitat	Recorded Condition	Condition Rationale
Species rich native Hedgerow (H1)	Good	See relevant condition assessment sheet.
Line of trees (TL1)	Poor	See relevant condition assessment sheet.

3.5 Pre-development Biodiversity Value of On-site Habitats

- 3.5.1 The pre-development biodiversity value of the on-site habitat has been calculated using the Statutory Biodiversity Metric. A full copy of the Metric is provided as a separate Excel workbook. The overall pre-development biodiversity value of the on-site habitat is set out within Table 3.3 (overleaf).

Table 3.3. *Pre-development biodiversity value of the on-site habitat*

Onsite baseline	Overall Units
Habitats	13.77
Hedgerows and tree lines	0.69
Watercourse	N/A

4 Post-development Habitats and BNG Assessment Result

4.1 Introduction

4.1.1 The BNG legislation places a duty on Local Planning Authorities to request the pre-development biodiversity value of the on-site habitat on the date of application (or an earlier date) as part of qualifying planning applications. This information is provided in the previous chapter of this report. Going beyond the scope of the statutory requirements, this chapter considers the likely change in biodiversity value as a result of the proposed development. Such information is not required under the legislation until planning has been approved (to be set out within a Biodiversity Gain Plan), but this information is provided now in order to provide the LPA with information as to how a 10% gain in biodiversity will be delivered.

4.2 Assumptions

4.2.1 When inputting the post-development habitat areas and condition to the Metric, the following assumptions have been made:

- Newly created habitat under the proposals will be managed appropriately to reach the assigned target condition (anticipated to be defined by a future management plan)
- On a highly conservative basis, all proposed trees have been assigned to 'poor' condition.

4.3 Strategic Significance

4.3.1 No strategic significance has been applied to the post-development habitats within the site.

4.4 Habitat Type and Condition

4.4.1 Summaries of the proposed post-development habitat creation / enhancement are set out in Tables 4.1 to 4.3 below. Post-development habitat locations are shown on Plan 6747/BNG2.

Table 4.1. Post-development onsite Habitat Creation

Habitat	Target Condition	Condition Rationale
Modified Grassland	Poor	Areas of amenity grassland to be created near to the built development through planting of a tough lawn seed mix. Management to prevent encroachment of scrub and Bracken <i>Pteridium aquilinum</i> as well as an absence of non-native species this habitat is anticipated to achieve at least poor condition within one year.
Modified Grassland	Moderate	Areas of amenity grassland to be created near to the built development through planting of an appropriate flowering lawn seed mix such as Emorsgate EL1, which contains a diversity of species. Management to prevent encroachment of scrub and Bracken as well as an absence of non-native species this habitat is

		anticipated to achieve at least a moderate condition within four years.
Developed land; sealed surface	N/A	This includes all roads, parking and buildings within the site. No assessment for the condition of this habitat is required.
Artificial unvegetated; unsealed surface	N/A	This includes areas of car parking / permeable pavers / gravel within the site. No assessment for the condition of this habitat is required.
Introduced shrub	N/A	This includes ornamental amenity planting. No assessment for the condition of this habitat is required.
Mixed scrub	Moderate	Areas of mixed scrub will be planted with native species in the west, eastern boundary and south-eastern corner of the site. Subject to appropriate management it is expected the scrub will achieve moderate condition after five years.
Other green roof	N/A	Green roofs located on new cycle stores. No assessment for the condition of this habitat is required.
Other neutral grassland	Moderate	Areas of other neutral grassland will be created throughout the site, in particular along the west of the site. The grassland areas will be sown with a suitable wildflower mixture in order to create areas which support a diverse range of flowering species for the benefit of biodiversity, and the wildflower mixture areas in particular will be subject to ecologically sensitive management prescriptions in order to maximise their floristic diversity and value for wildlife, resulting in a moderate condition achieved after five years.
Other woodland; broadleaved	Moderate	Areas of native woodland planting are proposed, which subject to suitable ecological management are calculated to achieve moderate condition within 15 years.
Rain garden	Poor	Areas of rain garden will be created. The Metric calculates this habitat will achieve poor condition within a year.
Urban tree	Poor	New trees to be planted are expected to achieve poor condition within 10 years (on a highly conservative basis).

Table 4.2. Post-development onsite Linear Feature (Hedgerow) Creation.

Habitat	Target Condition	Condition Rationale
Non-native and ornamental hedgerow	Poor	Non-native ornamental hedgerows will be created throughout the site. The condition assessment for non-native hedgerows is fixed at poor condition, achieved after 1 year.
Species-rich native hedgerow	Poor	New hedgerow planting will incorporate native species and will be subject to ecologically sensitive management prescriptions. The Metric calculates the hedgerow will achieve poor condition after one year (on a highly conservative basis).
Native hedgerow	Poor	New hedgerow planting will incorporate native species and will be subject to ecologically sensitive management prescriptions. The Metric calculates the hedgerow will achieve poor condition after one year (on a highly conservative basis).

4.5 Anticipated Change in Biodiversity

4.5.1 The anticipated change in biodiversity value as a result of the proposals has been calculated using the Statutory Biodiversity Metric, based on the assumptions and considerations set out above. A copy of the Metric is provided separately as an Excel workbook and relevant extracts from the completed calculator tool are provided at Appendix 6856/BNG2. The Metric calculates that the development will result in the following changes in biodiversity, summarised in Table 4.3 (below):

Table 4.3. Anticipated change in biodiversity

	Change in Units	% Change
Onsite Habitats	+1.85	+13.46%
Onsite Hedgerows and tree lines	+1.22	+176.18%
Onsite Watercourses	N/A – No watercourses present	

4.5.2 Accordingly, it is clear that (subject to appropriate implementation in line with the measures set out), the proposals will achieve calculated gains in excess of 10% in line with the relevant legislative and policy requirements. However, the trading summary within the Metric identifies a trading error due to the unmitigated loss of 0.2 units (0.015ha) of lowland mixed deciduous woodland (from the far south-east corner of the site), other woodland; broadleaved and urban trees. Accordingly, it will be necessary for the development to secure 0.2 units of lowland mixed deciduous woodland or higher distinctiveness habitat from within the same LPA or National Character Area (NCA), doubling to 0.4 units if a worst-case spatial risk multiplier is used. Similarly, 0.37 units of other woodland; broadleaved and 1.7 units of rural trees will need to be secured within the same LPA or NCA. Again, these figures will double if a worst-case spatial risk multiplier is used.

4.6 Biodiversity Gain Hierarchy

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

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

4.6.2 In relation to point (i), there is one high distinctiveness habitats within the site in the form of Lowland mixed deciduous woodland. The medium distinctiveness habitats present on site include other woodland; broadleaved, other neutral grassland and urban trees. It has not been feasible to avoid adverse effects on these habitats altogether, therefore mitigation is required in the form of suitable replacement on-site / off-site habitat.

4.6.3 In relation to point (ii), adverse effects are to be compensated by creating new on-site habitats and purchase of off-site units (to address trading).

5 Summary and Conclusions

- 5.1 Aspect Ecology is advising Wrenbridge (FRELD Reading LLP) in respect of the land at Shinfield Park, Reading, which is proposed for development to provide new industrial units.
- 5.2 BNG is a process that is considered both during the determination of planning applications and then post planning via a number of set documents (including a Biodiversity Gain Plan and, where required, a Habitat Management and Monitoring Plan). Following on from the amendments to Schedule 7A of the Town and Country Planning Act 1990, government advice has been published which sets out the information that LPAs require in order to consider BNG as part of a planning application. The necessary information is included within this report, therefore the LPA's statutory requirements under the BNG legislation have been satisfied.
- 5.3 In addition, going beyond the scope of the statutory requirements, a preliminary BNG assessment of the post-development value has been undertaken, which concludes that the proposed development will result in net gains in habitat units and hedgerows units within the site boundary, which are in excess of the relevant figure of 10%, albeit off-site units will be required to address the minor habitat trading errors.

Plan 6856/BNG1:

Pre-development Habitat Mapping



- Key:
- Sit e Boundary
 - Artificial unvegetated, unsealed surface (0.0375ha)
 - Developed land; sealed surface: Building (1.4025ha)
 - Developed land; sealed surface: Hardstanding (2.9400ha)
 - Introduced shrub (0.2825ha)
 - Lowland mixed deciduous woodland - Moderate Condition (0.0150ha)
 - Mixed scrub - Poor Condition (0.0075ha)
 - Modified grassland - Moderate Condition (0.4775ha)
 - Other neutral grassland (0.0550ha)
 - Other woodland; broadleaved - Moderate Condition (0.1425ha)
 - Other woodland; broadleaved - Poor Condition (0.1450ha)
 - Ponds (non-priority habitat) (0.0175ha)
 - Line of trees (0.135km)
 - Species-rich native hedgerow (0.035km)
 - Large Urban tree [3]
 - Medium Urban tree [20]
 - Small Urban tree [75]

0 10 20 30 40 m

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Shinfield Park, Reading

Pre-development Habitat Mapping

6856/BNG1

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February 2025

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Plan 6856/BNG2:

Post-development Habitat Mapping



Key:

- Site Boundary
- Proposed Artificial unvegetated, unsealed surface (0.1675ha)
- Proposed Developed land; sealed surface: Building (1.7850ha)
- Proposed Developed land; sealed surface: Hardstanding (1.9800ha)
- Proposed Introduced shrub (0.1425ha)
- Proposed Mixed scrub (0.1175ha)
- Proposed Modified grassland - Moderate Condition (0.0100ha)
- Proposed Modified grassland - Poor Condition (0.1650ha)
- Proposed Other green roof (0.0250ha)
- Proposed Other neutral grassland (0.8125ha)
- Proposed Other woodland; broadleaved (0.2425ha)
- Proposed Rain garden (0.0200ha)
- Retained Other woodland; broadleaved (0.0600ha)
- Proposed Native hedgerow (0.32km)
- Proposed Non-native and ornamental hedgerow (0.335km)
- Proposed Species-rich native hedgerow (0.18km)
- Retained Line of trees (0.135km)
- Proposed Small Urban Tree [273]
- Retained Medium Urban Tree [15]
- Retained Small Urban Tree [31]

0 10 20 30 40 m



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Shinfield Park, Reading PROJECT

Post-development Habitat Mapping TITLE

6856/BNG2 DRAWING NO.

G/BG REV

February 2025 DATE

CK/LS QC



Appendix 6856/BNG1:

Habitat Condition Assessment Sheets

Condition sheet: HEDGEROW Habitat Types					
Habitat Type					
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch					
Habitat Description					
ukhab – UK Habitat Classification					
On-site or off-site, site name and location	On-site - Shinfield Park, Reading		Survey date and Surveyor name		
Limitations (if applicable)			Survey reference (if relating to a wider survey)		
Grid reference			Habitat parcel reference	H1	
Condition Assessment Details					
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria. This assessment is based on the Hedgerow Survey Handbook¹ and Favourable Conservation Status document². For further clarification please refer to the Hedgerow Survey Handbook. Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.					
Hedgerow favourable condition attributes					
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)	
Core groups - applicable to all hedgerow types					
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	No	
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes	
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes	

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length; · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Yes	
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Yes	
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	

Additional group - applicable to hedgerows with trees only

E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		3

Condition categories for hedgerows with trees

Category	Category Requirements	Metric score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2

Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1	
Score achieved: 3			
Suggested enhancement interventions to improve condition score			

Condition Sheet: LINE OF TREES Habitat Type			
Habitat Types			
Line of trees Line of trees – associated with bank or ditch Ecologically valuable line of trees Ecologically valuable line of trees – associated with bank or ditch			
<i>Please see the separate Individual trees condition sheet for linear blocks and groups of trees in an <u>urban</u> setting. You should only use this Line of trees condition assessment and record this habitat type in <u>rural</u> locations.</i>			
Habitat Description			
See the Statutory Biodiversity Metric User Guide. This assessment is based on the Hedgerow Survey Handbook ¹ . For further clarifications please refer to the Handbook. Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.			
On-site or off-site, site name and location	On-site - Shinfield Park, Reading	Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	TL1
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	At least 70% of trees are native species.	No	Dominated by Cypress sp.
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Yes	
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	No	
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice ² .	No	
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes	
		Number of criteria passed	2
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)	X	
Suggested enhancement interventions to improve condition score			

Footnotes

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	On-site - Shinfield Park, Reading	Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	Modified grassland
Habitat Description			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	Yes	
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.	No	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)².	No	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	
G	There is an absence of invasive non-native plant species³ (as listed on Schedule 9 of WCA⁴).	Yes	
Essential criterion achieved (Yes or No)			Yes

Number of criteria passed			5
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	X	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover. Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement. Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
On-site or off-site, site name and location	On-site - Shinfield Park, Reading	Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	Other Neutral Grassland
Habitat Description			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	No	
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 insects, birds and small mammals to live and breed.	No	
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	No	
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%.	Yes	

E	Combined cover of species indicative of suboptimal condition³ 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. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	No	
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	Yes	
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		Yes	
Number of criteria passed		2	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid grassland types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)		
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)		
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	X	
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 - Professional judgement should be used alongside the UKHab description. Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3 - Species indicative of suboptimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . There may be additional relevant species local to the region and or site. Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. Footnote 5 – Wildlife and Countryside Act 1981 (as amended).			

Condition Sheet: POND Habitat Type			
Habitat Type			
Lakes - Ponds (priority habitat) Lakes - Ponds (non-priority habitat) Lakes - Temporary lakes ponds and pools (H3170) [Use this condition sheet for Temporary ponds and pools, use Lake condition sheet for Temporary lakes] Lakes - Ornamental lake or pond [Use this condition sheet for Ornamental ponds, use Lake condition sheet for Ornamental lakes]			
Habitat Description			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location	On-site - Shinfield Park, Reading	Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	P1
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - applicable to all ponds (woodland¹ and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Yes	
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	No	
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Yes	
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	No	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	No	
F	There is an absence of listed non-native plant and animal species ³ .	Yes	

G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	No	
Additional Criteria - must be assessed for all non-woodland ponds:			
H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	No	
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	No	
Number of criteria passed		3	
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/✓
Results for woodland ponds which require assessment of 7 core criteria			
Passes 7 criteria		Good (3)	
Passes 5 or 6 criteria		Moderate (2)	
Passes 4 or fewer criteria		Poor (1)	
Results for non-woodland ponds which require assessment of 9 criteria			
Passes 9 criteria		Good (3)	
Passes 6 to 8 criteria		Moderate (2)	
Passes 5 or fewer criteria		Poor (1)	X
Suggested enhancement interventions to improve condition score			
Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat. Footnote 2 – This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i>. Footnote 3 - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:			

Condition Sheet: SCRUB Habitat Type**Habitat Types**

Heathland and shrub - Blackthorn scrub
 Heathland and shrub - Gorse scrub
 Heathland and shrub - Hawthorn scrub
 Heathland and shrub - Hazel scrub
 Heathland and shrub - Mixed scrub
 Heathland and shrub - Dunes with sea buckthorn (H2160)
 Heathland and shrub - Willow scrub

Habitat Description

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For Dunes with sea buckthorn see:	Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of Conservation (jncc.gov.uk)		
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For other scrub types see:	ukhab – UK Habitat Classification		
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On-site or off-site, site name and location	On-site - Shinfield Park, Reading	Survey date and Surveyor name	
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Limitations (if applicable)		Survey reference (if relating to a wider survey)	
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Grid reference		Habitat parcel reference	Mixed scrub
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Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
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A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ - At least 80% of scrub is native, - There are at least three native woody species ² , - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	No	
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B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Yes	
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C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Yes	
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D	The scrub has a well-developed edge with scattered scrub and tall grassland and/or forbs present between the scrub and adjacent habitat.	No	
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E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	
Number of criteria passed			2
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)	X	
Suggested enhancement interventions to improve condition score			

Condition Sheet: WOODLAND Habitat Type															
UK Habitat Classification (UKHab) Habitat Types															
Woodland and forest - Lowland beech and yew woodland															
Woodland and forest - Lowland mixed deciduous woodland															
Woodland and forest - Native pine woodlands															
Woodland and forest - Other coniferous woodland															
Woodland and forest - Other Scot's pine woodland															
Woodland and forest - Other woodland; broadleaved															
Woodland and forest - Other woodland; mixed															
Woodland and forest - Upland birchwoods															
Woodland and forest - Upland mixed ashwoods															
Woodland and forest - Upland oakwood															
Woodland and forest - Wet woodland															
Habitat Description															
ukhab – UK Habitat Classification															
This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: Woodland Wildlife Toolkit (sylva.org.uk)															
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.															
On-site or off-site, site name and location	On-site - Shinfield Park, Reading	Survey date and Surveyor name		Habitat parcel reference											
Limitations (if applicable)		Survey reference (if relating to a wider survey)		Grid reference											
				W1	W2	W3	W4	W5	W6						
Condition Assessment Criteria															
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator										Notes (such as justification)
A	Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	3	1	2	2	2	2					
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	3	3	3	3	3	3					
C	Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ ≥10% cover.	1	3	3	1	3	3					
D	Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	2	2	1	3	1					
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .	3	3	2	2	3	3					
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁷ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁷ .	3	3	3	3	3	3					

Appendix 6856/BNG2:

Relevant Output from the Statutory Biodiversity Metric
Calculation Tool

Shinfield Park, Reading
Headline Results
Scroll down for final results ▲

Return to
results menu

On-site baseline	Habitat units	13.77	
	Hedgerow units	0.69	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	15.62	
	Hedgerow units	1.91	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	1.85	13.46%
	Hedgerow units	1.22	176.18%
	Watercourse units	0.00	0.00%

Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	1.85
	Hedgerow units	1.22
	Watercourse units	0.00
Spatial risk multiplier (SRM) deductions	Habitat units	0.00
	Hedgerow units	0.00
	Watercourse units	0.00

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	1.85
	Hedgerow units	1.22
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	13.46%
	Hedgerow units	176.18%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	13.77	15.15	0.00
Hedgerow units	10.00%	0.69	0.76	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓
No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲

Project Name: **Shirfield Park, Reading** Map Reference: **A-1 On-Site Habitat Baseline**

Condense / Show Columns

Condense / Show Rows

Main Menu

Area habitat summary	
Total Net Unit Change	1.88
Total Net % Change	13.69%
Trading Rule Satisfied	No - Check trading summaries ▲

Existing area habitats				Disturbance	Condition	Strategic significance	Required Action to Meet Trading Rule	Ecologist handling	
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Disturbance	Condition	Strategic significance	Total habitat value	
1	Urban	Artificial unvegetated, unsealed surface	No	0.0378	V Low	N/A - Other	Area/compression not in local strategy/ no local strategy	Compensation Not Required	0.00
2	Urban	Developed land, sealed surface	No	1.4028	V Low	N/A - Other	Area/compression not in local strategy/ no local strategy	Compensation Not Required	0.00
3	Urban	Developed land, sealed surface	No	2.94	V Low	N/A - Other	Area/compression not in local strategy/ no local strategy	Compensation Not Required	0.00
4	Urban	Introduced shrub	No	0.29	Low	Condition Assessment N/A	Area/compression not in local strategy/ no local strategy	Same Disturbance or better habitat retained 2	0.58
5	Woodland and forest	Lowland mixed deciduous woodland	No	0.015	High	Moderate	Location ecologically desirable but not in local strategy	Same habitat required =	0.20
6	Heathland and shrub	Mixed scrub	No	0.0075	Medium	Poor	Area/compression not in local strategy/ no local strategy	Same broad habitat or a higher Disturbance habitat required, not	0.03
7	Grassland	Modified grassland	No	0.4775	Low	Moderate	Area/compression not in local strategy/ no local strategy	Same Disturbance or better habitat retained 2	1.91
8	Grassland	Other neutral grassland	No	0.005	Medium	Poor	Area/compression not in local strategy/ no local strategy	Same Disturbance or a higher Disturbance habitat required, not	0.22
9	Woodland and forest	Other woodland, broadleaved	No	0.1875	Medium	Moderate	Location ecologically desirable but not in local strategy	Same broad habitat or a higher Disturbance habitat required, not	1.65
10	Woodland and forest	Other woodland, broadleaved	No	0.095	Medium	Poor	Location ecologically desirable but not in local strategy	Same broad habitat or a higher Disturbance habitat required, not	0.43
11	Lake	Ornamental lake or pond	No	0.0175	Low	Poor	Area/compression not in local strategy/ no local strategy	Same Disturbance or better habitat retained 2	0.04
12	Individual trees	Urban tree	No	0.1954	Medium	Moderate	Area/compression not in local strategy/ no local strategy	Same broad habitat or a higher Disturbance habitat required, not	1.56
13	Individual trees	Urban tree	No	0.7452	Medium	Moderate	Area/compression not in local strategy/ no local strategy	Same broad habitat or a higher Disturbance habitat required, not	5.99
14	Individual trees	Urban tree	No	0.1466	Medium	Moderate	Area/compression not in local strategy/ no local strategy	Same broad habitat or a higher Disturbance habitat required, not	1.17
15									
16									
Total habitat area				8.82					13.77
Site Area (excluding area of individual trees, green walls, intertidal hard structures)				8.82					

						Bespoke compensation agreed for losses of VERNI or Irreplaceable habitat		Comments		
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost			User comments	Planning authority comments	Habitat reference number
		0.00	0.00	0.04	0.00					
		0.00	0.00	1.40	0.00			Existing Buildings		
		0.00	0.00	2.94	0.00			Existing Hardstanding		
		0.00	0.00	0.29	0.58					
		0.00	0.00	0.02	0.20					
		0.00	0.00	0.03	0.03					
		0.00	0.00	0.48	1.91					
		0.00	0.00	0.08	0.22					
0.06		0.63	0.00	0.13	1.12					
		0.00	0.00	0.10	0.42					
		0.00	0.00	0.02	0.04					
0.0514		0.85	0.00	0.11	0.91			45x small existing trees (25 retained)		
0.4072		3.26	0.00	0.24	2.74			45x medium existing trees (20 retained)		
		0.00	0.00	0.15	1.17			3x large existing trees		
0.88	0.00	4.44	0.00	0.67	9.33					

Total area lost (excluding area of individual trees, green walls and intertidal hard structures) 5.47

MP to hectares conversion tool:			
Select a unit	Hectares	MP	

Project Name: Shinfield Park, ReadingMap Reference: A-2 On-Site Habitat Creation

Condense / Show ColumnsCondense / Show Rows

Main Menu

Area habitat summary

Total Net Unit Change1.88

Total Net % Change13.48%

Trading Rules SatisfiedNo - check trading summaries ▲

Area CheckArea Acceptable ✓

Ref	Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Post intervention habitats		Habitat units delivered	Comments		
				Distinctiveness	Condition	Strategic significance	Temporal multiplier	Final time to target condition (years)	Final difficulty of creation		User comments	Planning authority comments	Habitat reference number
1	Urban	Artificial unvegetated, unsealed surface	0.1675	V Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00			
2	Urban	Developed land, sealed surface	1.785	V Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00	Proposed Buildings		
3	Urban	Developed land, sealed surface	1.98	V Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00	Proposed Hardstanding		
4	Urban	Introduced shrub	0.1425	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.28			
6	Heathland and shrub	Mixed scrub	0.1175	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	5	Low	0.79			
6	Grassland	Modified grassland	0.01	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	4	Low	0.03			
7	Grassland	Modified grassland	0.168	Low	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.32			
8	Urban	Other green roof	0.025	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.05			
9	Grassland	Other neutral grassland	0.805	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	5	Low	5.39			
10	Woodland and forest	Other woodland, broadleaved	0.25	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	15	Low	1.17			
11	Urban	Rain garden	0.02	Low	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.04			
12	Individual trees	Urban tree	1.1156	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	10	Low	3.12			
13													
14													
15													
16													
17													
Total habitat area			6.88							11.19			

Site Area (Excluding area of individual trees, green walls, intertidal hard structures)

5.47

M² to hectares conversion tool:

Select a unit

Hectares

M²

Project Name: Schinfield Park, ReadingMap Reference:

B-1 On-Site Hedge Baseline

Condense / Show Columns

Condense / Show Rows

Table Views

Hedgerow summary	
Total Net Unit Change	1.28
Total Net % Change	178.18%
Trading Rules satisfied	Yes /

Existing hedgerow habitats				Distinctiveness		Condition		Strategic significance				Required Action to Meet Trading Rules	Ecological Intrinsic Value Total hedgerow mile	Comments							
Ref	Hedge number	Habitat type	Length (m)	Distinctiveness	Score	Condition	Score	Strategic significance		Strategic significance multiplier	Strategic significance multiplier			Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Planning authority comments
1	TL1	Line of trees	0.135	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy		Low Strategic Significance	1	Some distinctiveness based on better	0.27	0.135	0.27	0.00	0.00	0.00			
2	H1	Species rich native hedgerow	0.035	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy		Low Strategic Significance	1	Some distinctiveness based on better	0.42		0.00	0.00	0.04	0.42			
3																					
4																					
5																					
			0.17									0.69	0.14	0.00	0.27	0.00	0.04	0.48			

Project Name: **Shirah Park, Beeding**Map Reference:

B-2 On-Site Hedge Creation

Coordinate / Show Column

Coordinate / Show Rows

Main Menu

Hedge row summary	
Total Net Unit Change	1.84
Total Net % Change	176.16%
Tracking Value Realised	Year 4

		Proposed habitats		Disturbance		Condition		Strategic significance				Temporal multiplier				Difficulty risk multiplier				Comments					
Ref	Year hedge number	Habitat type	Length (m)	Disturbance	Score	Condition	Score	Strategic significance		Strategic significance multiplier	Strategic significance multiplier	Standard Time to target condition (years)	Habitat created to advance (years)	Delay to starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Bridges built delivered	User comments	Planning authority comments	Habitat reference number
1	1	Native hedgerow	0.32	Low	0	Poor	1	Assessment not in local strategy not in local strategy	Low Strategic Significance	1	1	1			Standard time to target condition applied	1	0.000	Low	Standard difficulty applied	Low	1	0.02			
2	2	Non-native and ornamental hedgerow	0.335	Y Low	1	Poor	1	Assessment not in local strategy not in local strategy	Low Strategic Significance	1	1	1			Standard time to target condition applied	1	0.000	Low	Standard difficulty applied	Low	1	0.32			
3	3	Species-rich native hedgerow	0.18	Medium	4	Poor	1	Assessment not in local strategy not in local strategy	Low Strategic Significance	1	1	1			Standard time to target condition applied	1	0.000	Low	Standard difficulty applied	Low	1	0.09			
4																									
5																									
6																									
7																									
			0.84																			1.84			

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