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Technical Note

Project:	Land to the West of Park Farm, Thornbury
Planning reference:	PT18/6450/O & APP/P0119/W/21/3288019
Title:	Metric 3.1: Changes to Biodiversity Net Gain Assessment
Date:	06 October 2022
Client:	Barwood Development Securities and The North-West Thornbury Land Consortium
Reference:	221006_P721_Thornbury_BNG Note 3.1_01: October 2022
Prepared:	D. Scholefield MCIEEM
Approved:	M. Jones CEnv MCIEEM

1 Introduction

1.1 In February 2022, EAD Ecology was commissioned by Barwood Development Securities and The North-West Thornbury Land Consortium to prepare a Biodiversity Net Gain (BNG) Assessment to inform the Planning Appeal for the proposed development at 'Land to the west of Park Farm, Thornbury'; the proposed development is hereafter referenced as the 'Proposed Appeal Development' and the site is hereafter referenced as the 'Appeal Site'). The BNG Assessment was undertaken in accordance with Metric 3.0 (Natural England, 2021); refer to Core Document P1.13. Since the submission of the BNG assessment, a revised version of the Metric, Metric 3.1 (Natural England 2022a), has been published. This Technical Note summarises the pertinent changes between Metric 3.0 and Metric 3.1 and provides an updated BNG assessment for the Proposed Appeal Development following Metric 3.1 methodology.

2 Changes to Defra BNG Metric

2.1 Metric 3.1 represents an evolution of the Metric 3.0, primarily focusing on clarifications to guidance and revisions to the condition assessments for specific habitats (Natural England 2022b). Changes relevant to the Proposed Appeal Development Metric calculations are summarised in Table 1 below

Table 1. Changes between Metric 3.0 and Metric 3.1 Habitat Condition Assessment Methodology (relevant to the Proposed Appeal Development and Appeal Site)

Habitat	Change between Metric 3.1 and Metric 3.0	Implications for BNG Assessment for Proposed Appeal Development under Metric 3.1
Grassland – low distinctiveness.	Habitat Condition criteria for achieving 'Good' and 'Moderate' conditions have been amended. The highest condition achievable for habitat 'failing' Habitat Condition Criteria 1 (species diversity) under	Baseline grassland Habitat Condition (Units G1 – G10) downgraded from 'Moderate' to 'Poor'. All units fail Condition 1. Lowers Habitat Value of the Appeal Site. Post- development 'Amenity grassland' Habitat Condition downgraded from 'Moderate' to 'Poor'; failure of Habitat Condition

Table 1. Changes between Metric 3.0 and Metric 3.1 Habitat Condition Assessment Methodology (relevant to the Proposed Appeal Development and Appeal Site)

Habitat	Change between Metric 3.1 and Metric 3.0	Implications for BNG Assessment for Proposed Appeal Development under Metric 3.1
	Metric 3.1 has been reduced from 'Moderate' to 'Poor'.	criteria 1. Lowers Habitat Value of the Proposed Appeal Development.
Grassland – medium, high & very high distinctiveness	Habitat Condition criteria amended to reflect differences between acid and non-acid grassland types. Additional essential criteria in Metric 3.1 (Habitat Condition Criteria 6) for achieving 'good' condition (non-acid grassland types only).	Post-development meadow grassland habitats downgraded from 'Good' to 'Moderate' Condition (reduced certainty in achieving 'Good' Habitat Condition). Lowers Habitat Value of the Proposed Appeal Development. .
Other woodland; broadleaved	Target Habitat Condition of 'Fairly Good' for newly-created 'Other woodland; broadleaved' reduced to 25 years under Metric 3.1.	Revised target for new woodland creation integrated into Metric. Increases Habitat Value of the Proposed Appeal Development.
Scrub habitats	Habitat Condition for bramble scrub fixed through the metric.	Applied through metric - No change in Habitat Value / Habitat Condition.

3 Methodology

3.1 The updated BNG assessment follows the methodology set out in Metric 3.1 Guidance (Panks *et al* 2022 a and b). Modifications from the previous assessment under Metric 3.0 (Core Document P1.13) are limited to the elements set out in Table 1. No further changes to the baseline or post-development habitats result from application of Metric 3.1.

3.2 Revised BNG Metric summary tables are provided in Appendix 1. Condition Assessments for Baseline, Created and Enhanced Habitats and Hedgerows are provided in Appendices 2 and 3. Assumptions applied to Metric 3.1 are provided in Appendix 4. The completed 3.1 Metric has also been supplied as a digital file (Excel spreadsheet).

4 Biodiversity Net Gain Metric 3.1 Conclusions

4.1 Under Metric 3.1, the pre-development (Appeal Site) biodiversity value is 82.39 'Habitat Units' (reduced from 161.01 Habitat Units under Metric 3.0 due to the revised Condition score applied to the existing grassland habitats) and 43.40 Hedgerow units. The post-development (Proposed Appeal Development) biodiversity value would be 143.44'Habitat Units' (reduced from 167.45 Habitat Units under Metric 3.0 due to the revised Condition score applied to the proposed grassland habitats) and 60.36 Hedgerow Units

4.2 The Proposed Appeal Development demonstrates a Biodiversity Net Gain of +61.06 Habitat Units (a gain of +74.11%) and +16.97 Hedgerow Units (a gain of +39.09%). All 'Habitat Trading' requirements specified in Metric 3.1 are satisfied. The Proposed Appeal Development would deliver substantial Biodiversity Net Gain within the Appeal Site, in excess of current national and local biodiversity planning policy requirements (NPPF; Paragraph 180[1] and Local Plan Policy PSP19[2] respectively). ..

Table 2: Metric 3.1 BNG Summary [3]

Scenario	Unit type	Units
Appeal Site baseline (pre-development_	Habitat units	82.39
	Hedgerow units	43.40
Proposed Appeal Development[4]	Habitat units	143.44
	Hedgerow units	60.36
On-site net % change (Habitat retention, creation & enhancement)	Habitat units	74.11
	Hedgerow units	39.09%
Total net unit change (Habitat retention, creation & enhancement)	Habitat units	+61.06
	Hedgerow units	+16.97
Trading rules Satisfied?	Yes	

References

EAD Ecology (2022). Land to the West of Park Farm, Thornbury Biodiversity Net Gain Assessment. 220225_P721_Thornbury_BNG Note: February 2022. Core Document Reference P1.13. Barwood Development Securities Ltd and The North West Thornbury Landowners Consortium.

Natural England (2021) Natural England Joint Publication JP029. The Biodiversity Metric 3.0 Auditing and accounting for biodiversity calculation tool.

Natural England (2022a) Natural England Joint Publication JP039. The Biodiversity Metric 3. 1 Auditing and accounting for biodiversity calculation tool.

Natural England (2022b) Natural England Joint Publication JP039. The Biodiversity Metric 3.1 Auditing and accounting for biodiversity. Summary of Changes from Biodiversity Metric 3.0 to Version 3.1

Panks S., N White, A Newsome, M. Nash, J Potter, M Heydon, E Mayhew, M Alvarez, T Russell, C. Cashon, F. Goddard, SJ Scott, M Heaver, SH. Scott, J Treweek, B Butcher, D Stone (2022a) Biodiversity Metric 3.1. Auditing and accounting for biodiversity: User Guide. Natural England Joint Publication JP039.

[1] NPPF (2021) Paragraph 180 "*Opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate*"

[2] South Gloucestershire Local Plan: Sites and Places Plan (adopted November 2017) Policy PSP19 "*Where appropriate biodiversity gain will be sought from development proposals. The gain will be proportionate to the size of the site*"

[3] Headline figures reflect metric outputs which include built in rounding to two decimal places.

[4] Refer to v3.1 Metric Calculator for full details.

Panks S., N White, A Newsome, M. Nash, J Potter, M Heydon, E Mayhew, M Alvarez, T Russell, C. Cashon, F. Goddard, S Scott, M Heaver, SH. Scott, J Treweek, B Butcher, D Stone (2022) Biodiversity Metric 3.1 Auditing and accounting for biodiversity Technical Supplement. Natural England Joint Publication JP039

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Figure 1: Green Infrastructure Parameters Plan

Scale for planning purposes only

Revision		Date	Drn	Ckd
L	Additional Translocated Hedge	19.12.19	AT	AT

PARAMETERS

- Site Boundary
- Amenity Public Open Space (including, as required: access, play facilities, drainage, landscaping, amenity grassland, retained vegetation, pedestrian/cycle links, and all necessary infrastructure)
- Flexible Land Use Boundary (Land use boundary deviation is permitted by a limit of 5m)
- Existing Trees and hedgerows to be retained
- Veteran Tree to be retained
- Existing Trees and hedgerows to be removed as required
- Zone where hedgerow removal is permitted to enable acccess
- Woodland Structure Planting
- Zone for New Allotments
- Existing retained Water Course
- Existing footpath (PROW) to be retained
- Proposed wildlife pond
- Translocated hedgerow or new hedgerow
- Zone for parkland with meadow grassland and dispersed tree planting
- Zone for SUDS Basins with wet grassland
- Indicative Alignment of Primary Street (Exact alignment to be determined at reserved matters stage)
- Indicative Alignment of Pedestrian, Cycle and Bus Access (Sustainable Travel link - exact alignment to be determined at reserved matters stage)

PARK FARM DEVELOPMENT

- Park Farm Boundary
- Indicative Development Area (Under Construction)
- Main Street Alignment

0 50 100 150 200 250m

Project
Pickedmoor
Thornbury

N

Drawing Title
Parameter Plan
Green Infrastructure

Date	Scale	Drawn by	Check by
05.06.18	1:5000@A3	KT	AT

Project No	Drawing No	Revision
27982	9604	L

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Figure 2: Illustrative Landscape Masterplan

Legend

- Site
- Proposed pedestrian linkages
- Proposed vehicle entrances
- Proposed sustainable transport connection to Park Farm
- Existing trees and hedgerows (priority habitat)
- Existing water course (priority habitat)
- Existing standing water / pond (priority habitat)
- Proposed informal meadow grassland
- Proposed wet grassland (SuDS depression)
- Proposed Wessex Water Foul Drainage

Proposed Tree/Hedgerow Planting:

- Native woodland structure planting (mixed species sizes)
- Parkland /open space planting (mixed species sizes)
- Translocated hedgerow
- Street trees (large species)
- Trees along road frontage (large species)
- Destination Park
- Neighbourhood Greens
- Natural Play
- Existing belt of trees to be managed to thicken up with interplanting of holly understorey and climatic climax ANS tree species. Where vistas are proposed the lower canopy of the taller trees would be thinned/cleared so as to providesightline 'windows' through the tree belt towards the church tower.

1. Proposed allotments
2. Proposed SuDS surface water attenuation areas: (It is envisaged that these would be dry depressions that would periodically fill with water for short periods of time during storm events)
3. Proposed translocated hedgerow
4. Location of existing hedgerow linking to woodland
5. Proposed parkland/informal POS
6. Proposed green corridor
7. Easement for existing oil pipeline
8. Existing watercourse & proposed crossing points
9. Proposed indicative wildlife pond location
10. Existing pond (priority habitat)
11. School (1FE)
12. Indicative location of Retail/Community Hub

NOTE: This drawing should be read in conjunction with the Green Infrastructure Context Plan 16-10-PL-202 which shows the green infrastructure assets and links surrounding the site.

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Project: Land West of Park Farm, Thornbury

Title: Illustrative Landscape Masterplan

Revisions

- **Rev F:** Areas of additional planting added - 23/06/2020
- **Rev E:** Hedgerows amended - 20/12/2019
- **Rev D:** Updated masterplan - 15/11/2019
- **Rev C:** Title and GI context amended- 05/11/2018
- **Rev B:** Minor graphical amendment - 21/09/2018
- **Rev A:** Minor legend amendments - 14/09/2018
- **Rev 0:** Drawing created - 31/08/2018

Drawn by:	Checked by:	Status:	Date:	Drawing no:	Rev:
JG	PJR	Planning	31/08/2018	16-10-PL-201	F

Scale: NTS

50m 100m

Figure 3: Pre-development (Baseline) Metric Habitat Condition Assessment Plan

N

Key

- Native Species-rich Hedgerow with trees (Poor condition)
- Native Species-rich Hedgerow (Good condition)
- Native Hedgerow with trees- Associated with bank or ditch (Good condition)
- Native Species-rich Hedgerow- Associated with bank or ditch (Good quality)
- Native Species-rich Hedgerow- Associated with bank or ditch (Poor condition)
- Native Hedgerow- Associated with bank or ditch (Poor condition)
- Native Hedgerow- Associated with bank or ditch (Good condition)
- Native Hedgerow (Poor condition)
- Native Hedgerow (Moderate condition)
- Native Hedgerow (Good condition)
- Site boundary
- Bramble scrub (Condition N/A)
- Lakes- Ponds (Non-Priority Habitat) (Poor condition)
- Modified grassland (Poor condition)
- Woodland and forest- Lowland mixed deciduous woodland (Moderate condition)
- Sparsely vegetated land- Ruderal/Ephemeral (Poor condition)
- Urban - developed land; sealed surface (condition N/A)
- Woodland and forest- Lowland mixed deciduous woodland (Poor condition)

0 125 250 Metres

H1 H2 H3 H4 H5 H6 H7 H8 H9 H12 H13 H14 H15 H16 H17 H18 H19 H20 H21 H22 H23 H24 H25 H26 H27 H28 H29 H30 H31 H32

G1 G2 G3 G4 G5 G6 G7 G8 G9 G10

Sc1 Sc2 Sc3 Sc4

W1 W2

TR1

P1 P2

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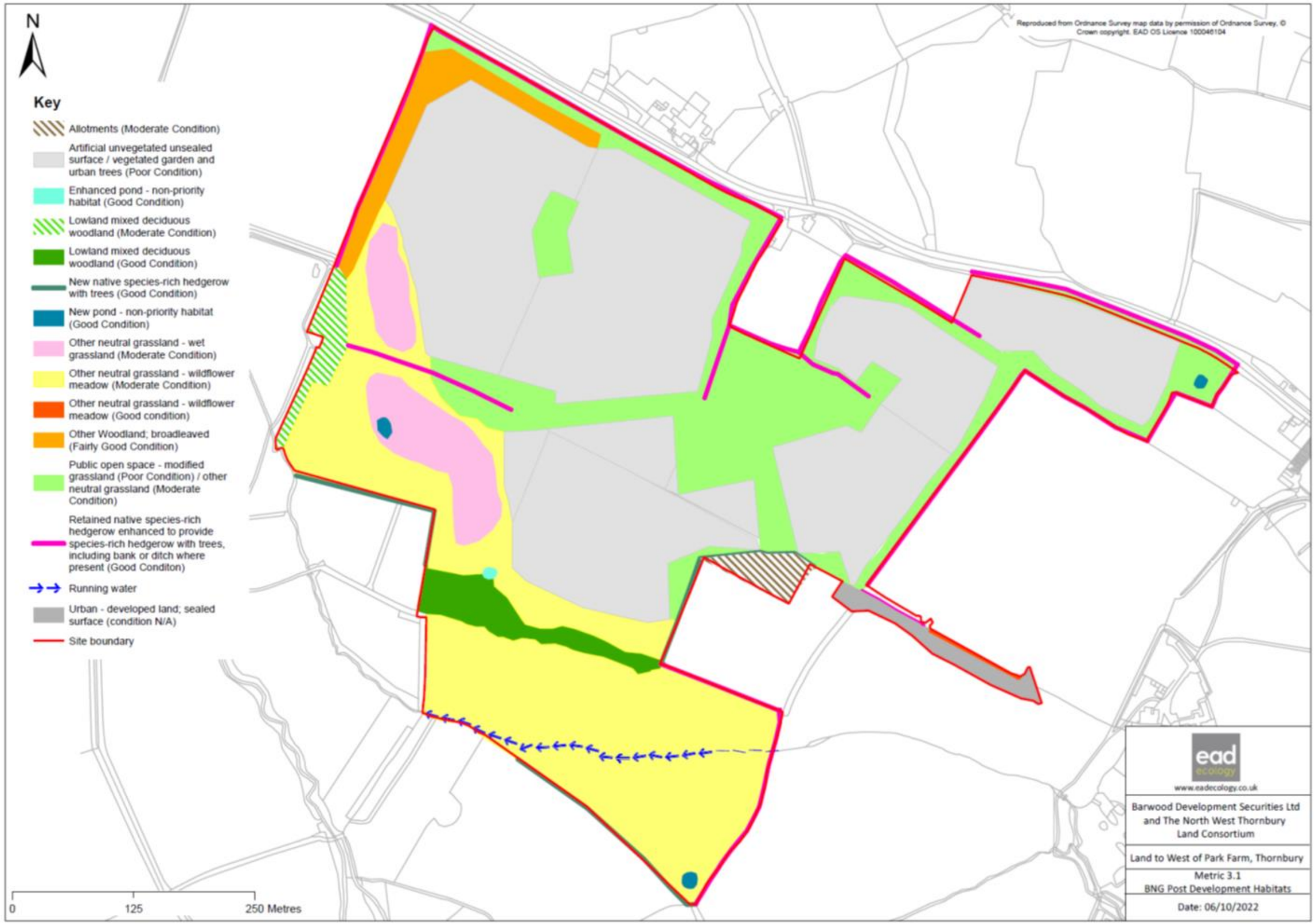
Land to West of Park Farm, Thornbury

Metric 3.1 Biodiversity Net Gain BaselineHabitat Plan

Date: 06/10/2022

Figure 4: Post-development Metric Habitat Retention, Creation and Enhancement Plan


N
Key
Allotments (Moderate Condition)
Artificial unvegetated unsealed surface / vegetated garden and urban trees (Poor Condition)
Enhanced pond - non-priority habitat (Good Condition)
Lowland mixed deciduous woodland (Moderate Condition)
Lowland mixed deciduous woodland (Good Condition)
New native species-rich hedgerow with trees (Good Condition)
New pond - non-priority habitat (Good Condition)
Other neutral grassland - wet grassland (Moderate Condition)
Other neutral grassland - wildflower meadow (Moderate Condition)
Other neutral grassland - wildflower meadow (Good condition)
Other Woodland; broadleaved (Fairly Good Condition)
Public open space - modified grassland (Poor Condition) / other neutral grassland (Moderate Condition)
Retained native species-rich hedgerow enhanced to provide species-rich hedgerow with trees, including bank or ditch where present (Good Conditon)
Running water
Urban - developed land; sealed surface (condition N/A)
Site boundary
0
125
250 Metres
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Land to West of Park Farm, Thornbury
Metric 3.1
BNG Post Development Habitats
Date: 06/10/2022

Appendix 1: Biodiversity Net Gain Metric 3.1 Habitat Baseline, Creation and Enhancement Summary Tables

Table A1.1. Baseline Habitat Metric 3.1 Summary Table (Changes under from Metric 3.0 highlighted yellow).

Habitat type	Area (ha)	Distinctiveness	Condition	Strategic significance	Total habitat units	Area Retained (ha)	Area enhanced (ha)	Baseline units enhanced	Area lost (ha)	Units lost	Assessor comments
Modified grassland	5.89	Low	Poor	Low	11.78	0	0	0	5.89	11.78	Unit G1: Fails Conditions 1, 2, 7
Modified grassland	5.82	Low	Poor	Low	11.64	0	0	0	5.82	11.64	Unit G2: Fails Conditions 1, 7
Modified grassland	4.49	Low	Poor	Low	8.98	0	0	0	4.49	8.98	Unit G3: Fails Conditions 1, 2, 7
Modified grassland	2.25	Low	Poor	Low	4.50	0	0	0	2.25	4.50	Unit G4: Fails Conditions 1, 2, 7
Modified grassland	0.34	Low	Poor	Low	0.68	0	0	0	0.34	0.68	Unit G5: Fails Conditions 1, 4
Modified grassland	1.94	Low	Poor	Low	3.88	0	0	0	1.94	3.88	Unit G6: Fails Conditions 1, 7
Modified grassland	3.43	Low	Poor	Low	6.86	0	0	0	3.43	6.86	Unit G7: Fails Condition 1
Modified grassland	3.85	Low	Poor	Low	7.70	0	0	0	3.85	7.70	Unit G8: Fails Conditions 1, 7
Modified grassland	3.15	Low	Poor	Low	6.30	0	0	0	3.15	6.30	Unit G9: Fails Condition 1
Modified grassland	2.23	Low	Poor	Low	4.46	0	0	0	2.23	4.46	Unit G10: Fails Conditions 1, 2, 7
Lowland mixed deciduous woodland	0.41	High	Poor	High	0.00	0	0.41	2.829	0	0.00	Unit W1: Lies within Nature Recovery Network; Woodland Strategic Network (refer to Appendix 4). Condition Score: 23 (small woodland unit lacking older tree class, species diversity, distinct canopy tiers and standing dead wood)
Lowland mixed deciduous woodland	0.75	High	Moderate	High	0.00	0	0.75	10.35	0	0.00	Unit W2: Lies with Nature Recovery Network; Woodland Strategic Network (refer to Appendix 4). Condition Score 29 (small woodland block lacking distinct canopy tiers and multiple stages of regrowth)
Ponds (Non-Priority Habitat)	0.02	Medium	Poor	Medium	0.04	0	0.01	0.044	0.01	0.04	Two small ponds - dry since 2016: both fail condition criteria 1,2, 8, and 9. Criteria relating to water levels n/a. Potential to provide habitat for local GCN (South Gloucestershire BAP species) Meta Population confirmed to east and west of site.
Bramble scrub	0.09	Medium	N/A	Low	0.36	0	0	0	0.09	0.36	Small bramble scrub patch in field corner; single age class. Condition pre-set
Bramble scrub	0.06	Medium	N/A	Low	0.24	0	0	0	0.06	0.24	Small bramble scrub patch in field corner; single age class. Condition pre-set
Bramble scrub	0.06	Medium	N/A	Low	0.24	0	0	0	0.06	0.24	Small bramble scrub patch in field corner; single age class. Condition pre-set
Bramble scrub	0.04	Medium	N/A	Low	0.16	0	0	0	0.04	0.16	Small bramble scrub patch in field corner; single age class. Condition pre-set
Ruderal/ Ephemeral	0.01	Low	Poor	Low	0.02	0	0	0	0.01	0.02	Small patch in field corner; Fails criteria 1, 3 and 4.
Other neutral grassland	0.1	Medium	Good	Medium	1.32	0.05	0	0	0.05	0.66	Grassland margin along STL Extension (Park Farm Buttercup Rd), precautionary condition assessment
Developed land; sealed surface	0.15	V. Low	N/A	Medium	0.0	0.15	0	0	0	0.00	Buttercup Rd
Total	**34.83**				**82.39**	**0.66**	**1.17**	**13.22**	**33.71**	**68.50**	

Table A1.2. Baseline Hedgerow Metric Summary Table

Hedge Ref	Hedgerow type	Length (km)	Distinctiveness	Condition	Strategic significance	Total hedgerow units	Length retained (km)	Length Enhanced (km)	Units retained	Units enhanced	Length lost (km)	Units lost	Assessor comments
H1	Native Hedgerow - Associated with bank or ditch	0.205	Medium	Good	Medium	2.829	0	0.205	0	2.829	0	0	Refer to Technical Note Table A2.5. Fails Condition C2 only, Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H2	Native Species Rich Hedgerow - Associated with bank or ditch	0.241	High	Poor	Medium	1.5906	0	0.241	0	1.5906	0	0	Refer to Technical Note Table A2.5. Fails Condition C1 & C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H3	Native Species Rich Hedgerow - Associated with bank or ditch	0.158	High	Good	Medium	3.1284	0	0.158	0	3.1284	0	0	Refer to Technical Note Table A2.5. Fails Condition C2 only, Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H4	Native Species Rich Hedgerow - Associated with bank or ditch	0.28	High	Poor	Medium	1.848	0	0	0	0	0.28	1.848	Refer to Technical Note Table A2.5. Fails Condition B2, C1 & C2. Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H5	Native Hedgerow	0.197	Low	Good	Medium	1.3002	0	0.15	0	0.99	0.047	0.3102	Refer to Technical Note Table A2.5. Fails Condition C2 only. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population. Assumed hedge removal for access.
H6	Native Species Rich Hedgerow with trees	0.124	High	Good	Medium	2.4552	0	0.124	0	2.4552	0	0	Refer to Technical Note Table A2.5. Fails Condition C2 only, Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population. n.
H7	Native Species Rich Hedgerow - Associated with bank or ditch	0.175	High	Poor	Medium	1.155	0	0.05	0	0.33	0.125	0.825	Refer to Technical Note Table A2.5. Fails Condition C1 & C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H8	Native Hedgerow - Associated with bank or ditch	0.134	Medium	Good	Medium	1.7688	0	0	0	0	0.134	1.7688	Refer to Technical Note Table A2.5. Fails Condition B2 & C2; Bank Present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H9	Native Hedgerow - Associated with bank or ditch	0.069	Medium	Good	Medium	0.9108	0	0.02	0	0.264	0.049	0.6468	Refer to Technical Note Table A2.5. Fails Condition B2 & C2; Ditch Present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H12	Native Species Rich Hedgerow - Associated with bank or ditch	0.178	High	Good	Medium	3.5244	0	0.178	0	3.5244	0	0	Refer to Technical Note Table A2.5. Fails Condition C2 only, Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H13	Native Species Rich Hedgerow - Associated with bank or ditch	0.114	High	Poor	Medium	0.7524	0	0.114	0	0.7524	0	0	Refer to Technical Note Table A2.5. Fails Condition B2, C1 & C2.; Ditch and bank present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H14	Native Species Rich Hedgerow - Associated with bank or ditch	0.166	High	Good	Medium	3.2868	0	0	0	0	0.166	3.2868	Refer to Technical Note Table A2.5. Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H15	Native Hedgerow - Associated with bank or ditch	0.225	Medium	Poor	Medium	0.99	0	0.15	0	0.66	0.075	0.33	Refer to Technical Note Table A2.5. Fails Condition A1, A2, B2, C1, C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population. Assumed hedge removal for access.
H16	Native Species Rich Hedgerow with trees - Associated with bank or ditch	0.045	V.High	Good	Medium	1.188	0.045	0	1.188	0	0	0	Refer to Technical Note Table A2.5. Fails Condition B2 & C2; Ditch Present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H17	Native Hedgerow with trees - Associated with bank or ditch	0.044	High	Good	Medium	0.8712	0	0	0	0	0.044	0.8712	Refer to Technical Note Table A2.5. Fails Condition C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.

Table A1.2. Baseline Hedgerow Metric Summary Table

Hedge Ref	Hedgerow type	Length (km)	Distinctiveness	Condition	Strategic significance	Total hedgerow units	Length retained (km)	Length Enhanced (km)	Units retained	Units enhanced	Length lost (km)	Units lost	Assessor comments
H18	Native Species Rich Hedgerow - Associated with bank or ditch	0.056	High	Good	Medium	1.1088	0	0.056	0	1.1088	0	0	Refer to Technical Note Table A2.5. Fails Condition C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H19	Native Species Rich Hedgerow - Associated with bank or ditch	0.171	High	Poor	Medium	1.1286	0	0.171	0	1.1286	0	0	Refer to Technical Note Table A2.5. Fails Condition C1 & C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H20	Native Hedgerow - Associated with bank or ditch	0.081	Medium	Poor	Medium	0.3564	0	0	0	0	0.081	0.3564	Refer to Technical Note Table A2.5. Fails Condition C1 & C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H21	Native Hedgerow with trees - Associated with bank or ditch	0.11	High	Good	Medium	2.178	0	0.11	0	2.178	0	0	Refer to Technical Note Table A2.5. Fails Condition C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H22	Native Hedgerow - Associated with bank or ditch	0.167	Medium	Poor	Medium	0.7348	0	0.05	0	0.22	0.117	0.5148	Refer to Technical Note Table A2.5. Fails Condition C1 & C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H23	Native Species Rich Hedgerow with trees	0.112	High	Poor	Medium	0.7392	0	0.112	0	0.7392	0	0	Refer to Technical Note Table A2.5. Fails Condition B1, C1, C2 & D2. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H24	Native Hedgerow - Associated with bank or ditch	0.125	Medium	Poor	Medium	0.55	0	0.125	0	0.55	0	0	Refer to Technical Note Table A2.5. Fails Condition C1 & C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H25	Native Hedgerow - Associated with bank or ditch	0.053	Medium	Good	Medium	0.6996	0	0.025	0	0.33	0.028	0.3696	Refer to Technical Note Table A2.5. Fails Condition C2; Ditch and bank present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H26	Native Hedgerow	0.05	Low	Moderate	Medium	0.22	0	0.05	0	0.22	0	0	Refer to Technical Note Table A2.5. Fails Conditions A2, B2, C1. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H27	Native Hedgerow	0.052	Low	Poor	Medium	0.1144	0	0.052	0	0.1144	0	0	Refer to Technical Note Table A2.5. Fails Condition B2, C1, C2 & D2. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H28	Native Hedgerow with trees - Associated with bank or ditch	0.082	High	Good	Medium	1.6236	0	0.082	0	1.6236	0	0	Refer to Technical Note Table A2.5. Fails Condition C2; Ditch present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H29	Native Hedgerow - Associated with bank or ditch	0.219	Medium	Good	Medium	2.8908	0	0.01	0	0.132	0.209	2.7588	Refer to Technical Note Table A2.5. Fails Condition B2 & C2; bank present. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H30	Native Species Rich Hedgerow	0.166	Medium	Good	Medium	2.1912	0	0.166	0	2.1912	0	0	Refer to Technical Note Table A2.5. Fails Condition B2 & C2. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H31	Native Species Rich Hedgerow - Associated with bank or ditch	0.05	High	Good	Medium	0.99	0.05	0	0.99	0	0	0.00	Adjacent to Buttercup Road (Precautionary Condition Assesment).All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
H32	Native Species Rich Hedgerow - Associated with bank or ditch	0.02	High	Good	Medium	0.4	0	0	0	0	0.02	0.40	Boundary hedge for STL (Precuationary Assesment).All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population.
Totals		**3.799**				**43.40**	**0.1**	**2.4**	**2.18**	**26.94**	**1.38**	**14.28**	

Table A1.3. Habitat Creation Metric 3.1 Summary Table (Changes from Metric 3.0 highlighted yellow).

Habitat	Area (ha)	Distinctiveness	Condition	Strategic significance	Time to target condition	Standard difficulty of creation	Applied difficulty multiplier	Habitat units delivered	Assessor comments
Other neutral grassland	8.54	Medium	Moderate	High	Standard	Low	Standard	65.75	Habitat comprises Wildflower meadow managed in accordance with LEMS to maintain species richness, varied sward height and to restrict scrub cover, bare ground and non-native species (refer to Technical Note Appendix 3). Assumed Failure of Condition 6. Habitat will contribute wildflower-rich areas to South the Gloucestershire BAP landscape-scale conservation project; West of England B-Line (refer to February 2022 Technical Note Table 1).
Other neutral grassland	1.5	Medium	Moderate	High	Standard	Low	Standard	11.55	Habitat comprises wet grassland managed in accordance with LEMS to maintain species richness, varied sward height and to restrict scrub cover, bare ground and non-native species. Assumed Failure of Condition 6. Habitat lies within Nature Recovery Network Indicative Wetland Opportunities Zone (refer to Appendix 4).
Other woodland; broadleaved	0.95	Medium	Fairly Good	High	Standard	Low	Standard	4.48	Managed in accordance with LEMS to provide native mixed species woodland and develop range of age classes and canopy tiers (refer to Appendix 22). Lies within Nature Recovery Network; Woodland Strategic Network (refer to Appendix 4).
Ponds (Non-Priority Habitat)	0.03	Medium	Good	Medium	Standard	Low	Standard	0.33	Managed in accordance with LEMS to provide permanent open water with aquatic vegetation and limited shading and absence of non-native species and fish populations. Habitat represents potential aquatic / breeding habitat for local GCN (South Gloucestershire BAP Species) Meta Population confirmed to east and west of site (refer to Appendix 4).
Allotments	0.3	Low	Moderate	Low	Standard	Low	Standard	1.16	Design / management will provide range of nectar sources and prevent establishment of non-native invasive species in accordance with Condition criteria.
Vegetated garden	6	Low	Poor	Low	Standard	Low	Standard	11.58	Private Gardens; no ongoing management. Estimate of 40% coverage of development area (refer to (refer to Appendix 4).
Modified grassland	3.4	Low	Poor	Low	Standard	Low	Standard	6.56	Amenity grassland /playing fields in POS managed in accordance with LEMS (assumed failure of Condition Criteria 1, and 2; refer to Appendix 3)
Other neutral grassland	3.4	Medium	Moderate	High	Standard	Low	Standard	26.18	Habitat comprises Wildflower meadow managed in accordance with LEMS to maintain species richness, varied sward height and to restrict scrub cover, bare ground and non-native species (refer to refer to Table A3.1). Assumed Failure of Condition 6. Habitat will contribute wildflower-rich areas to South the Gloucestershire BAP landscape-scale conservation project; West of England B-Line (refer to Appendix 4).
Urban Tree	0.2261	Medium	Poor	Low	Standard	Low	Standard	0.63	Estimate of 50 small and 50 medium street trees
Developmen t Land Sealed Surface	9.59	V.Low	N/A - Other	Low	Standard	Low	Standard	0.00	Development Area (houses, infrastructure etc.)
Total	**33.94**							**128.22**	

Table A1.4. Habitat Enhancement Metric Summary Table

Baseline						Post Development					Temporal risk multiplier			Difficulty risk multipliers		Habitat units delivered	Assessor comments
Habitat	Total habitat area (ha)	Distinctiveness	Condition	strategic significance	habitat units	Proposed habitat	Distinctiveness change	Condition change	Area (ha)	Strategic significance	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Standard or adjusted time to target condition	Standard difficulty of enhancement	Applied difficulty multiplier		
Lowland mixed deciduous woodland	0.41	High	Poor	High	2.829	Lowland mixed deciduous woodland	High - High	Poor - Moderate	0.41	High	0	0	Standard	High	Standard	3.286818	Unit W1: Lies with Nature Recovery Network; Woodland Strategic Network (refer to (refer to Appendix 4) Planting to enhance diversity of canopy and ground flora, create standing deadwood. Managed in accordance with LEMS; refer to Appendix 3.
Lowland mixed deciduous woodland	0.75	High	Moderate	High	10.35	Lowland mixed deciduous woodland	High - High	Moderate - Good	0.75	High	0	0	Standard	High	Standard	11.18747	Unit W2: Lies with Nature Recovery Network; Woodland Strategic Network (refer to Appendix 4). Planting to enhance diversity and structure of canopy and ground flora, create standing deadwood. Managed in accordance with LEMS; refer to Appendix 3.
Ponds (Non-Priority Habitat)	0.02	Medium	Poor	Medium	0.088	Ponds (Non-Priority Habitat)	Medium - Medium	Poor - Good	0.01	Medium	0	0	Standard	Medium	Standard	0.088338	Enhancement to retained pond (P2) to provide permanent open water with aquatic vegetation and limited shading and absence of non-native species and fish populations. Managed in accordance with LEMS; refer to Appendix 3. Habitat represents potential aquatic / breeding habitat for local GCN (South Gloucestershire BAP Species) Meta Population confirmed to east and west of site; refer to Appendix 4
TOTAL	**1.18**															**14.56263**	

Table A1.5. Hedgerow Creation Metric Summary Table

Ref	Proposed habitats					Temporal multiplier			Difficulty risk multipliers			Hedge units delivered	Assessor comments
	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Habitat created in advance/years	Delay in starting habitat creation/years	Time to target condition	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation		
1	Native Species Rich Hedgerow with trees	0.203	High	Good	Medium	0	0	Standard	Low	Standard	Low	1.97	Translocated hedge section buffered by POS and managed in accordance with LEMS to establish appropriate height / width, standard tree presence and species diversity; refer to Appendix 3. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
2	Native Species Rich Hedgerow with trees	0.235	High	Good	Medium	0	0	Standard	Low	Standard	Low	2.28	Translocated hedge section buffered by POS and managed in accordance with LEMS to establish appropriate height / width, standard tree presence and species diversity; refer to Appendix 3. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
3	Native Species Rich Hedgerow with trees	0.39	High	Good	Medium	0	0	Standard	Low	Standard	Low	3.79	Translocated hedge section buffered by POS and managed in accordance with LEMS to establish appropriate height / width, standard tree presence and species diversity; refer to Appendix 3. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
Total		0.83										8.04	

Table A1.5. Hedgerow Enhancement Metric Summary Table

Baseline					Post development/ post intervention habitats									Hedge units delivered	Assessor comments
						Change in distinctiveness and condition			Difficulty risk multipliers						
Metric Ref	Habitat	Length (km)	Condition	Strategic significance c	Proposed habitat	Distinctiveness movement	Condition	Strategic significance	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Time to target condition	Standard difficulty of enhancement	Applied difficulty multiplier		
1	Native Hedgerow - Associated with bank or ditch	0.205	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Medi - V.High	Good	Medium	0	0	Standard	Low	Standard	4.60	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3. for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
2	Native Species Rich Hedgerow - Associated with bank or ditch	0.241	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	4.93	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
3	Native Species Rich Hedgerow - Associated with bank or ditch	0.158	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	3.85	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3. for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
5	Native Hedgerow	0.197	Good	Medium	Native Species Rich Hedgerow with trees	Low - High	Good	Medium	0	0	Standard	Low	Standard	2.37	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
6	Native Species Rich Hedgerow with trees	0.124	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	3.14	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
7	Native Species Rich Hedgerow - Associated with bank or ditch	0.175	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	1.02	Interplant with appropriate native shrub species to increase species richness. Manage in accordance with LEMS to enhance hedge margin, establish appropriate height / width and allow development of standard trees. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.

Table A1.5. Hedgerow Enhancement Metric Summary Table

Baseline					Post development/ post intervention habitats									Hedge units delivered	Assessor comments
						Change in distinctiveness and condition			Difficulty risk multipliers						
Metric Ref	Habitat	Length (km)	Condition	Strategic significance c	Proposed habitat	Distinctiveness movement	Condition	Strategic significance	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Time to target condition	Standard difficulty of enhancement	Applied difficulty multiplier		
9	Native Hedgerow - Associated with bank or ditch	0.069	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Medium - V.High	Good	Medium	0	0	Standard	Low	Standard	0.45	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
10	Native Species Rich Hedgerow - Associated with bank or ditch	0.178	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	4.35	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Technical Note Tables A3.4 and A3.5 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
11	Native Species Rich Hedgerow - Associated with bank or ditch	0.114	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	2.33	Interplant with appropriate native shrub species to infill gaps. Manage in accordance with LEMS to enhance hedge margin, establish appropriate height / width and allow development of standard trees. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
13	Native Hedgerow - Associated with bank or ditch	0.225	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Medium - V.High	Good	Medium	0	0	Standard	Low	Standard	2.97	To be managed in accordance with LEMS to achieve all relevant condition criteria and maintain standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
16	Native Species Rich Hedgerow - Associated with bank or ditch	0.056	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	1.37	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 5 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4
17	Native Species Rich Hedgerow - Associated with bank or ditch	0.171	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	3.50	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
19	Native Hedgerow with	0.11	Good	Medium	Native Species Rich Hedgerow	High - V.High	Good	Medium	0	0	Standard	Low	Standard	2.79	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of

Table A1.5. Hedgerow Enhancement Metric Summary Table

Baseline					Post development/ post intervention habitats										Assessor comments
						Change in distinctiveness and condition			Difficulty risk multipliers						
Metric Ref	Habitat	Length (km)	Condition	Strategic significance c	Proposed habitat	Distinctiveness movement	Condition	Strategic significance	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Time to target condition	Standard difficulty of enhancement	Applied difficulty multiplier	Hedge units delivered	
	trees - Associated with bank or ditch				with trees - Associated with bank or ditch										standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
20	Native Hedgerow - Associated with bank or ditch	0.167	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Medium - V.High	Good	Medium	0	0	Standard	Low	Standard	0.99	To be managed in accordance with LEMS to achieve all relevant condition criteria and maintain standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
21	Native Species Rich Hedgerow with trees	0.112	Poor	Medium	Native Species Rich Hedgerow with trees	High - High	Good	Medium	0	0	Standard	Low	Standard	1.77	Manage in accordance with LEMS to maintain appropriate height / width and allow development of standard trees. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
22	Native Hedgerow - Associated with bank or ditch	0.125	Poor	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Medium - V.High	Good	Medium	0	0	Standard	Low	Standard	2.48	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
23	Native Hedgerow - Associated with bank or ditch	0.053	Good	Medium	Native Species Rich Hedgerow with trees	Medium - High	Good	Medium	0	0	Standard	Low	Standard	0.46	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
24	Native Hedgerow	0.05	Moderate	Medium	Native Species Rich Hedgerow with trees	Low - High	Good	Medium	0	0	Standard	Low	Standard	0.76	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
25	Native Hedgerow	0.052	Poor	Medium	Native Species Rich Hedgerow with trees	Low - High	Good	Medium	0	0	Standard	Low	Standard	0.76	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for

Table A1.5. Hedgerow Enhancement Metric Summary Table

Baseline					Post development/ post intervention habitats									Hedge units delivered	Assessor comments
						Change in distinctiveness and condition			Difficulty risk multipliers						
Metric Ref	Habitat	Length (km)	Condition	Strategic significance c	Proposed habitat	Distinctiveness movement	Condition	Strategic significance	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Time to target condition	Standard difficulty of enhancement	Applied difficulty multiplier		
															GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
26	Native Hedgerow with trees - Associated with bank or ditch	0.082	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	High - V.High	Good	Medium	0	0	Standard	Low	Standard	2.08	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
27	Native Hedgerow - Associated with bank or ditch	0.219	Good	Medium	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Medium - V.High	Good	Medium	0	0	Standard	Low	Standard	0.22	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
28	Native Species Rich Hedgerow	0.166	Good	Medium	Native Species Rich Hedgerow with trees	Medium - High	Good	Medium	0	0	Standard	Low	Standard	2.96	To be managed in accordance with LEMS to achieve all relevant condition criteria and allow development of standard trees; refer to Appendix 3 for details specific to hedge. All hedgerows represent terrestrial habitat links for GCN (South Gloucestershire BAP Species) Local meta population; refer to Appendix 4.
												Total		50.14	

Appendix 2: Baseline Habitat Condition Assessment

Table A2.1 Baseline Grassland (Modified Grassland) Condition 09/02/2022. Changes under from Metric 3.0 highlighted in yellow

Compartment	BNG Condition Criteria (Parks *et al* 2022) P= Pass/ F = Fail							Condition
	1	2	3	4	5	6	7	
G1	F	P	P	F	P	P	F	Poor
G2	F	P	P	P	P	P	F	Poor
G3	F	F	P	P	P	P	F	Poor
G4	F	F	P	P	P	P	F	Poor
G5	F	P	P	F	P	P	P	Poor
G6	F	P	P	P	P	P	F	Poor
G7	F	P	P	P	P	P	P	Poor
G8	F	P	P	P	P	P	F	Poor
G9	F	P	P	P	P	P	P	Poor
G10	F	F	P	P	P	P	F	Poor

Table A2.2 Baseline woodland Condition 09/02/2022; refer to Figure 3.

Compartment	BNG Condition Criteria (Parks *et al* 2021)													Score	Condition
	1	2	3	4	5	6	7	8	9	10	11	12	13		
W1	2	3	3	2	3	1	1	2	2	1	1	1	1	23	Poor
W2	2	3	3	2	2	3	3	3	2	2	1	1	2	29	Moderate

Table A2.3 Baseline Pond (non-Priory Habitat) Condition 09/02/2022; refer to Figure 3.

Compartment	BNG Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail									Condition
	1	2	3	4	5	6	7	8	9	
P1	F	F	N/A	P	N/A	P	P	F	F	Poor
P2	F	F	N/A	P	N/A	P	P	F	F	Poor

Table A2.4 Baseline Tall Ruderal Condition 09/02/2022; refer to Figure 3.

Compartment	BNG Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail				Condition
	1	2	3	4	
Tall Ruderal	F	P	F	F	Poor

Table A2.5 Baseline Hedgerow Condition 09/02/2022; refer to Figure 3.

Hedge Ref	Hedgerow Type	BNG Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail										Condition
		A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	
H1	Native Hedgerow - Associated with bank or ditch	P	P	P	P	P	F	P	P	F	N/A	Good
H2	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	F	F	P	P	F	N/A	Poor
H3	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	P	F	P	P	F	N/A	Good
H4	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	F	F	F	P	P	F	N/A	Poor
H5	Native Hedgerow	P	P	P	P	P	F	P	P	F	N/A	Good
H6	Native Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	F	P	P	P	P	Good
H7	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	F	F	P	P	F	N/A	Poor
H8	Native Hedgerow - Associated with bank or ditch	P	P	P	F	P	F	P	P	F	N/A	Good
H9	Native Hedgerow - Associated with bank or ditch	P	P	P	P	P	F	P	P	F	N/A	Good
H10	Outside redline – not included in assessment											
H11	Outside redline – not included in assessment											
H12	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	P	F	P	P	F	N/A	Good
H13	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	F	F	F	P	P	P	P	Poor
H14	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	P	P	P	P	F	N/A	Good
H15	Native Hedgerow - Associated with bank or ditch	F	F	P	F	F	F	P	P	F	N/A	Poor
H16	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	F	P	F	P	P	P	P	Good

Table A2.5 Baseline Hedgerow Condition 09/02/2022; refer to Figure 3.

Hedge Ref	Hedgerow Type	BNG Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail										Condition
		A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	
H17	Native Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	F	P	P	P	F	Good
H18	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	F	P	F	P	P	F	N/A	Good
H19	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	F	F	P	P	F	N/A	Poor
H20	Native Hedgerow - Associated with bank or ditch	P	P	P	P	F	F	P	P	F	N/A	Poor
H21	Native Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	F	P	P	P	P	Good
H22	Native Hedgerow - Associated with bank or ditch	P	P	P	P	F	F	P	P	F	N/A	Good
H23	Native Species Rich Hedgerow with trees	P	P	F	P	F	F	P	F	P	P	Poor
H24	Native Hedgerow - Associated with bank or ditch	P	P	P	P	F	F	P	P	F	N/A	Poor
H25	Native Hedgerow - Associated with bank or ditch	P	P	P	P	P	F	P	P	F	N/A	Good
H26	Native Hedgerow	P	F	P	F	F	P	P	P	F	N/A	Moderate
H27	Native Hedgerow	P	P	P	F	F	F	P	F	F	N/A	Poor
H28	Native Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	F	P	P	P	P	Good
H29	Native Hedgerow - Associated with bank or ditch	P	P	P	F	P	F	P	P	F	N/A	Good
H30	Native Species Rich Hedgerow	P	P	P	F	P	F	P	P	F	N/A	Good
H31	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good (Precautionary)
H32	Native Species Rich Hedgerow - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good (Precautionary

Appendix 3: Post-construction Management and Interventions

Table A3.1 Medium Distinctiveness Grassland Management / Interventions to achieve BNG Metric Condition Target. Changes from Metric 3.0 highlighted yellow.

Proposed habitat	BNG Habitat Creation Metric	BNG Condition Criteria (Parks et al 2022) P= Pass,/ F = Fail						Expected Condition	Management / Interventions to achieve criteria
		1	2	3	4	5	6		
Wildflower Meadow (POS)	Other neutral grassland	P	P	P	P	P	F	Moderate	• Sow with appropriate species rich neutral grassland native meadow seed mix. • Establish low nutrient topsoil / subsoil profile appropriate for species rich meadow grassland. • Implement varied cutting regime with removal of arisings. • Spot treatment for non-native / undesirable species
Wet grassland (POS)	Other neutral grassland	P	P	P	P	P	F	Moderate	• Sow with appropriate species rich wet grassland native meadow seed mix • Establish low nutrient topsoil / subsoil profile appropriate for species rich meadow grassland. • Implement varied cutting regime with removal of arisings. • Spot treatment for non-native / undesirable species
Wildflower Meadow (Development POS)	Other neutral grassland	P	P	P	P	P	F	Moderate	• Sow with appropriate species rich neutral grassland native meadow seed mix (shade tolerant for hedgerow margins). • Implement varied cutting regime with removal of arisings. • Spot treatment for non-native / undesirable species

Table A3.2; Modified Grassland Management / Interventions to achieve BNG Metric Condition Target. Changes from Metric 3.0 highlighted yellow.

Compartment	BNG Condition Criteria (Parks *et al* 2022) P= Pass/ F = Fail							Expected Condition	Management / Interventions to achieve criteria
	1	2	3	4	5	6	7		
Amenity Grassland (Development POS)	F	F	P	P	P	P	P	Poor	• Managed as amenity grassland / playing fields. Spot treatment for non-native / undesirable species

Table A3.2 Pond (Non-Priority Habitat) Management / Interventions to achieve BNG Metric Condition target.

Reference	Baseline Condition (refer to Table A2.3)	Post Development										Management / Interventions to achieve criteria
		BNG Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail									Expected Condition	
		1	2	3	4	5	6	7	8	9		
P2	Poor	P	P	P	P	P	P	P	P	P	Good	• Excavate existing basin to establish permanent open water. • Manage surrounding vegetation to reduce shading of bank. • Plant with appropriate native aquatic / emergent/ marginal vegetation. • Monitor and remove non-native plants and any fish
New Ponds	N/A	P	P	P	P	P	P	P	P	P	Good	• Excavate to establish permanent open water. • Plant with appropriate native aquatic / emergent/ marginal vegetation. • Monitor and remove non-native plants and any fish

Table A3.3 Woodland Management / Interventions to achieve BNG Metric Condition target.

Compartment	Baseline Condition refer to Table A2.2)	Post Development Score													Management / Interventions to achieve criteria
		BNG Condition Criteria (Parks *et al* 2021)												Expected Condition	
		1	2	3	4	5	6	7	8	9	10	11	12	13	
W1	Poor (23)	2	3	3	3	3	2	2	3	2	2	1	3	3	Moderate (31)	• Create standing dead wood • Sow appropriate woodland ground flora mix and / or plug plant with native woodland species. • Increase diversity of woody species and under canopy • Manage access to prevent damage to ground
W2	Moderate (28)	2	3	3	3	3	3	3	3	2	3	1	3	3	Good (35)	• Create standing dead wood • Sow appropriate woodland ground flora mix and / or plug plant with native woodland species. • Increase diversity of woody species and under canopy • Manage access to prevent damage to ground
Other Woodland planting	N/A	2	3	3	3	3	3	3	3	2	3	1	1	3	Good (33)	• Plant diverse range of native woody species. • Sow appropriate woodland ground flora mix and / or plug plant with native woodland species. • Manage to encourage canopy cover and coppice to establish range of canopy tiers. • Maintain easement as open space • Under sow with woodland ground flora mix

Table A3.4 Hedgerow Management / Interventions to achieve BNG Metric Condition target.

Hedge Ref	Baseline (refer to Table A2.5)		Post Development											Management / Interventions to achieve Condition (refer to Table A3.5)
			Hedgerow Type	Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail										
	Hedgerow Type	Condition		A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	
H1	Native Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9
H2	Native Species Rich Hedgerow - Associated with bank or ditch	Poor	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	2, 5, 7, 9
H3	Native Species Rich Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	5, 7, 9
H5	Native Hedgerow	Good	Native Species Rich Hedgerow with trees	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9
H6	Native Hedgerow with trees - Associated with bank or ditch	Good	Native Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 8, 9
H9	Native Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9
H12	Native Species Rich Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	5, 7, 9
H13	Native Species Rich Hedgerow - Associated with bank or ditch	Poor	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	2, 5, 7, 9

Table A3.4 Hedgerow Management / Interventions to achieve BNG Metric Condition target.

Hedge Ref	Baseline (refer to Table A2.5)		Post Development											Management / Interventions to achieve Condition (refer to Table A3.5)
			Hedgerow Type	Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail										
	Hedgerow Type	Condition		A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	
H15	Native Hedgerow - Associated with bank or ditch	Poor	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	2, 6, 7, 9
H16	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	2, 6, 7, 9
H17	Native Hedgerow with trees - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	5, 8, 9
H18	Native Species Rich Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	5, 7, 9
H19	Native Species Rich Hedgerow - Associated with bank or ditch	Poor	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	5, 7, 9
H21	Native Hedgerow with trees -Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 8, 9
H22	Native Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9

Table A3.4 Hedgerow Management / Interventions to achieve BNG Metric Condition target.

Hedge Ref	Baseline (refer to Table A2.5)		Post Development											Management / Interventions to achieve Condition (refer to Table A3.5)
			Hedgerow Type	Condition Criteria (Parks *et al* 2021) P= Pass,/ F = Fail										
	Hedgerow Type	Condition		A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	
H23	Native Species Rich Hedgerow with trees	Poor	Native Species Rich Hedgerow with trees	P	P	P	P	P	P	P	P	P	P	Good	3, 5, 8, 9
H24	Native Hedgerow - Associated with bank or ditch	Poor	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9
H25	Native Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9
H26	Native Hedgerow	Moderate	Native Species Rich Hedgerow with trees	P	P	P	P	P	P	P	P	P	P	Good	1, 2, 5, 7, 9
H27	Native Hedgerow	Poor	Native Species Rich Hedgerow with trees	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 7, 9
H28	Native Hedgerow with trees - Associated with bank or ditch	Good	Native Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 5, 8, 9
H29	Native Hedgerow - Associated with bank or ditch	Good	Native Species Rich Hedgerow with trees - Associated with bank or ditch	P	P	P	P	P	P	P	P	P	P	Good	1, 2, 5, 7, 9
H30	Native Species Rich Hedgerow	Good	Native Species Rich Hedgerow with trees	P	P	P	P	P	P	P	P	P	P	Good	5, 7, 9
New Hedge	N/A	N/A	Native Species Rich Hedgerow with trees	P	P	P	P	P	P	P	P	P	P	Good	2, 4, 6, 7, 9

Table A3.5 Hedgerow Management / Interventions specified in Table A3.4

Code	Action
1	Interplant hedgerow with native woody species to increase species richness.
2	Interplant hedgerow with native woody species to infill gaps (total <10% no gaps greater than 5m).
3	Coppice or lay hedge to promote dense regrowth from base (<0.5m vertical gap at base of canopy).
4	Translocate existing hedgerow woody component to create species rich hedgerow.
5	Manage hedgerow to maintain minimum height and width > 1.5m.
6	Manage hedgerow to increase minimum height and width to > 1.5m.
7	Identify suitable trunks along length of hedgerow (> 1 per 30m of hedgerow), mark and avoid cutting during regular maintenance to establish standard trees. Plant new standards in hedgerows where existing trunks are not present.
8	Maintain health of existing standard trees within hedgerow.
9	Manage >1m width margin adjacent to hedgerow base (at least one side) to provide appropriate undisturbed vegetated buffer (<5% non-native or undesirable species).

Appendix 4: Metric3.1 Assessment Methodology and assumptions

Pre-development habitats

Extended Phase 1 Habitat Surveys of the site were undertaken by EAD Ecology from 2016 to 2018 to inform the Ecological Impact Assessment (Environmental Statement Chapter 12, Barwood 2019). The Phase 1 Habitat Survey followed Institute of Environmental Assessment (IEA) guidelines (1995) and JNCC methodology (2010) to identify the habitat types present.

An update Extended Phase 1 Habitat Survey of the site was undertaken by EAD Ecology on 9 February 2022. This information was used to undertake a Habitat Condition Assessment of all habitats in accordance with Defra Metric 3.1 Criteria (Panks et al, 2022 a and b). Pre-intervention habitat areas and lengths have been measured from geo-referenced plans within ArcGIS.

Whilst February is considered a sub-optimal period for Condition Assessment (Panks et al 2022b), the pre-existing survey information, habitats present and a precautionary approach to Condition Criteria assessment ensured that the baseline survey was appropriate to inform the BNG Assessment.

Post-development habitats

The habitat areas are based on the Green Infrastructure Parameter Plan and Illustrative Landscape Masterplan submitted with the Environmental Statement (refer to Figures 1 and 2 respectively) and measured from geo-referenced plans within ArcGIS.

The proposed Appeal Development includes 6.8ha of 'Amenity Public Open Space' of underdetermined habitat type; refer to Figure 1. This area is expected to include landscaping, amenity and drainage functions. For the purposes of this BNG assessment, this area has been classified in the Metric as follows:

- 3.4 ha of 'Modified grassland' to reflect likely amenity grassland and playing field provision.
- 3.4 ha of 'Other Neutral Grassland' to reflect expected landscape buffers to retained / proposed hedgerows and trees and provision of other low intensity POS e.g. wildflower meadow.

Attenuation areas are designed as periodically inundated depressions5, which will support species-rich wet grassland integrated into the large extent of surrounding informal public open space. The Metric therefore classifies this habitat as 'Other Neutral Grassland'.

Proposed development parcels have been classified based on the following assumptions:

- An estimated quantum of 60% parcel area as 'Artificial Un-vegetated Sealed Surface'.
- An estimated quantum of 40% parcel area as 'Vegetated garden'6
- An estimate of 50 medium and 50 small 'urban' trees delivered within land used for school, retail and transport functions (e.g. streets, footpaths, parking courts).

Hedgerow calculations allow for creation of site access points where identified on the GI Parameters Plan (H5 and H15). Retained hedgerows will be enhanced where feasible to increase distinctiveness and condition.

[5] 1.1m deep with side slopes ranging between 1 in 4 and 1 in 12

[6] This figure is based on professional experience and provides an average quantum of garden space delivered across large residential and mixed-use developments, which include units of varying size and a range of densities.

Determination of expected post-development habitat condition is based on the implementation of a Landscape and Ecological Management Strategy (LEMS) in accordance with the mitigation set out in Chapter 12 of the ES. The LEMS would detail the management for all ecological measures in order to meet relevant Metric habitat condition criteria.

The 'Assessors Comments' within the Site Habitat /Hedgerow Creation and Site Habitat/Hedgerow Enhancement Metric Tables provide further information on the measures proposed to achieve the targeted habitat type and/or condition. All interventions proposed to achieve the conditions specified in the Metric are detailed in Appendices. It is considered that all measures are realistic and achievable.

Strategic Significance / Delivery

The Strategic Significance of Baseline and Post Construction habitats applied to the Metrics have been assigned in accordance with the Metric guidance (Panks et al 2022 a and b), with reference to site-specific information; refer to Table AX.1. The 'Assessors Comments' within the Metric Tables provide further justification for the 'Strategic Significance' applied to individual habitats.

Table A4.1: BNG Metric Strategic Significance Criteria

Strategic Significance	Criteria applied in BNG Metric	Relevant Habitats
Within an area formally identified in a local strategy (High).	Specific habitats located within the West of England Nature Recovery Network strategic networks.[7]	Lowland Mixed Deciduous Woodland Other broadleaved woodland
	Specific habitats contributing to landscape-scale conservation projects identified in the South Gloucestershire Biodiversity Action Plan.[8, 9]	Other Neutral Grassland (species-rich wildflower meadow)
Location ecologically desirable but not in local strategy (Medium).	Habitats that can contribute to the Favourable Conservation Status (FCS) of local populations of notable or South Gloucestershire BAP Priority Species confirmed as present in the local landscape (i.e. great crested newt) by increasing extent and quality of the local habitat resource and improving landscape connectivity.	All hedgerows (GCN) Ponds (GCN)
Area/compensation not in local strategy/ no local strategy: (Low).	All other habitats.	Tall ruderal, bramble scrub, modified grassland, allotments , vegetated garden, urban trees and un-vegetated sealed surface

[7] https://wenp.org.uk/#maps
[8] https://www.southglos.gov.uk/documents/Biodiversity-Action-Plan-2016-26.pdf
[9] https://www.buglife.org.uk/our-work/b-lines/b-lines-south-of-england

No site or development-specific risks which would affect either the difficulty or time to target condition for the proposed habitat creation and enhancement have been identified. In the absence of an approved phasing strategy[10], it is presumed that there will be no advance habitat creation/-enhancement or delay in delivery of the proposed habitats.

References

Barwood Development Securities Ltd and The North West Thornbury Landowners Consortium (2019) Environmental Statement. Land to the West of Park Farm, Thornbury, South Gloucestershire. December 2019

Barwood Development Securities Ltd and the North West Thornbury Landowner Consortium and South Gloucestershire Council (2022) Land West of Park Farm, Thornbury. Statement of Common Ground Local Planning Authority Reference Number – PT18/6450/O PINS Reference: APP/P0119/W/21/3288019 February 2022 (Version FINAL SIGNED)

Institute of Environmental Assessment, (1995). Guidelines for baseline ecological assessment. Chapman and Hall (Spon).

JNCC (2010). Handbook for Phase-1 Habitat Survey: a technique for environmental audit. JNCC, Peterborough.

Natural England (2022) Natural England Joint Publication JP039. The Biodiversity Metric 3.1 Auditing and accounting for biodiversity.

Panks S., N White, A Newsome, M. Nash,, J Potter, M Heydon, E Mayhew, M Alvarez, T Russell, C. Cashon, F. Goddard, S Scott, M Heaver, SH. Scott, J Treweek, B Butcher, D Stone (2022a) Biodiversity Metric 3.1. Auditing and accounting for biodiversity: User Guide. Natural England Joint Publication JP039

Panks S., N White, A Newsome, , M. Nash,, J Potter, M Heydon, E Mayhew, M Alvarez, T Russell, C. Cashon, F. Goddard, S Scott, M Heaver, SH. Scott, J Treweek, B Butcher, D Stone (2022) Biodiversity Metric 3.1 Auditing and accounting for biodiversity Technical Supplement. Natural England Joint Publication JP039

[10] Environmental Statement paragraph 3.6.1: *A detailed phasing strategy is not confirmed at this stage, but the planning application approval would be subject to a condition requiring the submission of a phasing plan prior to commencement.*