Biodiversity Net Gain Assessment: Design Stage

June 2024

Land South of A507
and West of Buntingford

Prepared by
CSA Environmental

On behalf of
Hallam Land Management Limited

Report No: CSA/6815/03

CSA environmental

masterplanning | ecology | landscape | heritage

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/6815/03	-	19/06/2024	AC	JW	
	A	20/06/2024	AC	-	Amended site description

CONTENTS

		Page
	Executive Summary	**1**
1.0	**Introduction**	**5**
2.0	**Planning Policy & Legislation**	**7**
3.0	**Methods**	**9**
	Biodiversity Calculations	9
	Baseline Habitats	9
	Post-Development Habitats	10
	Strategic Significance	10
	Additional Considerations	10
	Assumptions & Limitations	11
4.0	**Baseline Biodiversity**	**12**
	Strategic Significance	12
	Baseline Biodiversity Units	12
5.0	**Post-Intervention Biodiversity**	**14**
	Habitat Retention & Enhancement	14
	Habitat Creation	15
	Strategic Significance	15
	Significant On-site Gain	15
6.0	**Net Effect on Biodiversity**	**16**
	Biodiversity Units	16
	Habitat Coverage	16
	Qualitative Appraisal	17
8.0	**Management & Monitoring**	**19**
9.0	**Summary & Conclusions**	**20**
11.0	**References**	**21**

Appendices

Appendix A: Baseline Habitats Plan

Appendix B: Proposed Habitats Plan

Appendix C: Draft Biodiversity Gain Plan

Appendix D: Habitat & Hedgerow Condition Assessments

EXECUTIVE SUMMARY

Commercial development including employment land is proposed at Land South of A507 and West of Buntingford. Outline planning permission is sought from East Hertfordshire District Council which will be subject to the Biodiversity Gain Condition in accordance with Schedule 14 of the Environment Act (2021).

CSA Environmental was instructed by Hallam Land Management Limited to undertake a 'Design Stage' Biodiversity Net Gain Assessment (BNGA) of the proposed development. The Statutory Biodiversity Metric Calculation Tool was used to determine pre- and post- development biodiversity values, and predict the net effect of the proposed development upon biodiversity.

Baseline habitats at the Site comprise arable, woodland and hedgerows of low to medium distinctiveness. No nature conservation designations cover the Site or adjacent land.

Post-development habitats at the Site will comprise commercial development including an employment area, Sustainable Drainage System (SuDS) features and 7.24ha of informal open space.

A net gain of biodiversity is predicted for the proposed development of **+3.57 habitat units** (+12.84%) and **+1.17 hedgerow units** (+20.46%). This is subject to significant on-site gains delivered within open space to include other neutral grassland, woodland and tree planting.

Subject to securing the above through relevant legal mechanisms the Biodiversity Gain Condition could be discharged following grant of consent through submission of a Biodiversity Gain Plan template as drafted herein.

To assist East Hertfordshire District Council in their consideration of BNG and the proposed development, relevant statements have been set out in Box 1 and 2 in respect of applicable BNG policy and legal requirements.

Box 1. Biodiversity Net Gain Statements
Planning permission sought for the development, if granted, **would be subject to the Biodiversity Gain Condition** as set out within Schedule 14 of the Environment Act (2021) given that planning permission is applied for after 12 February 2024.
The biodiversity value of on-site habitats set out herein relate to the date of the planning application and not an earlier date.
The biodiversity value of on-site habitats set out herein are not lower than on date of application.
On-site biodiversity gain proposed herein is significant based upon the following: • Proposed habitats include those of medium distinctiveness comprising broadleaved woodland, other neutral grassland, mixed scrub and individual trees. • Proposed habitats comprise large areas of low distinctiveness habitat comprising modified grassland.
The Site does not contain irreplaceable habitat as defined under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024).

Box 2. Accordance with 'Biodiversity Net Gain: Good Practice Principles for Development' (Baker et al., 2019).	
Principle 1. Apply the 'Mitigation Hierarchy'	Design decisions have been documented within the prepared EcIA and give due consideration for the CIEEM Guidelines for Ecological Impact Assessment (EcIA) (CIEEM, 2018) including the mitigation hierarchy. Trading rules have been accorded with in the prepared metric and ecologically justified decisions have been taken in respect of proposed habitats. The Biodiversity Gain Hierarchy has also been followed, with habitats of medium or higher distinctiveness retained on-site as far as possible and mitigation of loss of habitats through enhancement of on-site habitats and the creation of on-site habitats. No off-site offsetting or purchase of biodiversity credits is required.
Principle 2. Avoid losing biodiversity which cannot be offset by gains elsewhere (e.g., irreplaceable habitats).	No irreplaceable habitats are present on-site. Other notable habitats and features (including hedgerows, woodland and mature trees) have been prioritised for protection as part of the proposed design.
Principle 3. Be inclusive & equitable	Design decisions taken have considered wider stakeholders including new users of the site. Open space design has sought to balance biodiversity benefits and access to nature, with recreational uses and delivery of employment land.
Principle 4. Address risks (e.g., difficulty of achieving habitat creation/enhancement for net gain).	A precautionary approach has been taken to grassland and woodland habitat type and condition for on-site biodiversity gain provision, with the highest provision comprising other neutral grassland and broadleaved woodland in moderate condition.
Principle 5. Make a 'measurable' Net Gain contribution (e.g., calculated using an appropriate metric).	The Statutory Biodiversity Metric has been used to demonstrate a clear and quantified calculation of the net effect of development upon biodiversity, using habitat as a proxy for wider biodiversity.
Principle 6. Ensure that Net Gain design achieves the best outcomes for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.	Informal Open Space has been designed to provide the best outcomes for biodiversity, including large scale habitat creation comprising open grassland and linear wooded habitats to retain and enhance connectivity, SuDS features and integrated ecological niches.
Principle 7. Be additional Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).	Informal Open Space has been designed to deliver a net gain in biodiversity for the Site, in addition to providing the required levels of recreational and other public open space.
Principle 8. Create a Net Gain legacy Ensure Net Gain generates long-term benefits.	Habitat creation at the Site will be subject to on-going management to ensure long-term benefits.

Principle 9. Optimise sustainability Optimise the wider environmental benefits for a sustainable society and economy.	Informal Open Space has been designed to provide wider environmental benefits for users of the Site, providing a combination of spaces for recreational use alongside those dedicated for wildlife.
Principle 10. Be transparent Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	A full copy of the Statutory Biodiversity Metric calculation tool and Condition Assessments will be provided alongside this report for transparency with regard to how the BNG for the Site has been calculated.

1.0 INTRODUCTION

1.1 This report has been prepared by CSA Environmental on behalf of Hallam Land Management Limited and sets out the findings of a 'Design Stage' Biodiversity Net Gain (BNG) Assessment. Commercial development is proposed at the Land South of A507 and West of Buntingford (hereafter 'the Site'). This report details the predicted net effect of the proposed development upon biodiversity.

1.2 The report has been prepared with due consideration for the Chartered Institute of Ecology and Environmental Management's guidance for design stage reporting on Biodiversity Net Gain (CIEEM, 2021). The report has also takes into account of wider CIEEM best-practice guidance (2017 & 2018), Biodiversity Net Gain: Good practice principles for development (Baker et al., 2019) and the Biodiversity: Code of practice for planning and development published by the British Standards Institute (BS 42020:2013).

1.3 The Site occupies an area of c. 13.28ha and consists of a single arable field, a small, wooded copse and boundary hedgerows (see Habitats Plan in Appendix A). The Site is located around central grid reference TL 3526 2940, to the west of Buntingford.

1.4 The report should be read in conjunction with the Ecological Impact Assessment (EcIA) (CSA/6815/02/A) prepared for the proposed development which provides full baseline habitat information upon which post-development biodiversity value set out herein is based.

1.5 This 'Design Stage' BNG Assessment aims to:

- Confirm whether planning permission sought for the development, if granted, would be subject to the biodiversity gain condition as set out within the Environment Act (2021) [see Box 1];
- Provide information about "...the steps taken or to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat". Furthermore, evidence is provided as to how the Biodiversity Gain Hierarchy, as set out in as set out in the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024), has been applied.
- Establish the following using the Statutory Biodiversity Metric Calculation, which uses habitat as a proxy for biodiversity comprises three separate modules (Habitat Units, Hedgerow Units & Watercourse Units);
    - 'pre-development' (baseline) biodiversity baseline value of the Site
    - 'post-development' (post-intervention) biodiversity value of the Site
    - Any off-site biodiversity values (baseline & post-intervention)

    - Net effect of the proposed development
    - Whether relevant 'trading' rules and other controls have been accorded with
    - the Biodiversity Gain Objective (10%) is met or not
- State whether "... the biodiversity value of the on-site habitat will be lower on the date of application (or an earlier date) because of the carrying on of activities ('degradation') in which case the value is to be taken as immediately before the carrying on of the activities, and if degradation has taken place supporting evidence of this";
- State whether any on-site biodiversity provision is 'significant' and if so, how the specific gains would secured for 30 years, in accordance with Paragraph 9, Schedule 7A of the Town & Country Planning Act (1990).
- Confirm the presence and location of any irreplaceable habitat at the Site, as set out in the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024)
- Clearly identify any assumptions made or deviation from Statutory Biodiversity Metric Guidance.
- Detail any legal frameworks for how biodiversity net gain would be secured subject to grant of planning permission.

1.6 In accordance with the Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations (2024) the following drawings have also been prepared:

- Baseline Habitats Plan (CSA/6815/109) provided in Appendix A
- Proposed Habitats Plan (CSA/6815/110) provided in Appendix B

1.7 To assist the authority in their consideration of the application, a Draft Biodiversity Gain Plan is provided in Appendix C making use of the most recently published template. A final Biodiversity Gain Plan would be prepared to discharge the biodiversity gain condition following the grant of any relevant consent.

2.0 PLANNING POLICY & LEGISLATION

2.1 The following legislation brings into force Schedule 14 of the Environment Act (2021), making Biodiversity Net Gain (BNG) a condition of planning permission in England from 12 February 2024.

- The Biodiversity Gain (Town and Country Planning) (Consequential Amendments) Regulations 2024
- The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024
- The Biodiversity Gain Site Register Regulations 2024
- The Biodiversity Gain Requirements (Exemptions) Regulations 2024
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024
- The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024

2.2 The National Planning Policy Framework (2024) (NPPF) sets out existing government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, paragraph 180, states that the planning system and planning policies should minimise impacts on and provide net gains for biodiversity.

2.3 Accompanying the NPPF, central government guidance on the implementation of planning policies is set out within online Planning Practice Guidance (PPG). That relating to the protection and enhancement of the Natural Environment was most recently updated in August 2021. The Natural Environment PPG addresses principles across a broad spectrum of topics targeting biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services, and the use of local ecological networks to support the national Nature Recovery Network. In particular the PPG promotes the delivery of measurable biodiversity net gain through the creation and enhancement of habitats alongside development.

2.4 The following policy from the East Hertfordshire District Plan makes reference to biodiversity and the protection and enhancement of priority habitats and species:

<u>Policy NE3: Species and Habitats</u>

"Development should always seek to enhance biodiversity and to create opportunities for wildlife. Proposals must demonstrate how the development improves the biodiversity value of the site and surrounding environment. Evidence will be required in the form of up-to-date ecological surveys undertaken by a competent ecologist prior to the submission of an application. ***The Biodiversity value of a site pre and post***

development will be determined by applying a locally approved Biodiversity Metric where appropriate. *Submitted information must be consistent with BS 42020 2013. Where insufficient data is provided, permission will be refused.*

Proposals should detail how physical features will be maintained in the long term.

Development which would result in the loss or significant damage to trees, hedgerows or ancient woodland sites will not be permitted. The Council will seek their reinforcement by additional planting of native species where appropriate. Protective buffers of complementary habitat will be expected to adjoin these features, sufficient to protect against root damage and improvement of their long term condition. A minimum buffer zone of 10m (or greater if required) is considered appropriate.

Proposals will be expected to protect and enhance locally important biodiversity sites and other notable ecological features of conservation value.

Proposals should avoid impacting on Species and Habitats of Principle Importance as published under section 41 of the Natural Environment and Rural Communities Act 2006 (or as subsequently amended).

Where adverse impacts are unavoidable, appropriate mitigation and compensation measures must be employed, commensurate to the importance, the legal protection or other status of the species or habitat. The District Council will impose conditions/planning obligations which seek to:

- *Facilitate the survival of existing populations as well as encouraging the establishment of new populations*
- *Reduce disturbance to a minimum*
- *Provide adequate alternative habitats to sustain at least the current levels of populations*

Development adjoining rivers or streams will be required to preserve or enhance the water environment in accordance with Policy WAT3 (Water Quality and the Water Environment).

Integrated bird and bat boxes will be expected in all development bordering public green space and beneficial habitat."

3.0 METHODS

Biodiversity Calculations

3.1 The Statutory Biodiversity Metric (Defra, 2024) was used to determine baseline (pre-development) and post-intervention (post-development) biodiversity values, and to calculate the net effect of the development upon biodiversity. Specifically, the Statutory Biodiversity Metric Calculation Tool was populated and used to run all calculations present herein, and in accordance with the Statutory Metric User Guide (Defra, 2024).

3.2 The Statutory Biodiversity Metric uses habitat (vegetation and edaphic conditions) as a proxy for measuring biodiversity more widely. This reductive approach allows for the relative biodiversity 'value' of land to be calculated and expressed as transferrable 'Biodiversity Units'. The metric adopts UK Habitat Classification (UK Hab; Butcher et al., 2020) system with some minor deviation.

3.3 The metric consists of a primarily 'Area' module which calculates 'Habitat Units' such as grassland, woodland and urban habitats, as well as two linear modules for 'Hedgerow Units' (including lines of trees) and 'Watercourse Units' (including rivers, canals and ditches). These separate Biodiversity Units types cannot be converted between these modules and are addressed separately herein. For the purposes of this report watercourses modules were not populated given the absence of these linear features from the Site.

3.4 A Statutory Biodiversity Metric Calculation Tool has been prepared for the proposed development and is provided separately in full for interrogation by East Hertfordshire District Council, relevant consultees and stakeholders.

3.5 All metric calculations have been reviewed by Alexandra Cole MCIEEM.

Baseline Habitats

3.6 The accompanying EcIA report (CSA/6815/02/A) provides details of UKHab survey undertaken at the Site on 06 December 2023 including full survey methods.

3.7 Baseline (pre-development) habitat areas and linear measurements were taken from the Baseline Habitats Plan (Appendix A) prepared in mapping software Quantum Geographic Information Systems (QGIS). Mapping is based upon field survey, topographical survey, aerial photography and OS mapping to an accuracy of 10m^2/0.001ha (polygons) and 5m (linear).

Habitat & Hedgerow Condition Assessment

3.8 An assessment of habitat and hedgerow condition was undertaken on 15 May 2024 by Alexandra Cole MCIEEM (FISC L4) and 30 May 2024 by Rhodri Gruffydd (FISC L3), in accordance with the Statutory Metric User Guide (Defra, 2024). Published condition assessment templates have been completed and provided in Appendix D alongside wider condition information.

Post-Development Habitats

3.9 Post-development habitats areas and linear measurements were taken from the Proposed Baseline Habitats Plan (Appendix B) prepared in mapping software QGIS. This plan is based upon the Land Use Components Plan prepared by David Lock Associates (HLM082/019/E) on behalf of Hallam Land Management, along with indicative landscape designs. Wider consideration of construction methods, future land-use and management were used to determine the extent of existing habitat loss/deterioration, retention/enhancement and creation which would occur-post development.

3.10 Professional judgement was required throughout the calculation process to ensure target habitats were reasonable and achievable against and ecologically justified. Habitat condition for both enhanced and created habitats was assigned taking a precautionary approach and with consideration of biotic and operational phase conditions (i.e. those which may limit the extent to which 'good' condition is likely to be reached).

Strategic Significance

3.11 A desktop assessment was undertaken to determine relevant strategic significance multipliers for pre- and post-development habitats in accordance with Table 7 of the Statutory Metric User Guide (Defra, 2024) with particular consideration of Local Nature Recovery Strategies (LNRS).

Additional Considerations

3.12 In accordance with the good practice principles as set out above, the following additional considerations have been given:

- Wider consideration of ecological functionality, with a qualitative ecological assessment presented herein.
- Consideration of non-ecological stakeholders, such as end-users (e.g. residents) of the scheme and choices with regard to access and multi-functionality.
- Identification of opportunities to deliver wider environmental gain (e.g. carbon sequestration, water quality and climate resilience) guiding habitat/design choices beyond certain ecological outcomes.

Assumptions & Limitations

3.13 Effort has been taken to ensure mapping, and measurements taken from mapping, are accurate to the level stated. However, given the nature of habitats, methods of field survey and the potential for inaccuracies in aerial photography and some other mapping, there remain some potential for errors in the calculations presented herein.

3.14 Professional judgement and a precautionary approach is required to establish baseline and post-development scenarios to assess current habitat type and condition, and to predict future changes. Accordingly predicted outcomes for habitats and biodiversity more widely may differ from those presented herein.

3.15 Specific assumptions with regard to certain existing and proposed habitats have been identified where relevant throughout the report.

4.0 BASELINE BIODIVERSITY

4.1 For full habitat descriptions and species lists, please refer to the EcIA (CSA/6815/02/A) with baseline habitats illustrated on the Habitats Plan (Appendix A). Appendix D sets out full details of habitat condition assessment including completed standard templates.

Strategic Significance

4.2 There is no published Local Nature Recovery Strategy (LNRS) for the local vicinity. However, the Hertfordshire Ecological Network Map provided for the Site has been reviewed in respect of assigning significant strategic significance. Accordingly, given the entire Site and all habitats fall outside of nature conservation designation areas and ecologically important locations, all of the baseline habitat units are assigned as 'Low' strategic significance.

4.3 The above approach has also been adopted for post-intervention (post-development) habitat units as set out below.

Baseline Biodiversity Units

4.4 A summary of the on-site habitat areas and baseline biodiversity units, as calculated using the accompanying Statutory Biodiversity Metric are set out in Table 1 below. These include habitat and hedgerow units.

Table 1. Summary of On-site Baseline Biodiversity Units

HABITATS		
Habitat Type	**Area (ha)**	**Habitat Units**
Cereal crops	12.44	24.88
Other woodland; broadleaved	0.08	0.64
Developed land; sealed surface	0.53	0.00
Other neutral grassland	0.14	1.12
Mixed scrub	0.02	0.16
Other woodland, broadleaved	0.07	0.56
Rural tree*	0.0529	0.42
Total	**13.28**	**27.78**
HEDGEROWS		
Hedgerow Type	**Length (km)**	**Hedgerow Units**
H1 Native hedgerow	0.77	3.08
H2 Native hedgerow with trees	0.14	1.12
H8 Native hedgerow	0.38	1.52
Total	**1.29**	**5.72**

* Area measurements attributed to 'individual trees' are not included in the total area as trees oversail other habitats.

4.5 The majority of the Site area (98%) comprises habitats of 'low' or 'very low' distinctiveness comprising arable land and hardstanding, contributing the majority of its overall biodiversity value (90%). Smaller areas (2%) of 'medium' distinctiveness habitats are present and contribute a modest proportion (10%) of overall biodiversity value.

4.6 Hedgerows across the Site comprise 'low' to 'medium' distinctiveness habitats, all comprising native hedgerows. H1 and H2 will be retained in full, with 44% of the total hedgerow length across the Site retained and enhanced.

5.0 POST-INTERVENTION BIODIVERSITY

5.1 The proposed development comprises commercial development including an employment area, Sustainable Drainage System (SuDS) features and 7.24ha of informal open space.

5.2 Post-intervention habitat areas and linear measurements are illustrated on the Proposed Habitats Plan in Appendix B. This drawing is based upon development parameters set out within the Land Use Components Plan prepared by David Lock Associates (HLM082/019/E) with consideration given to the Illustrative Masterplan (David Lock Associates; HLM082/021/C). The following assumptions have been made with regard to these plans in line with the Statutory Biodiversity Metric User Guide (2024) and professional judgement taking a precautionary approach where necessary:

- Employment area assumed to comprise 100% built form
- All individual trees (number taken from Illustrative Masterplan; HLM082/021/C) are assumed to be 'small' in size, and in poor condition for 'urban'/street contexts and moderate condition for 'rural' contexts

5.3 On-site habitat retention, enhancement and creation set out below would be secured through control of detailed development/landscape design, a Habitat Management & Monitoring Plan (HMMP) and appropriate application of a planning condition or legal condition.

Habitat Retention & Enhancement

5.4 The majority of area habitats at the Site will be lost to development, comprising principally arable land, with just under half of all linear habitats retained. The following habitats will be retained and/or enhanced:

- 0.08ha of broadleaved woodland (W1) will be retained and appropriately buffered from development/edge effects.
- 0.53ha of existing infrastructure (developed land; sealed surface).
- 0.04ha of other neutral grassland along road verges.
- Hedgerows H1 and H2 will be enhanced and subject to gapping up, improvement of adjacent habitats and favourable long-term management.

5.5 As set out within the accompanying EcIA the retention of these habitats will require protections during construction and in operation through the following:

- Tree protection measures in line with standard arboricultural practice (BS5837: 2012)

- Construction Environmental Management Plan, to include standard pollution control measures to be implemented during construction
- Landscape and Ecology Management Plan

5.6 Enhancements works would be delivered and secured through the HMPP.

Habitat Creation

5.7 As part of the proposed development a range of habitats will be created including employment land and associated infrastructure, incidental greenspace, and large-scale habitat creation within 'Buntingford Park' to include grassland, scrub and linear wooded habitats.

Strategic Significance

5.8 An equivalent approach to strategic significance as been taken for post-intervention biodiversity units as for baseline units above, with all habitats having 'low' strategic significance.

Significant On-site Gain

5.9 The following proposed habitat enhancement and creation proposals are likely to be considered 'significant' by East Hertfordshire District Council:

- Creation of habitats of medium distinctiveness, including broadleaved woodland, other neutral grassland, mixed scrub and individual trees
- Creation of areas of low distinctiveness habitat as part of 'Buntingford Park' and informal open space.
- Enhancement of hedgerows H1 and H2 to 'good' condition

5.10 In accordance with Paragraph 9, Schedule 7A of the Town & Country Planning Act (1990) these habitats contributing to significant on-site gains require additional mechanisms to secure their creation/enhancement and management over 30-years, such as through an appropriate planning condition and/or legal agreement in accordance with an on-site HMMP.

6.0 NET EFFECT ON BIODIVERSITY

Biodiversity Units

6.1 The net effect on biodiversity as a result of the proposed development is set out within the accompanying Statutory Biodiversity Metric and summarised below in Table 2A and 2B.

Table 2A. Net Effect on Biodiversity: Habitat Units

	Habitat Units	% Change
On-site baseline	27.78	
On-site post-intervention	31.35	
On-site net change	+3.57	+12.84%
Total net change	**+3.57**	**+12.84%**
Trading Rules Satisfied		

Table 2B. Net Effect on Biodiversity: Hedgerow Units

	Habitat Units	% Change
On-site baseline	5.72	
On-site post-intervention	6.89	
On-site net change	+1.17	+20.46%
Total net change	**+1.17**	**+20.46%**
Trading Rules Satisfied		

6.2 It is demonstrated that the proposed development will result in a net gain in excess of 10% for habitat units and hedgerow units with all relevant trading rules satisfied.

Habitat Coverage

6.3 The net change in cover (area and linear) for broad and priority habitat is summarised in Table 3 below.

Table 3. Net Effect Habitat Coverage

	Area (ha) / Length (km) change	% Change
Urban	+5.39ha	+1017%
Arable	- 12.44ha	-100%
Woodland	+0.90ha	+600%
Grassland	+5.07ha	+4264%
Scrub	+0.18ha	+900%
Hedgerow (priority habitat)	+0.72km	-56%

6.4 The proposed development will inevitably result in the net losses of arable habitats and a significant increase in urban habitats within the employment area. Several habitats, currently comprising only a small proportion of the Site are proposed, including other neutral grassland and broadleaved woodland.

6.5 A net loss of priority hedgerow habitat is predicted, due access into the development. Retained hedgerows will be enhanced.

Qualitative Appraisal

6.6 A wider appraisal of the proposed development's effects upon biodiversity is set out below in Table 4 below. This includes factors not fully captured through the Statutory Biodiversity Metric, which uses only habitat type and condition as a proxy for biodiversity, omitting important factors such as connectivity and functioning of habitats.

Table 4. Qualitative Appraisal of effects upon Biodiversity

Ecological Features, Functions & Factors	Baseline Conditions	Potential Effects
Habitat Connectivity	Arable land at the Site contributes little to local ecological networks, with the exception of field hedgerows to the boundaries of the Site.	Development will impede habitat connectivity through the east of the Site for many species. Structural landscaping provide some ancillary benefits to certain mobile species. New habitats to the peripheries of the Site and within Informal Open Space to the west, including grassland, scrub and woodland provide significant increase in habitat availability and connectivity for certain species, north to south through the Site, contributing to wider ecological networks.
Structural diversity	The Site has very limited habitat structure with little or no interfaces between broad habitat types	Proposed development and landscaping on-site will increase the structural diversity of habitat at the Site. Interfaces between formal (short mown) and informal habitats, as well as between broad habitat types (grassland, scrub, woodland and hedgerow) will provide a greater range of opportunities for biodiversity, at a number of scales.
Habitat Mosaics	The Site has a very low diversity of habitats.	Proposed development and habitats on-site will increase the number of habitat types and their structural diversity. The combination of grassland, scrub, woodland, trees and hedgerows will provide a mosaic of habitat to benefit biodiversity.
Soil biodiversity	Arable land which dominates the site is subject to frequent chemical inputs (fertiliser, pH correction and herbicides) and physical disturbance. The soil biota is likely to be significantly impacted by such works, reducing soil carbon, other nutrient cycling and wider environmental benefits.	Development will include the loss and damage of soils to built form and will prevent natural functioning of this habitat. Where arable is converted to permanent grassland and other habitats including woodland, substantive benefits are anticipated to soil environments and biodiversity.

8.0 MANAGEMENT & MONITORING

8.1 Full details of management and monitoring for delivery of the on-site biodiversity gains will be provided within a Habitat Monitoring and Management Plan (HMMP) for a 30-year period. This HMMP will include the following principal elements:

- Establishment and management of the following 'significant' biodiversity gains:
    - Broadleaved woodland, other neutral grasslands and individual tree planting within informal open spaces
    - Extensive areas of modified grassland within informal open spaces
    - Hedgerow enhancement measures
- Adaptive management options
- Monitoring regime and reporting process
- Roles and responsibilities
- Processes to ensure remedial measures can be undertaken in the event that target habitat or condition is not achieved

9.0 SUMMARY & CONCLUSIONS

9.1 Planning permission sought for the proposed development will be subject to the Biodiversity Gain Condition in accordance with Schedule 14 of the Environment Act (2021).

9.2 As set out herein, a net gain in biodiversity in excess of 10% is predicted as a result of the proposed development, based upon provision of significant on-site gains. The Statutory Biodiversity Metric Calculation Tool was used to calculate the following outcomes:

- +3.57 habitat unit gain or +12.84%
- +1.17 hedgerow unit gain or +20.46%
- All relevant trading rules satisfied

9.3 Following any grant of planning permission an application to discharge the Biodiversity Gain Condition would be submitted completing the Biodiversity Gain Plan provided in draft in Appendix C.

9.4 On-site significant biodiversity gain would be secured through an appropriate legal mechanism (as such planning condition) subject to an on-site HMMP for a 30-year period.

11.0 REFERENCES

Baker, J., 2016. *Biodiversity Net Gain: Good practice principles for development*. CIEEM, CIRIA & IEMA.

Baker, J., Hoskin, R., and Butterworth, T., 2019. *Biodiversity Net Gain: Good Practice Principles for Development. A practical guide*. CIEEM, CIRIA & IEMA.

Business and Biodiversity Offsets Programme (BBOP), 2018. *Business Planning for Biodiversity Planning: A Roadmap*. Available at: https://www.forest-trends.org/bbop_pubs/business-planning-bng [Accessed March 2024].

Butcher, B., Carey, P., Edmonds, R., Norton, L., and Treweek, J., 2023. *UK Habitat Classification Version 2.0* [pdf] UKHab Ltd. Available at http://www.ukhab.org/ [Accessed March 2024].

Chartered Institute of Ecology and Environmental Management, 2017. *Guidelines for Ecological Report Writing*. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2018. *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.1. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2021. *Biodiversity Net Gain Report and Audit Templates*. Winchester: CIEEM.

Natural England, 2020. *National Habitat Network Maps; User Guide V.2*. Available at: https://magic.defra.gov.uk/Metadata_for_magic/Habitat%20Network%20Mapping%20Guidance.pdf [Accessed March 2024].

Defra, 2024. *The Statutory Biodiversity Metric User Guide*. London: Defra.

Appendix A

Baseline Habitats Plan



N

- Site boundary
- Other land in applicant's control
- Arable and horticulture (c1)
- Developed land. sealed surface (u1b)
- Other neutral grassland (g3c)
- Other woodland-broadleaved (w1g)
- Dense scrub (h3)
- Hedgerows (h2a)
- Hedgerows with trees (h2a 11)
- Individual trees
  Only trees not within hedgerows or trees within hedgerows proposed to be removed are shown:
  1 medium rural tree
  1 large rural tree

0 200 400 m

Contains Bing maps © Microsoft 2024
For reference purpose only. No further copies may be made.

CSA environmental
Dixies Barns, High Street,
Ashwell, Hertfordshire SG7 5NT
t 01462 743647
e ashwell@csaenvironmental.co.uk
w csaenvironmental.co.uk

Project	Land South of A507 and West of Buntingford	Date	June 2024	Drawing No.	CSA/6815/109
Drawing Title	Baseline Habitats Plan	Scale	1:6000 on A4	Rev	B
Client	Hallam Land Management Limited	Drawn	RG	Checked	AC

Appendix B

Proposed Habitats Plan



N

- Site boundary
- Other land in applicant's control
- Employment area
  Developed land; sealed surface (u1b)
- Modified grassland (g4)
- Other neutral grassland (g3c)
- Developed land. sealed surface (u1b)
- Other woodland-broadleaved (w1g)
- Retained hedgerows (h2a)
- Retained hedgerows with trees (h2a 11)
- Individual trees
  Only retained individual trees not within hedgerows are shown:
  1 large rural tree retained
  1 medium rural tree removed
  39 small urban trees proposed
  126 small rural trees proposed

0 200 400 m

Contains Bing maps © Microsoft 2024
For reference purpose only. No further copies may be made.

CSA environmental
Dixies Barns, High Street,
Ashwell, Hertfordshire SG7 5NT
t 01462 743647
e ashwell@csaenvironmental.co.uk
w csaenvironmental.co.uk

Project	Land South of A507 and West of Buntingford	Date	June 2024	Drawing No.	CSA/6815/110
Drawing Title	Proposed Habitats Plan	Scale	1:6000 on A4	Rev	B
Client	Hallam Land Management Limited	Drawn	RG	Checked	AC

Appendix C

Draft Biodiversity Gain Plan

Department for Environment Food & Rural Affairs

Biodiversity gain plan

Submit a biodiversity gain plan to show how your development will achieve biodiversity net gain.

When to use this form

A biodiversity gain plan shows how a development will achieve 10% biodiversity net gain (BNG). Submit this form to your local planning authority after they approve your planning application.

Unless your development is exempt, you cannot start the development until the LPA approves your biodiversity gain plan and biodiversity metric calculation tool.

1. Submission details

1.1 Date

For example, 3/11/2023

1.2 Planning application reference number

1.3 Local planning authority (LPA)

East Hertfordshire District Council

1.4 Development site address

If the site does not have an address, enter the OS grid reference.

TL 3526 2940

1.5 Describe the development

Tell us about the proposed development and any changes of use (250 words).

Outline planning permission for employment land.

2. Developer details

2.1 Applicant name

2.2 Company name

Hallam Land Management Limited

2.3 Address

2.4 Email address

2.5 Telephone number

2.6 Declaration

By signing this declaration, you confirm that the information you give is complete and correct. Any opinions are your genuine opinions.

2.7 Signature

2.8 Date

3. Responsible person details

Tell us about who is responsible for completing the biodiversity gain plan. For example, a consultancy ecologist or planning agent.

3.1 Name

Alexandra Cole

3.2 Company name

CSA Environmental

3.3 Address

3.4 Email address

3.5 Telephone number

3.6 Declaration

By signing this declaration, you confirm that the information you give is complete and correct. Any opinions are your genuine opinions.

3.7 Signature

3.8 Date

19/06/2024

4. Biodiversity net gain strategy

4.1 Is the relevant date for the pre-development biodiversity value the same date as the planning application?

- ▣ Yes
- ☐ No

4.2 If no, what earlier date did you agree with the LPA?

NA

4.3 How have you met the guidance on 'what counts towards your BNG'?

Find out what you can count towards a development's BNG

All habitats included within BNG are for enhancing actions, rather than mitigation or compensation.

4.4 How will you avoid or minimise impacts to habitats?

Tell us about the steps you've taken on site, including to avoid or minimise the impact on irreplaceable habitats.

No irreplaceable habitats are present on-site. Other notable habitats and features (including hedgerows, woodland and mature trees) have been prioritised for protection as part of the proposed design.

4.5 Did you use your local nature recovery strategy to inform the strategic significance of habitats?

This includes other specified strategies if you do not have a local nature recovery strategy.

- ▣ Yes
- ☐ No

4.6 How will you achieve the target net gain percentage?

- ▣ On-site
- ☐ Off-site
- ☐ Both

4.7 Are any of your on-site enhancements considered 'significant'?

Find out what counts as a significant on-site enhancement.

- ▣ Yes
- ☐ No

4.8 If yes, tell us about the significant on-site enhancements

Include the appropriate planning condition or how you've secured the habitat.

Significant on-site habitats include:
• Creation of habitats of medium distinctiveness comprising broadleaved woodland, other neutral grassland, mixed scrub and individual trees.
• Creation of extensive areas of low distinctiveness habitat as part of 'Buntingford Park'
• Enhancement of hedgerows H1 & H2 to 'good' condition
To be secured via LEMP and detailed design secured through Planning Condition

4.9 How many off-site biodiversity units do you need to meet 10% net gain?

0

4.10 Explain why you're using off-site biodiversity units

Only answer this question if you're planning to use off-site biodiversity units (250 words).

NA

4.11 Explain why you're planning to use statutory biodiversity credits

Only answer this question if you're planning to use statutory biodiversity credits (250 words).

NA

4.12 Do you have a habitat management and monitoring plan?

☐ Yes
■ No

4.13 Have you used the statutory biodiversity metric tool?

■ Yes
☐ No

4.14 Biodiversity metric calculation

Send your biodiversity metric calculation to the LPA and enter the file name.

6815_Statutory_Biodiversity_Metric_Calculation_Tool_20240619

4.15 Condition assessments

Send your condition assessments to the LPA and enter the file name.

6815_Statutory_Biodiversity_Metric_Condition_Assessments

4.16 Pre-development habitat survey report and map

Send your baseline habitat survey report and map to the LPA. Enter the file name.

6815_109_B_Baseline Habitats Plan

4.17 Post-development habitat map or landscape plan

Send your post-development habitat survey report and map to the LPA. Enter the file name.

6815_110_B_Proposed Habitats Plan

4.18 Have you included an approved habitat degradation in the baseline?

If yes, include the relevant consenting body and reference number.

☐ Yes
▣ No

Consenting body

NA

Reference number

NA

5. Irreplaceable habitats

5.1 Does the development impact any irreplaceable habitats?

If yes, tell us if you've submitted an approved compensation plan.

☐ Yes
▣ No

5.2 Have you submitted an approved compensation plan?

☐ Yes
▣ No

6. On-site habitat enhancements

Answer this section if your development includes on-site habitat enhancements.

6.1 Survey date

For example, 3/11/2023

06/12/2023 & 15/05/2024 & 30/05/2024

6.2 Survey constraints

For example, access issues, weather, or seasonal constraints.

NA

6.3 Total pre-development biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

27.78

Number of hedgerow biodiversity units

5.72

Number of watercourse biodiversity units

0

6.4 Total post-development biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

31.35

Number of hedgerow biodiversity units

1.17

Number of watercourse biodiversity units

0

6.5 Total net change in biodiversity units

Enter the number from the headline results in your statutory biodiversity metric calculation.

Area habitat biodiversity units

3.57

Area habitat biodiversity units % change

12.84

Hedgerow biodiversity units

1.17

Hedgerow biodiversity units % change

20.46

Watercourse biodiversity units

0

Watercourse biodiversity units % change

0

6.6 Will you register and allocate any biodiversity units from your site to other developments?

If yes or provisionally, give details.

☐ Yes

▣ No

6.7 Give details

Tell us about the amount of biodiversity units and the development location (250 words).

NA

7. Off-site habitat enhancements

Answer this section if your development includes off-site habitat enhancements.

7.1 Tell us about the off-site habitat enhancements

Include whether you're delivering the off-site enhancements or buying biodiversity units.

NA

7.2 Biodiversity gain site register reference number

NA

7.3 How have you secured the off-site habitat enhancements?

Tell us about any responsible bodies and whether you've used an S106 or conservation covenant.

NA

7.4 Total baseline biodiversity value

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

NA

Number of hedgerow biodiversity units

NA

Number of watercourse biodiversity units

NA

7.5 Total biodiversity value post-intervention

Enter the number from the headline results in your statutory biodiversity metric calculation.

Number of area habitat biodiversity units

NA

Number of hedgerow biodiversity units

NA

Number of watercourse biodiversity units

NA

7.6 Total net change in biodiversity units

Enter the number from the headline results in your statutory biodiversity metric calculation.

Area habitat biodiversity units

NA

Area habitat biodiversity units % change

NA

Hedgerow biodiversity units

NA

Hedgerow biodiversity units % change

NA

Watercourse biodiversity units

NA

Watercourse biodiversity units % change

NA

8. Statutory biodiversity credits

Answer this section if you need to use statutory biodiversity credits.

8.1 Do you need to use statutory biodiversity credits?

☐ Yes
▣ No

8.2 How many statutory biodiversity credits do you need?

Tell us the unit shortfall by tier, including the spatial risk multiplier. Enter the number from the headline results in your statutory biodiversity metric calculation.

A1

NA

A2

NA

A3

NA

A4

NA

A5

NA

H

NA

W

NA

8.3 What evidence is there that no units are available through the market?

Send a message from at least 3 habitat providers, or a search result from online registers.

NA

8.4 Proof of purchase

Send proof of purchase and enter the reference number.

NA

9. Trading summary

9.1 Distinctiveness group

Tell us if you met the BNG trading rules on habitat compensation for each distinctiveness group. If you did not meet the trading rules, tell us if you agreed bespoke habitat compensation.

Check the rules on habitat compensation in the statutory biodiversity metric user guide.

Very high

Trading rules met.

High

Trading rules met.

Medium

Trading rules met.

Low

Trading rules met.

10. Sharing data (optional)

10.1 Can we share your ecological survey data with the Local Environmental Records Centre or other bodies?

▣ Yes
☐ No

Appendix D

Habitat & Hedgerow Condition Assessments

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	Land South of A507 and West of Buntingford	**Survey date and Surveyor name**	06/12/2023 Alexandra Cole MCIEEM
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	

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.	1	
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	
C	**Invasive plant species**	No invasive species[3] present in woodland.	Rhododendron *Rhododendron ponticum* or cherry laurel *Prunus laurocerasus* not present, and other invasive species[3] <10% cover.	Rhododendron or cherry laurel present, or other invasive species[3] ≥10% cover.	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	
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	

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	Woodland <10ha
G	**Woodland regeneration**	All three classes present in woodland[8]; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland[8].	No classes or coppice regrowth present in woodland[8].	2	
H	**Tree health**	Tree mortality 10% or less, no pests or diseases and no crown dieback[9].	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present[9].	Greater than 25% tree mortality and or any high-risk pest or disease present[9].	3	
I	**Vegetation and ground flora**	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.	1	
J	**Woodland vertical structure**	Three or more storeys across all survey plots, or a complex woodland[11].	Two storeys across all survey plots[11].	One or less storey across all survey plots[11].	1	
K	**Veteran trees**	Two or more veteran trees[12] per hectare.	One veteran tree[12] per hectare.	No veteran trees[12] present in woodland.	1	
L	**Amount of deadwood**	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities[13].	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	1	
M	**Woodland disturbance**	No nutrient enrichment or damaged ground evident[14].	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground[14].	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground[14].	1	
				Total Score (out of a possible 39)	26	

Condition Assessment Result	Condition Assessment Score	Result Achieved
Total score >32 (33 to 39)	Good (3)	Moderate
Total score 26 to 32	Moderate (2)	
Total score <26 (13 to 25)	Poor (1)	

Suggested enhancement interventions to improve condition score

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	Land South of A507 and West of Buntingford	**Survey date and Surveyor name**	30/05/2024 Rhodri Gruffydd
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	

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 Handbook[1] and Favourable Conservation Status document[2]. 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**	**Habitat parcel reference**									
				H1	H2	H8							
				Grid reference									
Core groups - applicable to all hedgerow types				**Criterion passed (Yes or No)**									**Notes (such as justification)**
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).	Y	Y	Y							
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 *Prunus spinosa* 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).	Y	Y	Y							

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).	Y	N	Y								
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).	N	Y	N								
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.	N	N	N								
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 *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	N	N								
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].	Y	Y	Y								
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).	Y	Y	Y								
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.	-	Y	-								

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.	-	Y	-									

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** Does not fail both attributes 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** Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	

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** Does not fail both attributes 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** Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	

Suggested enhancement interventions to improve condition score

CSA environmental

Dixies Barns, High Street,
Ashwell, Hertfordshire
SG7 5NT

t 01462 743647
e ashwell@csaenvironmental.co.uk
w csaenvironmental.co.uk

Office 20, Citibase,
95 Ditchling Road,
Brighton BN1 4ST

t 01273 573871
e brighton@csaenvironmental.co.uk
w csaenvironmental.co.uk

9 Hills Road,
Cambridge,
CB2 1GE

t 07713 468300
e cambridge@csaenvironmental.co.uk
w csaenvironmental.co.uk

3 Ripple Court,
Brockeridge Park, Twyning,
Tewkesbury GL20 6FG

t 01386 751100
e tewkesbury@csaenvironmental.co.uk
w csaenvironmental.co.uk

Wizu Workspace, 32 Eyre St,
Sheffield City Centre,
Sheffield S1 4QZ

t 07838 290741
e sheffield@csaenvironmental.co.uk
w csaenvironmental.co.uk

Worting House,
Church Lane, Basingstoke,
RG23 8PY

t 01256 632340
e basingstoke@csaenvironmental.co.uk
w csaenvironmental.co.uk