

Environmental Statement: Chapter 7

Technical Appendix 7.16: Biodiversity Net Gain Assessment

Land East of Blackmore Farm, Melksham

Gleeson Land Ltd

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1 Introduction

Introduction

- 1.1.1 A biodiversity net gain (BNG) assessment of the development proposals was undertaken to quantify the estimated net change in biodiversity resulting from the Proposed Development. The assessment utilised the Defra Statutory Metric calculation tool (Defra, 2025a), with reference to supporting documents and the Biodiversity Metric principles (Defra, 2025b & 2025c). The completed metric has been provided as a digital file (Excel spreadsheet).
- 1.1.2 As the application is at outline stage, the calculations are based on the 'Illustrative Landscape Strategy' (Environmental Dimension Partnership, 2026; drawing reference: edp9278_d027e); refer to Figure 7.16.1.

Pre-development habitats

- 1.1.3 The on-site habitat and hedgerow baseline was informed by a Habitat Condition Assessment (HCA) survey undertaken by experienced botanists (FISC Level 4/5) from EAD Ecology on 11–12 May 2025 and 16 May 2025; refer to Figure 7.16.2.
- 1.1.4 The assessments followed Defra Statutory Metric methodologies, also referencing the relevant supporting documents (Defra, 2025b & 2025c).
- 1.1.5 The Watercourse component of the metric was informed by a River Condition Assessment (RCA) which comprised two components; a field survey and desk study. The field survey element comprised three Modular River Physical (MoRPh) 5 surveys, covering a combined total of 150m of the 585m watercourse. These were undertaken on 12 May 2022 and updated on 11 June 2024 by a Modular River Survey accredited ecologist in accordance with the MoRPh survey Technical Reference (Gurnell & Shuker, 2022).
- 1.1.6 The field survey recorded the geomorphological and vegetative structure of the on-site watercourses and margins within 10m of the Site, with each MoRPh5 sub-reach comprising five MoRPh modules¹. The desk study element was undertaken using Google Earth Pro and Defra MAGIC maps to measure the planform, confinement and valley gradient of an extended Reach² encompassing the project area in order to determine the River Type. Survey results acquired from the field survey and desk study were inputted into a MoRPh Pro Information System (Cartographer) to generate a Final Condition Score. The Final Condition Score was then adjusted, where necessary, to account for over-deepening and inputted within the Metric.

Habitat area measurements

- 1.1.7 Measurements of both pre-development and post-development habitats were undertaken with QGIS and then incorporated into the Metric. Areas for individual trees were calculated in accordance with guidance (Defra, 2025b), using the integrated Statutory Metric Tree Helper.

On-site post-development habitats

- 1.1.8 Post-development on-site habitat areas are based on the 'Illustrative Landscape Strategy' (Environmental Dimension Partnership, 2026; drawing reference: edp9278_d027e); refer to

¹ MoRPh Module is defined as a short length of river (approximately two channel widths in length) along which a single MoRPh survey is conducted.

² Reach is defined as a section of river along which boundary conditions are sufficiently uniform that the river maintains a near consistent internal set of processes-form interactions.

Figure 7.16.1. This represents the results of an iterative process to maximise on-site biodiversity value in accordance with the ecological hierarchy, the biodiversity gain hierarchy and the biodiversity net gain good practice principles (CIEEM, CIRIA & IEMA, 2016), considering all other layout constraints; refer to Table 7.16.1.

Table 7.16.1: Application of Biodiversity Gain Hierarchy

Biodiversity Gain Hierarchy	Scheme response
First, in relation to onsite habitats which have a Medium, High and Very High distinctiveness (a score of four or more according to the statutory biodiversity metric), the avoidance of adverse effects from the development and, if they cannot be avoided, the mitigation of those effects.	All non-linear habitats on site had low or very low distinctiveness. Medium, High and Very High distinctiveness hedgerows were retained where possible within the design of the scheme to try and avoid adverse effects. Where this was not possible, similar habitats were proposed in the 'Illustrative Landscape Strategy' to help mitigate the effects. The entire length of the watercourse was retained/enhanced.
Second, in relation to all onsite habitats which are adversely affected by the development, the adverse effect should be compensated by prioritising in order, where possible, the enhancement of existing onsite habitats, creation of new onsite habitats, allocation of registered offsite gains and finally the purchase of biodiversity credits.	Where identified as suitable to do so, hedgerows and grassland habitats were proposed to be enhanced or created on-site. Hedgerows are proposed for enhancement through management/planting. Other neutral grassland will be created through seeding and management. These options were maximised within the Site boundary and are predicted to exceed the 10% mandatory requirement. No off-site gains are anticipated to be required.

- 1.1.9 Determination of expected post-development on-site habitat conditions are based on the relevant habitat condition criteria in the Statutory Metric (Defra, 2025c). Post-development river condition score was assessed by running a scenario based on the development proposals. The interventions proposed to achieve the conditions specified in the Metric are detailed in Table 7.16.9. In the professional opinion of EAD Ecology, all measures and targeted habitat conditions are considered realistic and achievable and assume the implementation of a Biodiversity Gain Plan, including a Habitat Management and Monitoring Plan (HMMP) detailing the establishment requirements for habitats and long-term management of retained, enhanced and created habitats. The HMMP would be produced in accordance with the Natural England HMMP Template (JP058) and companion document.
- 1.1.10 Given that the application is at outline stage, it is unknown when habitat creation on-site would occur. It is anticipated that habitat creation would have no or minimal delay in commencement. Therefore, for the purposes of this assessment, the 'delay in creation' within the Metric has been entered as '1' as a precautionary measure. Further assessment would be undertaken when more details are known to inform discharge of the Biodiversity Gain Plan Condition prior to any development commencing.

Strategic Significance

- 1.1.11 The strategic significance of both baseline and post-construction habitats applied to the Metric have been assigned in accordance with the Statutory Biodiversity Metric guidance (Defra, 2025b), with reference to site-specific information. The Site is within an area currently covered by a Local

Nature Recovery Strategy (LNRS; Wiltshire and Swindon LNRS), therefore the strategic significance has been assigned with reference to Table 7 within the Statutory Biodiversity Metric guidance (Defra, 2025b).

- 1.1.12 The Site does not lie within any of the defined LNRS 'mapped measures'; therefore 'low' strategic significance was assigned to all habitats, hedgerows and watercourses.

Assumptions and limitations

- 1.1.13 The following assumptions and limitations were identified in this BNG assessment:

- The post-development habitats were mapped in accordance with the 'Illustrative Landscape Strategy' produced by the Environmental Dimension Partnership and the percentage habitat cover was extracted from details within this document.
- Appropriate site tests, such as soil analyses, would be required to inform and confirm the feasibility of proposed habitat creation/enhancement measures for the Biodiversity Net Gain Plan condition.
- All proposed hedgerows would be species-rich in accordance with the UKHab 2.0 criteria.
- Hedgerow and tree loss was assessed against the 'Illustrative Landscape Strategy' plan.
- Other neutral grassland will be created in moderate condition where there is public access and in good condition where there is limited public access, through seeding and management.
- Other broadleaved woodland in moderate condition will be created through planting and management.
- Areas of mixed scrub will be created through planting and management.
- The development footprint would comprise 70% developed land; sealed surface and 30% vegetated gardens. Roads have been excluded from these area calculations using the 'Illustrative Landscape Strategy' where possible.
- Habitat management 10m either side of each bank will lead to the watercourse being enhanced through reduction in riparian encroachment; with the exception of two existing retained culverts to be used as footbridges.

2 Results

- 2.1.1 The pre-development biodiversity value of the Site is 62.09 'Habitat Units,' 35.10 'Hedgerow Units', and 3.82 'Watercourse Units'; refer to Table 7.16.2.
- 2.1.2 The post-development biodiversity value of the Site, based on Figure 7.16.3, would be 97.81 'Habitat Units', 41.80 'Hedgerow Units', and 4.66 'Watercourse Units'. The proposed development would, therefore, demonstrate a net gain of 35.71 'Habitat Units' (+57.52%), a net gain of 6.69 Hedgerow Units (+19.07%), and a net gain of 0.84 Watercourse Units (+21.94%); refer to Table 7.16.2.
- 2.1.3 The conditions of the baseline habitats, hedgerows and watercourse located within the Site are provided in Tables 7.16.3 – 7.16.6. The indicative post-construction conditions of habitats, hedgerows and watercourses are provided in Table 7.16.7.

Table 7.16.2: BNG Metric Summary³

On-site baseline pre-development	Habitat units	62.09
	Hedgerow units	35.10
	Watercourse units	3.82
On-site post-development (Habitat retention, creation & enhancement)	Habitat units	97.81
	Hedgerow units	41.80
	Watercourse units	4.66
On-site net % change (Habitat retention, creation & enhancement)	Habitat units	+ 57.52
	Hedgerow units	+ 19.07
	Watercourse units	+ 21.94
Total net unit change (Habitat retention, creation & enhancement)	Habitat units	+ 35.71
	Hedgerow units	+ 6.69
	Watercourse units	+ 0.84

Trading rules

- 2.1.4 Where the above on-site habitat delivery is applied, all 'Trading rule' requirements specified in the Statutory Metric would be met for 'Habitat Units', 'Hedgerow Units', and 'Watercourse Units'.

Additionality

- 2.1.5 In accordance with current guidance, mitigation or compensation for impacts to Special Areas of Conservation (SAC) / Special Protection Areas (SPA) / European Protected Species (EPS) / further listed schemes⁴ (FLS) can be used 'in part' towards achieving Biodiversity Net Gain. This means that at least 10% of the development's biodiversity units must be related to habitat proposals not providing SAC/SPA/EPS/FLS mitigation/compensation (i.e. SAC mitigation/compensation can contribute up to the point of no net loss).
- 2.1.6 Hedgerow removal comprising 0.69ha is proposed within the scheme. Proposed EPS mitigation (hazel dormouse) includes the creation of 0.7436ha of 'other woodland; broadleaved'; equating to 3.36 habitat units.

³ Headline figures reflect metric outputs which include built in rounding of two decimal places.

⁴ <https://www.gov.uk/guidance/what-you-can-count-towards-a-developments-biodiversity-net-gain-bng>

- 2.1.7 The Proposed Development has a total baseline of 62.09 habitat units, of which 60.24 units are lost; proposed EPS mitigation delivers 3.36 habitat units as detailed above. As this is substantially less than the biodiversity loss arising from the Proposed Development, the EPS mitigation habitat falls within the mitigation quantum required to achieve no net loss and therefore complies with statutory BNG additionality requirements.

Irreplaceable habitats

- 2.1.8 Two veteran trees were located within the Site (identified as Tree 106 and 127; refer to Table 7.16.4). One off-site veteran tree's canopy was oversailing the Site (identified as Tree 43; refer to Table 7.16.4). These three trees are to be retained and buffered from development.

3 Biodiversity Net Gain Strategy

- 3.1.1 A HMMP would set out the on-site habitat protection, enhancement, establishment and management strategies together with a framework for monitoring to provide certainty for the achievement of long-term maintenance of the predicted units for on-site post-intervention habitats.
- 3.1.2 The HMMP would include detailed habitat establishment methods and programme, proposed management activities which can be implemented for 30-year period and a detailed work programme to ensure successful establishment/restoration of habitat, together with details of monitoring to evaluate the success of ongoing management activities and provide regular condition reporting to Wiltshire Council. The extent and frequency of monitoring reporting will be agreed with Wiltshire Council.

4 Conclusions

- 4.1.1 The Biodiversity Net Gain calculations based on the 'Illustrative Landscape Strategy' (Figure 7.16.1) demonstrate that the Proposed Development would deliver on-site net gain and satisfy the Metric trading rules. The Biodiversity Net Gain calculations based on the 'Illustrative Landscape Strategy' indicate that the Proposed Development would deliver a net gain of 57.52% in Habitat Units, 19.07% in Hedgerow Units, and 21.94% in Watercourse Units.
- 4.1.2 As this BNG Assessment is based upon an 'Illustrative Landscape Strategy', an updated BNG Assessment would need to be undertaken based on detailed landscape designs to inform discharge of the biodiversity gain condition.

5 References

CIEEM, CIRIA and IEMA (2016). Biodiversity Net Gain Good practice principles for development. Available at: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>

Defra (2025a). The Statutory Biodiversity Metric Auditing and accounting for biodiversity calculation tool. July 2025.

Defra (2025b). The Statutory Biodiversity Metric User Guide. July 2025.

Defra (2025c). The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology. January 2025.

Gurnel and Shuker (2022). The MoRPh Survey Technical Reference Manual (2022 Version).

Wiltshire and Swindon Local Nature Recovery Strategy. Available at: <https://www.wiltshire.gov.uk/article/8288/Wiltshire-and-Swindon-Local-Nature-Recovery-Strategy>

Figure 7.16.1: Illustrative Landscape Strategy



**Figure 7.16.2: Biodiversity Net Gain Assessment:
Baseline Plan**



Key

- Site boundary
- Individual Trees
 - Existing Very Large Rural Tree
 - Existing Large Rural Tree
 - Existing Medium Rural Tree
- Hedgerows
 - Native hedgerow
 - Native hedgerow - associated with bank or ditch
 - Species-rich native hedgerow - associated with bank or ditch
 - Species-rich native hedgerow with trees
 - Species-rich native hedgerow with trees - associated with bank or ditch
- Watercourses
 - Culvert
 - Other rivers and streams
- Habitats
 - Developed land; sealed surface
 - Modified grassland
- Habitat Condition
 - Moderate
 - Poor
 - N/A - Other

Figure 7.16.3: Biodiversity Net Gain Assessment: Post-intervention Plan



Key

Site boundary

Individual Trees

Proposed Small Urban Tree (Poor condition)

Retained Very Large Rural Tree

Retained Large Rural Tree

Retained Medium Rural Tree

Hedgerows

Native hedgerow

Native hedgerow with trees

Native hedgerow with trees - associated with bank or ditch

Species-rich native hedgerow

Species-rich native hedgerow - associated with bank or ditch

Species-rich native hedgerow with trees

Species-rich native hedgerow with trees - associated with bank or ditch

Watercourses

Culvert

Other rivers and streams

Habitats

Allotments

Developed land; sealed surface

Introduced shrub

Mixed scrub

Modified grassland

Other neutral grassland

Other woodland; broadleaved

Sustainable drainage system

Traditional orchards

Residential development block (70% Developed land; sealed surface, 30% Vegetated garden)

Habitat Condition

Good

Moderate

Poor

N/A - Other

Condition Assessment N/A



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**Tables 7.16.3 – 7.16.6: Baseline Habitat Condition
Assessment Results**

Table 7.16.3: Baseline Habitat Condition Assessment Results.

Habitat Ref	Habitat Type	BNG Condition Criteria (Parks et al 2024) P= Pass, F = Fail							Condition
		A	B	C	D	E	F	G	
Low Distinctiveness Grassland									
F03	Modified grassland	P	F	P	F	P	P	P	Moderate
F05	Modified grassland	F	F	P	P	F	P	P	Poor
F18	Modified grassland	F	F	P	F	P	P	P	Poor
F19	Modified grassland	P	F	P	P	F	P	P	Moderate
F20	Modified grassland	F	F	P	P	F	P	P	Poor
F21	Modified grassland	F	F	P	P	F	P	P	Poor
F22	Modified grassland	F	F	P	P	F	P	P	Poor
Urban									
U1	Developed land; sealed surface	Condition: N/A – Other. The condition of this habitat type is not assessed.							

Table 7.16.4: Baseline Tree Condition Assessment Results

Tree ref	BNG Condition Criteria (Parks et al 2023) <i>P= Pass, F = Fail</i>						Size	Condition
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>		
T24	P	P	P	F	F	F	Large	Moderate
T43*	P	P	P	F	P	P	Very Large	Good
T106*	P	P	P	P	P	P	Very Large	Good
T125	P	P	P	F	P	P	Medium	Good
T127*	P	P	P	F	P	P	Very Large	Good
T132	P	P	P	F	P	P	Medium	Good
T133	P	P	P	F	P	P	Large	Good
T134	P	P	P	F	P	P	Large	Good
T135	P	P	P	F	P	F	Large	Moderate

Trees marked with an asterisk (*) are veteran trees; an irreplaceable habitat.

Table 7.16.5: Baseline Hedgerow Condition Assessment Results

Hedge Ref	Hedgerow Type	BNG Condition Criteria <i>P= Pass, F = Fail</i>										Condition
		<i>A1</i>	<i>A2</i>	<i>B1</i>	<i>B2</i>	<i>C1</i>	<i>C2</i>	<i>D1</i>	<i>D2</i>	<i>E1</i>	<i>E2</i>	
H05	Native hedgerow	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H06	Native hedgerow	<i>P</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>F</i>	-	-	<i>Moderate</i>
H12a	Species rich native hedgerow with trees	<i>P</i>	<i>F</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>Moderate</i>
H49	Native hedgerow – associated with bank or ditch	<i>F</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Moderate</i>
H50	Species-rich native hedgerow – associated with bank or ditch	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H51	Native hedgerow – associated with bank or ditch	<i>F</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Moderate</i>
H52	Species-rich native hedgerow with trees – associated with bank or ditch	<i>F</i>	<i>P</i>	<i>F</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>Moderate</i>
H53	Species-rich native hedgerow – associated with bank or ditch	<i>F</i>	<i>F</i>	<i>F</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Poor</i>
H54	Species-rich native hedgerow – associated with bank or ditch	<i>P</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H55	Native hedgerow	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H56	Species-rich native hedgerow – associated with bank or ditch	<i>P</i>	<i>P</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H57	Native hedgerow	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H58	Native hedgerow	<i>P</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>F</i>	-	-	<i>Moderate</i>
H59	Native hedgerow	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H60a	Species-rich native hedgerow – associated with bank or ditch	<i>F</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	-	-	<i>Moderate</i>
H60b	Species-rich native hedgerow – associated with bank or ditch	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	-	-	<i>Good</i>
H61	Species-rich native hedgerow – associated with bank or ditch	<i>P</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>P</i>	<i>F</i>	-	-	<i>Moderate</i>
H62	Species-rich native hedgerow – associated with bank or ditch	<i>F</i>	<i>F</i>	<i>F</i>	<i>F</i>	<i>F</i>	<i>P</i>	<i>P</i>	<i>F</i>	-	-	<i>Poor</i>

Hedge Ref	Hedgerow Type	BNG Condition Criteria P= Pass, F = Fail												Condition
		A1	A2	B1	B2	C1	C2	D1	D2	E1	E2			
H63	Species-rich native hedgerow – associated with bank or ditch	P	F	P	P	P	P	P	P	-	-		Good	
H64	Species-rich native hedgerow – associated with bank or ditch	P	F	P	P	F	P	P	F	-	-		Moderate	
H65	Native hedgerow	F	F	P	P	F	P	P	F	-	-		Moderate	

Table 7.16.6: Baseline Watercourse Condition Assessment Results.

Morph5	1	2	3
River name	Stream 1	Stream 1	Stream 1
Reach name	Stream 1, Melksham	Stream 1, Melksham	Stream 1, Melksham
Sub-reach name	Stream 1, Melksham, 1	Stream 1, Melksham, 2	Stream 1, Melksham, 4
Module	1 to 5	1 to 5	1 to 5
Location	ST 93058 63679	ST 92619 63896	ST 92788 63883
Shape	1.6666666	1.7352941	2.5
Average width	1.4	1.18	2
A1 - Brading Index	1	1	1
A2 - Sinuosity Index	1.125	1.125	1.125
A3 - Anabranching Index	1	1	1
A4 - Level of confinement	Unconfined	Unconfined	Unconfined
A5 - Reach Valley Gradient	0.0025	0.0025	0.0025
A6 - Bedrock reach	FALSE	FALSE	FALSE
A7 - Coarsest Bed Material	SI	SI	SI
A8 - Average Bed Material	SI	SI	SI
Calculated River Type	K	K	K
B1 - Bank top vegetation structure	1	2	1
B2 - Bank top tree feature richness	0	0	1
B3 - Bank top water-related features	0	0	0
B4 - Bank top NNIPS cover	0	0	0
B5 - Bank top managed ground cover	-2	-2	-2
C1 - Bank face riparian vegetation structure	1	1	1
C2 - Bank face tree feature richness	0	0	0
C3 - Bank face natural bank profile extent	3	3	3
C4 - Bank face natural bank profile richness	1	1	1
C5 - Bank face natural bank material richness	1	1	1
C6 - Bank face bare (unvegetated) sediment extent	1	4	3
C7 - Bank face artificial bank profile extent	0	0	0
C8 - Bank face reinforcement extent	0	0	0
C9 - Bank face reinforcement material severity	0	0	0
C10 - Bank face NNIPS cover	0	0	0
D1 - Channel margin aquatic vegetation extent	2	1	3
D2 - Channel margin aquatic morphotype richness	1	1	2
D3 - Channel margin physical feature extent	0	1	0

D4 - Channel margin physical feature richness	0	1	0
D5 - Channel margin artificial features	0	0	0
E1 - Channel aquatic morphotype richness	3	2	2
E2 - Channel bed tree feature richness	0	1	0
E3 - Channel bed hydraulic feature richness	1	1	1
E4 - Channel bed natural physical features extent	0	0	0
E5 - Channel bed natural physical feature richness	0	0	0
E6 - Channel bed material richness	1	1	1
E7 - Channel bed siltation	0	0	0
E8 - Channel bed reinforcement extent	0	0	0
E9 - Channel bed reinforcement materials severity	0	0	0
E10 - Channel bed artificial features severity	-4	0	0
E11 - Channel bed NNIPS cover	0	0	0
E12 - Channel bed filamentous algae cover	0	0	0
Preliminary Condition Score	0.3805668	0.951417	0.8987854
Over-deepening	'Highly Likely'	'Highly likely'	'Likely'
Final condition	Fairly Poor	Fairly Poor	Fairly Poor

Table 7.16.7: Post-Construction Management and Interventions

Table 7.16.7: Post-Construction Management and Interventions

Habitat	Predicted condition	Justification
Grassland – Modified grassland	Poor	Precautionary assessment – areas of amenity grassland are unlikely to have a species richness of 6-8 species per m ² . Therefore, 'Poor' condition assumed.
Grassland – Other neutral grassland	Moderate	Proposed management of wildflower grassland will ensure development of a diverse, species-rich sward, meeting the following condition criteria as a minimum, i.e.: A – the appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type. Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. B – Sward height will be varied. C – Cover of bracken <20% and cover of scrub <5%. Precautionary assessment – areas of other neutral grassland have potential to achieve a species richness of ≥10 species per m². However, 'Moderate' condition assumed.
Grassland – Other neutral grassland	Good	Proposed management of wildflower grassland will ensure development of a diverse, species-rich sward, meeting the following condition criteria as a minimum, i.e.: A – the appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type. Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. B – Sward height will be varied. C – Bare ground cover is between 1-5% D – Cover of bracken <20% and cover of scrub <5%. E – There are 10 or more vascular plants per m² present, including forbs
Grassland – Traditional Orchard	Poor	Proposed management of traditional orchard would result in the following condition criteria being met: C – Less than 5% of fruit trees smothered by scrub and patches of scrub occupy less than 10% of ground cover. G – Grassland to be seeded with an appropriate seed mix and subject to appropriate management to ensure establishment and persistence of a medium or above distinctiveness grassland. H – Absence of invasive species and species indicative of sub-optimal condition account for less than 10% ground cover. Precautionary assessment – Moderate condition could be achieved
Scrub – Mixed scrub	Moderate	Proposed management of scrub habitats would result in the following condition criteria being met: A – At least three woody species with no one species comprising >75%. B – Management will allow development of a variety of age classes. C – No invasive non-native species present and species indicative of suboptimal condition make up <5% of ground cover. D – Well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).

Habitat	Predicted condition	Justification
Urban Allotments -	Moderate	Areas of allotment are likely to have varied vegetation providing opportunities for invertebrates to live as well as less than 5% cover of invasive non-native plants (listed on schedule 9 of wildlife and country side act 1981 (as amended))
Urban – Urban trees	Poor	Precautionary assessment - once established, urban trees are expected to pass condition criteria A, B, D as a minimum.
Woodland and forests – Other woodland; broadleaved	Moderate	The following scores will be targeted for each of the criteria: A – 2, B – 3, C – 3, D – 3, E – 3, F – 3, G – 2, H – 3, I – 1, J – 2, K – 1, L – 1, M – 2 (Score: 29).
Urban – SuDs	Moderate	Proposed management of SUDS would result in the following condition criteria being met: A – Varied vegetation structure. C – Invasive non-native plant species and others which are detrimental to native wildlife cover less than 5%.
Native Hedgerow	Moderate	Habitat is retained and will continue to be managed to maintain condition criteria, i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length.
Native Hedgerow	Good	Habitat is retained and will continue to be managed to maintain condition criteria, i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length.
Species rich native hedgerow – associated with bank or ditch	Poor	Habitat is retained and will continue to be managed to maintain condition criteria, i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length.
Species rich native hedgerow – associated with bank or ditch	Moderate	Habitat is retained and will continue to be managed to maintain condition criteria, i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length.

Habitat	Predicted condition	Justification
		D1 – invasive/introduced species make up <10% hedge length.
Species rich native hedgerow – associated with bank or ditch	Good	Habitat is retained and will continue to be managed to maintain condition criteria, i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length.
Native species-rich hedgerow	Moderate	Once established, proposed management will ensure new hedgerows are likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length. Precautionary assessment as good condition potentially achievable.
Native species-rich hedgerow with trees	Moderate	Once established, proposed management will ensure new hedgerows are likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length. E2 - >95% of hedgerow trees are in healthy condition and little or no evidence of adverse impacts to tree health by damage from animals, pests and disease or human activity. Retained habitat to be managed to retain same condition. Precautionary assessment as good condition potentially achievable.
*Native hedgerow with trees	Moderate	Proposed management will allow tree growth from existing native hedgerows while maintaining current condition. Management will ensure that it is likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length. E2 - >95% of hedgerow trees are in healthy condition and little or no evidence of adverse impacts to tree health by damage from animals, pests and disease or human activity.

Habitat	Predicted condition	Justification
		Precautionary assessment as good condition potentially achievable.
*Native hedgerow with trees	Good	Proposed management will allow tree growth from existing native hedgerows while maintaining current condition. Management will ensure that it is likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length. E2 - >95% of hedgerow trees are in healthy condition and little or no evidence of adverse impacts to tree health by damage from animals, pests and disease or human activity.
*Native hedgerow with trees – associated with bank or ditch	Moderate	Proposed management will allow tree growth from existing native hedgerow – associated with bank or ditch while maintaining current condition. Management will ensure that it is likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length. E2 - >95% of hedgerow trees are in healthy condition and little or no evidence of adverse impacts to tree health by damage from animals, pests and disease or human activity. Precautionary assessment as good condition potentially achievable.
*Native species-rich hedgerow with trees – associated with bank or ditch	Moderate	Proposed management will allow tree growth from existing native species rich hedgerow – associated with bank or ditch while maintaining current condition. Management will ensure that it is likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length.

Habitat	Predicted condition	Justification
		E2 - >95% of hedgerow trees are in healthy condition and little or no evidence of adverse impacts to tree health by damage from animals, pests and disease or human activity. Retained habitat to be managed to retain same condition. Precautionary assessment as good condition potentially achievable.
*Native species-rich hedgerow with trees – associated with bank or ditch	Good	Proposed management will allow tree growth from existing native species rich hedgerow – associated with bank or ditch while maintaining current condition. Management will ensure that it is likely to meet the following condition criteria; i.e.: A1 – has to be >1.5m high on average. A2 – has to be >1.5m wide on average. B1 – no gaps of >0.5m beneath canopy for majority of hedge. B2 – gaps make up less than 10% of hedge length with no gaps >5m. C2 – nettles, docks and cleavers present in <20% hedge length. D1 – invasive/introduced species make up <10% hedge length. E2 - >95% of hedgerow trees are in healthy condition and little or no evidence of adverse impacts to tree health by damage from animals, pests and disease or human activity.
*Watercourse – other rivers and streams	Fairly poor	Watercourse enhanced through reduction/removal in riparian encroachment.

Habitats marked with an asterisk (*) are existing habitats which will be enhanced.

Figure 7.16.4: Headline Results

Detailed results are provided within the Statutory Biodiversity Metric, which has been issued separately.

Land East of Blackmore Farm, Melksham

Headline Results

Scroll down for final results ⚴

Return to results menu

On-site baseline	Area habitat units	62.09	
	Hedgerow units	35.10	
	Watercourse units	3.82	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	97.81	
	Hedgerow units	41.80	
	Watercourse units	4.66	
On-site net change (units & percentage)	Area habitat units	35.71	57.52%
	Hedgerow units	6.69	19.07%
	Watercourse units	0.84	21.94%
Off-site baseline	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Area 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)	Area habitat units	35.71	
	Hedgerow units	6.69	
	Watercourse units	0.84	
Spatial risk multiplier (SRM) deductions	Area 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)	Area habitat units	35.71	
	Hedgerow units	6.69	
	Watercourse units	0.84	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	57.52%	
	Hedgerow units	19.07%	
	Watercourse units	21.94%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	62.09	68.30	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	35.10	38.61	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	3.82	4.20	0.00	No additional watercourse units required to meet target ✓



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