Biodiversity Net Gain Assessment

West of Ifield - Phase 1 Infrastructure

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1 Introduction

1.1 Background

This Biodiversity Net Gain report (BNG) assesses the potential change in biodiversity value of the West of Ifield Phase 1 Infrastructure scheme. It has been prepared by Arcadis Consulting (UK) Ltd (Arcadis) on behalf of Homes England as a requirement to support the planning application to Horsham District Council (HDC) for the construction of the enabling infrastructure at the West of Ifield site. This comprises the Crawley Western Multi-modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road (herein referred to as the 'Proposed Development'. This is a component of a hybrid application, the description of which is:

Hybrid planning application (part outline and part full planning application) for a phased, mixed use development comprising:

A full element covering enabling infrastructure including the Crawley Western Multi-Modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road, supported by associated infrastructure, utilities and works, alongside:

An outline element (with all matters reserved) including up to 3,000 residential homes (Class C2 and C3), commercial, business and service (Class E), general industrial (Class B2), storage or distribution (Class B8), hotel (Class C1), community and education facilities (Use Classes F1 and F2), gypsy and traveller pitches (sui generis), public open space with sports pitches, recreation, play and ancillary facilities, landscaping, water abstraction boreholes and associated infrastructure, utilities and works, including pedestrian and cycle routes and enabling demolition.

This hybrid planning application is accompanied by an Environmental Statement.

This hybrid planning application is for a phased development intended to be capable of coming forward in distinct and separable phases and/or plots in a severable way.

This report relates solely to the Phase 1 road redline, which is being submitted for full planning permission, and includes the enabling infrastructure including the Crawley Western Multi-Modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road, supported by associated infrastructure utilities etc.. This report should be read alongside the wider Land West of Ifield BNG report (Ramboll, 2025). This BNG assessment document identifies the baseline biodiversity value, and the proposed interventions to achieve a minimum of 10% net gain in biodiversity, of the footprint of the proposed development in relation to the Phase 1, the highways infrastructure, and does not include the wider proposed development site. Phase 1a and 1b are the initial proposed development activities for a project that shall be delivered in phases over several years.

Homes England intends to redevelop approximately 172 hectares (ha) of Land West of Ifield within the administrative area of Horsham District Council (HDC) which immediately abuts Crawley Borough Council (CBC) boundary in West Sussex for a residential-led mixed use development.

The area of the proposed Phase 1 infrastructure works is referred to in this report as 'the Site'. The area of the Site is approximately 29.5ha. Image 1 details the wider West of Ifield housing development site boundary and the footprint of the proposed Phase 1a and 1b infrastructure scheme is shown in Image 2.

Image 1: Land West of Ifield Outline application boundary
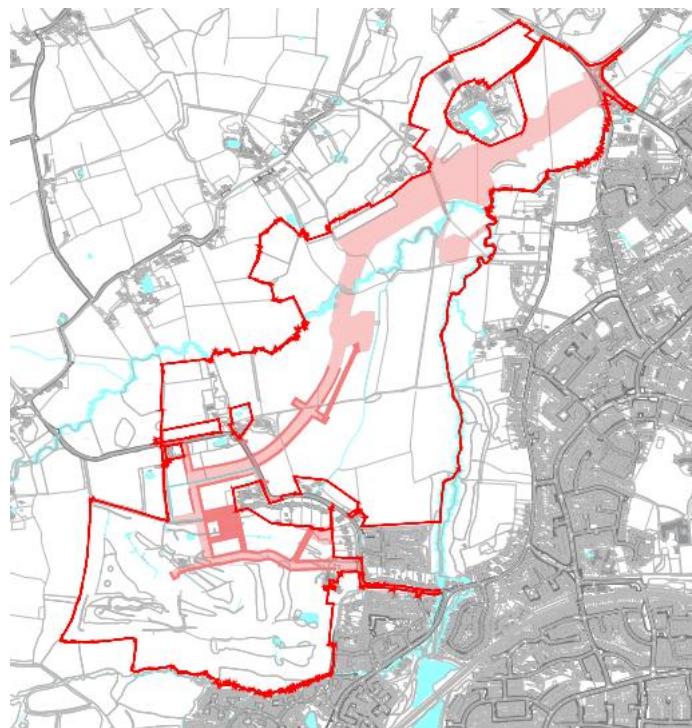
Image 2: Redline of the Phase 1a and 1b infrastructure detailed planning application
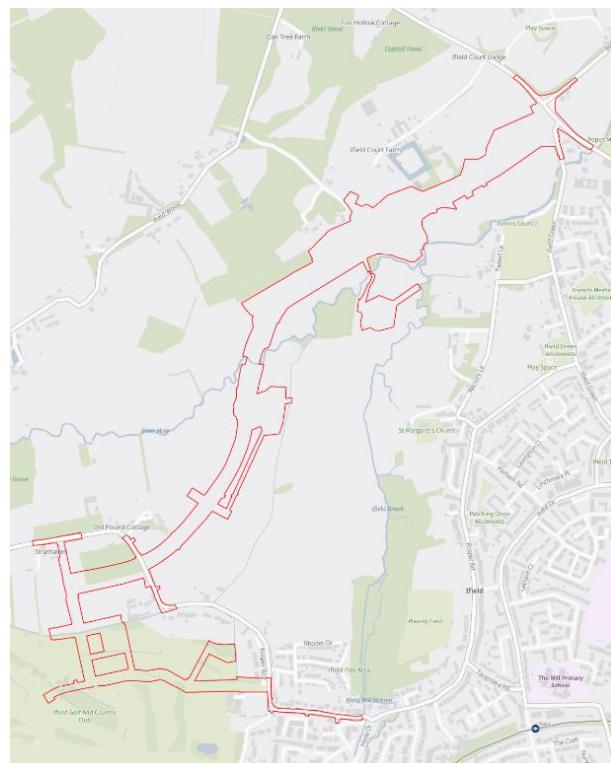
A habitat survey was completed by Ramboll in August 2022. Further surveys were completed in April 2023 and in 2025 by Ramboll due to changes to the red line boundary. Details of the updated 2022, 2023 and 2025

surveys can be found within the Ramboll West of Ifield Biodiversity Assessment Report (Ramboll, 2025). This report outlines the baseline value of the Site, and the measures required to achieve a minimum of 10% net gain in biodiversity post-development.

1.2   Site Location and Setting

The wider Land West of Ifield site covers approximately 172 ha and is located to the west of Ifield near Crawley in West Sussex (see Image 3). The wider Land West of Ifield site is bounded by Charlwood Road in the north, beyond which lies Gatwick Airport. The site comprises predominantly agricultural land in the northern and central areas (dominated by arable and grazed pasture fields) and Ifield Golf Course in the south. A range of habitats are present throughout the site including grassland, woodland, scrub, a network of hedgerows and lines of trees and ponds. The River Mole flows west to east through the northern half of the site. The detailed application site for Phase 1 occupies approximately 29.5 ha through the centre of the proposed Development and is centred at Ordnance Survey (OS) Grid Reference TQ 24270 37769, at postcode RH11 0EL.

Image 3: Aerial imagery of the area within which Land West of Ifield is proposed to be constructed.
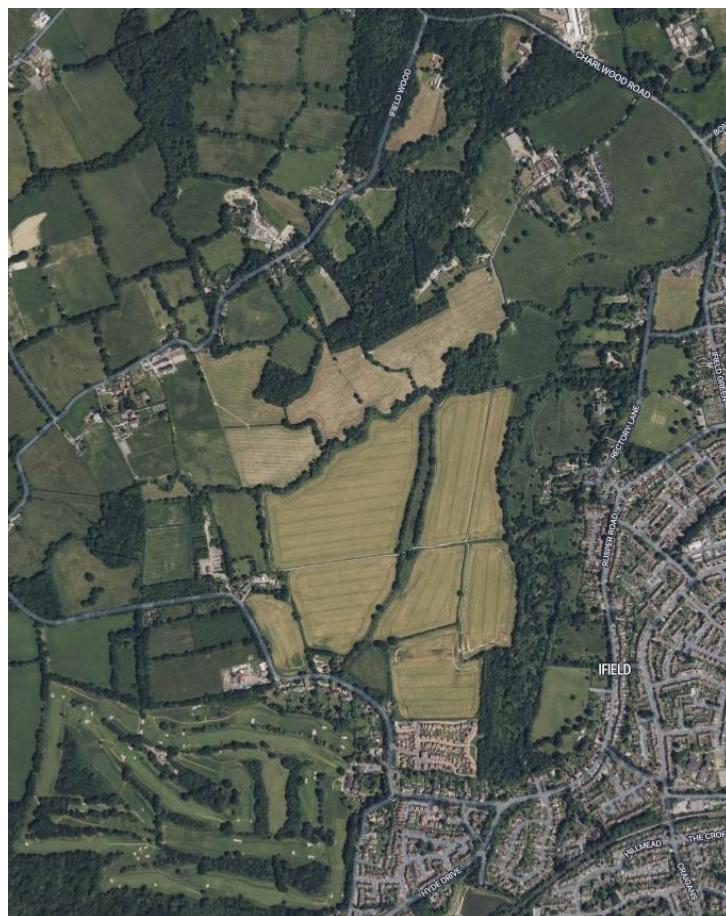
1.3   BNG in Policy and Legislation

In line with the 25 Year Plan for the Environment (HM Government, 2018) and the National Planning Policy Framework (MHCLG, 2024), new development should identify and pursue opportunities for securing measurable net gains for biodiversity and for the wider environment. The Environment Act 2021 followed by the Biodiversity Gain Site Register Regulations 2024 mandate the requirement for 10% Biodiversity Net Gain (BNG) for new developments in England from 12 February 2024. This has been inserted into Schedule 7A of the Town and Country Planning Act 1990 (by Schedule 12 of the Environment Act 2021). BNG is measured using the Statutory BNG Metric and guidance documents published by DEFRA.

2   Methodology

2.1   Baseline Data

A habitat survey was completed by Ramboll between 9 and 11 and 22 and 24 August 2022. Further surveys were completed in April 2023 and in 2025 by Ramboll due to changes to the red line boundary. Details of the updated 2022, 2023 and 2025 survey can be found within the Ramboll West of Ifield Biodiversity Assessment Report (Ramboll, 2025). Habitats were recorded using UK Habitat classification system (UKHab Ltd, 2023) and input into the Statutory Biodiversity Metric tool. Aerial imagery (Google Earth, 2024) and MAGIC mapping (MAGIC, 2024) were used to aid with UK Habitat classification.

All baseline habitat information utilised in this report is taken from the data collected by Ramboll. To avoid duplication, all baseline data details including condition assessments should be read from the Ramboll habitat survey report (Ramboll, 2025).

2.2   Biodiversity Metric

The purpose of this document is to estimate the potential net change in biodiversity value of the Phase 1 Site. This approach uses information on the habitats and features of the Site before and after the proposed habitat loss and mitigation through management to calculate a biodiversity value. This information was then used to calculate a change in the biodiversity value of the Site.

These calculations were undertaken using the Statutory Biodiversity Metric, a spreadsheet-based tool into which data can be entered to carry out BNG calculations (DEFRA, 2024a), following the corresponding User Guide (DEFRA, 2024b).

When considering baseline conditions, the metric takes account of several factors, detailed below in Table 1. The numbers in brackets show the multipliers used by the metric for each category.

Table 1: Biodiversity Metric Criteria

Evaluation	Values assigned	Criteria
Habitat type	UK habitat classification typologies. The unit for each of the habitat types is calculated and then multiplied by the size of this habitat. The unit number is based upon the habitat's distinctiveness, condition and strategic significance.	Based upon species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats.
Size of habitat parcel	Area measured in hectares and linear features measured in kilometres.	N/A. The sizes of the different proposed habitats were calculated using a Geographical Information System (GIS) based on the habitats presented on the Baseline Habitat Map within Appendix A. The area taken up by rural trees throughout the Site was calculated using the tree helper tool within the metric.
The distinctiveness of the habitat type	Value predetermined for each habitat type on a scale of Very Low (0), Low (2), Medium (4), High (6) and Very High (8)	See Table 2 for distinctiveness criteria.
The condition of each habitat parcel	Value assigned based on a scale of Poor (1), Fairly Poor (1.5), Moderate (2), Fairly	The condition of the habitat is defined as: "the biological 'working-order' of a habitat type judged against the perceived ecological optimum state for

Evaluation	Values assigned	Criteria
	Good (2.5) and Good (3). For some habitat types this is pre-determined	that particular habitat." This provides a measure of variation in the quality of areas of the same habitat type.
Strategic significance	Value assigned based on a scale of Low (1), Medium (1.1) and High (1.15) strategic importance	Strategic significance assesses the value of habitats from the point of view of environmental objectives and preferred locations for biodiversity. The strategic significance has been used from the Ramboll BNG survey and report.

Table 2 provides details of the distinctiveness bandings to which each area-based habitat is assigned.

Table 2: Area based habitat distinctiveness valuation bandings.

Distinctiveness band	Multiplier	Typical habitats
Very High	8	Priority habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) that are highly threatened, internationally scarce and require conservation action e.g. blanket bog. Small amount of remaining habitat with a high proportion unprotected by designation. Endangered or Critical European red list habitats.
High	6	Priority habitats as defined in Section 41 of the NERC Act (HM Government, 2006) requiring conservation action e.g., lowland fens. Remaining Priority Habitats not in very high distinctiveness band & other red list habitats.
Medium	4	Semi-natural habitats not classed as a Priority Habitat but with significant wildlife benefit, e.g., mixed scrub. One Priority Habitat (arable field margins).
Low	2	Habitat of low biodiversity value e.g., temporary grass and clover ley. Agricultural and Urban land of lower biodiversity value.
Very low	0	Little or no biodiversity value e.g., hard standing or sealed surface Urban – artificial structures which are un-vegetated, sealed surfaces or built linear features of very low biodiversity value.

2.3   Baseline Trees

To align with the Ramboll metric being produced for the wider Land West of Ifield outline application, tree areas were calculated using the tree helper tool in the metric. All trees were given a baseline condition of moderate (with the exception of one veteran tree that was given a condition of 'high'. This tree is identified as an irreplaceable habitat within the metric.

2.4   Post-Intervention Calculation

The Site was reassessed for the conditions that will be present under the post-development proposal. The post-intervention landscape plan used for this calculation is illustrated within Appendix B. The landscape strategy contains created habitats, enhanced habitats and retained habitats. For the created habitats, the proposed typologies need to be translated from landscaping typologies into UK Habs habitat types. The translation used in the metric is presented in Table 3 below.

For retained habitats, the baseline habitat and condition was utilised. For enhanced habitats, the habitat condition that would be achieved through management as part of the road scheme was utilised (this is explained in more detail later in this report).

Table 3: Translation of landscape habitat typologies to UK Habs habitat types

Landscape typology	UK Habs typology	Notes
Grass Swales and Attenuation ponds	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Hardstanding, cycleway, footpath	Developed land; sealed surface	These areas are all tarmac or sealed surface
Ornamental Rain Garden	Rain garden (urban typology)	Considering the species list is predominantly ornamental species a urban typology rain garden was considered the correct habitat type.
Transitional Rain Garden	Rain garden (urban typology)	Although the species mix would suggest a grassland typology may develop within these areas,, considering the locations alongside the road it was considered that the urban rain garden typology was more appropriate in this situation.
Meadow Rain Garden	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Woodland Planting	Other woodland, broadleaved	Considering the seed mix proposed for the ground floor and the tree species proposed, a broadleaved woodland was considered the appropriate typology.
Grass Seeding	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Watercourse	Ditch or culvert, as appropriate	Two short sections of ditch with a culvert beneath the newly created rows are to be created

Landscape typology	UK Habs typology	Notes
Temporary seeding of embankments	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Hawthorn Planting	Hawthorn scrub	Hawthorn scrub will be created
Trees planted along road alignment	Urban Tree	The size of these was assumed to be small, with the area calculated using the tree helper in the metric. The number of trees was calculated from the landscape drawing.

When considering post-intervention calculations, the metric takes account of several factors, detailed below in Table 4.

Table 4: Biodiversity Metric Post-Intervention Criteria

Factor	Criteria and Site-specific Condition
Difficulty categories	The number of biodiversity units provided by each habitat within the Site was calculated in the same way as the baseline habitats but with the following multipliers: Very high (0.1); High (0.33); Medium (0.67); Low (1).
	Difficulty categories are based on standard scores that reflect how difficult the habitat is to create or restore and temporal risk (how long the habitat type takes to establish).
Habitat Change	Different habitats change scenarios are attributed different levels of risk (risk around the confidence in the successful establishment of habitats) and different multipliers are applied to reflect this. Two distinct habitat change scenarios are recognised in the Statutory Biodiversity Metric:
	Habitat creation - where one habitat type is replaced by another or the habitat is destroyed (e.g., by development works) and the same habitat is recreated.
	Habitat enhancement - where its distinctiveness and / or condition are improved.
	Enhancement carries less risk and can therefore provide a greater unit uplift.
Spatial risk	A separate risk multiplier is applied to post-intervention sites outside of the Site. This incentivises the use of sites near the intervention site, for ecological and social reasons. Higher multipliers are assigned to more distant sites which results in a decrease in the value of an off-site location with increasing distance.
	At this stage, post-development interventions are all being undertaken within the Site boundary and the wider development site so spatial risks are not relevant.
Advanced and delayed habitat creation	Advanced habitat interventions are encouraged within the metric (along with being good practice), by reducing the multipliers associated with time to target condition. Similarly delayed habitat interventions are discouraged, with delays resulting in increased time to target condition.

Factor	Criteria and Site-specific Condition
'Pseudo' double counting areas	The total area input into the tool can be greater than the total area of the Site. This is due to the three-dimensional nature of certain habitats. For example, the area covered by a tree is approximately the area covered by its canopy, but if an area of grassland is underneath, both would be included in the metric. As such the area of the tree canopy is 'counted' twice and can result in the area in the metric being larger than the area of the Site.
Calculation of gains or losses	The net change in biodiversity or hedgerow units on and off-site is calculated within the tool by subtracting the baseline units from the post-intervention units. The overall net change is the sum of the change in units on-site and off-site. The percentage net gain is then calculated by dividing this overall net change by the number of baseline units on the Site
Changes in broad habitat type calculations	The UKHab classification system is hierarchical in structure, so specific habitat types can be grouped into broad habitat types. The changes in area and biodiversity units associated with each of these broad habitat types was calculated using the baseline and post-intervention data.
Areas excluded from the assessment	The metric is not designed to assess impacts to habitats within statutory designated sites or "irreplaceable" habitats. There are no irreplaceable habitats, such as ancient woodland, or statutory designated sites present within the Site and therefore all habitats were assessed.

2.5   Strategic Significance

Within the metric, the application of strategic significance was aligned with the BNG assessment of the wider site being conducted by Ramboll (Ramboll, 2025). The strategic significance for all baseline area-based habitat parcels and hedgerows within the Site that fall wholly or partially into the 'High Habitat Potential' area within the emerging Nature Recovery Network (NRN) for Horsham District Council has been determined as 'Formally identified in local strategy' (i.e. high strategic significance). The strategic significance for any baseline habitats and hedgerows outside of the 'High Habitat Potential' area within the NRN, have been determined as 'Location ecologically desirable but not in local strategy' (i.e. medium strategic significance). The NRN is shown below in Image 4.

Image 4: Horsham District Council emerging Nature Recovery Network used to inform the strategic significance
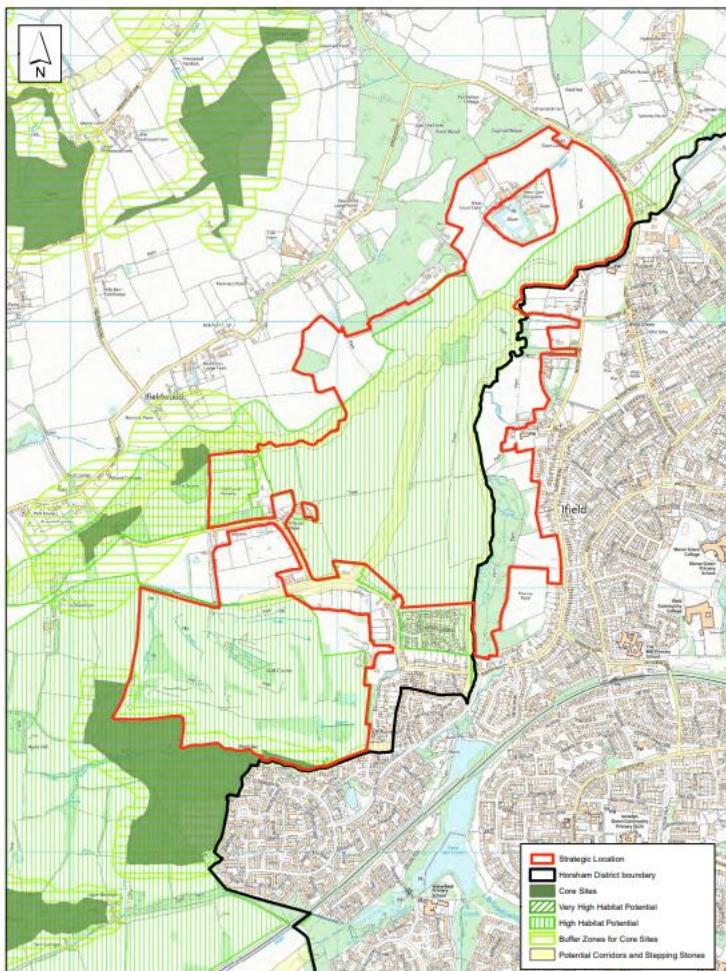
2.6   'Red Box' Errors

The Statutory Biodiversity Metric tool will show an 'error' flag or 'red box' error when a problem has been encountered and point the user to where this may have occurred. These could relate to mistakes or broken rules in any of the tabs of the Statutory Biodiversity Metric; 'red-box' errors can also be justified, for example, if it's an outline application, if there are exceptional ecological circumstances, or if the plan is to purchase statutory credits from Natural England.

2.7   Watercourse information

All watercourse information was extracted from the Ramboll baseline. For further information on the condition assessments of these features please refer to the Ramboll Habitat Survey (Ramboll, 2025).

2.8   Overlap Areas

There are areas of 'overlap' the detailed application as part of Phase 1 and the subsequent development as part of the wider Land West of Ifield scheme. These areas are predominantly where land will be utilised for the road construction but may then subsequently be redeveloped as part of the wider Land West of Ifield development. Within this metric, the post-construction habitats of these areas are assumed to be as it would be upon the completion of the Phase 1 scheme. This is considered appropriate as this will be the status should subsequent developments not commence.

2.9   Delay to starting habitat creation or enhancement

Within the metric, a two-year delay has been applied to all habitat creation and enhancement in line with the proposed construction timeline. This matches the delay applied in the Ramboll metric (Ramboll, 2025).

2.10 Limitations

The habitat data was collected using the metric 4.0 condition assessments methodology, but since this time the Statutory Biodiversity Metric was released and has been used to assess the baseline and post-intervention biodiversity value. The condition assessments for each habitat have not changed between metric 4.0 and the statutory metric so no conversion was required for the habitat condition assessments and no differences are expected. Update surveys have been conducted accruing to the Statutory Metric approach.

Survey data from Ramboll has been used to calculate the biodiversity baseline of the Site, there were limitations with those assessments in terms of extreme drought conditions for the distinctiveness and habitat condition assessments, particularly the grasslands. The distinctiveness and condition of the habitats have not been confirmed by Arcadis. Neither have they been agreed with the Local Planning Authority.

3 Results

3.1 Baseline

This section details the UK Habitat Classification typologies and their condition and strategic significance scores. The condition assessments for each of the habitat areas is detailed in Appendix D.

The Site predominantly comprised fields of modified grassland, cereal crops and other neutral grassland. The fields are bordered by hedgerows, mixed scrub and parcels of other broadleaved woodland and lowland mixed deciduous woodland. The baseline habitats are displayed in the Baseline Habitat Plan in Appendix A. Table 5 provides a summary of each habitat type within the Site boundary and the conditions. A full description of the habitats, including species, present within the Site is provided in the Ramboll West of Ifield BNG Assessment Report (Ramboll, 2025).

While there are areas of ancient woodland and designated sites within the wider site, these areas are not within the redline boundary of the Phase 1 infrastructure works, referred in this report as the Phase 1 Site.

Table 5 details the baseline habitats and their size and condition. A breakdown of the different condition assessments and strategic significance can be found within the BNG calculator appended as Appendix C.

Table 5: Baseline Habitat Typology and Condition Summary)

Habitat	Total Area (ha)/ Length (km)	Condition
Artificial unvegetated, unsealed surface	0.132626	N/A
Cereal crops	5.152063	N/A
Developed land; sealed surface	1.972251	N/A
Lowland mixed deciduous woodland	0.022929	Moderate / Good
Mixed scrub	0.675659	Poor / Moderate / Good
Modified grassland	18.00056	Poor / Moderate
Other neutral grassland	1.700296	Poor / Moderate
Other woodland; broadleaved	1.632571	Moderate / Good
Sparsely vegetated land	0.067014	Poor / Moderate / Good
Total Area	**29.337**	**N/A**
Species-rich native hedgerow with trees	0.774 km	Poor / Moderate / Good
Line of trees	0.258 km	Moderate
Non-native and ornamental hedgerow	0.107 km	Poor
Other river and streams	0.05 km	Fairly Good
Ditches	1.13 km	Poor
Total Length	**2.32 km**	**N/A**

3.2 Post Intervention Habitat Change

Several habitats on the Site are proposed to change to facilitate the Proposed Development. This includes transforming areas of cereal crops, grassland and small areas of mixed scrub and woodland to habitats for the proposed road layout and associated footpaths, cycle paths and verges. This is detailed below in

Table 6 summarises the proposed habitat changes (i.e. where habitat is retained, enhanced or lost) as a result of the development. The post development landscape plan in Appendix B illustrates the Site post intervention.

Table 6: Habitat Change Summary

Habitat	Total Area/Length		
	Retained	**Enhanced**	**Lost**
Artificial unvegetated, unsealed surface	0.054265		0.078361
Cereal crops	0.083815		5.068248
Developed land; sealed surface	0.259471		1.442616
Lowland mixed deciduous woodland	0.131461		0.000129
Mixed scrub		0.001049	0.9963
Modified grassland		3.047457	14.884643
Other neutral grassland	0.592107		1.049247
Other woodland; broadleaved	0.619389		0.962365
Rural tree	0.1587		1.1075
Tall forbs	0.039904		0.026897
Total Area	**c.1.939 ha**	**c.3.049 ha**	**c. 25.616 ha**
Hedgerows	0.84 km	0 km	0.3 km
Other rivers and streams	0.054 km	0 km	0 km
Ditches	0.084 km	0.57 km	0.48 km
Total Length	**0.978 km**	**0.57 km**	**0.78 km**

Most of the habitat loss is agricultural land, largely pasture and cereal crop followed by woodland and mixed scrub with some other neutral grassland, presented in Image 5. There is a loss of linear habitat, 0.3 km of hedgerow, and 0.48 km of ditches.

Image 5: Habitat area lost (ha)
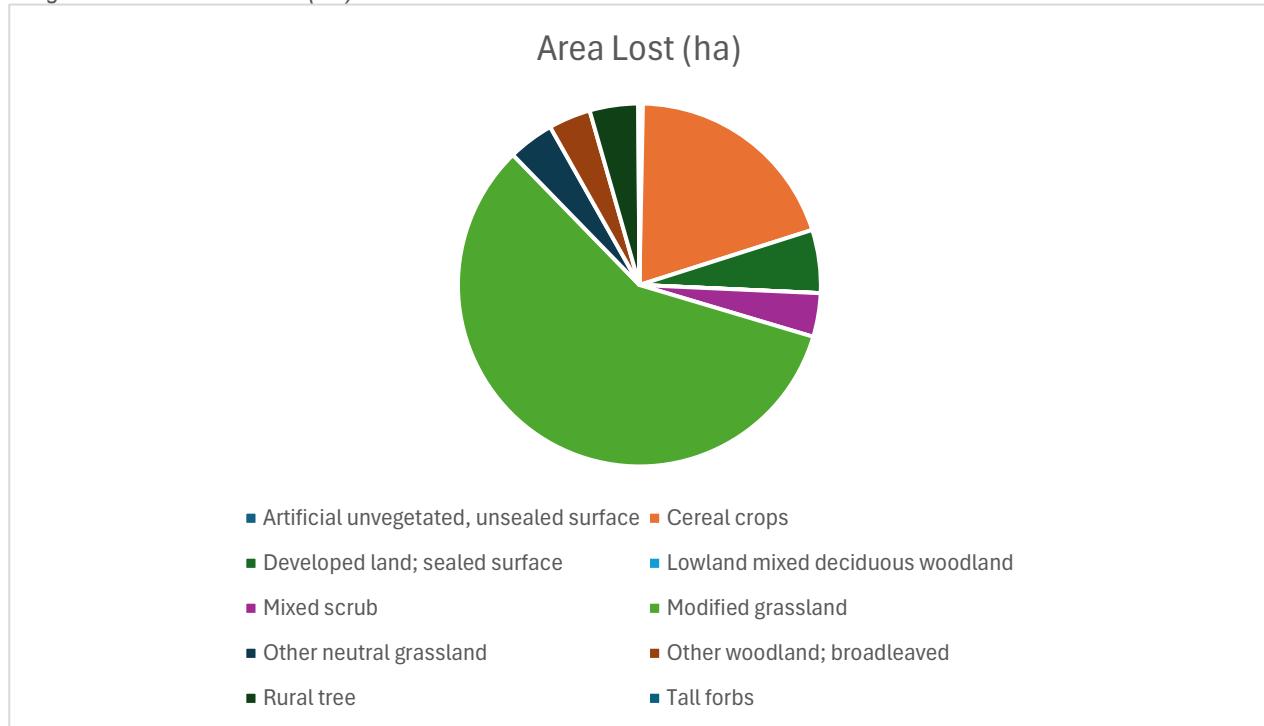
The total area of habitat lost to the development is 24.51 ha; 0.3 km of hedgerow is also lost. Table 7 summarises the habitat composition of the Site boundary post development and the target condition for each habitat type. For each habitat created the target condition (explaining how this is considered achievable) is shown in Appendix D.

Table 7: Habitat Creation Summary

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
Developed land; sealed surface	9.112	N/A - Other	N/A - Other
Embankment seeding	0.8948	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Grass swales and Attenuation ponds	3.2345	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Hawthorn scrub	0.2054	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Meadow rain garden	0.2025	Moderate	A target of moderate condition is considered appropriate for this habitat

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
			when associated with a road scheme and likely maintenance regime.
Ornamental rain garden	0.1004	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Other neutral grassland	9.8211	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Other woodland; broadleaved	0.4478	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Other woodland; broadleaved	0.2826	Good	A target of 'good' condition should be endeavoured for all areas of woodland planting within the nature recovery network area.
Rain garden	0.1298	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Urban tree	0.8387	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Watercourse footprint	0.0457	N/A - Other	N/A - Other
Lowland Mixed Deciduous woodland	0.158 ha	Poor	The intention is to create new parcel of lowland mixed deciduous woodland (LMDW), adjacent to existing LMDW. This approach will likely promote natural regeneration and successful establishment of LMDW. The woodland is expected to take 10 years to establish and reach 'poor' condition, however and ecologically diverse woodland in 'moderate' condition may be achieved through appropriate long-term management for more than 30 years. Habitat management actions include those that: • Manage woodlands according to the UK Forestry

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
			Standard (Forestry Commission 2023);
			• Maintain structural diversity with mature trees and scrub of varying age to provide a wide range of habitats. Ensure continuity of woodland by regeneration or replanting when necessary;
			• Maintain 'naturalness' of woods where possible, avoiding sudden and drastic modification of woods;
			• Maintain woodland 'edge habitat' to encourage a wide variety of flora and fauna;
			• Maintain open spaces such as ridges and clearings to provide sheltered sunny areas. This encourages the growth of flowering plants which provide nectar and pollen for insects. If possible, the open areas should include bare ground and low and high vegetation;
			• Leave any wet areas such as streams and ponds undisturbed;
			• Maintain a range of dead wood, particularly for saproxlyic invertebrates, in both shady and sunny situations. This will also encourage fungi which provide food for invertebrates and birds;
			• Maintain the undisturbed soil structure; and
			• Allow natural regeneration of woodlands wherever possible.
Total Area	**25.36* ha**	**N/A**	
Species-rich native hedgerow with trees	0.033 km	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
Ditches	0.119 km	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Total length	**0.152 km**	**N/A**	N/A - Other

*NB: the increase in area from the baseline relates to double counting of tree areas (see methodology for further detail).

Post development, areas of retained habitats will be enhanced. These include retained areas of modified grassland and mixed scrub and lengths of ditch. All retained areas of modified grassland (poor and moderate condition) and scrub (poor condition) will be enhanced. Details of which ditches are to be enhanced are presented in the BNG Statutory Biodiversity Metric calculator. Table 8 summarises the proposed habitat enhancement as part of the development and the target condition for each habitat type. For each habitat enhancement, the target condition (explaining how this is considered achievable) is shown in Appendix D.

Table 8: Habitat Enhancement Summary

Baseline Habitat	Area or length	Baseline Condition	Proposed Habitat	Target condition	Rationale
Modified grassland	1.369 ha	Poor	Other Neutral Grassland	Moderate	When brought under a management regime, it is considered that areas of poor condition modified grassland will be able to be managed to achieve a moderate condition other neutral grassland. This will be through removal of nitrogen inputs, over seeding to increase species diversity as required and changed ongoing management.
Modified grassland	1.677 ha	Moderate	Other Neutral Grassland	Moderate	When brought under a management regime, it is considered that areas of poor condition modified grassland will be able to be managed to achieve a moderate condition other neutral grassland. This will be through removal of nitrogen inputs, over seeding to increase species diversity as

Baseline Habitat	Area or length	Baseline Condition	Proposed Habitat	Target condition	Rationale
					required and changed ongoing management.
Mixed scrub	0.001 ha	Poor	Mixed scrub	Moderate	When brought under a management regime, it is considered that areas of poor condition mixed scrub will be able to be managed to achieve a moderate condition
Total Area	**3.05 ha**	**N/A**			
Ditches	0.57 km	Poor	Ditches	Moderate	When brought under a management regime, it is considered that poor condition ditches will be able to be managed to achieve a moderate condition.

In line with Ramboll Recommendations (BNG Report, Ramboll 2025), it is assumed that all ditches to be retained can be improved through the following actions to achieve 'Moderate' condition through design and management:

• Maintaining good water quality, with clear water (low turbidity) and no pollution.

• Planting a range of emergent, submerged and floating-leaved plants so that there are than 10 species of emergent, floating or submerged plants present in a 20 m ditch length.

• Planting a fringe of aquatic marginal vegetation along more than 75% of the ditch.

• Maintaining less than 10% cover of filamentous algae and or duckweed |

Baseline Habitat	Area or length	Baseline Condition	Proposed Habitat	Target condition	Rationale
					Lemna spp by minimising eutrophication. • Minimising physical damage to less than 5% of the ditch, by preventing damage from damage from machinery use or storage, or any other damaging management activities. • Maintaining sufficient water levels with a minimum summer depth of approximately 0.5 m in minor ditches and 1 m in main drains. This will be informed by the Flood Risk Assessment at detailed design stage. • Ensure that less than 10% of the ditch is heavily shaded. • Ensure that there is an absence of floral and faunal invasive non-native species (INNS).
Total Length	**0.57 km**	**N/A**			

4   Summary

The headline results of the BNG assessment for the Site, using the Statutory Biodiversity Metric calculator are presented below. It should be noted that this assessment only assesses the Phase 1 works, and the outcome of this assessment should be considered holistically with the wider West of Ifield Development, reported in the Ramboll BNG Report (Ramboll 2025).

Overall, there is a gain of 8.58 habitat units, a 6.19% increase in overall biodiversity value of habitat units. There is an initial loss of modified grassland, but despite this large loss, grassland habitat units are responsible for most of the biodiversity unit delivery in the post development plans. This is provided through the enhancement of existing areas of grassland and planting of new areas of other neutral grassland.

To achieve 10% biodiversity net gain, an additional 5.28 habitat units will be required. In the Phase 1 area, trading rules are met with the exception of habitat creation for medium and low distinctiveness habitats (which are considered deliverable within the wider Ifield site or through other approaches). Medium and low distinctiveness units would need to be delivered elsewhere, this could be delivered on the wider Land West of Ifield site or through a registered habitat bank or through the purchase of statutory credits.

N.B. within the Phase 1 scheme a single veteran tree, which is considered an irreplaceable habitat is being removed. Within the metric this cannot be accounted for and therefore will always be considered a loss of biodiversity value.

There is currently an 8.1% loss in hedgerow units due to the removal of hedgerows. It is not possible for the hedgerow units to be recovered within the Site boundary due to a limited availability of area and an aspiration to keep an open nature to the scheme. The loss of hedgerow biodiversity units is expected to be accounted for in the West of Ifield housing development. An additional 2.73 hedgerow units would be required to deliver 10% net gain.

There is currently projected to be a 2.25% loss in watercourse units. An additional 0.72 Water course units would be required to deliver a 10% net gain.

All of these results are presented in Image 6.

Image 6: Habitats, hedges and watercourse units for baseline and post-intervention scenarios and net change

On-site baseline	Habitat units	138.60	
	Hedgerow units	15.08	
	Watercourse units	5.86	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	147.19	
	Hedgerow units	13.86	
	Watercourse units	5.72	
On-site net change (units & percentage)	Habitat units	8.58	6.19%
	Hedgerow units	-1.22	-8.10%
	Watercourse units	-0.13	-2.25%

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)		
	Habitat units	8.58
	Hedgerow units	-1.22
	Watercourse units	-0.13

Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)		
	Habitat units	6.19%
	Hedgerow units	-8.10%
	Watercourse units	-2.25%

Trading rules satisfied?	No - Check Trading Summaries ▲

Unacceptable loss of irreplaceable habitat recorded - no bespoke compensation for losses has been agreed ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	138.60	152.46	5.28
Hedgerow units	10.00%	15.08	16.59	2.73
Watercourse units	10.00%	5.86	6.44	0.72

5   References

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Appendix A: Baseline Habitat Plan

Appendix A: Baseline Habitat Plan

Appendix B: Post Intervention Landscape Design

Appendix B: Post Intervention Landscape Design

Appendix C: Biodiversity Metric

Appendix D: Condition Assessments for Post-construction Habitats (Created and Enhanced)

Table 9: Condition assessment criteria for rain garden habitat (created)

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No	Single structural habitat component or vegetation type accounts for more than 80% of the total habitat area. This lack of diversity in vegetation structure can limit opportunities for vertebrates and invertebrates, as a more varied structure would provide a wider range of niches and resources
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Yes	The habitat parcel contains a variety of plant species that are beneficial for wildlife, such as flowering species providing nectar sources throughout different times of the year. This diversity is important for supporting a range of invertebrates and other wildlife, ensuring that food resources are available across seasons.
C	Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3]. **Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).**	Yes	Invasive non-native plant species cover less than 5% of the total vegetated area, meeting the criteria for passing.

Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)		
Condition Assessment Result			**Condition Assessment Score**	
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.			Good (3)	
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.			Moderate (2)	Yes
• Passes 0 or 1 of 3 core criteria.			Poor (1)	

Table 10: Condition assessment criteria for urban tree habitat (created)

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Yes	At least 70% of the trees within the block are native, which supports local biodiversity and ecological balance
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	The tree canopy is continuous, with minimal gaps, indicating healthy growth and effective coverage, supporting a stable microclimate and offers shelter and habitat for various species.
C	The tree is mature (or more than 50% within the block are mature)[1].	No	Less than 50% within the block are mature
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes	There is minimal to no adverse impact from human activities, and the trees retain more than 75% of their expected canopy, suggesting they are in good health and able to perform ecological roles such as carbon sequestration and habitat provision.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	The lack of natural ecological niches such as deadwood, cavities, or loose bark indicates limited opportunities for supporting vertebrates and invertebrates, which could reduce biodiversity.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	The presence of more than 20% of the tree canopy area oversailing vegetation suggests a multi-layered habitat structure, which is beneficial for biodiversity by providing various niches and resources for different species.

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Number of criteria passed		4	
Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**		
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	Yes	
Passes 2 or fewer criteria	Poor (1)		

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Table 11: Condition assessment criteria for broadleaved woodland habitat (created)

Condition Assessment Criteria						
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	**Score per indicator (Moderate condition)**	**Score per indicator (Good Condition)**
A	**Age distribution of trees**	Three age-classes[1] present.	Two age-classes[1] present.	One age-class[1] present.	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].	2	2
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.	2	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	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].	2	3

		Condition Assessment Criteria				
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
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].	3	3
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].	2	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.	2	3

	Condition Assessment Criteria					
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].	2	3
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	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].	2	3
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].	2	3
Condition Assessment Result					**Moderate**	**Good**

Condition Assessment Criteria		
Total score >32 (33 to 39)		
Total score 26 to 32		
Total score <26 (13 to 25)		

Table 12: Condition assessment criteria for hawthorn scrub habitat (created)

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
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 Corylus avellana, common juniper Juniperus communis, sea buckthorn Hippophae rhamnoides (only in its restricted native range), or box Buxus sempervirens, which can be up to 100% cover).	Yes	The habitat will consist of native species with no single species comprising more than 75% on its own
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present.	No	This will be created hence not already present
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	Non-native invasive species will be actively managed to be kept under<5%
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	Not present
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Yes	The created scrub will be managed to meet this criteria
Co	**Condition Assessment Score**		

Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
nditionAssessmentResult(outof5criteri		

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
a)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	Yes	

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
Passes 2 or fewer criteria	Poor (1)		

Table 13: Condition assessment criteria for Other neutral grasslands (created)

	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.	Yes	The parcel is seeded with Emorsgate EM10 and represents a good example of the habitat type, with characteristic indicator species present.
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	Sward height will be uniformly cut, preventing the creation of varied microclimates.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	No	Bare ground will not be maintained, which is required for certain ecological functions.
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Yes	Bracken and scrub cover are below the required thresholds, ensuring minimal competition for grassland species.

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
E	Combined cover of species indicative of suboptimal condition[3] 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 species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	Yes	Invasive species will be actively managed, and machinery or physical damage will be avoided.
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	Yes	
Passes 2 or fewer criteria	Poor (1)		

Table 14: Condition assessment criteria for Ornamental Rain Garden

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
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 *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* (only in its restricted native range), or box *Buxus sempervirens*, which can be up to 100% cover).	Yes	This is targeted as a good example of this habitat
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present.	Yes	16 species have been finalised.
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	Invasives will be managed to a minimum and are <5% ground cover
D	The scrub has a well-developed edge with scattered scrub and tall grassland	No	The scrub will be uniformly maintained

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
	and or forbs present between the scrub and adjacent habitat.		
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	No clearings will be present
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score		
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	Yes	
Passes 2 or fewer criteria	Poor (1)		

Table 15: Condition assessment criteria for Modified grassland (enhanced to Moderate)

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 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 m^2 (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	EM3 Special General Purpose meadow mixture is being utilised to meet this criterion.
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.	Yes	Sward height is managed to create microclimates, with 20% of the sward less than 7 cm and 20% more than 7 cm, promoting habitat diversity for vertebrates and invertebrates.
C	Any scrub present accounts for less than 20% of the total grassland area. (Some	No	Scrub cover is present accounting more than 20% of the total area

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
	scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.		
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	Physical damage is evident in less than 5% of the grassland area, reflecting careful land management to minimize harm.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Bare ground is present at a level between 1% and 10%, supporting species that rely on exposed soil for burrowing, basking, or germination.
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	No	Cover not maintained at 20%
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	There are no invasive plant species present, indicating successful management practices to prevent ecological degradation.
Condition Assessment Result (out of 7 criteria)	**Condition Assessment Score**		
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	Yes	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		

Table 16: Condition assessment criteria for Modified grassland (enhanced to Good)

	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	EM3 Special General Purpose meadow mixture is being utilised to meet this criterion.
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.	Yes	Sward height is managed to create microclimates, with 20% of the sward less than 7 cm and 20% more than 7 cm, promoting habitat diversity for vertebrates and invertebrates.
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble Rubus fruticosus agg. may be present). Note - patches of scrub with continuous	Yes	Scrub cover is minimal, occupying less than 20% of the grassland area. This ensures the dominance of grasses and forbs rather than woody vegetation.

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
	(more than 90%) cover should be classified as the relevant scrub habitat type.		
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	Physical damage is evident in less than 5% of the grassland area, reflecting careful land management to minimize harm.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Bare ground is present at a level between 1% and 10%, supporting species that rely on exposed soil for burrowing, basking, or germination.
F	Cover of bracken Pteridium aquilinum is less than 20%.	Yes	Bracken cover is maintained below the threshold of 20%, ensuring it does not outcompete grassland species or create overly shaded areas.
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	There are no invasive plant species present, indicating successful management practices to prevent ecological degradation.
Condition Assessment Result (out of 7 criteria)	**Condition Assessment Score**		
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	Yes	

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		

Table 17: Condition assessment criteria for Embankment seeding (created)

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 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 m^2 (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	The parcel is seeded with Emorsgate EM8 Meadow mixture for wetlands and represents a good example of the habitat type, with characteristic indicator species present.
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	Uniform sward height management prevents the formation of varied grassland structures, which are essential for creating diverse habitats for insects and small animals.

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Scrub cover is minimal, occupying less than 20% of the grassland area. This ensures the dominance of grasses and forbs rather than woody vegetation.
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	Less than 5% of the site shows physical damage, demonstrating effective protection against activities like overgrazing, erosion, or machinery impacts.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	No	Bare ground is absent, which limits opportunities for species that rely on exposed soil for burrowing, basking, or seed germination.
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	Bracken cover is maintained below the threshold of 20%, ensuring it does not outcompete grassland species or create overly shaded areas.
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	There are no invasive plant species present, indicating successful management practices to prevent ecological degradation.
Condition Assessment Result (out of 7 criteria)	**Condition Assessment Score**		

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	Yes	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		

Table 18: Condition assessment criteria for created hedgerow habitat

			Condition Assessment	Criterion passed (Yes or No)
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 *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).	Yes

		Condition Assessment		Criterion passed (Yes or 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).	No
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

			Condition Assessment	Criterion passed (Yes or 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 *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* 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). | No |
| 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. | No |

Condition Assessment				Criterion passed (Yes or No)
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.	Yes
Good: No more than 2 failures in total AND No more than 1 failure in any functional group. 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). 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)."				Moderate

Table 19: Condition assessment criteria for created and enhanced ditches

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Yes	The ditch has clear water (low turbidity) with no obvious signs of pollution.
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	Yes	More than 10 species of emergent, submerged, or floating-leaved plants identified in a 20 m ditch length.
C	There is less than 10% cover of filamentous algae and or duckweed *Lemna* spp. (these are signs of eutrophication).	Yes	Less than 10% cover of filamentous algae and/or duckweed (Lemna spp.), indicating low eutrophication.
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	No	Marginal vegetation is present along less than 75% of the ditch.
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Yes	Physical Damage is kept to a minimum
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Yes	Water levels are sufficient, with a minimum summer depth of 50 cm in minor ditches and 1 m in main drains.
G	Less than 10% of the ditch is heavily shaded.	Yes	Less than 10% of ditch is shaded
H	There is an absence of non-native plant and animal species[1].	Yes	No non-native plant or animal species are present.
Passes 8 criteria	Good (3)		
Passes 6 or 7 criteria	Moderate (2)	Yes	
Passes 5 or fewer criteria	Poor (1)		

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