Appendix 12: Biodiversity Net Gain assessment

Biodiversity Net Gain Assessment

1   Methods and assumptions

A Biodiversity Net Gain (BNG) assessment of the development proposals of the Site was undertaken. The BNG assessment utilised Defra Biodiversity Metric calculation tool (version 4.0, Natural England 2023) with reference to supporting documents (Natural England 2023a, 2023b & 2023c), to quantify the net change in habitats as a result of the proposed development. The completed Metric has been supplied as a digital file (Excel spreadsheet).

Pre-development habitats

The onsite habitat, and hedgerow baseline was informed by a Habitat Condition Assessment (HCA) survey undertaken by an experienced (FISC level 4) ecologist from EAD Ecology on 13 June 2023 (refer to Tables A12.2, A12.3 and 12.4, and the Baseline Condition Assessment Plan (Figure A12.1) and separate Biodiversity Metric spreadsheet (Tables A12.5 to A12.9). All baseline habitat information was gathered prior to any construction activity within the Site, and the Habitat Condition Assessments followed relevant methodologies (Natural England 2023c).

Baseline habitat measurements were undertaken using QGIS, then consolidated and incorporated into the metric using the Natural England Biodiversity Metric 4.0 GIS import tool (Natural England 2023 & 2023b). Baseline tree areas were calculated using the integrated Metric 4.0 Individual tree helper.

Due to differences in habitat definitions between UKHab and Phase 1 Habitat survey, the scattered trees within the grounds of Tidcombe Hall have been mapped and assessed within the baseline as broadleaved woodland.

Post-development habitats

Post-development habitat areas shown are based on the Illustrative Layout prepared for the planning application (Ref: 230301 L 02 02 E; Clifton Emery Design 2023); refer to Figure 2 and Figure A12.2. Habitat measurements were undertaken on georeferenced plans using QGIS, then consolidated and incorporated into the metric using the Natural England Biodiversity Metric 4.0 GIS import tool. Areas for proposed trees were calculated in accordance with guidance (Natural England 2023a) using the integrated Metric 4.0 Individual tree helper.

Due to the illustrative nature of the layout design, assumptions about the proportions of the proposed habitats within the development were made; these assumptions are detailed on the Post-development Metric Habitat Retention, Creation and Enhancement Plan (Figure A12.2), and described in the Metric Excel document.

Due to the illustrative nature of the layout design, precise tree planting specifications are not shown on the Illustrative Layout plan, but was assumed that 50 'small' and 20 'medium' 'individual trees' will be planted within the POS for the purpose of the BNG Metric calculations; the precise locations of these trees are not displayed on the Post-development Metric Habitat Retention, Creation and Enhancement Plan, but would be scattered throughout all areas of public open space (Figure A12.2).

Interventions proposed to achieve the conditions specified in the Metric are detailed in Table A12.2. It is considered that all measures and targeted habitat conditions are realistic and achievable; refer to Figure A12.2, Table A12.6 and separate Biodiversity Metric spreadsheet. Determination of expected post-development habitat condition is based on the relevant habitat condition criteria in Defra 4.0 (Natural England 2023c), and assumes implementation of a Construction Ecological Management Plan (CEMP)

providing planting specification and establishment requirements for habitats, and an Ecological Management Plan (LEMP), detailing the long-term management of retained and created habitats.

The BNG assessment has been based on the assumption that landscape creation will be undertaken within 36 months of an area of habitat being removed. Therefore, a two-year delay in starting habitat creation has been applied within the Metric spreadsheet.

Strategic Significance / Delivery
The Strategic Significance of both Baseline and Post Construction habitats applied to the Metric have been assigned in accordance with the Metric guidance (Natural England 2023a), with reference to site-specific information. The Site is located immediately adjacent to Grand Western Canal Country Park Local Nature Reserve, which is designated for its local wildlife abundance including otter and scarce chaser dragonfly, and as such, the adjacent hedgerows, both existing and proposed, were categorised as being 'Location ecologically desirable but not in local strategy' for strategic significance.

2   Biodiversity Net Gain

The pre-development biodiversity value of the Site is 31.48 'Habitat Units', and 15.95 'Hedgerow Units'; refer to Table A12.1.

The post-development biodiversity value of the Site, based on an assessment of the illustrative layout detailed in Figure 2 would be 32.97 'Habitat Units', and 17.58 'Hedgerow Units'; refer to Figure A12.2. The proposed development would therefore, demonstrate a net gain of 1.49 Habitat Units (+4.73%), and a net gain of 1.63 Hedgerow Units (10.24%); refer to Table A12.1.

The areas and conditions of the baseline habitats, hedgerows, and trees currently located on the Site are provided in Tables A12.2, A12.3 and A12.4. The indicative post-construction 'Site habitat creation' Biodiversity Units for habitats and hedgerows are provided in Table A12.7 and A12.8 respectively.

Table A12.1: BNG Metric Summary [5]

Onsite baseline pre-development	Habitat units	31.48
	Hedgerow units	15.95
Onsite post-development (Habitat retention & creation)	Habitat units	32.97
	Hedgerow units	17.58
Onsite net % change (Habitat retention & creation)	Habitat units	4.73%
	Hedgerow units	10.24%
Total net unit change (Habitat retention & creation)	Habitat units	1.49
	Hedgerow units	1.63

Trading rules
Trading rules are met for all habitat distinctiveness groups.

---

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

Additionality

Dormouse mitigation is being proposed onsite so has been considered as part of this BNG assessment. Protected species mitigation can only contribute to the BNG calculations up to no-net loss; additional habitat creation over and above what is required for protected species mitigation is required to deliver net gain. In this instance, the proposed 'other neutral grassland'/wildflower meadow creation delivers area-based non-protected species mitigation solely for the delivery of net gain, as it does not represent dormouse habitat. The 'other neutral grassland'/wildflower meadow alone would deliver an additional 9.02 Habitat Units, solely for the purpose of BNG. Additionality requirements are therefore addressed by the current proposals.

For hedgerows, it is considered that delivery of the requisite amount of non-mitigation hedgerow would be possible within the parameters of the illustrative layout, although due to the illustrative nature of the proposals, it is proposed that a further BNG assessment would be undertaken at the Reserved Matters stage using detailed landscape planting plans to confirm this. However, on the basis of the current illustrative design, the approximately 138m section of proposed 'Species-rich native hedgerow with trees - associated with bank or ditch' in the south of the Site, that is disconnected from the surrounding dormouse habitat and thus not considered to be mitigation habitat, would deliver 1.51 Hedgerow Units, which is just under 10% of the hedgerow baseline.

3   Conclusions

The Biodiversity Net Gain calculations based on the outline landscape strategy demonstrate that the proposed development would deliver a net gain of 4.73% in Habitat Units, and a 10.24% net gain in Hedgerow Units. The trading rules would be met for habitat distinctiveness groups. The proposed hedgerow creation would offset and compensate for the small loss of hedgerow associated with the proposed Site access.

A Construction Ecological Management Plan (CEMP) and Landscape and Ecological Management Plan (LEMP) would set out the habitat protection, enhancement, establishment and management strategies together with a framework for monitoring to provide certainty for the achievement and long-term maintenance of the predicted units for onsite post-intervention habitats and hedgerows.

4   References

Natural England (2023). *The Biodiversity Metric 4.0 Auditing and accounting for biodiversity calculation tool.* ISBN: 978-1-7393362-0-2

Natural England (2023a) *Biodiversity Metric 4.0 User Guide*. Natural England Joint Publication JP039.

Natural England (2023b) *Biodiversity Metric 4.0 Short Data Input Guide*. Natural England Joint Publication JP039.

Natural England (2023c) *The Biodiversity Metric 4.0 -Technical Annex 1: Condition Assessment Sheets and Methodology*. Natural England Joint Publication JP039. ISBN 978-1-7393362-2-6.

Figure A12.1: Pre-development (Baseline) Habitat Condition Assessment Plan
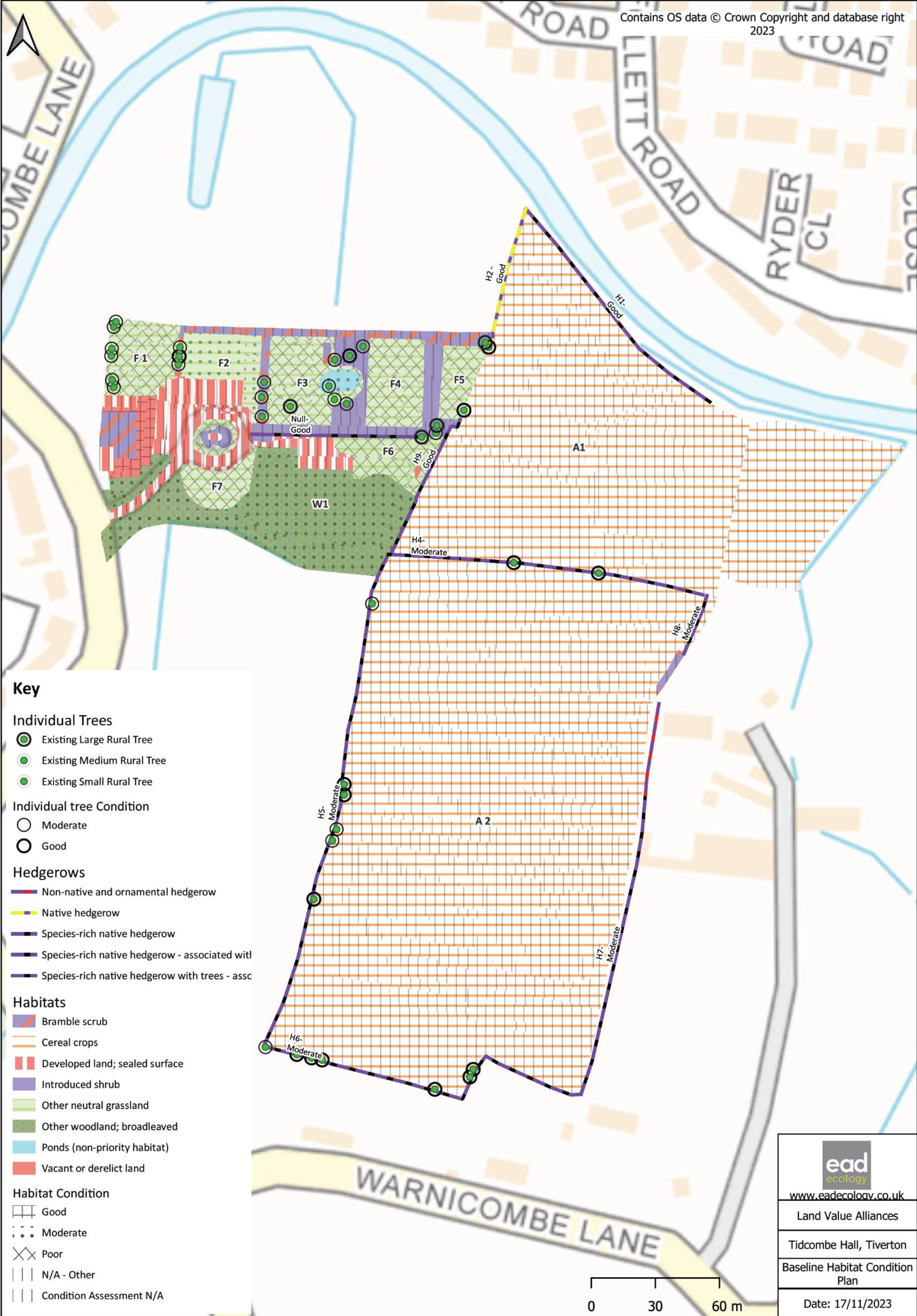
Key

Individual Trees
- ⬤ Existing Large Rural Tree
- ⬤ Existing Medium Rural Tree
- ⬤ Existing Small Rural Tree

Individual tree Condition
- ◯ Moderate
- ◯ Good

Hedgerows
- ▬▬ Non-native and ornamental hedgerow
- ▬▬ Native hedgerow
- ▬▬ Species-rich native hedgerow
- ▬▬ Species-rich native hedgerow - associated with
- ▬▬ Species-rich native hedgerow with trees - asso

Habitats
- Bramble scrub
- Cereal crops
- Developed land; sealed surface
- Introduced shrub
- Other neutral grassland
- Other woodland; broadleaved
- Ponds (non-priority habitat)
- Vacant or derelict land

Habitat Condition
- Good
- Moderate
- Poor
- N/A - Other
- Condition Assessment N/A

Contains OS data © Crown Copyright and database right 2023

ead ecology
www.eadecology.co.uk
Land Value Alliances
Tidcombe Hall, Tiverton
Baseline Habitat Condition Plan
Date: 17/11/2023

0   30   60 m

Figure A12.2: Post-development Metric Habitat Retention, Creation and Enhancement Plan

Key

Proposed Trees
- ◎ Proposed Large Rural Tree
- ◉ Proposed Medium Rural Tree
- ● Proposed Small Rural Tree

Hedgerows
- ▬ Non-native and ornamental hedgerow
- ▬ Native hedgerow
- ▬ Species-rich native hedgerow
- ▬ Species-rich native hedgerow - associated with bank or ditch
- ▬ Species-rich native hedgerow with trees - associated with bank or ditch
- ▬ Lost

Habitats
- Allotments
- Bioswale
- Built linear features
- Development parcels (70% developed land; sealed surface, 30% vegetated garden)
- Southern POS (50% other neutral grassland, 20% modified grassland, 30% mixed native scrub)
- Northern POS (70% other neutral grassland, 20% modified grassland, 10% broadleaved woodland)
- Other woodland; broadleaved
- Ponds (non-priority habitat)
- Sustainable drainage system
- Traditional orchards

Habitats Condition
- Good
- Moderate
- N/A - Other

Contains OS data © Crown Copyright and database right 2023

ead ecology
www.eadecology.co.uk

Land Value Alliances

Tidcombe Hall, Tiverton

Post-development Habitat Condition Plan

Date: 21/11/2023

0   30   60 m

Table A12.2. Baseline Habitat Condition Assessment Results (June 2023); refer to Figure A12.1.

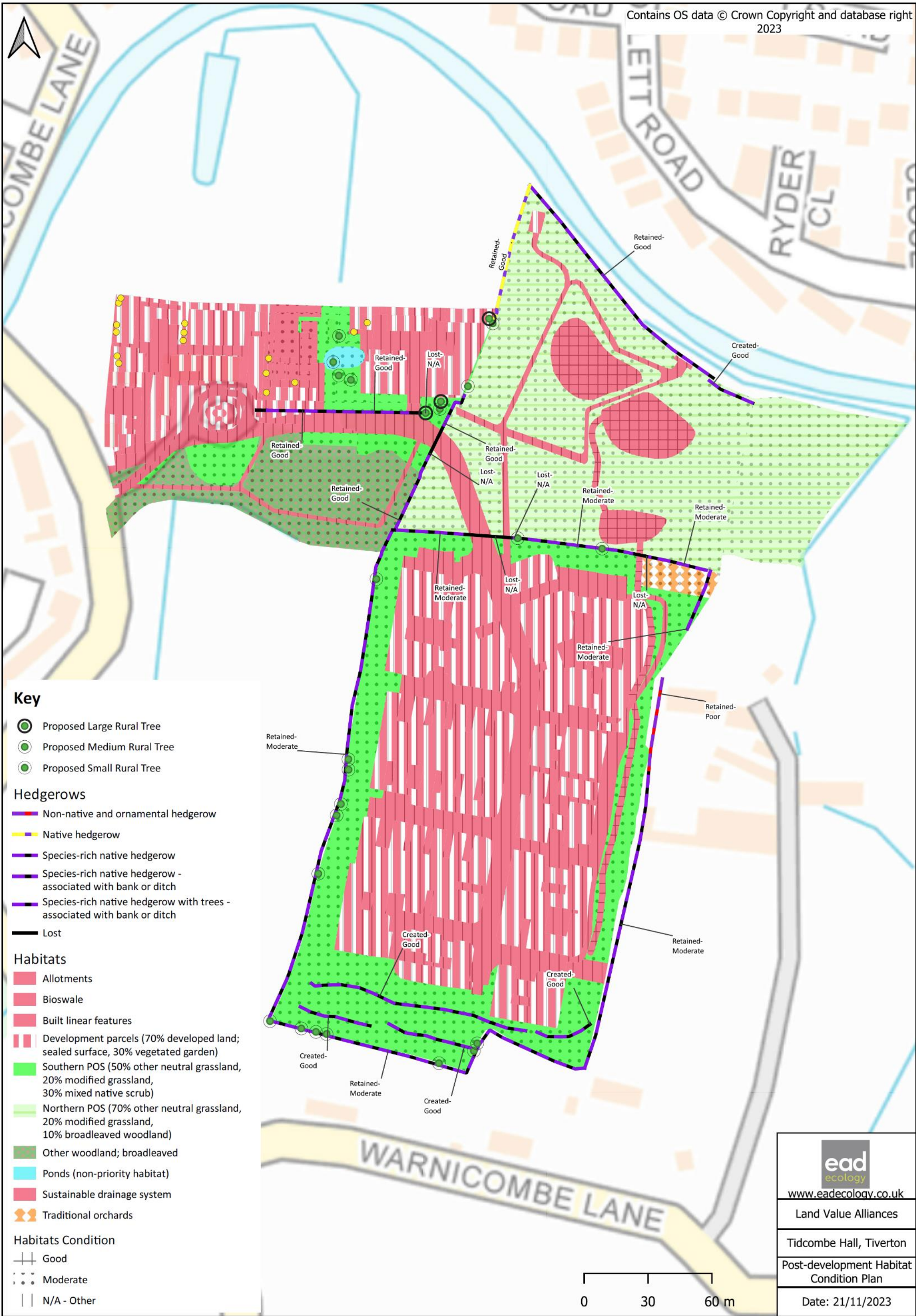| Parcel code	Habitat type	Area (Ha)	Condition	Condition assessment notes	Strategic significance
-	Cropland – cereal crops	5.0517	N/A	N/A	Area / compensation not in local strategy/ no local strategy
F1	Grassland – other neutral grassland	0.1140	Poor	Fails condition criteria A: The grassland is not a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland) – cover of forbs is low and indicator species listed by UKHab for the habitat type are not consistently present. Passes condition criteria B: Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed. Fails condition criteria C: Cover of bare ground is less than 1%. Fails condition criteria D: Cover of bracken is less than 20%, however cover of scrub (including bramble) is more than 5%. Fails condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for more than 5% of the total area. Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	Area / compensation not in local strategy / no local strategy
F2	Grassland – other neutral grassland	0.0895	Moderate	Passes condition criteria A: The grassland is a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland). Passes condition criteria B: Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed. Passes condition criteria C: Cover of bare ground is between 1% and 5%. Fails condition criteria D: Cover of bracken is less than 20%, however cover of scrub (including bramble) is more than 5%. Passes condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area. Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	Area / compensation not in local strategy / no local strategy

Table A12.2. Baseline Habitat Condition Assessment Results (June 2023); refer to Figure A12.1.

Parcel code	Habitat type	Area (Ha)	Condition	Condition assessment notes	Strategic significance
F3	Grassland – other neutral grassland	0.1257	Poor	Fails condition criteria A: The grassland is not a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland) – cover of forbs is low and indicator species listed by UKHab for the habitat type are not consistently present. Passes condition criteria B: Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed. Fails condition criteria C: Cover of bare ground is less than 1%. Fails condition criteria D: Cover of bracken is less than 20%, however cover of scrub (including bramble) is more than 5%. Passes condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area. Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	Area / compensation not in local strategy / no local strategy
F4	Grassland – other neutral grassland	0.1079	Poor	Fails condition criteria A: The grassland is not a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland) – cover of forbs is low and indicator species listed by UKHab for the habitat type are not consistently present. Fails condition criteria B: Sward height is not varied and lacks microclimates which provide opportunities for insects, birds and small mammals to live and breed. Fails condition criteria C: Cover of bare ground is less than 1%. Passes condition criteria D: Cover of bracken is less than 20% and cover of scrub is less than 5%. Passes condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area. Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	Area / compensation not in local strategy / no local strategy
F5	Grassland – other neutral grassland	0.0535	Poor	Fails condition criteria A: The grassland is not a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland) – cover of forbs is low and indicator species listed by UKHab for the habitat type are not consistently present.	Area / compensation not

Table A12.2. Baseline Habitat Condition Assessment Results (June 2023); refer to Figure A12.1.

Parcel code	Habitat type	Area (Ha)	Condition	Condition assessment notes	Strategic significance
				Fails condition criteria B: Sward height is not varied and lacks microclimates which provide opportunities for insects, birds and small mammals to live and breed.	in local strategy / no local strategy
				Fails condition criteria C: Cover of bare ground is less than 1%.	
				Passes condition criteria D: Cover of bracken is less than 20% and cover of scrub is less than 5%.	
				Passes condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	
				Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	
F6	Grassland – other neutral grassland	0.0865	Poor	Fails condition criteria A: The grassland is not a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland) – cover of forbs is low and indicator species listed by UKHab for the habitat type are not consistently present.	Area / compensation not in local strategy / no local strategy
				Passes condition criteria B: Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	
				Fails condition criteria C: Cover of bare ground is less than 1%.	
				Fails condition criteria D: Cover of bracken is less than 20%, however cover of scrub (including bramble) is more than 5%.	
				Passes condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	
				Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	
F7	Grassland – other neutral grassland	0.0743	Poor	Fails condition criteria A: The grassland is not a good representation of the habitat type it has been identified as (g3c5 Arrhenatherum neutral grassland) – cover of forbs is low and indicator species listed by UKHab for the habitat type are not consistently present.	Area / compensation not in local strategy / no local strategy
				Passes condition criteria B: Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	

Table A12.2. Baseline Habitat Condition Assessment Results (June 2023); refer to Figure A12.1.

Parcel code	Habitat type	Area (Ha)	Condition	Condition assessment notes	Strategic significance
				Fails condition criteria C: Cover of bare ground is less than 1%.	
				Fails condition criteria D: Cover of bracken is less than 20%, however cover of scrub (including bramble) is more than 5%.	
				Passes condition criteria E: Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	
				Fails condition criteria F: There are fewer than 10 vascular plant species per m2 present.	
-	Heathland and shrub – bramble scrub	0.127	N/A	One species (bramble) comprising more than 75% coverage.	Area / compensation not in local strategy / no local strategy
P2	Lakes – Ponds (non-priority habitat)	0.0172	Moderate	Passes condition criteria A: The pond is of good water quality, with clear water indicating no obvious signs of pollution.	Area / compensation not in local strategy / no local strategy
				Passes condition criteria 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.	
				Passes condition criteria C: Less than 10% of the water surface was covered with duckweed or filamentous algae.	
				Passes condition criteria D: The pond was not artificially connected to other waterbodies.	
				Passes condition criteria E: Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams, pumps or pipework.	
				Passes condition criteria F: There was an absence of listed non-native plant and animal species.	
				Passes condition criteria G: The pond did not contain fish.	

Table A12.2. Baseline Habitat Condition Assessment Results (June 2023); refer to Figure A12.1.

Parcel code	Habitat type	Area (Ha)	Condition	Condition assessment notes	Strategic significance
				Passes condition criteria H: Emergent, submerged or floating plants (excluding duckweed) cover at least 50% of the pond area which is less than 3 m deep. Fails condition criteria I: More than 50% of the pond surface was shaded by adjacent scrub.	
-	Urban – developed land; sealed surface	0.2254	N/A- Other	N/A	Area / compensation not in local strategy / no local strategy
-	Urban – introduced shrub	0.1364	N/A- Other	N/A	Area / compensation not in local strategy / no local strategy
-	Urban – vacant or derelict land	0.0422	Good	Passes condition criteria A: Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area. Passes condition criteria B: The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year. Passes condition criteria C: Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife cover less than 5% of the total vegetated area.	Area / compensation not in local strategy / no local strategy
W1	Woodland and forest – other woodland; broadleaved	0.4679	Moderate	Criteria A – scores 3: Three age-classes present. Criteria B – scores 3: No significant browsing damage evident in woodland. Criteria C – scores 1: Rhododendron present in the woodland. Criteria D – scores 3: Five or more native tree or shrub species found across woodland parcel. Criteria E – scores 2: 50 - 80% of canopy trees and understory shrubs are native.	Area / compensation not in local strategy / no local strategy

Table A12.2. Baseline Habitat Condition Assessment Results (June 2023); refer to Figure A12.1.

Parcel code	Habitat type	Area (Ha)	Condition	Condition assessment notes	Strategic significance
				Criteria F – scores 3: Woodland is <10ha, in which case 0 - 20% temporary open space is permitted. Criteria G – scores 2: One or two classes only present in woodland regeneration. Criteria H – scores 1: A high-risk disease is present (ash dieback). Criteria I – scores 1: No recognisable woodland NVC plant community at ground layer present. Criteria J – scores 3: Three storeys across all survey plots. Criteria K – scores 1: No veteran trees present in woodland. Criteria L – scores 2: Between 25% and 50% of all survey plots within the woodland parcel have deadwood. Criteria M – scores 2: Less than 1 hectare in total of nutrient enrichment across woodland area and less than 20% of woodland area has damaged ground. Overall score: 27/39	

Table A12.3 Baseline Hedgerow Condition Assessment Results; refer to Figure A12.1.

Hedge Ref	A1. Height (>1.5m average)	A2. Width (>1.5m average)	B1. Gap under canopy (<0.5m average)	B2. Canopy gaps (<10%, 5m max)	C1. Undisturbed ground (1m width at least 1 side)	C2. Nutrient-enriched perennial vegetation (<20% cover of the area of undisturbed ground.)	D1. Invasives/ Neophytes (non-natives) (<10%)	D2. Damage (<10%)	E1. One mature tree / 20-50m and more than 1 age class present	E2. Tree health (>95% in healthy condition)	Bank or ditch	Sp. rich	Length (km)	Condition
H1	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	0.0126	Good
H2	✓	✓	✓	✓	✓	X	✓	✓	N/A	N/A	X	X	0.067	Good
H3	✓	✓	✓	✓	X	X	✓	✓	N/A	N/A	✓	✓	0.149	Moderate
H4	✓	✓	✓	✓	X	X	✓	✓	N/A	N/A	✓	✓	0.239	Moderate
H5	✓	✓	✓	✓	X	X	✓	✓	N/A	N/A	✓	✓	0.168	Moderate
H6	✓	✓	✓	✓	X	X	✓	✓	✓	X	✓	✓	0.144	Moderate
H7	✓	✓	✓	✓	X	X	✓	✓	✓	X	✓	✓	0.029	Moderate
H8	✓	✓	✓	✓	✓	X	✓	X	✓	X	✓	✓	0.073	Moderate
H9	✓	✓	✓	✓	✓	✓	X	✓	N/A	N/A	X	✓	0.08	Good
Ornamental Hedge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			0.043	Good

Table A12.4 Baseline Individual Trees Condition Assessment Results; refer to Figure A12.1.

Tree Reference	Size	Condition	Condition criteria A: The tree is a native species (or at least 70% within the block are native species).	Condition criteria B: The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Condition criteria C: The tree is mature (or more than 50% within the block are mature).	Condition criteria D: There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Condition criteria E: Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Condition criteria F: More than 20% of the tree canopy area is oversailing vegetation beneath.
T1	Medium	Good	✓	✓	✓	X	✓	✓
T2	Medium	Good	✓	✓	✓	✓	X	✓
T3	Medium	Good	✓	✓	✓	✓	X	✓
T5	Medium	Moderate	✓	X	✓	X	✓	✓
T6	Medium	Good	✓	✓	✓	✓	✓	✓
T6a	Medium	Good	✓	✓	✓	✓	✓	✓
T7	Medium	Moderate	X	✓	✓	✓	X	✓
T7a	Medium	Moderate	X	✓	✓	✓	X	✓
T8	Medium	Good	✓	✓	✓	✓	X	✓
T 9	Medium	Moderate	X	✓	✓	✓	X	✓
T 10	Medium	Good	✓	✓	✓	✓	X	✓
T11	Medium	Good	✓	✓	✓	✓	X	✓
T12	Medium	Good	X	✓	✓	✓	✓	✓
T13	Medium	Good	✓	✓	✓	✓	X	✓
T14	Medium	Good	✓	✓	✓	✓	✓	✓
T14a	Medium	Good	✓	✓	✓	✓	✓	✓
T15	Large	Moderate	X	✓	✓	✓	X	✓
T16	Medium	Good	✓	✓	✓	✓	✓	✓
T17	Large	Good	✓	✓	✓	✓	✓	✓
T18	Medium	Moderate	✓	X	✓	✓	X	✓

Table A12.4 Baseline Individual Trees Condition Assessment Results; refer to Figure A12.1.

Tree Reference	Size	Condition	Condition criteria A: The tree is a native species (or at least 70% within the block are native species).	Condition criteria B: The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Condition criteria C: The tree is mature (or more than 50% within the block are mature).	Condition criteria D: There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Condition criteria E: Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Condition criteria F: More than 20% of the tree canopy area is oversailing vegetation beneath.
T19	Large	Good	✓	✓	✓	✓	✓	✓
T20	Small	Moderate	✓	✓	X	✓	X	✓
T21	Small	Moderate	✓	✓	X	✓	X	✓
T22	Small	Moderate	✓	X	X	X	✓	✓
T23	Small	Moderate	✓	X	X	X	✓	✓
T24	Small	Moderate	✓	X	X	X	✓	✓
T25	Small	Moderate	✓	✓	X	✓	X	✓
T26	Small	Moderate	✓	✓	X	✓	X	✓
T27	Medium	Good	✓	✓	✓	✓	X	✓
T28	Medium	Moderate	X	✓	X	✓	X	✓
T29	Small	Moderate	X	✓	X	✓	X	✓
T30	Small	Moderate	✓	✓	X	✓	X	✓
T31	Small	Moderate	✓	✓	X	✓	X	✓
T32	Large	Good	✓	✓	✓	✓	✓	✓
T33	Small	Moderate	✓	✓	X	✓	X	✓
T34	Small	Moderate	✓	✓	X	✓	X	✓
T35	Medium	Moderate	X	✓	✓	✓	X	✓
T36	Medium	Moderate	X	✓	✓	✓	X	✓
T37	Medium	Good	✓	✓	✓	✓	X	✓
T38	Small	Moderate	✓	✓	X	✓	X	✓

Table A12.5. Headline Summary Results

Tidcombe Hall, Tiverton			
Headline Results	Return to results menu		
Scroll down for final results ⚠			

On-site baseline	*Habitat units*	31.48	
	Hedgerow units	15.95	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	32.97	
	Hedgerow units	17.58	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Habitat units*	1.49	4.73%
	Hedgerow units	1.63	10.24%
	Watercourse units	0.00	0.00%
Off-site baseline	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	1.49	
	Hedgerow units	1.63	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	1.49
	Hedgerow units	1.63
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	4.73%
	Hedgerow units	10.24%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Table A12.6. Site Habitat Baseline

Ref	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Total habitat units	Area retained	Area enhanced	Baseline units	Baseline units enhance	Area habitat lost	Units lost	Bespoke compensation agreed for unacceptable losses	User comments
1	Cropland	Cereal crops	5.4484	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	10.90	0	0	0.00	0.00	5.45	10.90		
2	Grassland	Other neutral grassland	0.0895	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.72	0	0	0.00	0.00	0.09	0.72		
3	Grassland	Other neutral grassland	0.5564	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.23	0	0	0.00	0.00	0.56	2.23		
4	Heathland and shrub	Bramble scrub	0.127	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.51	0	0	0.00	0.00	0.13	0.51		
5	Lakes	Ponds (non-priority habitat)	0.0172	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.14	0.0172	0	0.14	0.00	0.00	0.00		
6	Urban	Developed land; sealed surface	0.2254	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00	0	0	0.00	0.00	0.23	0.00		
7	Urban	Introduced shrub	0.1364	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.27	0	0	0.00	0.00	0.14	0.27		
8	Urban	Vacant or derelict land	0.0422	Low	Good	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.25	0	0	0.00	0.00	0.04	0.25		
9	Woodland and forest	Other woodland; broadleaved	0.4679	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	3.74	0.3965	0	3.17	0.00	0.07	0.57		
10	Individual trees	Rural tree	0.2293614	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.75	0.15291	0	1.83	0.00	0.08	0.92		3 large good (1 lost)
11	Individual trees	Rural tree	0.0764538	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.61	0	0	0.00	0.00	0.08	0.61		1 large moderate
12	Individual trees	Rural tree	0.54965305	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	6.60	0.47637	0	5.72	0.00	0.07	0.88		15 medium good (2 lost)
13	Individual trees	Rural tree	0.29314829	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.35	0.2565	0	2.05	0.00	0.04	0.29		8 medium moderate (1 lost)
14	Individual trees	Rural tree	0.05292955	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.42	0.00814	0	0.07	0.00	0.04	0.36		13 small moderate (11 lost)
15																
16																
17																
18																
19																
	Total habitat area		**8.31**					**31.48**	**1.31**	**0.00**	**12.98**	**0.00**	**7.00**	**18.50**		
	Site Area (Excluding area of Individual trees and Green walls)		**7.11**													

Total area lost (excluding area of Individual trees and Green walls) | **6.70**

Table A12.7. Site Hedgerow Baseline

Baseline ref	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Required Action to Meet Trading Rules	Total hedgerow units
1		Native hedgerow	0.067	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.40
2		Non-native and ornamental hedgerow	0.043	V.Low	1	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.04
3		Species-rich native hedgerow - associated with bank or ditch	0.556	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	6.67
4		Species-rich native hedgerow with trees - associated with bank or ditch	0.074	V.High	8	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	1.78
5		Species-rich native hedgerow with trees - associated with bank or ditch	0.173	V.High	8	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	2.77
6		Species-rich native hedgerow	0.08	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.96
7		Species-rich native hedgerow with trees - associated with bank or ditch	0.126	V.High	8	Good	3	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Like for like	3.33
8												
9												
10												
11												
12												
			1.12									15.95

Retention category biodiversity value						Comments	
Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Consenting body comments
0.067	0	0.40	0.00	0.00	0.00		
0.043	0	0.04	0.00	0.00	0.00		
0.527	0	6.32	0.00	0.03	0.35		
0.059	0	1.42	0.00	0.02	0.36		
0.173	0	2.77	0.00	0.00	0.00		
0.062	0	0.74	0.00	0.02	0.22		
0.126		3.33	0.00	0.00	0.00	Location deemed ecologically desirable because adjacent to Grand Western Canal Country Park Local Nature Reserve	
1.06	0.00	15.02	0.00	0.06	0.92		

Table A12.8. Site Habitat Creation

Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	Habitat units delivered	User comments	Consenting body comments	GIS reference number
Grassland	Other neutral grassland	0.60055	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	3.74	Habitat creation measures based on Illustrative layout prepared for the planning application (Ref: 230301 L 02 02 E; Clifton Emery Design 2023). 50% of southern POS; refer to baseline habitat plan		
Grassland	Other neutral grassland	1.11517	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	6.95	70% of Northern POS; refer to baseline habitat plan.		
Grassland	Traditional orchards	0.0474	High	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	22	Low	0.26			
Urban	Allotments	0.0673	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	3	Low	0.24			
Urban	Bioswale	0.0728	Low	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	5	Medium	0.24			
Urban	Built linear features	1.5386	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00			
Urban	Developed land; sealed surface	1.35891	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Medium	0.00			
Urban	Sustainable drainage system	0.2348	Low	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Medium	0.74			
Urban	Vegetated garden	0.58239	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	3	Low	1.05			
Grassland	Modified grassland	0.24022	Low	Poor	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	3	Low	0.43	20% of Southern POS; refer to baseline habitat plan		
Heathland and shrub	Mixed scrub	0.36033	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	2.25	30% of Southern POS; refer to baseline habitat plan		
Grassland	Modified grassland	0.31862	Low	Poor	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	3	Low	0.57	20% of Northern POS; refer to baseline habitat plan.		
Woodland and forest	Other woodland; broadleaved	0.15934	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	17	Low	0.70	10% of Northern POS; refer to baseline habitat plan		
Individual trees	Urban tree	0.203575204	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	29	Low	0.58	50 small trees (scattered within POS)		
Individual trees	Urban tree	0.732870734	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	27	Low	2.24	20 medium trees (scattered within POS)		
Total habitat area		**7.63**							**19.99**			

Site Area (Excluding area of Individual trees and Green walls) | **6.70**

Table A12.9. Site Hedgerow Creation

Baseline ref	New hedge number	Proposed habitats Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Temporal multiplier Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	Hedge units delivered	Comments User comments	Consenting body comments
1		Species-rich native hedgerow with trees - associated with bank or ditch	0.07	V.High	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	22	Low	0.77		
2		Species-rich native hedgerow with trees - associated with bank or ditch	0.023	V.High	Good	Location ecologically desirable but not in local strategy	Check details- Delay in starting habitat in required condition? ⚠	22	Low	0.28	Location deemed ecologically desirable because adjacent to Grand Western Canal Country Park Local Nature Reserve	
3		Species-rich native hedgerow with trees - associated with bank or ditch	0.138	V.High	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	22	Low	1.51	Disconnected from adjacent dormouse habitat so not considered mitigation (delivers approximately 10% of hedgerow baseline so additionality not considered likely to be an issue for hedgerows)	
4												
5												
6												
7												
8												
			0.23							2.56		