Appendix 1:

Updated Technical Note on Biodiversity Net Gain and Updated DEFRA METRIC

1.0 TECHNICAL NOTE - BIODIVERSITY NET GAIN METRIC 4.0 CALCULATIONS

- 1.1 FPCR Environment and Design Ltd. (FPCR) were commissioned by Wain Estates to complete an update biodiversity offsetting assessment of the Development Framework Plan (FPCR drawing ref: 09364-FPCR-XX-ZZ-DR-L-0010 P11) and Illustrative Masterplan (FPCR drawing ref: 09364-FPCR-XX-ZZ-DR-L-0012 P07) for the proposed development on land located north of Wilderness Lane, Great Barr, Birmingham.
- 1.2 This Technical Note summarises the calculations and provides details regarding any assumptions made to inform this assessment.

Background

- 1.3 The site is approximately 27ha in size, located on the north-west edge of the town of Great Barr, Birmingham. Proposals are for an Outline planning application for up to 150 dwellings with associated access, surface water mitigation and green infrastructure including more formal landscaping and habitats designed to maximise their biodiversity value. Structural planting, including avenues of trees and grass verges will be included, in addition to the long-term retention and enhancement of the hedgerow network and extensive restoration of meadows within the west and south of the site.
- 1.4 The site was originally designated as a Site of Local Importance for Nature Conservation (SLINC) and following further survey work undertaken by the Wildlife Trust for Birmingham in the Black Country in 2018 was updated to SINC in August 2019.
- 1.5 It is possible to satisfy the requirements of the allocation avoidance as defined at Paragraph 186(a) of the NPPF (December 2023). The scheme design has sought to reduce unnecessary vegetation removal and provide appropriate mitigation within the site.

Methodology

- 1.1 Natural England's published biodiversity net gain metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a proposed development site before and after development. It treats the flat "habitats" and linear features "hedgerows" separately, and is based on pre-determined values, along with published written guidance, set by a Natural England-led team of experts. The BNG assessment was undertaken in accordance with the Defra Biodiversity Metric 4.0. This was the current metric at the time of survey, with Natural England (NE) guidance¹ stating 'You should use the most current published version of the Biodiversity Metric, unless specified otherwise by the consenting body'.
- 1.2 The site boundary, results of the updated habitat survey undertaken in May 2024, Development Framework Plan (FPCR drawing ref: 09364-FPCR-XX-ZZ-DR-L-0010 P11) and Illustrative Masterplan (FPCR drawing ref: 09364-FPCR-XX-ZZ-DR-L-0012 P07) were used to inform this assessment.

¹ Nash, M., Irvine R., and Panks S., (April 2022) Biodiversity Metric 3.1 Frequently Asked Question. Natural England [online] Available from: http://publications.naturalengland.org.uk/publication/6049804846366720 [Accessed 30/08/2023].

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- 1.3 The development site was mapped and divided into existing habitat criteria. Habitats were defined using the UK Habitat Classification, with further information providing habitat area, distinctiveness and condition, which are used to calculate the value of each habitat.
- 1.4 The condition assessments were undertaken using the relevant Condition Assessment Criteria within the DEFRA Biodiversity Metric 4.0 Technical Annex 1 Condition Assessment Sheets².
- 1.5 Full details of the calculation methodology are provided in Biodiversity Metric 4.0 User Guide³.
- 1.6 The Natural England MAGIC database was consulted to identify any areas with statutory designations, and the eCountability (Birmingham data search) was consulted for locally designated sites.

2.0 BASELINE CONDITIONS

Baseline Habitats

- 2.1 The site comprised 14 field compartments which predominantly comprised other neutral grassland, bound by native mature hedgerows and treelines. Smaller areas of dense bramble scrub and tall forbs were present in the north-eastern field compartments areas of mature mixed scrub around the two ponds.
- 2.2 Baseline habitats are provided within Table 1 below and are depicted on Figure 1: Biodiversity Net Gain Baseline Habitats. An update assessment of the grassland is detailed within the separate Technical Note⁴ and condition score are detailed at Appendix A. The metric valued the baseline habitats at 185.68 habitat units and 47.93 hedgerow units. The metric summary is provided at Appendix B.

Desk Study and Ecological Strategic Significance

2.3 The whole of the site falls within the Peakhouse Farm SINC designation. The designation was updated from a partial SLINC based upon the extensive network of native hedgerows, moderate levels of structural and botanical diversity of the grassland and local faunal populations it supports, including breeding birds and bats. The site also lies within a core ecological area as identified by the Brimingham and Black Country Nature Improvement Area ecological network mapping. Therefore, all grassland, hedgerow and ponds habitats have been assigned a high strategic significance. The areas of scrub provided connectivity to habitats within the site that are covered by the designation and have been assigned a medium strategic significance. The remaining tall forbs and buildings have been assigned a low strategic significance multiplier.

⁴ FPCR (2024) Land north of Wilderness Lane, Great Barr, Birmingham. Update Grassland Survey Technical Note.

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Natural England (2023) The Biodiversity Metric 4.0 -Technical Annex 1 – Condition Assessment Sheets and Methodology [Online] Available at: https://publications.naturalengland.org.uk/publication/6049804846366720 [Accessed 29/08/2023]

³ Natural England (2023) The Biodiversity Metric 4.0 User Guide[Online] Available at: https://publications.naturalengland.org.uk/publication/6049804846366720 [Accessed 29/08/2023]

Table 1: Summary of Existing Baseline Habitat Value

Habitat type	Area (ha)	Distinctiveness	Condition	Biodiversity units	
Grassland: Other neutral grassland	12.511	Medium	Moderate	100.78	
Grassland: Other neutral grassland	7.6929	Medium	Fairly Poor	53.08	
Grassland: Other neutral grassland	5.3991	Medium	Poor	24.84	
Grassland: Modified grassland	0.3537	Medium	Moderate	1.63	
Grassland: Bracken	0.0437	Medium	Condition Assessment N/A	0.10	
Lakes: Ponds (non-priority habitat)	0.079	Medium	Moderate	0.73	
Heathland and shrub: Mixed scrub	0.1482	Medium	Moderate	1.30	
Heathland and shrub: Mixed scrub	0.1399	Medium	Poor	0.62	
Heathland and shrub: Bramble	0.3459	Medium	Condition Assessment N/A	1.38	
Sparsely vegetated land: Tall forbs	0.2756	Medium	Poor	1.42	
Urban: Developed land; sealed surface	0.0081	Medium	Moderate	0.00	
Individual trees: Rural tree	0.0733	Medium	Moderate	0.67	
Total	27.00			185.68	

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator. The total provided also <u>excludes</u> individual trees.

- 1.7 A network of 33 hedgerows and five tree lines border the field compartments. These were largely unmanaged at the time of the survey, comprising tall outgrown hedgerows of varying species composition. All hedgerows were considered to be habitats of principle importance (HPIs) (Natural Environment and Rural Communities Act (2006) Section 41) on account of them supporting >80% native species and were considered to be mostly of moderate to high nature conservation value. Typical of most Midlands hedges, hawthorn *Crataegus monogyna* represented the main shrub with blackthorn, hazel *Corylus avellana*, ash *Fraxinus excelsior*, field maple *Acer campestre* and elder *Sambucus nigra* also well represented.
- 1.8 The vast majority of the network is to be retained, except for minor losses of H22, H29, H30, H31, TL1 and TL4 to facilitate the access. The hedgerow type and associated details plus the biodiversity units for each hedgerow on site have been calculated and are presented in Table 2 below. Hedgerow references are indicated on Figure 1.

Table 2: Existing On-Site Hedgerows Biodiversity Units

Habitat	Length (km)	Condition	Biodiversity Units
H1 Native hedgerow	0.184	Good	1.27
H2 Native hedgerow	0.12	Good	0.83
H3 Native hedgerow - associated with bank or ditch	0.096	Moderate	0.88
H4 Native hedgerow with trees	0.062	Good	0.86
H5 Native hedgerow - associated with bank or ditch	0.12	Good	1.66
H6 Native hedgerow	0.123	Good	0.85
H7 Species-rich native hedgerow with trees - associated with bank or ditch	0.129	Good	3.56
H8 Native hedgerow	0.051	Good	0.35
H9 Native hedgerow - associated with bank or ditch	0.056	Good	0.77

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H10 Native hedgerow with trees - associated with 0.165		Good	3.42
bank or ditch H11 Native hedgerow with trees - associated with	0.440	Cood	2.46
bank or ditch	0.119	Good	
H12 Species-rich native hedgerow with trees - associated with bank or ditch	0.147	Moderate	2.70
H13 Native hedgerow with trees - associated with bank or ditch	0.149	Good	3.08
H14 Native hedgerow with trees - associated with bank or ditch	0.081	Good	1.12
H15 Native hedgerow with trees	0.178	Moderate	1.64
H16 Native hedgerow with trees - associated with bank or ditch	0.214	Good	4.43
H17 Native hedgerow	0.165	Good	1.14
H18 Native hedgerow	0.052	Good	0.36
H19 Native hedgerow	0.043	Good	0.30
H20 Native hedgerow	0.06	Moderate	0.28
H21 Native hedgerow	0.138	Good	0.95
H22 Native hedgerow	0.069	Good	0.48
H23 Native hedgerow with trees	0.087	Moderate	0.80
H24 Native hedgerow with trees	0.053	Good	0.73
H25 Native hedgerow with trees	0.071	Good	0.98
H26 Native hedgerow with trees	0.122	Good	1.68
H27 Native hedgerow with trees	0.097	Good	1.34
H28 Native hedgerow	0.025	Moderate	0.12
H29 Native hedgerow	0.099	Good	0.68
H30 Native hedgerow	0.036	Good	0.25
H31 Native hedgerow with trees	0.083	Good	1.15
H32 Native hedgerow	0.196	Good	1.35
H33 Non-native and ornamental hedgerow	0.046	Poor	0.05
TL1 Line of trees - associated with bank or ditch	0.42	Moderate	1.93
TL2 Line of trees	0.074	Moderate	0.34
TL3 Line of trees	0.16	Poor	0.37
TL4 Line of trees	0.097	Moderate	0.45
TL5 Line of trees	0.339	Good	2.34
Totals	4.53		47.93

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.

3.0 PROPOSED DESIGN

Habitats

Retention and Enhanced

3.1 Habitat retention and enhancement is illustrated in Figure 3. The proposed development has been carefully designed with a sensitive landscape design to retain the habitats of highest distinctiveness and condition where possible, including the fields with the highest botanical interest in the south of the site. The development parcels have been located within the fields which comprised grassland of poor

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quality, particularly within the north-eastern field compartments (F6 & F11) where swards have become rank and are being encroached by bramble scrub and tall forbs. Smaller losses of moderate condition grassland within field F5 will result from the creation of the LEAP and attenuation basins, however the surrounding grassland is to be restored. To provide compensation for these losses the field compartments within the south and west of the site which were also considered to be in decline will be brought under appropriate management and restored. These include field compartments F1-F4, F9 and F12. Areas adjacent to the informal footpaths around the perimeter of the site are to be retained.

Habitat Creation

- 3.2 Habitat creation is shown in Figure 4. Due to the high-level, conceptual nature of the design layout at this stage, in order to carry out a Biodiversity Impact Assessment, the following assumptions/recommendations have been made:
 - Assumed a 70:30 split for the Proposed Residential Development parcels (hardstanding/buildings: garden/planting);
 - Retained corridors around the residential areas to comprise modified grassland that could achieve 'moderate' condition;
 - LEAP assumed to be hardstanding;
 - SuDS basins can be sensitively designed with marginal shelves, aquatic and marginal
 planting with areas of permanent water to go above their primary function and to be of value
 to local fauna and thereby function as 'non-priority ponds'. Soils from marshy grassland soils
 are to be translocated to increase the amount of marshy grassland within the site which is
 currently in decline;
 - That the majority of the enhanced grassland can achieve 'good' condition;
 - New areas of mixed scrub could achieve 'moderate' condition;
 - That all retained hedgerows in 'moderate' condition could be enhanced to 'good' condition;
 and
 - Urban trees planted within the residential areas will comprise a native, small sized standards that could achieve 'moderate' condition.
- 3.3 The biodiversity units for each habitat on the Site have been calculated and are presented in Table 3, along with a description of the management recommendations which will be employed to achieve the target conditions for each habitat type.

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Table 3: Summary of Proposed Habitat Creation and Enhancement

Habitat (UKHab Type)	Targets for Creation/Management	Area (ha)	Target Condition	Distinctiveness	Biodiversity Units
Other neutral grassland (Enhanced)	 The areas of retained existing grassland within the south of the eastern compartment will be enhanced through favourable management to target good condition grassland through the adoption of the following management practices: Overseeding with a Species-rich Meadow Seed Mix as per the Landscape Strategy Plan, to include introduction of yellow rattle to reduce vigour of grasses and allow less competitive species to spread; Creation of colonization gaps through raking or chain harrowing to break up the sward and expose some bare ground without substantial disturbance of soils to allow new seed to germinate; Management will be reduced to create a varied sward height, taking a late hay cut to allow plants to set seed; The seed mix will contain a sufficient number of species to encourage the establishment of grassland with a minimum of 10 species per m²; and Removal of any bracken, bramble, or scrub clumps. 	9.2094 (Moderate) 7.6929 (Fairly Poor) 4.0228 (Poor)	Good Good	Medium	92.24 62.82 34.30
Modified grassland	 The flowering grassland areas will in part be managed as amenity grasslands, but this should include addition management prescriptions to focus on achieving good condition through the following measures: Using Naturescape N14 'Flowering Lawn Mixture' or similar containing 12 species to encourage at least 6-8 species per m²; Ensuring management encourages a varied sward height, particularly during the spring/summer; Regular management to prevent scrub/bracken encroachment; Reseeding any areas of failed establishment. 	1.8711	Moderate	Low	7.14
Other neutral grassland	Areas of other neutral grassland will be restored around the attenuation basins. Management will focus on maximizing their biodiversity to create a diverse sward by employing the following management measures: • Using a native species rich seed mix to achieve a diverse sward; • Management will be reduced to create a varied sward height, following the suppliers' specifications with one cut per year following establishment;	0.7231	Moderate	Medium	5.57

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	The seed mix will contain a sufficient number of species to encourage the establishment				
	of grassland with a minimum of 9 species per m ² ;				
	Reseeding any areas of failed establishment; and				
	Removal of any bracken, bramble, or scrub clumps.				
	Areas of native scrub planting will be incorporated around the attenuation basin to contribute to				
	a mosaic of habitats and promote a diversity of plants and structure within the Site. These will be				
	managed to achieve moderate condition through the following measures:				
	Planting will ensure a diversity of species with within blocks of scrub with no one species				
Mixed scrub	comprising more than 75% cover;	0.35	Moderate	Medium	2.58
	The borders of scrub will be subject to relaxed management extended at least 2m from				
	the scrub edge to encourage a diverse interface between habitats;				
	Replacement planting of failed specimens during establishment period; and				
	Additional planting after 10 years where natural regeneration has not been successful.				
	The attenuation features will be designed to hold a degree of standing water throughout the				
	year to create ponds that will be planted with marginal vegetation to create diverse features.				
	Soils from areas of marshy grassland to be affected are to be translocated to increase this				
	resource within the site. The following management prescriptions will be employed to reach the				
	target condition:				
	The features will be designed to allow water levels to fluctuate naturally through the year.				
Ponds (non-	The ponds will not be stocked with fish and they will be monitored to ensure that fish are not	0.5169	Moderate	Medium	4.09
oriority habitat)	introduced	0.0100	Moderate	Wediam	4.00
	Management of nearby habitats will be free from fertilizer input to prevent eutrophication of				
	the ponds. The ponds will be monitored for the establishment of duckweed and this will be				
	removed where it becomes prevalent				
	Marginal vegetation will be introduced and allow to establish such that it covers at least 50% of				
	the ponds area that is less than 3m deep.				
Vegetated					
garden /	Private garden areas and classified in poor condition. Estimated at 30% of the development	1.179	Poor	Low	2.26
olanting	parcels.		. 55.	20	2.20
214111119	A minimum of 70 small standards total are to be planted across the Site within the development				
	footprint. Each individual tree will be targeted to moderate condition via the management				
Jrban trees	prescriptions below:	0.3013	Moderate	Medium	0.92
	· · · ·				
	All trees should be native species or native cultivars;				

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			1	
•	If planted in groups, the distance between centres should be set such that the expected			
	canopies should be less than 5m apart;			
•	Relaxed management removing only branches that pose a risk to traffic/pedestrians such			
	that trees retain more than 75% of the expected canopy size for the corresponding age;			
	and			
•	Planted with verges or green infrastructure such that at least 20% of the ground beneath			
	each tree is vegetated.			

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Retained / Enhanced Hedgerows

- 3.4 The vast majority of the hedgerows and treelines are to be retained in their entirety and maintained through a commitment towards their long-term management with the aim of maximising their biodiversity value. The following measures will be employed within the Site Boundary to enhance the existing hedgerows:
 - Hedgerows will be subjected to reduced management to encourage the establishment of tall, bushy hedgerows;
 - Additional planting of a range of native hedgerow species will be carried out within retained hedgerows to close up gaps where they develop and create more continuously dense and bushy features;
 - Fertiliser use will be prohibited within grasslands adjacent to hedgerows to prevent nutrient enrichment as a result of the Site management operations; and
 - A minimum of 1m adjacent the hedgerows will be managed as 'undisturbed' ground where possible within the Site boundary. Management of grasslands within these areas adjacent to hedgerows will be in line with the management of meadow grasslands.

Hedgerow Creation

- 3.5 The proposals include the creation of three new lengths of native species-rich hedgerows with trees to reinstate historical hedgerow boundaries that have been removed. These will enhance the retained hedgerow network and provide additional connectivity around the site.
- 3.6 Native species-rich hedgerows will be planted to ensure they provide a diverse range of species along their length. In particular, these will target the southern boundary to link the existing retained hedgerows and provide a continuous feature linking the treeline along the western boundary and area of offsite woodland.
- 3.7 Altogether, 0.36km of native hedgerow planting will be carried out which will be managed a target condition of moderate, generating a total of 3.67 hedgerow units. Management will include the following measures:
 - Failed specimens will be replaced during establishment on a like-for-like basis;
 - · Hedgerows will be managed to encourage tall, wide and bushy features with only one side of hedgerows cut each year;
 - Fertiliser use will be prohibited within grasslands in the Site Boundary that are adjacent to hedgerows to reduce nutrient enrichment; and
 - A minimum of 1m adjacent to the hedgerows will be managed as 'undisturbed' ground where possible. Management of grasslands within these areas adjacent to hedgerows will be in line with the management of meadow grasslands.

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4.0 RESULTS AND CONCLUSION

4.1 The habitat retention, enhancement and creation proposals highlighted within this report have all been inputted into the Biodiversity Metric 4.0. Table 7 provides a summary of the headline results of the biodiversity metric 4.0 assessment completed for the proposals. The full metric has been provided separately.

Table 4: Biodiversity Metric 4.0 Headline Results

Baseline	Habitat Units	185.68		
	Hedgerow Units	47.93		
Post-Intervention	Habitat Units	234.11		
	Hedgerow Units	53.12		
Total Net Unit Change	Habitat Units	+48.44		
	Hedgerow Units	+5.18		
Total Net Percentage Change	Habitat Units	26.09%		
	Hedgerow Units	10.81%		

- 1.9 As shown in Table 7, assessment has demonstrated proposals will lead to a net gain of 48.93 habitat units, representing a 26.06% gain through the retention of habitats of high value and the habitat enhancement and creation measures outlined above.
- 1.10 The proposed development retains most of these hedgerows although 0.17km will be lost to facilitate access roads/footpaths. The enhancement of retained hedgerows and additional habitat creation and enhancements proposals will lead to an additional 5.18 hedgerow units equating to a 10.81% gain in the Site's hedgerow resource.

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Appendix A: Baseline Habitat Condition Assessments

Other Neutral Grassland - Grassland (medium distinctiveness)

		Grassland Reference								
Condition Criteria	F1		F1a		F2			F3a		
	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes		
A The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. N.B. this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Fail	Only 46.86% fit to MG6b so does not closely affiliate to NVC community. Indicator species not consistently present	Pass	57.67% fit to MG6b and therefore g3c6 Lolium-Cynosurus neutral grassland.	Pass	55.43% fit to MG6b and therefore g3c6 Lolium-Cynosurus neutral grassland	Pass	53.17% fit to MG10 and therefore g3c8 Holcus- Juncus neutral grassland		
B Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	A lack of recent management had resulted in a tall sward with little variation in height.	Fail	A lack of recent management had resulted in a tall sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.		
C Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Pass		Pass		Pass		Pass			
D Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No bracken & scrub <5%.	Pass	No bracken or scrub.	Pass	No bracken or scrub.	Pass	No bracken or scrub.		
E Combined cover of species indicative of sub-optimal condition2 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 (as listed on Schedule 9 of WCA4) are present, this criterion is automatically failed.	Pass	Species indicative of sub- optimal condition averaged at 0.8% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0.33% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0.2% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 1.03% across the quadrats and no INNS present.		
F There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). N.B. this criterion is essential for achieving Good condition for non-acid grassland types only.	Fail	Average of 7.2 species when species indicative of sub-optimal condition excluded.	Fail	Average of 9.4 species.	Fail	Average of 9.8species when species indicative of sub-optimal condition excluded.	Fail	Average of 9.7 species.		
Total Passes	Total Passes 2		4 excluding F		4 excluding F		4 excluding F			
Condition		Poor Moderate		Moderate		Moderate				

Condition Assessment Result	Condition Assessment Score
Passes 5 or 6 of 6 criteria, including essential criteria A and F	Good (3)
Passes 3 or 4 of 6 criteria, including essential criteria A	Moderate (2)
Passes 0, 1 or 2 of 6 criteria; OR Passes 3 or 4 criteria excluding A and F	Poor (1)

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	Grassland Reference							
Condition Criteria		F3b		F4		F5		F6
	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes
A The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. N.B. this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Pass	53.17% fit to MG10 and therefore g3c8 Holcus- Juncus neutral grassland	Half pass	49.04% fit to MG6b and therefore g3c6 Lolium-Cynosurus neutral grassland but indicator species not constant.	Half pass	50.27 fit to MG6b and therefore g3c6, but doesn't meet the broad criteria for g3c with less than 8 species per m² and <20% forbs. Half passes the criteria.	Fail	Resembles species-poor MG1 community but indicator species not constant and doesn't meet the broad criteria for g3c6 with less than 8 species per m² and <20% forbs.
B Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Pass	More natural variability.
C Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Pass		Fail	Bare ground <1%	Pass		Fail	Bare ground <1%
D Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No bracken & scrub <5%.	Pass	No bracken or scrub.	Pass	No bracken or scrub.	Pass	Some scrub encroachment but <5%.
E Combined cover of species indicative of sub-optimal condition2 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 (as listed on Schedule 9 of WCA4) are present, this criterion is automatically failed.	Pass	Species indicative of sub- optimal condition averaged at 0.38% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 1.4% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0.66% across the quadrats and no INNS present.
F There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). N.B. this criterion is essential for achieving Good condition for non-acid grassland types only.	Fail	Average of 9.1species when species indicative of sub-optimal condition excluded.	Fail	Average of 9.4 species when species indicative of sub-optimal condition excluded.	Fail	Average of 7.4 species when species indicative of sub-optimal condition excluded.	Fail	Average of 5.3 species when species indicative of sub-optimal condition excluded.
Total Passes	es 4 excluding F		2.5 exc. F & not fully meeting A		3.5 ex	cc. F & not fully meeting A	3 exc. A & F	
Condition	Condition Moderate		Fairly Poor		Fairly Poor		Poor	

Condition Assessment Result	Condition Assessment Score
Passes 5 or 6 of 6 criteria, including essential criteria A and F	Good (3)
Passes 3 or 4 of 6 criteria, including essential criteria A	Moderate (2)
Passes 0, 1 or 2 of 6 criteria; OR Passes 3 or 4 criteria excluding A and F	Poor (1)

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	Grassland Reference								
Condition Criteria		F7		F8		F9		F11	
	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes	
A The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. N.B. this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Fail	Does not closely affiliate to any community with neutral indicators at low abundances.	Fail	Does not closely affiliate to any community with neutral indicators at low abundances.	Fail	49.77% fit to MG6b and therefore a poor fit g3c6 Lolium-Cynosurus neutral grassland. Indicator species not consistently present.	Fail	Resembles a rank MG1 community but neutral indicators at low abundances.	
B Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	
C Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Pass		Pass		Fail	Bare ground <1%	Fail	Bare ground <1%	
D Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No bracken & scrub <5%.	Pass	No bracken or scrub.	Pass	No bracken or scrub.	Pass	No bracken or scrub.	
E Combined cover of species indicative of sub-optimal condition2 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 (as listed on Schedule 9 of WCA4) are present, this criterion is automatically failed.	Pass	Species indicative of sub- optimal condition averaged at 0.2% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0.2% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition <5% and no INNS present.	Fail	No INNS present, however Species indicative of sub- optimal condition was >5% across the parcel.	
F There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). N.B. this criterion is essential for achieving Good condition for non-acid grassland types only.	Fail	Average of 9.0 species when species indicative of sub-optimal condition excluded.	Fail	Average of 6.2 species when species indicative of sub-optimal condition excluded.	Fail	Average of 9.6 species when species indicative of sub-optimal condition excluded.	Fail	Average of 3.7 species when species indicative of sub-optimal condition excluded.	
Total Passes	Total Passes 3 exc. A & F		3 exc. A & F			2 exc. A & F		1	
Condition		Poor		Poor		Poor	Poor		

Condition Assessment Result	Condition Assessment Score
Passes 5 or 6 of 6 criteria, including essential criteria A and F	Good (3)
Passes 3 or 4 of 6 criteria, including essential criteria A	Moderate (2)
Passes 0, 1 or 2 of 6 criteria; OR Passes 3 or 4 criteria excluding A and F	Poor (1)

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	Grassland Reference					
Condition Criteria		F12	F13		F14	
	Criteria	Notes	Criteria	Notes	Criteria	Notes
A The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. N.B. this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Pass	55.31% fit to MG6b and therefore g3c6 Lolium-Cynosurus neutral grassland. Indicator species consistently present.	Fail	Potentially MG6b but indicator species not consistently present.	Fail	Does not closely affiliate to any community with neutral indicators at low abundances.
B Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.
C Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Fail	Bare ground <1%	Fail	Bare ground <1%	Pass	
D Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No bracken or scrub.	Pass	No bracken or scrub.	Pass	No bracken or scrub.
E Combined cover of species indicative of sub-optimal condition2 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 (as listed on Schedule 9 of WCA4) are present, this criterion is automatically failed.	Pass	Species indicative of sub- optimal condition averaged at 0.02% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0% across the quadrats and no INNS present.	Pass	Species indicative of sub- optimal condition averaged at 0.8% across the quadrats and no INNS present.
F There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). N.B. this criterion is essential for achieving Good condition for non-acid grassland types only.	Pass	Average of 10.6 species when species indicative of sub-optimal condition excluded.	Fail	Average of 6.8 species when species indicative of suboptimal condition excluded.	Fail	Average of 6.6 species when species indicative of sub-optimal condition excluded.
Total Passes	3 4		2		3 exc. A & F	
Condition	Moderate Poor		Poor	Poor Poor		

Condition Assessment Result	Condition Assessment Score
Passes 5 or 6 of 6 criteria, including essential criteria A and F	Good (3)
Passes 3 or 4 of 6 criteria, including essential criteria A	Moderate (2)
Passes 0, 1 or 2 of 6 criteria; OR Passes 3 or 4 criteria excluding A and F	Poor (1)

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Modified Grassland - Grassland (low distinctiveness)

	Grassland Reference			
Condition Criteria	F10			
	Criteria	Criteria		
A There must be 6-8 species per m², including at least 2 forbs (including those in Footnote 1). NB - this criterion is non-negotiable for achieving moderate or good condition.	Pass	7.9 species per m ² on average across the quadrats.		
B Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	A lack of recent management had resulted in a tall tussocky sward with little variation in height.		
C Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Pass	Less than 20% scrub.		
D Physical damage evident in less than 5% of total grassland area, such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities.	Pass	Some damage at field access but <5% of total area.		
E Cover of bare ground between 1% and 10%, including localised areas, for example, rabbit warrens.	Fail	Less than 1%.		
F Cover of bracken less than 20%.	Pass	None present.		
G There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Pass	None present.		
Total Passes		5 including A		
Condition		Moderate		

Condition Assessment Result	Condition Assessment Score
Passes 6 or 7 of 7 criteria including essential criteria A	Good (3)
Passes 4 or 5 of 7 criteria; OR Passes 6 of 7 criteria excluding essential criteria A	Moderate (2)
Passes 0, 1, 2 or 3 of 7 criteria	Poor (1)

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	Scrub Reference				Scrub Reference			
Condition Criteria	S1		S2		S3			
	Criteria	Notes	Criteria	Notes	Criteria	Notes		
A Habitat is representative of UKHab description (where in its natural range). At least 80% is native and there are at least three woody species, with no one species comprising more than 75% of the cover (except hazel, common juniper, sea buckthorn or box, which can be up to 100% cover).	Fail	Dominated by bramble (>75%).	Pass	Mix of hawthorn, blackthorn, bramble and elder.	Fail	Dominated by crack willow (>75%).		
B Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	Fail	No seedlings or saplings recorded.	Fail	No seedlings or saplings present.	Fail	No young shrubs		
C There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Pass	No INNS but species of sub- optimal condition present at >5%	Pass		Pass	No INNS but species of sub- optimal condition present at >5%.		
D The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat.	Pass	Unmanaged tall grassland present.	Pass	Unmanaged tall grassland present.	Pass	Unmanaged tall grassland present.		
E There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	Too small for clearings.	Pass	Open area where pond P2 is located.	Fail	Too small for clearings.		
Total Passes	2		3		2			
Condition		Poor Moderate		Poor				

Condition Assessment Result	Condition Assessment Score
Passes 5 criteria	Good (3)
Passes 3 or 4 criteria	Moderate (2)
Passes 2 or fewer criteria	Poor (1)

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	Pond Reference				
Condition Criteria		P1	P2		
	Criteria Notes		Criteria	Notes	
A The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Pass		Fail	High turbidity	
B There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	Pass		Pass		
C Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Pass		Pass		
D The pond is not artificially connected to other waterbodies, e.g. agricultural ditches or artificial pipework.	Pass		Pass		
E Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams, pumps or pipework.	Pass		Pass		
F There is an absence of listed non-native plant and animal species.	Pass		Pass		
G The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Pass		Fail		
Additional Criteria - must be assessed for all non-woodland pon	ds:				
H Emergent, submerged or floating plants (excluding duckweed) cover at least 50% of the pond area which is less than 3 m deep.	Pass		Fail	Very little vegetation	
I The pond surface is no more than 50% shaded by adjacent trees and scrub.	Fail		Fail		
Total Passes	8			6	
Condition	Moderate		Moderate		

Condition Assessment Result for Woodland Ponds	Condition Assessment Score
Passes 7 criteria	Good (3)
Passes 5 or 6 criteria	Moderate (2)
Passes 4 or fewer criteria	Poor (1)
Condition Assessment Result for Non-Woodland Ponds	Condition Assessment Score
Passes 9 criteria	Good (3)
Passes 6 to 8 criteria	Moderate (2)
Passes 5 or fewer criteria	Poor (1)

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Condition Oritoria	Hedgerow Reference										
Condition Criteria	H1	H2	Н3	H4	H5	H6	H7	H8	H9	H10	H11
A1 Height >1.5m average along length.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
A2 Width >1.5m average along length.	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass
B1 Gap between ground and base of canopy <0.5 m for >90% of length.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B2 Gaps make up <10% of total length and no canopy gaps >5 m.	Pass	Pass	Fail	Pass							
C1 >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 hedge (at least).	Fail	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
C2 Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Pass	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail
D1 >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D2 >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Pass	Pass	Fail	Pass							
E1 There is more than one age-class (or morphology) of tree present, and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.	n/a	n/a	n/a	Fail	n/a	n/a	Fail	n/a	n/a	Fail	Fail
E2 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.	n/a	n/a	n/a	Pass	n/a	n/a	Pass	n/a	n/a	Pass	Pass
Total Failures	1	2 (same functional group)	3	2	1	2	2	1	1	2	2
Condition	Good	Moderate	Moderate	Good							

Condition Assessment Result for Hedgerows without Trees	Condition Assessment Score
≤2 total failures; AND no more than 1 failure in any functional group	Good (3)
≤4 total failures; AND does not fail both attributes in more than one functional group	Moderate (2)
>4 total failures; OR fails both attributes in multiple functional groups	Poor (1)
Condition Assessment Result for Hedgerows with trees	Condition Assessment Score
Condition Assessment Result for Hedgerows with trees ≤2 total failures; AND no more than 1 failure in any functional group	Good (3)
·	

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Condition Critoria	Hedgerow Reference										
Condition Criteria	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22
A1 Height >1.5m average along length.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
A2 Width >1.5m average along length.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail
B1 Gap between ground and base of canopy <0.5 m for >90% of length.	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass
B2 Gaps make up <10% of total length and no canopy gaps >5 m.	Pass	Pass	Fail	Fail	Pass	Pass	Pass	Pass	Fail	Pass	Pass
C1 >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 hedge (at least).	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
C2 Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	Pass	Fail	Fail	Pass	Fail	Fail	Fail	Fail	Fail	Fail
D1 >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D2 >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass
E1 There is more than one age-class (or morphology) of tree present, and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.	Pass	Fail	n/a	Fail	Fail	n/a	n/a	n/a	n/a	n/a	n/a
E2 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.	Fail	Pass	n/a	Pass	Pass	n/a	n/a	n/a	n/a	n/a	n/a
Total Failures	3	1	1	4	1	1	1	1	3	1	2
Condition	Moderate	Good	Good	Moderate	Good	Good	Good	Good	Moderate	Good	Good

Condition Assessment Result for Hedgerows without Trees	Condition Assessment Score
≤2 total failures; AND no more than 1 failure in any functional group	Good (3)
≤4 total failures; AND does not fail both attributes in more than one functional group	Moderate (2)
>4 total failures; OR fails both attributes in multiple functional groups	Poor (1)
Condition Assessment Result for Hedgerows with trees	Condition Assessment Score
≤2 total failures; AND no more than 1 failure in any functional group	Good (3)
≤5 total failures; AND does not fail both attributes in more than one functional group	Moderate (2)
>5 total failures; OR fails both attributes in multiple functional groups	Poor (1)

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Condition Critoria	Hedgerow Reference										
Condition Criteria	H23	H24	H25	H26	H27	H28	H29	H30	H31	H32	H33
A1 Height >1.5m average along length.	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Fail
A2 Width >1.5m average along length.	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Fail
B1 Gap between ground and base of canopy <0.5 m for >90% of length.	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass
B2 Gaps make up <10% of total length and no canopy gaps >5 m.	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass
C1 >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 hedge (at least).	Fail	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass
C2 Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Pass	Fail	Fail	Fail
D1 >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail
D2 >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Fail
				,		,			,	,	
E1 There is more than one age-class (or morphology) of tree present, and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.	Fail	Fail	Fail	Fail	Fail	n/a	n/a	n/a	Fail	n/a	n/a
E2 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.	Pass	Pass	Pass	Pass	Pass	n/a	n/a	n/a	Pass	n/a	n/a
Total Failures	4	2	2	2	4	4	1	0	2	1	5
Condition	Moderate	Good	Good	Good	Moderate	Moderate	Good	Good	Good	Good	Poor

Condition Assessment Result for Hedgerows without Trees	Condition Assessment Score
≤2 total failures; AND no more than 1 failure in any functional group	Good (3)
≤4 total failures; AND does not fail both attributes in more than one functional group	Moderate (2)
>4 total failures; OR fails both attributes in multiple functional groups	Poor (1)
Condition Assessment Result for Hedgerows with trees	Condition Assessment Score
Obligation Assessment Result for Heagerows with trees	Condition Assessment ocore
≤2 total failures; AND no more than 1 failure in any functional group	Good (3)
·	

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Line of Trees

		Treeline Reference									
Condition Criteria		TL1	TL2			TL3		TL4	TL5		
	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes	
A At least 70% of trees are native species.	Pass		Pass		Fail	Sycamore and cherry laurel comprise >30%	Pass		Pass	Sycamore present but <30% of resource.	
B Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Pass		Pass		Pass		Pass		Pass		
C One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and fallen deadwood.	Pass		Pass	Veteran tree present.	Fail		Pass	Trees with features to support bat roosts present.	Pass		
D There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice.	Fail	Surfaced footpath borders the site to the south.	Pass		Fail	Residential boundary.	Pass		Pass		
E At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass		Pass		Pass		Fail	Evidence of damage from grazing horses and electric fence previously pinned to trees.	Pass		
Total Passes		4		5	2			4	5		
Condition		Moderate		Good		Poor		Moderate	Good		

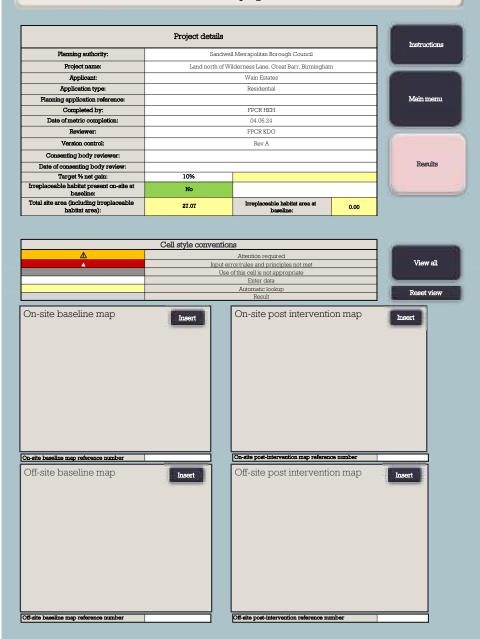
Condition Assessment Result	Condition Assessment Score
Passes 5 criteria	Good (3)
Passes 3 or 4 criteria	Moderate (2)
Passes 2 or fewer criteria	Poor (1)

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APPENDIX B: BIODIVERSITY METRIC 4.0 CALCULATIONS

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The Biodiversity Metric 4.0 - Calculation Tool Start page



Headline Results Scroll down for final results A			
	Habitat units	185.68	1
On-site baseline	Hedgerow units	47.93	
Oil bite babeline	Watercourse units	0.00	
	Habitat units	234.11	
On-site post-intervention	Hedgerow units	53.12	
(Including habitat retention, creation & enhancement)	Watercourse units	0.00	
	Habitat units	48.44	26.09%
On-site net change	Hedgerow units	5.18	10.81%
(units & percentage)	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units Hedgerow units Watercourse units	0.00 0.00 0.00	
000000000000000000000000000000000000000	Habitat units	0.00	
Off-site post-intervention	Hedgerow units	0.00	
(Including habitat retention, creation & enhancement)	Watercourse units	0.00	
000 11 13	Habitat units	0.00	0.00%
Off-site net change	Hedgerow units	0.00	0.00%
(units & percentage)	Watercourse units	0.00	0.00%
	Habitat units	48.44	1
Combined net unit change	Hedgerow units	5.18	
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00	
	Habitat units	0.00	
C (1 1 1 1 1 1 (CD) 6 1 1 1 (** *	0.00	1

	Habitat units	48.44
Combined net unit change	Hedgerow units	5.18
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00
	Habitat units	0.00
Spatial risk multiplier (SRM) deductions	Hedgerow units	0.00
	Watercourse units	0.00

FINAL RESULTS		
W () () ()	Habitat units	48.44
Total net unit change	Hedgerow units	5.18
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00
	Habitat units	26.09%
Total net % change	Hedgerow units	10.81%
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00%
Trading rules satisfied?	Υe	es √

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	185.68	204.24	0.00
Hedgerow units	10.00%	47.93	52.73	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Unit requirement met or surpassed \checkmark Unit requirement met or surpassed \checkmark Unit requirement met or surpassed \checkmark

Project Name: Land north of Wilderness Lane, Great Barr, Birmingham Map Reference:

A-1 On-Site Habitat Baseline

Area habitat summary
Total Net Unit Change
Total Net % Change
Trading Rules Satisfied

Condense / Show Columns Condense / Show Rows

M² to hectares conversion tool:

1 1 2 2 3 3 4 4 5 5 6 6 6 7 7 8 8 9 9 10 0 11 1 12 2 13 3 14 4 18 8 16 6 17 7 18 8 19 9 10 11 11 12 12 13 13 14 15 16 16 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19												Ecological
1 1 2 2 3 3 4 4 5 5 6 6 6 7 7 8 8 9 9 10 0 11 1 12 2 13 3 14 4 15 5 16 6 17 7 18 8 19 9 10 10 10 10 10 10 10 10 10 10 10 10 10		Existing area habitats		Distinctivene	288	Condition	1	Strategic signi		Strategic	Required Action to Meet	baseline baseline
2 2 3 3 4 4 5 5 6 6 6 6 7 7 8 8 8 9 9 10 0 11 1 12 2 13 3 14 4 1.5 5 16 6 19 9 10 10 11 11 12 12 13 14 15 15 16 16 17 17 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	road Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Significance multiplier	Trading Rules	Total habitat uni
3 3 4 4 5 5 6 6 6 7 7 8 8 8 9 9 10 0 11 1 12 2 13 3 14 4 18 8 16 6 17 7 18 19 9 20 11 Heat	Grassland	Other neutral grassland	0.908	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	4.18
4 4 5 6 6 6 7 7 8 8 8 9 9 10 0 11 1 12 2 13 14 4 1.5 16 16 19 19 10 10 11 11 12 12 13 14 14 15 15 16 16 17 17 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Grassland	Other neutral grassland	0.1872	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (2)	1.72
5	Grassland	Other neutral grassland	3.2897	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	30.27
6 6 7 8 8 9 9 100 111 122 133 144 155 166 19 9 100 100 111 112 111 111 111 111 111 111	Grassland	Other neutral grassland	0.9191	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required	8.46
7	Grassland	Other neutral grassland	0.11	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	1.01
8 8 9 100 111 122 133 144 155 166 117 168 119 120 121 Heat	Grassland	Other neutral grassland	0.8178	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	7.52
9 9 10 11 11 12 12 13 13 14 14 15 16 16 17 18 18 19 19 11 11 11 11 11 11 11 11 11 11 11	Grassland	Other neutral grassland	5.1557	Medium	4	Fairly Poor	1.5	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	35.57
10 11 12 13 13 14 14 15 16 16 17 17 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Grassland	Other neutral grassland	2.5372	Medium	4	Fairly Poor	1.5	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (2)	17.51
11	Grassland	Other neutral grassland	0.0475	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (2)	0.22
12 13 14 14 15 16 16 16 17 17 18 18 19 19 13 10 11 Heat	Grassland	Other neutral grassland	0.8258	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	3.80
13 14 15 16 16 17 17 18 18 19 19 11 Heat	Grassland	Other neutral grassland	0.639	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required	2.94
1.8 1.8 1.17 1.18 1.18 1.19 1.19 1.19 1.19 1.19 1.19	Grassland	Other neutral grassland	3.1148	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	14.33
1.8 1.17 1.18 1.19 1.30 1.31 Heat	Grassland	Modified grassland	0.3537	Low	2	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness or better habitat required ≥	1.63
18 19 Heat	Grassland	Other neutral grassland	0.08	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	0.37
17 18 19 30 Heat	Grassland	Other neutral grassland	4.0728	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	37.47
18 19 30 Heat	Grassland	Other neutral grassland	1.7577	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	8.09
30 Heat	Grassland	Other neutral grassland	1.1411	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	5.25
30 31 Heat	Grassland	Bracken	0.0437	Low	2	Condition Assessment N/A	1	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness or better habitat required ≥	0.10
B1 Heat	Lakes	Ponds (non-priority habitat)	0.061	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	habitat required ≥ Same broad habitat or a higher distinctiveness habitat required (≥)	0.56
	Lakes	Ponds (non-priority habitat)	0.018	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (≥)	0.17
Heat	athland and shrub	Mixed scrub	0.1399	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required (2)	0.62
	athland and shrub	Mixed scrub	0.1482	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required (2)	1.30
23 Heat	athland and shrub	Bramble scrub	0.3459	Medium	4	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	1.38
34 Sparse	sely vegetated land	Tall forbs	0.2756	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.55
25	Urban	Developed land; sealed surface	0.0081	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00
	Individual trees	Rural tree	0.0733	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required (2)	0.67
27												
29 30												
31		Total habitat area	27.07									107.00
		Total natural area Site Area (Excluding area of Individual trees and Green walls)	27.07									185.68

Select a unit Hectares Mª

	F	Retention ca	tegory biodiv	versity value		Bespoke compensation		Comments	
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost	agreed for unacceptable losses	User comments	Consenting body comments	GIS reference number
0	0.908	0.00	4.18	0.00	0.00		Field F1 whole compartment to be enhanced.		Fl
0.1521	0	1.40	0.00	0.04	0.32		Field F1a. Area either side of proposed footpath retained.		Fla
0.1771	3.0712	1.63	28.26	0.04	0.38		Field F2. The majority to be enhanced through better management, small areas adjacent to the proposed footpath to be retained.		E9
0	0.9191	0.00	8.46	0.00	0.00		Field F3. Sward to be enhanced through appropriate management.		E3
0	0.11	0.00	1.01	0.00	0.00		Field F3a. Area to be enhanced through appropriate management.		F3a
0	0.8178	0.00	7.52	0.00	0.00		Field F3b. Sward to be enhanced through appropriate management.		F3b
0.2089	4.9468	1.44	34.13	0.00	0.00		Field F4. Only half passes essential condition criteria A. Recognisable community but indicator species not consistent. Area adjacent to the footpath to be retained, the remainder enhanced.		F4
0	0.5639	0.00	3.89	1.97	13.62		Field F5. Only half passes essential condition criteria A. Is a recognisable MG6b community, however it doesn't pass sufficient broad criteria for g5c under UKHab ver 2 with less than 8 species per m2 and <20% cover of forbs.		ES
0	0	0.00	0.00	0.05	0.22		Field F6		F6
0	0	0.00	0.00	0.83	3.80		Field F7		F7
0	0	0.00	0.00	0.64	2.94		Field F8		F8
0.5895	2.5253	2.71	11.62	0.00	0.00		Field F9. Area adjacent to the proposed footpath to be retain, the remainder brough under appropriate management and enhanced.		F9
0	0	0.00	0.00	0.35	1.63		Field F10		F10
0	0	0.00	0.00	0.08	0.37		Field F11		F11
1.2015	2.6692	11.05	24.56	0.20	1.86		Field F12. Area adjacent to the proposed footpath to be retain, the remainder brough under appropriate management and enhanced.		F12
0	0	0.00	0.00	1.76	8.09		Field F13		F13
0	0	0.00	0.00	1.14	5.25		Field F14		F14
0	0	0.00	0.00	0.04	0.10				
0.061	0	0.56	0.00	0.00	0.00		Pond Pl		Pl
0.018	0	0.17	0.00	0.00	0.00		Pond P2		P2
0.0946	0	0.42	0.00	0.05	0.20		S1 & S3		
0.0538	0	0.47	0.00	0.09	0.83		S2		
0	0	0.00	0.00	0.35	1.38				
0	0	0.00	0.00	0.28	0.55				
0	0	0.00	0.00	0.01	0.00				
0.0366	0	0.34	0.00	0.04	0.34		2 medium trees in moderate conditon. One to be retained		T1 & T2

A Tairly' Category has been used - check evidence to ensure this is appropriate Δ

Total area lost (excluding area of Individual trees and Green walls) 7.91

roject Name: Land north of Wilderness Lane, Great Barr, Birmingham Map Reference:

A-2 On-Site Habitat Creation

Condense / Show Columns

Main Menu Instructions

Ārea h	abitat summary
Total Net Unit Change	48.44
Total Net % Change	28.09%
Trading Rules Satisfied	Yes √
Area Check (excluding individual trees and green walls)	Area Acceptable ✓

	11.11									Dost de	velopment/ post inte	mantion habitate											4
			Distincti		1 0-	ndition	Charte also also also identifica			Post de	меториненту розг инк	STYGETTOTI TISTOTISTS	Temporal multiplier			l	Difficulty multipliers				G	ments	4
			Distincti	IA GETINGRA	- Ca	namon	Strategic signific	RIICE					Temporal multiplier				Dimiculty multipliers	'		1	Con	imenis	
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Habitat units delivered	User comments	Consenting body comments	GIS reference number
Urban	Developed land; sealed surface	2.737	VLow	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	70% built development within Proposed Residential Development areas		
Urban	Vegetated garden	1.173	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	2.26	30% gardens within Proposed Residential Development areas		
Urban	Developed land; sealed surface	0.04	VLow	0	N/A - Other	r 0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	Anciliary areas of hardstanding forming roads and footpaths around the Proposed Residential Development areas.		
Urban	Developed land; sealed surface	0.4993	VLow	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	LEAP		
Grassland	Modified grassland	1.8711	Low	2	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	4	0	0	Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low	1	7.14	Ancilliary areas of grassland surrounding the Proposed Residential Development areas and surrounding the LEAP.		
Grassland	Other neutral grassland	0.7231	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	S	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	5.57	Restored areas of grassland around the ponds.		
Grassland	Mixed scrub	0.35	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	2.58	New areas of scrub planting at the peripheries of the development and near to the LEAP.		
Heathland and shrub	Ponds (non-priority habitat)	0.5169	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	3	0	0	Standard time to target condition applied	3	0.899	Low	Standard difficulty applied	Low	1	4.09	Sensitively designed attenuation basins.		
Individual trees	Urban tree	0.3013	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27	0	0	Standard time to target condition applied	27	0.382	Low	Standard difficulty applied	Low	1	0.92	x74 new small trees planted around the Proposed Residential Development areas.		
		_		_														_					+
		_		_														_					+
				_																1			+

Total habitest area 8.21

Site Area (Endoding area of Individual trees and Green walls) 7.91

M[®] to bectares conversion tool: Select a unit Hectares 1/2

Total Units 22.58

	ne / Show Rows	i.																												
ain Menu Inst	tructions								Г									tal development/ post intervention hab	ab											
				Pareline habitat	•					Propos	ed Nebitet (Pre-populated but can be oversidden)	Obsage in distincti	reness and condition					Rostogic	alguillosson			Tempo	orel risk multiplier			Difficulty risk	outtpliers			Comments
Baseline labitat	Total habitet eren (hectares)	Sanslino distinctiveness bend	Baselina distinctiveness score	Baseline ocedition oxiogory	laneline condition score	Resultes straingle significance oxingory	Pareline strategic significance score	Baseline imbiint units	Required Action to Most Trading Rules	Proposed Broad Habitet	Proposed inhibits	Distinctiveness change	Condition change	Area (hactarea)	Distinctiveness	Soore	Condition Score	Strategie alguiliossos	Strategio significance	Sirelegic position target condition (years)	Eabitet enhanced advence (year	Delay in starting inhibited enhancement (years)	Standard or adjusted time to terget condition	Pixel time to target condition (years)	nal time to Stand target difficul multiplier enhance	rd y of Applied difficulty multi ment	Plant difficulty of enhancement	Difficulty sufficient spplied.	User comments	Consenting body comm
Grazzland - Other neutral grazzland	0.908	Medium	4	Poor	1	High strategic significance	1.15	4.18	Same broad habitet or a higher distinctiveness habitet received (C)	Greesland	Other neutral grassland	Medium - Medium	Poor - Good	0.908	Medium		Good 3	Formally identified in local strat	97 High strategic significance	1.15 15	0	0	Standard time to target condition applied	15	0.586 Lo	Standard difficulty appl	d Low	1 9.07	Enhanced crassland within field F1	
Grazzland - Other neutral grazzland	3.2897	Medium	4	Moderate	2	High strategic zignificance	1.15	30.27	Same broad habitet or a higher distinctiveness habitet required (2)	Grandand	Other neoiral grassland	Medium - Medium	Moderate - Good	3.0712	Medium	4	Good 3	Formally identified in local strat		1.15 10	0	0	Standard time to target condition applied	10	0.700 Lo	Standard difficulty appl	d Low	1 38.15		
Grazzland - Other neutral grazzland	0.9191	Medium	4	Moderate	2	High strategic zicnificance	1.15	8.46	Same broad habitat or a higher distinctiveness habitat required (2)	Gransland	Other neolinal grassland	Medium - Medium	Moderate - Good	0.9191	Medium	4	Good 3	Formally identified in local strat	97 High strategic significance	1.15 10	0	0	Standard time to target condition applied	10	0.700 Lo	Standard difficulty appl	d Low	1 11.42	Datamond or assigned within field F3	
Grazzland - Other neutral grazzland	0.11	Medium	4	Moderate	2	High strategic zicrificance	1.15	1.01	Same broad habitet or a higher distinctiveness habitet required (2)	Greesland	Other neutral grassland	Medium - Medium	Moderate - Good	0.11	Medium	4	Good 3	Formally identified in local strat	97 Migh strategic zignificance	1.15 10	0	0	Standard time to target condition applied	10	0.700 Lo	Standard difficulty appl	d Low	1 1.37	Enhanced craspland within field File	
Grazzland - Other neutral grazzland	0.8178	Medium	4	Moderate	2	High strategic significance	1.15	7.52	Same broad habitet or a higher distinctiveness habitet required (2)	Grassland	Other neutral grassland	Medium - Medium	Moderate - Good	0.8178	Medium	4	Good 3	Formally identified in local strat		1.15 10	0	0	Standard time to target condition applied	10	0.700 Lo	Standard difficulty appl	d Low	1 10.16	Dahanced grassland within field F3b	
Grazzland - Other neutral grazzland	5.1957	Medium	4	Pairly Poor	1.5	High strategic zicrificance	1.15	35.57	Same broad habitat or a higher distinctiveness habitat required (2)	Gransland	Other neutral grassland	Medium - Medium	Fairly Poor - Good	4.9468	Medium		Good 3	Formally identified in local strat	97 High strategic zizzificance	1.15 12	0	0	Standard time to target condition applied	12	0.652 Lo	Standard difficulty appl	d Low	1 56.39	Enhanced grassland within field F4	
Grazzland - Other neutral grazzland	2.5372	Medium	4	Pairly Poor	1.5	High strategic significance	1.15	17.51	Same broad habitat or a higher distinctiveness habitat required (2)	Greesland	Other peatral grassland	Medium - Medium	Fairly Poor - Good	0.5839	Medium	4	Good 3	Formally identified in local strat	97 High strategic zignificance	1.15 12	0	0	Standard time to target condition applied	12	0.652 Lo	Standard difficulty appl	d Low	1 6.43	Enhanced crasuland within field FS	
Grazzland - Other neutral grazzland	3.1148	Medium	4	Poor	1	High strategic zignificance	1.15	14.33	Same broad habitat or a higher distinctiveness habitat required (2)	Grassland.	Other nestral grassland	Medium - Medium	Poor - Good	2.5253	Medium	4	Good 3	Formally identified in local strat	97 High strategic zignificance	1.15 15	0	0	Standard time to target condition applied	15	0.586 Lo	Standard difficulty appl	d Low	1 25.23	Enhanced crasuland within field F9	
Grazzland - Other neutral grazzland	4.0728	Medium	4	Moderate	2	High strategic significance	1.15	37.47	Same broad habitat or a higher distinctiveness habitat required (2)	Gransland	Other neutral grassland	Medium - Medium	Moderate - Good	2.6892	Medium	4	Good 3	Formally identified in local strat	97 High strategic stanificance	1.15 10		0	Standard time to target condition applied	10	0.700 Lo	Standard difficulty appl	d Low	1 33.15	Debancari revassiand within fall-F12	
							_														_	-								
	_												Total habitet area	_														101.87		

t Name: Land north of Wilderness Lane, Great Barr, Birmingham Map Refere B-1 On-Site Hedge Baseline Hedgerow summary

Total Net Unit Change 5.18

Total Net % Change 10.81%

Trading Rules Satisfied Yes √

Condense / Show Columns Condense / Show Rows

	Existing hedgerow habitats			Distinctiveness		Conditio	n	Strategic significa		Required Action to	Ecologic baselin	
Baseline ref	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Meet Trading Rules	Total hedgero units
1	Hl	Native hedgerow	0.184	Low	2	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	1.27
2	H2	Native hedgerow	0.12	Low	2	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.83
3	НЗ	Native hedgerow - associated with bank or ditch	0.096	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.88
4	H4	Native hedgerow with trees	0.062	Medium	4	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.86
5	H5	Native hedgerow - associated with bank or ditch	0.12	Medium	4	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	1.66
6	Н6	Native hedgerow	0.123	Low	2	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.88
7	H7	Species-rich native hedgerow with trees - associated with bank or ditch	0.129	V.High	8	Good	3	Formally identified in local strategy	High strategic significance	1.15	Like for like	3.56
8	H8	Native hedgerow	0.051	Low	2	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.35
9	H9	Native hedgerow - associated with bank or ditch	0.056	Medium	4	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.77
10	H10	Native hedgerow with trees - associated with bank or ditch	0.165	High	6	Good	3	Formally identified in local strategy	High strategic significance	1.15	Like for like or better	3.42
11	H11	Native hedgerow with trees - associated with bank or ditch	0.119	High	6	Good	3	Formally identified in local strategy	High strategic	1.15	Like for like or better	2.46
12	H12	Species-rich native hedgerow with trees - associated with bank or ditch	0.147	V.High	8	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Like for like	2.70
13	H13	Native hedgerow with trees - associated with bank or ditch	0.149	High	6	Good	3	Formally identified in local strategy	High strategic	1.15	Like for like or better	3.08
14	H14	Native hedgerow - associated with bank or ditch	0.081	Medium	4	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	1.12
15	H15	Native hedgerow with trees	0.178	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness	1.64
16	H16	Native hedgerow with trees - associated with bank or ditch	0.214	High	6	Good	3	Formally identified in local strategy	High strategic	1.15	Like for like or better	4.43
17	H17	Native hedgerow	0.165	Low	2	Good	3	Formally identified in local strategy	High strategic	1.15	Same distinctiveness	1.1
18	H18	Native hedgerow	0.052	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.3
19	H19	Native hedgerow	0.043	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.3
20	H20	Native hedgerow	0.06	Low	2	Moderate	2	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.2
21	H21	Native hedgerow	0.138	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.9
22	H22	Native hedgerow	0.069	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.4
23	H23	Native hedgerow with trees	0.087	Medium	4	Moderate	2	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.8
24	H24	Native hedgerow with trees	0.053	Medium	4	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.7
25	H25	Native hedgerow with trees	0.071	Medium	4	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.9
26	H26		0.122	Medium	4	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	1.6
27	H27	Native hedgerow with trees Native hedgerow with trees	0.122	Medium	4	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	1.3
28	H28	-	0.091	Low	2	Moderate	2		significance High strategic	1.15	band or better Same distinctiveness	0.1
		Native hedgerow						Formally identified in local strategy	significance High strategic	_	band or better Same distinctiveness	-
29	H29	Native hedgerow	0.099	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.6
30	H30	Native hedgerow	0.036	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.2
31	H31	Native hedgerow with trees	0.083	Medium	4	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	1.1
32	H32	Native hedgerow	0.196	Low	2	Good	3	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	1.3
33	H33	Non-native and omamental hedgerow	0.046	V.Low	1	Poor	1	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	0.0
34	TL1	Line of trees - associated with bank or ditch	0.42	Low	2	Moderate	2	Formally identified in local strategy	significance High strategic	1.15	band or better Same distinctiveness	1.9
35	TL2	Line of trees	0.074	Low	2	Moderate	2	Formally identified in local strategy	significance	1.15	band or better	0.3
36	TL3	Line of trees	0.16	Low	2	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.3
37	TL4	Line of trees	0.097	Low	2	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.4
38	TL5	Line of trees	0.339	Low	2	Good	3	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	2.3
39 40												
41 42												
43			4.53									47.5

	Retention ca	ategory bio	diversity valu	е		Com	ments	1
Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Consenting body comments	GIS reference number
0.172	0	1.19	0.00	0.01	0.08			
0.12	0	0.83	0.00	0.00	0.00			
0	0.085	0.00	0.78	0.01	0.10			
0.062	0	0.86	0.00	0.00	0.00			
0.12	0	1.66	0.00	0.00	0.00			
0.123	0	0.85	0.00	0.00	0.00			
0.129	0	3.56	0.00	0.00	0.00			
0.051	0	0.35	0.00	0.00	0.00			
0.056	0	0.77	0.00	0.00	0.00			
0.165	0	3.42	0.00	0.00	0.00			
0.119	0	2.46	0.00	0.00	0.00			
0	0.147	0.00	2.70	0.00	0.00			
0.149	0	3.08	0.00	0.00	0.00			
0.081	0	1.12	0.00	0.00	0.00			
0	0.178	0.00	1.64	0.00	0.00			
0.214	0	4.43	0.00	0.00	0.00			
0.165	0	1.14	0.00	0.00	0.00			
0.052	0	0.36	0.00	0.00	0.00			
0.043	0	0.30	0.00	0.00	0.00			
0	0.06	0.00	0.28	0.00	0.00			
0.129	0	0.89	0.00	0.01	0.06			
0.049	0	0.34	0.00	0.02	0.14			
0	0.079	0.00	0.73	0.01	0.07			
0.05	0	0.69	0.00	0.00	0.04			
0.071	0	0.98	0.00	0.00	0.00			
0.122	0	1.68	0.00	0.00	0.00			
0.097	0	1.34	0.00	0.00	0.00			
0	0.025	0.00	0.12	0.00	0.00			
0.088	0	0.61	0.00	0.01	0.08			
0	0	0.00	0.00	0.04	0.25			
0.067	0	0.92	0.00	0.02	0.22			
0.196	0	1.35	0.00	0.00	0.00			
0.046	0	0.05	0.00	0.00	0.00			
0.405	0	1.86	0.00	0.02	0.07			
0.074	0	0.34	0.00	0.00	0.00			
0.16	0	0.37	0.00	0.00	0.00			
0.07	0	0.32	0.00	0.03	0.12			
0.339	0	2.34	0.00	0.00	0.00			
3.78	0.57	40.45	6.24	0.17	1.24			

Name: Land north of Wilderness Lane, Great Barr, Birmingham Map Refer
B-2 On-Site Hedge Creation

Condense / Show Columns Condense / Show Rows

Main Menu Instructions

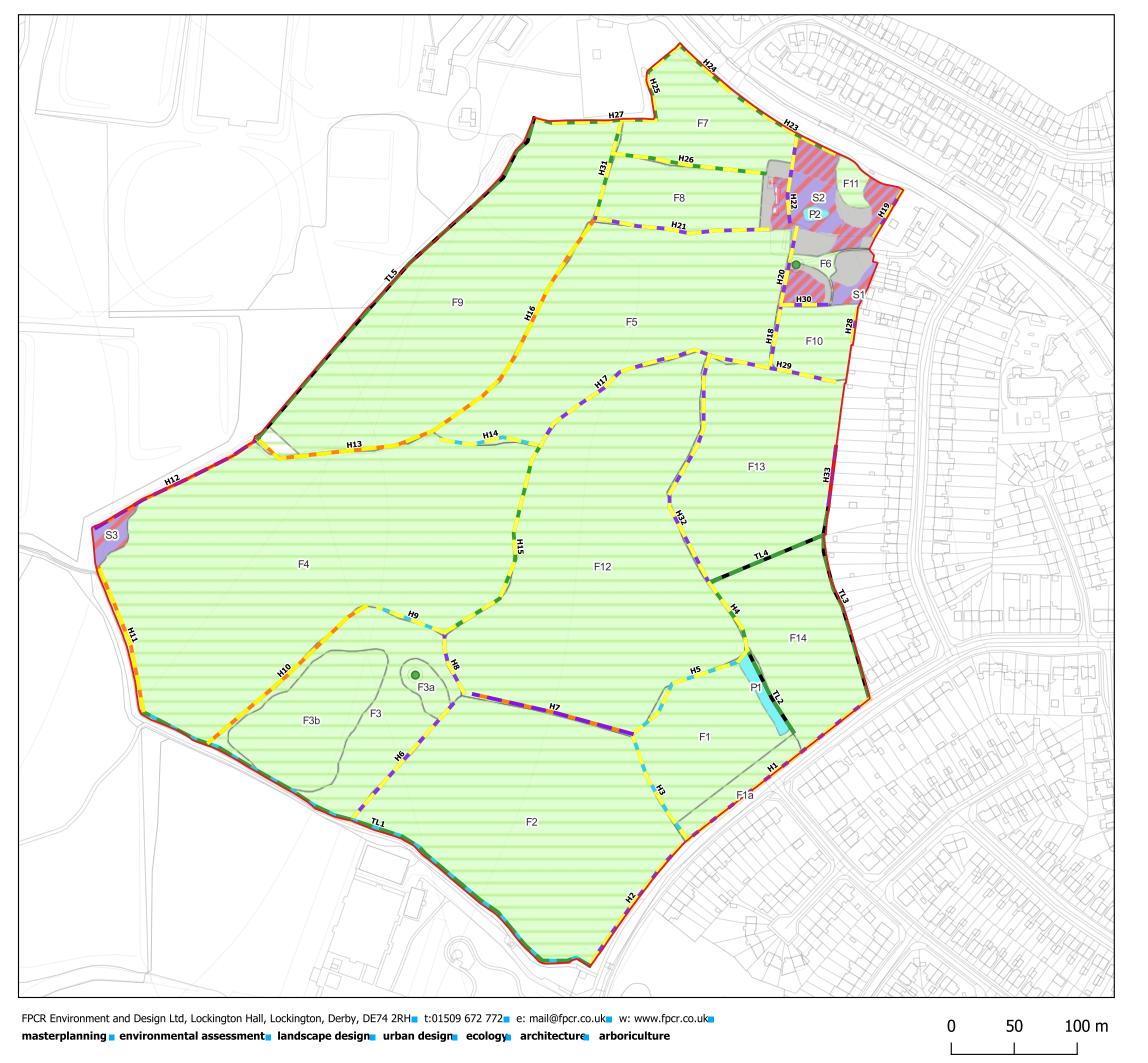
																4								
Proposed habitats		Distinctiveness		Distinctiveness		Distinctiveness		tinctiveness Condition		Strategic significance		Temporal multiplier						Difficulty risk multipliers			Hedge units delivered	Com	nments	
Baseline ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	delivered	User comments	Consenting body comments	GIS reference number
1		Species-rich native hedgerow with trees	0.09	High	6	Good	3	Formally identified in local strategy	High strategic significance	1.15	20	0	0	Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	0.91			
2		Species-rich native hedgerow with trees	0.1	High	6	Good	3	Formally identified in local strategy	High strategic significance	1.15	20	0	0	Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	1.02			
3		Species-rich native hedgerow with trees	0.122	High	6	Good	3	Formally identified in local strategy	High strategic significance	1.15	20	0	0	Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	1.24			
4		Species-rich native hedgerow with trees	0.05	High	6	Good	3	Formally identified in local strategy	High strategic significance	1.15	20	0	0	Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	0.51			
- 8																								
6																								
7																								
- 8																								\perp
9																							1	
			0.36]																	3.67			

nd north of Wilderness Lane, Great Barr, Birmingham
B-3 On-Site Hedge Enhancement Condense / Show Columns Condense / Show Rows

Main Menu Instructions

Post development/ post intervention habitats	
i i i	Diff.

		Post development/ post intervention habitats													
	Baseline Habitats		Change in distinctiv	eness and condition		Distinctiveness	Condition	Strategic significance	Temporal multiple	ier	Difficulty risk multipliers		Com	ments	
Baseline ref	Baseline habitat	Proposed (Pre-populated but can be overridden)	Distinctiveness movement	Distinctiveness movement Condition movement Length (km) Distinctiveness movement	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of enhancement	Hedge units delivered	User comments	Consenting body comments	GIS reference number	
3	Native hedgerow - associated with bank or ditch	Native hedgerow - associated with bank or ditch	Medium - Medium	Moderate - Good	0.085	Medium	Good	Formally identified in local strategy	Standard time to target condition applied	2	Low	1.15			Н3
12	Species-rich native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow with trees - associated with bank or ditch	V.High - V.High	Moderate - Good	0.147	V.High	Good	Formally identified in local strategy	Standard time to target condition applied	4	Low	3.88			H12
15	Native hedgerow with trees	Native hedgerow with trees	Medium - Medium	Moderate - Good	0.178	Medium	Good	Formally identified in local strategy	Standard time to target condition applied	4	Low	2.35			H15
20	Native hedgerow	Native hedgerow	Low - Low	Moderate - Good	0.06	Low	Good	Formally identified in local strategy	Standard time to target condition applied	2	Low	0.40			H20
23	Native hedgerow with trees	Native hedgerow with trees	Medium - Medium	Moderate - Good	0.079	Medium	Good	Formally identified in local strategy	Standard time to target condition applied	4	Low	1.04			H23
28	Native hedgerow	Native hedgerow	Low - Low	Moderate - Good	0.025	Low	Good	Formally identified in local strategy	Standard time to target condition applied	2	Low	0.17			H28
_					_										
-															
					0.57							8.99			
					0.57	_						6.88			



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Red Line Boundary

Baseline Habitats

Bracken

Bramble scrub

Developed land; sealed surface

Mixed scrub

Other neutral grassland

Ponds (non-priority habitat)

Tall forbs

Baseline Hedgerows

- Non-native and ornamental hedgerow H33
- Line of trees TL2, TL3, TL4, TL5
- Line of trees associated with bank or ditch TL1
- Native hedgerow H1, H2, H6, H8, H17, H18, H19, H20, H21, H22, H28, H29, H30, H32
- Native hedgerow associated with bank or ditch H3, H5, H9, H14
- Native hedgerow with trees H4, H15, H23, H24, H25, H26 H27, H31
- Native hedgerow with trees associated with bank or ditch H10, H11, H13, H16
- Species-rich native hedgerow with trees associated with bank or ditch H7, H12

Baseline Trees

Existing Medium Rural Tree



Wain Estates

Land North of Wilderness Lane, Great Barr, Birmingham

> issue date 10/6/2024

BASELINE HABITAT PLAN



figure number