BIRDWORLD AND HASKINS GARDEN CENTRE



BIRDWORLD AND HASKINS GARDEN CENTRE, FARNHAM ROAD, HOLT POUND, HAMPSHIRE

Biodiversity Net Gain Report

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1. INTRODUCTION

1.1. Background & Proposals

- 1.1.1. Ecology Solutions was commissioned in July 2023 by Birdworld and Haskins Garden Centre to undertake a Biodiversity Net Gain assessment for the redevelopment of Birdworld and Haskins Garden Centre, Farnham Road, Holt Pound, Hampshire (see Plan ECO1).
- 1.1.2. The site has planning permission for partial redevelopment. The new proposals involve redevelopment of the entire site, including the reconfiguration and relocation of the existing garden centre and Birdworld.

1.2. Site Characteristics

- 1.2.1. The site is situated to the southwest of Wrecclesham, Farnham. It is bound by the A325 to the east, Gravel Hill Road to the south, ancient woodland (part of the wider Alice Holt Forest) to the west and grassland with scattered trees to the north.
- 1.2.2. The Haskins Forest Lodge Garden Centre includes an existing garden centre building, associated car parking, and external horticultural area consisting of greenhouses and displays of plants. Birdworld consists of a range of natural and artificial habitats, including buildings (both vacant and in use), amenity grassland, hardstanding, car parking, mature trees and a variety of environments for birds, including sand and water.

1.3. Biodiversity Net Gain Report

1.3.1. This document assesses the level of Biodiversity Net Gain within the site. This report has been prepared with due consideration to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹² in relation to Biodiversity Net Gain. This assessment is based on the results of the habitat surveys completed by Ecology Solutions in 2022 and an updated walkover in December 2023.

¹ CIEEM (2019). Biodiversity Net Gain. Good Practice Principles for Development, A Practical Guide.

² CIEEM, CIRIA, IEMA (2016). *Biodiversity Net Gain: Good Practice Principles for Development.*

2. THE BIODIVERSITY METRIC 4.0

- 2.1. The Biodiversity Metric 4.0 was released on 24 March 2023 and uses habitat features as a proxy measure for capturing the value and importance of nature. It uses calculations to assess the importance of each habitat based on its size, ecological condition and location.
- 2.2. Measurements for habitats pre-development were calculated using QGIS. Assessments regarding the habitats present, as well as their condition, were based on information gathered during survey work.
- 2.3. Measurements for the post-development situation were calculated using the 'General Arrangement Plans' provided by the Richards Partnership (see Appendices 1 to 3).

3. METHOD FOR CALCULATING POST-DEVELOPMENT STATUS

- 3.1. The metric runs calculations based on all areas within the site. The metric is designed to provide habitats which are accurately reflective of those proposed in the 'General Arrangement Plans' and 'Planting Palettes' (Appendices 1 to 4).
- 3.2. Clarification on the nature of the landscape proposals was provided by the Richards Partnership (the landscape architects) where necessary.
- 3.3. The proposed habitats and their metric counterparts are illustrated in Table 3.1.

Proposed Habitat	BNG Metric Habitat Classification
Amenity Grass	Modified Grassland
Meadow Grass	Other Neutral Grassland
Meadow Grass for Wetlands	Other Neutral Grassland
Structure Planting	Mixed Scrub
Ornamental Shrub, Herbaceous and	Introduced Shrub
Grass Planting	
Bulb Planting	Included as part of Modified Grassland
Rain Garden	Rain Garden
SuDS Attenuation Basin	Sustainable Drainage System (SuDS)
Marginal Mix	Included as part of Sustainable Drainage
	System (SuDS)
Swale	Ditches / Other Neutral Grassland
Trees	Individual Trees (Urban)
Ivy Screen Wall	Ground-based Green Wall
Hedge Planting / Mixed Native	Non-native and Ornamental Hedgerow /
Hedgerow	Native Hedgerow
Developed Land (buildings, roads,	Developed land; Sealed Surface
paving, walls, and paths)	

Table 3.1. Reconciliation of landscape strategy and metric habitat types.

4. RESULTS AND DISCUSSION OF METRIC

4.1. This section should be read in conjunction with the Biodiversity Metric calculation tool which has been provided separately.

4.2. Baseline Habitat

- 4.2.1. Table 4.1 below summarises the habitats present on site pre-development (see Plans ECO2 and ECO3). The information included within this table is based on information gathered during the habitat surveys undertaken by Ecology Solutions in 2022 and an updated walkover in December 2023.
- 4.2.2. A baseline total of 86.10 habitat units, 3.25 hedgerow units, and 1.04 watercourse units are present within the development site.
- 4.2.3. Habitats were classified based on their conformity to UK habitat classifications³ and condition assessments were completed for habitats, hedgerows and watercourses identified within the site. The Biodiversity Metric 4.0 User Guide⁴ and Technical Annex 1⁵, in addition to professional judgment were used to inform the habitats' condition criteria.

³ UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at https://www.ukhab.org).

⁴ Natural England (2023). *The Biodiversity Metric 4.0, User Guide,* Natural England Joint Publication JP039.

⁵ Natural England (2023). *The Biodiversity Metric 4.0 – Technical Annex 1: Condition Assessment Sheets and Methodology*, Natural England Joint Publication JP039.

Habitats						
Baseline Habitat	Baseline Biodiversity Units	Condition Criteria / P	ass or Fail / Indicator Score	Condition	Ecological Features and Condition Notes	Post- development
Modified Grassland	7.35	Grassland (low distinct A – There are six to eight vascular plant species per square	tiveness)	5/7 condition criteria	Modified grassland is present across the site. These areas are associated with the aviaries and paddocks situated within Birdworld, and amenity	5.53 units lost 1.61 units retained
	metre, including at least two forbs (essential criterion for achieving Moderate or Good condition).	Fail	passed and essential criterion A failed = Poor	grassland fronting the A325. The grassland is well-managed and mown short to maintain its amenity aesthetic. Species present within the habitat	0.22 units enhanced	
B – Sward height is varied.	Fail		include Perennial Rye Grass Lolium perenne, Daisy Bellis perennis and Creeping			
	for less than 20 the total grassla area. D – Physical damage is evide less than 5% of	C – Scrub accounts for less than 20% of the total grassland area.	Pass		Buttercup Ranunculus repens. Given the monotonous composition of modified grassland located within the site, a site-wide condition assessment was conducted. All modified grassland was conditioned as Poor given a lack of species per square metre (an essential criterion for achieving	
		D – Physical damage is evident in less than 5% of the total grassland area.	Pass			
		E – Cover of bare ground is between 1% and 10%.	Pass			
	F – Cover of Bracken is below 20%.	Pass		Moderate and Good condition). Modified grassland situated		
		G – There is an absence of invasive non-native plant species.	Pass		within the southern portion of Birdworld (the farm) and that fronting the A325 will be lost. Further loss will occur in the remainder of Birdworld but much	

					of the habitat in the north and west of the site will be retained. Modified grassland located east of the A325 will be over-seeded with a meadow mixture, providing an enhancement over the existing situation.	
Other Neutral	3.11	Grassland (medium di	istinctiveness)	Poor	Neutral grassland is present in	3.11 units
Grassland		A – Grassland is good representation of habitat type. Indicator species are consistently present (essential criterion for achieving Moderate or Good condition).	Fail	3/6 condition criteria passed and essential criteria A and F failed = Poor	the north of the site, adjacent to the existing Birdworld car park. The area is occasionally used as an overflow car park. The grassland is more species-rich compared to the amenity areas elsewhere within the site. Species include Perennial Rye Grass, Annual Meadow Grass Poa annua, Sweet Vernal Grass	enhanced
		B – Sward height is varied.	Fail		Anthoxanthum odoratum, Yorkshire Fog Holcus lanatus,	
		C – Cover of bare ground is between 1% and 5%.	Pass		Sorrel Rumex acetosa, Bugle Ajuga reptans, Meadow Buttercup Ranunculus acris,	
		D – Cover of Bracken is below 20% and cover of scrub is below 5%.	Pass		Daisy, Cat's-ear Hypochaeris radicata, Dandelion Taraxacum officinale, Yarrow Achillea millefolium, Creeping Buttercup,	
		E – Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area. No invasive	Pass		Field Wood-rush Luzula campestris, Germander Speedwell Veronica chamaedrys and Silverweed Potentilla anserina. The entirety of this grassland will be enhanced via over-seeding	

		T			1		Г
		non-native plant species present. F – There are 10 or more vascular plant species per square metre, including forbs characteristic of the habitat type (essential criterion	F	-ail	_	and a change in management regime to achieve Good condition.	
		for achieving Good condition).					
Bramble Scrub	0.29	Condition assessment	t not applicable		N/A	Small areas of Bramble Rubus fruticosus scrub are present within the southwest, west and centre of Birdworld. The majority of Bramble scrub will be retained.	0.12 units lost 0.16 units retained
Mixed Scrub	2.77	Scrub	Southwest	Remaining	Moderate	Mixed scrub is situated in the	1.52 units lost
		A – Scrub is good representation of its habitat type. At least 80% of scrub is native and there are at least 3 native woody species. No single species comprises more than 75% cover.	Pass	Fail	Southwest scrub: 3/5 condition criteria passed = Moderate	southeast, centre and north of the site. The largest area occurs along the A325 and adjacent to the farm and existing garden centre. The largest area is dominated by Bramble and Hawthorn Crataegus monogyna with Beech Fagus sylvatica, Ash	1.25 units retained
		B – Seedlings, saplings, young shrubs and mature shrubs are all present.	Pass	Pass	Remaining: 2/5 condition criteria passed = Poor	Fraxinus excelsior, Lime Tilia platyphyllos x cordata, Alder Alnus glutinosa and Birch Betula sp. also being present. This scrub was scored as Moderate in condition.	
		C – There is an absence of invasive, non-native plant	Pass	Pass	. 301	oondaton.	

		species, and species indicative of sub-optimal condition make up less than 5% of ground cover.										The remaining scrub areas were assessed together, given their similar structure and species composition. Species present include Goat Willow Salix caprea, Weeping Willow Salix	
		D – Scrub has well developed edge, with scattered scrub and tall grassland and / or forbs present on margin.		F	ail				Fail			babylonica, Alder and London Plane Platanus x hispanica. These areas of scrub were scored as Poor in condition, given the relative lack of native woody species present in each	
		E- Clearings, glades or rides are present within the scrub.		F	ail				Fail			The majority of mixed scrub will be lost with the remainder being retained.	
Ornamental	0.34	Pond (P)	1	2	4	5	6	7	9	10	Poor	Ten ponds are present across	0.23 units lost
Lake or Pond		A – Pond is of good water quality.	F	F	F	Р	F	Р	F	F	P1 and P6:	the site, eight of which are associated with enclosures	0.11 units
		B – Semi-natural habitat is present around entire perimeter of pond for at least 10m from pond edge.	F	F	F	F	F	F	F	F	3/9 condition criteria passed = Poor	within Birdworld. These ponds are largely used by exotic wildlife including Penguins, Flamingos and Pelicans. The ponds score Poor in condition.	retained
		C – Less than 10% of water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Р	Р	Р	Р	Р	Р	Р	Р	Ponds P2 and P4: 2/9 condition criteria passed =	Two of the largest ponds (Ponds P9 and P10) in the south of Birdworld will be lost. The remaining ponds will be retained.	
		D – Pond is not artificially connected to other waterbodies.	F	F	F	F	F	F	Р	Р	Poor Ponds P5, P7 and P9:		

		E – Pond water levels can fluctuate naturally. No artificial dams, pumps, or pipework.	F	F	F	F	F	F	Р	Р	4/9 condition criteria passed = Poor		
		F – Absence of non- native plant and animal species.	F	F	F	F	F	F	F	F	Pond P10: 5/9		
		G – Pond is not artificially stocked with fish.	Р	F	Р	Р	Р	Р	Р	Р	condition criteria passed =		
		H – Emergent, submerged, or floating plants cover at least 50% of pond area which is less than 3m deep (criterion for non- woodland ponds).	F	F	F	F	F	F	F	F	Poor		
		I – Pond surface is no more than 50% shaded by adjacent trees and scrub (criterion for non- woodland ponds).	Р	Р	F	Р	Р	Р	F	Р			
Ponds (Non-	0.11	Pond			3				P8		Moderate	Two of the ten ponds within	0.11 units lost
Priority Habitat)		A – Pond is of good water quality.		Pa	ass			Р	ass		Pond P3:	Birdworld appear to have naturally formed. Pond P3 is a	
		B – Semi-natural		F	ail			F	ail		6/7	damp depression situated within	
		habitat is present									condition criteria	Woodland W1. It is likely to be	
		around entire perimeter of pond									passed =	seasonally flooded. The pond is heavily shaded and there is leaf	
		for at least 10m from									Moderate	litter but no aquatic or marginal	
		pond edge.										vegetation present. Pond P8 is	
		C – Less than 10%		Pa	iss			Р	ass		Pond P8:	located towards the centre of the	
		of water surface is									6/9	site and is surrounded by trees	
		covered with									condition	and mixed scrub. There is a	

		duckweed <i>Lemna</i> spp. or filamentous algae. D – Pond is not	Daga	Door	criteria passed = Moderate	thick layer of leaf litter with no aquatic or marginal vegetation present. The pond is also heavily shaded.	
		artificially connected to other waterbodies.	Pass	Pass		Both of these ponds will be lost to the development.	
		E – Pond water levels can fluctuate naturally. No artificial dams, pumps, or pipework.	Pass	Pass			
		F – Absence of non- native plant and animal species.	Pass	Pass			
		G – Pond is not artificially stocked with fish.	Pass	Pass			
		H – Emergent, submerged, or floating plants cover at least 50% of pond area which is less than 3m deep (criterion for non- woodland ponds).	N/A – Pond is within woodland	Fail			
		I – Pond surface is no more than 50% shaded by adjacent trees and scrub (criterion for non- woodland ponds).	N/A – Pond is within woodland	Fail			
Ruderal / Ephemeral	0.03	Urban A – Vegetation structure is varied. A single structural	Pass		Good 3/3 condition	A small area of ruderal vegetation is situated in the midwest of the site, in amongst the skeleton of a disused building.	0.03 units retained
		habitat component			criteria	Broad-leaved Dock Rumex	

		does not account for more than 80% of area. B – Habitat contains different plant species beneficial	Pass	passed = Good	obtusifolius and Common Nettle Urtica dioica are dominant with Bramble Rubus fruticosus also present. This area will be retained	
		for wildlife. C – Invasive nonnative plant species and others detrimental to native wildlife cover less than 5% of area (complete absence	Pass		entirely.	
		of invasive species required for Good condition).				
Allotments	0.01	Urban		Poor	An allotment is present in the	0.01 units lost
Allourierus	0.01	A – Vegetation structure is varied. A single structural habitat component does not account for more than 80% of area.	Fail	1/3 condition criteria passed = Poor	south of the site. This comprises six growing sections separated by bark chipping paths that run between. The allotment is fenced off from the surrounding grassland area.	0.01 utilits lost
		B – Habitat contains different plant species beneficial for wildlife.	Fail		The allotment will be lost to the development.	
		C – Invasive non- native plant species and others detrimental to native wildlife cover less than 5% of area (complete absence of invasive species	Pass			

		required for Good condition).				
Bare Ground	0.46	Urban A – Vegetation structure is varied. A single structural habitat component does not account for more than 80% of area. B – Habitat contains different plant species beneficial for wildlife. C – Invasive non- native plant species and others detrimental to native wildlife cover less than 5% of area (complete absence of invasive species required for Good condition).	Fail Pass	Poor 1/3 condition criteria passed = Poor	There are areas of bare ground colonised by tall ruderal and short perennial species located throughout the site. Species present include Red Dead-nettle Lamium purpureum, Annual Meadow Grass, Cleavers Galium aparine, Ivy-leaved Speedwell Veronica hederifolia, American Willowherb Epilobium ciliatum, Thyme-leaved Speedwell Veronica serpyllifolia, Marsh Thistle Cirsium palustre and Silver Birch Betula pendula. These areas were assessed together. The majority of these areas will be lost to the development.	0.24 units lost 0.22 units retained
Vacant or Derelict Land	0.22	Urban A – Vegetation structure is varied. A single structural habitat component does not account for more than 80% of area. B – Habitat contains different plant	Fail Fail	Poor 1/3 condition criteria passed = Poor	A large area of vacant or derelict land is present in the south of the site. The area is used for the storage of natural materials scheduled to be burned, as well as a designated fire area. It is also used for the storage of maintenance vehicles and piles of waste.	0.22 units lost

		species beneficial for wildlife. C – Invasive nonnative plant species and others detrimental to native wildlife cover less than 5% of area (complete absence of invasive species required for Good condition).	Pass				This area will be lost to the development.	
Ground Level Planters	0.14	Condition assessment	t not applica	ble.		N/A	There are numerous areas of amenity planting situated throughout the site. Many of these areas constitute nonnative ornamental species.	0.13 units lost 0.01 units retained
Introduced Shrub	1.47	Condition assessment	t not applica	ble.		N/A	There are numerous areas of amenity shrubs situated throughout the site. Many of these areas constitute nonnative ornamental species.	0.60 units lost 0.87 units retained
Vegetated Garden	0.12	Condition assessment	t not applica	ble.		N/A	Two vegetated garden areas are present on-site. A garden area associated with the cottage in the north of the site is dissected by a path that runs between the cottage and the existing Birdworld car park. The second garden surrounds Building BW10 towards the centre of the site. The northern garden will be retained and the central garden lost.	0.10 units lost 0.02 units retained
Other	5.53	Woodland	W1	W2	W3	Moderate	Three woodlands (W1, W2 and	0.34 units lost
Woodland; Mixed		1 – Age distribution of trees	2	1	1	and Poor	W3) are present on-site.	

	2 – Wild, domestic			1	\\/.	Charles present within these	5.19 units
	and feral herbivore	3	3	3	W1: Condition	Species present within these areas include Horse-chestnut	retained
		3	3	٥	score of		retairieu
	damage				25/39 =	Aesculus hippocastanum, Japanese Laurel Aucuba	
	3 – Invasive plant	1	3	3	25/39 = Poor	·	
	species				P001		
	4 – Number of	3	3	3	WO.	Sambucus nigra, Rhododendron Rhododendron ponticum,	
	native tree species		_		W2: Condition	,	
	5 – Cover of native		_			Norway Maple <i>Acer</i> platanoides,	
	tree and shrub	2	2	2	score of	Lawson's Cypress	
	species				26/39 =	Chamaecyparis lawsoniana,	
	6 – Open space	3	3	3	Moderate	Leyland Cypress Cupressus x	
	within woodland		, ,	Ü	14/0	leylandii, Douglas Fir	
	7 – Woodland	2	2	1	<u>W3:</u>	Pseudotsuga menziesii, Scots	
	regeneration			'	Condition	Pine Pinus sylvestris, Sycamore	
	8 – Tree Health	2	2	2	score of	Acer pseudoplatanus, Silver	
					26/39 =	Birch, Crack Willow Salix fragilis,	
	9 - Vegetation and	3	3	3	Moderate	Hazel Corylus avellana, Ash	
	ground flora	3	3	٥		Fraxinus excelsior, Hornbeam	
	10 - Woodland	1	4	4		Carpinus betulus, Oak Quercus	
	vertical structure	1	1	1		robur, Coast Redwood Sequoia	
	11 – Veteran trees	1	1	1	1	sempervirens, European Larch	
	12 – Amount of	4	4	4	1	Larix decidua, Alder, Goat	
	deadwood	1	1	1		Willow, Japanese Red Cedar	
	13 – Woodland				1	Cryptomeria japonica and Grand	
	disturbance					Fir Abies grandis.	
						Portions of Woodland W1 and	
						W2 will be lost and W3 will	
						retained.	
		1	1	2		Non-native Lawson Cypress and	
		•		_		Japanese Red Cedar trees will	
						be removed from the eastern	
						portion of Woodland W2. The	
						area will then be planted with	
						native trees, thus enhancing the	
						woodland. Woodland W2	
						achieves a score of three for	

Link on Tree	04.40		Cood	Condition indicator 4 given the presence of more than five native tree species. This is the maximum score and cannot be increased to account for the enhancement that will inevitably take place. The area of woodland concerned is instead treated as retained within the metric.	20 0 units locat
Urban Tree	64.16	See Appendix 5 for all condition criteria and scores for individual trees.	Good, Moderate and Poor	A substantial number of individual trees are present across the site, ranging in size from small to large.	20.8 units lost 43.38 units retained
Developed Land; Sealed Surface	0	Condition assessment not applicable.	N/A	Thirty-six buildings are present on-site, in addition to areas of hardstanding. The south of the site will be redeveloped with the majority of Birdworld in the north remaining unaffected.	N/A
Hedgerows					
Baseline Hedgerow	Baseline Biodiversity Units	Condition Criteria / Pass or Fail	Condition	Ecological Features and Condition Notes	Post- development
Non-Native and Ornamental Hedgerow	0.90	Condition assessment not applicable.	Fixed at Poor	The majority of hedgerows found within the site are ornamental consisting of both non-native and native species. They are managed to maintain an amenity value. Such species include Alder, Dogwood <i>Cornus sanguinea</i> , Hornbeam, Norway Maple, Red-osier Dogwood <i>Cornus sericea</i> and Sycamore.	0.46 units lost 0.45 units retained

Native	1.1	Hedgerows	H1	H2	H3	Moderate	Three native hedgerows	0.81 units lost
Hedgerow		A1 – More than	Fail	Fail	Fail	and Poor	(Hedgerows H1, H2 and H3) are	
		1.5m tall on					situated along the eastern site	0.11 units
		average.				<u>H1:</u>	boundary.	retained
		A2 – More than	Fail	Fail	Fail	Fails a total		
		1.5m wide on				of more	Hedgerow H1 is located in the	0.18 units
		average.				than four	northeast, west of the A325.	enhanced
		B1 – Gap between	Fail	Pass	Pass	attributes =	Hedgerows H2 and H3 are	
		ground and canopy				Poor	situated further south and to the	
		base below 0.5m for					east of the A325. Hedgerow H1	
		more than 90% of				H2 and H3:	comprises primarily of Ivy with	
		hedgerow length.				No more	Sycamore present in the	
		B2 – Gaps comprise	Pass	Fail	Fail	than four	northern section. The	
		less than 10% of				failures in	understorey includes Common	
		total hedgerow				total but	Nettle, Garlic Mustard, Broad-	
		length and no gaps				fails both A	leaved Dock and Cow Parsley.	
		are more than 5m				attributes =	The hedgerow is approximately	
		wide.				Moderate	one metre in height and includes	
		C1 – More than 1m	Pass	Pass	Pass		several gaps. At its core is a	
		width of undisturbed					wooden fence.	
		ground with					110 100 100	
		perennial					Hedgerow H2 is very	
		herbaceous					segmented, achieving, on	
		vegetation is					average, one metre in height.	
		present for more					Hawthorn is dominant with	
		than 90% of					Horse-chestnut, Elder and	
		hedgerow length (on					Sycamore also occurring. The	
		one side at least).					understorey includes Bramble,	
		C2 – Plant species	Fail	Fail	Fail		Common Nettle, Cow Parsley, Garlic Mustard, Hogweed and	
		indicative of nutrient					Hedge Bindweed.	
		enrichment of soils					rieuge billuweed.	
		dominate less than					Hedgerow H3 is essentially a	
		20% cover of					continuation of Hedgerow H3	
		undisturbed ground.					and comprises the same species	
		D1 – More than 90%	Pass	Pass	Pass		and structure.	
		of hedgerow and					and structure.	
		undisturbed ground						

		is free of invasive non-native plant species. D2 – More than 90% of hedgerow or undisturbed ground is free of damage caused by humans.		Fail			Pass	3		Pass	6		Hedgerow H1 will be retained whilst Hedgerow H2 will be lost. A portion of Hedgerow H3 will be enhanced whilst the remainder is lost.	
Line of Trees	1.24	Line of Trees (TL)	1	2	3	4	5	6	7	8	9	Moderate	Several lines of trees are	0.52 units lost
		A – At least 70% of trees are native species. B – Tree canopy is predominantly continuous with gaps in cover making up less than 10% of total area	P	P	P	F P	F P	F P	F P	P	F P	and Poor TL1, TL2 and TL3: 3/5 condition criteria passed = Moderate	Treeline TL1 lies along the northern boundary of the Birdworld car park and comprises Scots Pine and Oak. Treeline TL2 extends along the western boundary of the	0.72 units retained
		and no gap being										TL4 to TL8:	Birdworld car park and similarly comprises Scots Pine and Oak.	
		more than 5m wide. C – One or more trees has veteran features and/or ecological niches.	Р	Р	P	F	F	F	Р	F	F	2 or less condition criteria passed =	To the immediate southwest of Treeline TL2 is Treeline TL3 which is of the same	
		D – There is an undisturbed naturally-vegetated strip of at least 6m on both sides of tree line. E – At least 95% of trees are in healthy condition with little/no evidence of	F	F	F	F	F	F	F	F	F	Poor	composition but also includes a Lawson's Cypress specimen. Treeline TL4 is present along the western boundary of Woodland W2 and includes Lawson's Cypress and Oak. Treeline TL5 lies adjacent to the southern boundary of Woodland	
		damage.											W2 and extends southwards forming a perimeter around a section of the Garden Centre car	

Watercourses								park. This treeline is exclusively Leyland Cypress. Treeline TL6 matches Treeline TL5 in terms of composition and location but is separated from the latter by an access road to the car park they surround. Treeline TL7 is a short line of trees present just north of the Garden Centre and consists of Leyland Cypress and Lawson's Cypress. Treeline TL8 is a row of closely planted trees designed to form a screen or hedge, present to the west of the Garden Centre. It comprises Leyland Cypress and Oak, with Leyland Cypress dominating the end sections and Oak being dominant in the centre of the group. Treeline TL9 is a small group of Leyland Cypress present along the southern site boundary.	
Baseline Watercourse	Baseline Biodiversity Units	Condition Criteria / Pass or Fail	Condit	ion			Ecological Features and Condition Notes	Post-development	
Ditches	1.04	Ditches A – Ditch is of good water quality.	D1 Pass	D2 Pass	D3 Pass	D4 Pass	Poor	Four ditches are present within the site. Ditch D1 runs along the northwest site boundary. This	0.29 units lost

B – Range of emergent, submerged and floating-leaved plants are present.	Fail	Fail	Fail	Pass	D1, D2 and D3: 4/8 condition criteria	ditch was wet at the time of survey, with shallow, gently flowing water present, although it likely dries in the summer months.	0.67 units retained 0.08 units enhanced
C – Less than 10% cover of filamentous algae and / or duckweed.	Pass	Pass	Pass	Pass	passed = Poor	Ditch D2 is present near the A325 and is overgrown with vegetation. This ditch dissects	
D – Aquatic marginal vegetation is present along more than 75% of the ditch.	Fail	Fail	Fail	Fail	5/8 condition criteria passed = Poor	an area of mixed scrub and was wet at the time of survey with Common Reed <i>Phragmites australis</i> present around it. Ditch D3 is located towards the south of the site, where it extends into Woodland W3. The ditch is overgrown with Common Reed and Bramble. Ditch D4 extends along the southern site boundary. The ditch bounds Woodland W3 and	
E – Damage is evident along less than 5% of ditch.	Pass	Pass	Pass	Pass			
F – Sufficient water levels are maintained.	Fail	Fail	Fail	Fail			
G – Less than 10% of ditch is heavily shaded.	Fail	Fail	Fail	Fail			
H – Absence of non- native plant and animal species.	Pass	Pass	Pass	Pass		includes flowing water approximately 10-15cm deep at the time of survey. Ditch D4 flows off-site and aquatic vegetation was observed within the off-site section.	

Table 4.1. Summary of baseline habitats, hedgerows, and watercourses on-site.

4.3. **Post-Development**

- 4.3.1. Tables 4.2 and 4.3 below summarise the habitats proposed on-site post-development, which are illustrated on Plan ECO4 and in Appendices 1 to 3. Plan ECO5 illustrates the retention, enhancement and loss of habitats, hedgerows and watercourses on-site as part of the development.
- 4.3.2. The development proposals include areas of amenity grass, meadow, mixed scrub, ornamental shrubs incorporating perennial species, grasses and ferns, in addition to an attenuation basin and rain garden, both of which will be planted with wetland grass and marginal species. More than 500 trees will be planted across the site. New hedgerows and ditches will be established with lengths of existing features enhanced. The planting palette comprises a predominantly native species mix for the Birdworld portion of the site and a more ornamental, non-native mix for the garden centre portion. The proposals also involve the reconfiguration and relocation of the existing garden centre and Birdworld with new areas of car parking, roads and paths established throughout the site.
- 4.3.3. Overall, the proposed scheme would result in a net gain of 10.64 habitat units, 0.89 hedgerow units, and 0.78 watercourse units. This translates to a percentage change of +12.36% in habitat units, +27.41% in hedgerow units, and +74.65% in watercourse units from pre- to post-development.
- 4.3.4. The targeted conditions for proposed habitats will be achieved through appropriate management undertaken during the operational phase of the proposals. This will ensure the proposed habitats continue to offer biodiversity benefit in the future.
- 4.3.5. Proposed habitat, hedgerow and watercourse conditions have been based against Natural England's Condition Assessment criteria and are expected to be easily achieved through appropriate management.

Created Habita Proposed	Landscape	Target	Biodiversity	Target Condition Notes
Habitat	Plan Habitat	Condition	Units Delivered	Target Condition Notes
Modified Grassland	Amenity Grass / Bulb Planting	Poor	1.11	New areas of amenity grassland are proposed across the site. These areas will be established at the centre of the site around the new Birdworld entrance and car park, as well as the areas fronting the A325. This habitat will be subject to a high degree of management and is considered unlikely to meet essential criterion A required for a 'Moderate' or 'Good' condition.
Other Neutral Grassland	Meadow Grass / Meadow Grass for Wetlands / Swale	Moderate and Poor	5.46	Meadow is to be established around the proposed attenuation basin to the south of the site and within the ancient woodland buffer zone in the southwest of the site. Further areas will be established around the proposed buildings in the northwest of the site and play barn in the east of the site. Meadow will also be present adjacent to the A325. The majority of meadow is expected to meet essential criterion A and at least 3 criteria overall, achieving a Moderate condition. The areas of meadow planting within the proposed Birdworld carpark (wet meadow adjacent to proposed ditches) are assigned a Poor condition as they are not expected to be of the same quality as the remaining grassland.
Mixed Scrub	Structure Planting	Poor	0.13	Structural planting is to be established to the north of the proposed garden centre car park. A poor condition is considered appropriate considering the size of the area.
Introduced Shrub	Ornamental Shrub, Herbaceous and Grass Planting	N/A	1.71	Ornamental species will be planted throughout the site and will provide both wildlife and amenity value. This planting will perennial species, grasses and ferns, in addition to larger shrubs.
Rain Garden	Rain Garden	Moderate	0.04	A rain garden will be established to the north of the new Birdworld entrance. This habitat is expected to pass all three core condition criteria to achieve Good condition but was assigned a Moderate condition to be conservative.
Sustainable Drainage System (SuDS)	SuDS Attenuation Basin / Marginal Planting	Moderate	0.12	An attenuation basin will be established in the south of the site and will be planted with marginal plant species and meadow mix. This area will provide functional drainage and provide benefits to wildlife, particularly amphibians in their terrestrial phase, and aquatic phase when the feature is inundated with water. The proposed habitat is expected to pass condition criteria B, C, E1 and E2, which would achieve a Moderate condition.
Ground-based Green Wall	Ivy Screen Wall	Poor	0.04	A retaining wall clad with pre-grown Ivy screens will be established along the A325 frontage.
Individual Trees (Urban)	Trees	Moderate	27.87	A total of 535 individual urban trees will be planted across the site, of which 322 are expected to reach a small size and 213 a medium size.

Developed	Buildings,	N/A	0	The proposals involve the reconfiguration and relocation of the existing garden centre
Land; Sealed	Roads,			and Birdworld with new areas of car parking, roads and paths established throughout
Surface	Paving, Walls,			the site.
	and Paths			
Created Hedge	rows			
Proposed	Landscape	Target	Biodiversity	Target Condition Notes
Hedgerow	Plan Habitat	Condition	Units Delivered	
Non-Native	Hedge	Poor	1.41	The majority of proposed hedgerows will be ornamental and comprise both native and
and	Planting /			non-native species. New hedgerows will predominantly be situated within the new car
Ornamental	Mixed Native			parks and along the A325 frontage.
Hedgerow	Hedgerow			
Native	Hedge	Moderate	1.18	Native hedgerows are proposed along the southwestern site boundary and along the
Hedgerow	Planting /			eastern site boundary, adjacent to the A325. The hedgerows are expected to meet
	Mixed Native			moderate condition.
	Hedgerow			
Created Water	courses			
Proposed	Landscape	Target	Biodiversity	Target Condition Notes
Watercourse	Plan Habitat	Condition	Units Delivered	
Ditches	Swale /	Moderate	1.05	A ditch is to be established in the south of the site to drain water into the proposed
	Meadow			attenuation basin. Further ditches will be created within the new Birdworld carpark and
	Grass for			will provide functional drainage and offer new opportunities to wildlife.
	Wetlands			

Table 4.2. Summary of post-development habitats, hedgerows, and watercourses on-site.

Enhanced Habitats										
Baseline Habitat	Baseline Condition	Proposed Habitat	Target Condition	Biodiversity Units Delivered	Target Condition Notes					
Modified Grassland	Poor	Other Neutral Grassland	Moderate	0.68	Modified grassland located east of the A325 will be over-seeded with a meadow mixture to establish a more species-rich sward. The grassland will be managed to ensure a Moderate condition is achieved and maintained. Essential criterion A for achieving moderate condition will be met by ensuring the habitat is a good representation of neutral grassland.					
Other Neutral Grassland	Poor	Other Neutral Grassland	Good	6.76	The area of neutral grassland in the north of the site will be entirely enhanced via over-seeding with a meadow mixture and a change in management regime. Condition criteria A and F,					

					essential for achieving Good condition, will be passed by ensuring the habitat is a good representation of neutral grassland and that more than 10 vascular plant species, including forbs are present per square metre. A change in mowing regime will allow for a varied sward height, thus passing criterion B.
Enhanced Hed	gerows				
Baseline Hedgerow	Baseline Condition	Proposed Hedgerow	Target Condition	Biodiversity Units Delivered	Target Condition Notes
Native Hedgerow	Moderate	Native Hedgerow	Good	0.26	A portion of Hedgerow H3 will be enhanced via infill planting with native species, passing criterion B2. The hedgerow will be allowed to grow to an average height and width of more than 1.5 metres, passing criteria A1 and A2.
Enhanced Wat	_				
Baseline Watercourse	Baseline Condition / Riparian Encroachment	Proposed Watercourse	Target Condition / Riparian Encroachment	Biodiversity Units Delivered	Target Condition Notes
Ditches	Poor Major / No Encroachment	Ditches	Poor No Encroachment / No Encroachment	0.10	Ditch D1 will be passively enhanced due to the removal of existing hardstanding present in the north of the site. Currently this developed land results in major encroachment into the riparian zone of the ditch. Post-development, the hardstanding will be replaced with meadow and thus no encroachment will occur to the riparian zone.

Table 4.3. Summary of habitat, hedgerow, and watercourse enhancements on-site.

5. EVALUATION

5.1. The Principles of Evaluation

Biodiversity Net Gain – Good Practice Principle for Development

- 5.1.1. CIRIA, CIEEM and IEMA have developed principles of good practice to achieve Biodiversity Net Gain. These principles provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature through sustainable development. There are ten principles in total, and all principles must be applied together as one approach. The ten principles are set out below.
- 5.1.2. **Principle 1. Apply Mitigation Hierarchy.** Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensation for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
- 5.1.3. Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere. Avoid impacts on irreplaceable biodiversity; these impacts cannot be offset to achieve no net loss or net gain.
- 5.1.4. **Principle 3. Be inclusive and equitable.** Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to net gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.
- 5.1.5. **Principle 4. Address risks.** Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
- 5.1.6. **Principle 5. Make a measurable net gain contribution.** Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
- 5.1.7. **Principle 6. Achieve the best outcomes for biodiversity.** Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when:
 - Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses.
 - Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation.
 - Achieving net gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels.
 - Enhancing existing or creating new habitat.
 - Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.

- 5.1.8. **Principle 7. Be additional.** Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
- 5.1.9. **Principle 8. Create a net gain legacy.** Ensure net gain generates longterm benefits by:
 - Engaging stakeholders and jointly agreeing practical solutions that secure net gain in perpetuity.
 - Planning for adaptive management and securing dedicated funding for long-term management.
 - Designing net gain for biodiversity to be resilient to external factors, especially climate change.
 - Mitigating risks from other land uses.
 - Avoiding displacing harmful activities from one location to another.
 - Supporting local-level management of net gain activities.
- 5.1.10. **Principle 9. Optimise sustainability.** Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
- 5.1.11. **Principle 10. Be transparent.** Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Lawton's Principle

- 5.1.12. Principles for enhancing England's wildlife sites were developed as part of the Lawton Review⁶. Across the UK, these principles can be used to design Biodiversity Net Gain activities to boost wildlife sites. They are:
 - Improving the quality of wildlife sites;
 - Increasing the size of the wildlife sites;
 - Enhancing connections between, or joining up wildlife sites;
 - · Creating new wildlife sites; and
 - Reducing pressure on wildlife sites.

5.2. **Post-Development Evaluation**

- 5.2.1. The contribution of the site to Biodiversity Net Gain has been assessed with due regard to the principles outlined and discussed above.
- 5.2.2. The landscaping proposals succeed in achieving a net gain in habitat, hedgerow and watercourse units, delivering net unit increases of 10.64, 0.89 and 0.78 respectively.
- 5.2.3. The development proposals include areas of amenity grass, meadow, mixed scrub, ornamental shrubs incorporating perennial species, grasses and ferns, in addition to an attenuation basin and rain garden, both of which will be planted with wetland grass and marginal species. More than 500 trees will be planted across the site. New hedgerows and ditches will be established with lengths of existing features enhanced. The planting palette comprises a predominantly native species mix for the Birdworld portion of the site and a more ornamental, non-native mix for the garden

⁶ Department for Environment, Food and Rural Affairs (2010). *Making Space for Nature: A Review of England's Wildlife Sites*, DEFRA.

centre portion. The proposals also involve the reconfiguration and relocation of the existing garden centre and Birdworld with new areas of car parking, roads and paths established throughout the site.

- 5.2.4. The proposals will maintain and enhance green infrastructure across the site and provide elevated opportunities for foraging and nesting birds, bats and Hedgehogs. An increase in floristic diversity across the site will also heighten invertebrate suitability, thus benefitting aforementioned species groups.
- 5.2.5. The net gains delivered by the landscape proposals are detailed within Table 5.1 below.

	Watercourse Units	+74.65%
	Hedgerow Units	+27.41%
Combined Total Net Change (%)	Habitat Units	+12.36%
	Watercourse Units	+0.78
	Hedgerow Units	+0.89
Combined Total Net Unit Change	Habitat Units	+10.64
	Watercourse Units	1.82
	Hedgerow Units	4.14
On-Site Post-intervention	Habitat Units	96.73
	Watercourse Units	1.04
	Hedgerow Units	3.25
On-Site Baseline	Habitat Units	86.10

Table 5.1. Summary of Biodiversity Net Gain.

6. LEGISLATION AND POLICY CONTEXT

6.1. The planning policy framework that relates to Biodiversity Net Gains at the site is issued nationally through the National Planning Policy Framework (NPPF) and locally through the planning policies of East Hampshire District Council.

6.2. National Policy

National Planning Policy Framework (December 2023)

- 6.2.1. Guidance on national policy for Biodiversity Net Gain is provided by the NPPF, published in March 2012, revised on 24 July 2018, 19 February 2019, July 2021, 5 September 2023 and again on 20 December 2023. The following sections of the policy relate to Biodiversity Net Gain:
- 6.2.2. Paragraph 180(d) states that planning policies and decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current future pressures.
- 6.2.3. Paragraph 185(b) states that to protect and enhance biodiversity and geodiversity, plans should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and purse opportunities for securing measurable net gains for biodiversity.
- 6.2.4. Paragraph 186(d) states that when determining planning application, local planning authorities should apply the following principle: development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

6.3. Local Policy

East Hampshire District Local Plan: Joint Core Strategy (adopted 2014)

- 6.3.1. East Hampshire District Council (EHDC) adopted the Local Plan: Joint Core Strategy in May 2014. The South Downs National Park Authority (SDNPA) adopted the Local Plan: Joint Core Strategy in June 2014.
- 6.3.2. The Local Plan: Joint Core Strategy is the first part of a new Local Plan for the area outside of the South Downs National Park (SDNP). Within the National Park, the Local Plan: Joint Core Strategy will be superseded by the South Downs National Park Local Plan. These plans will guide development outside and within the SDNP.
- 6.3.3. The following policy of the East Hampshire District Local Plan: Joint Core Strategy is relevant to Biodiversity Net Gain.
- 6.3.4. **Core Policy 21 Biodiversity.** This policy states that development should ensure wildlife enhancements are incorporated into the design to achieve a net gain in biodiversity, alongside the retention and protection of existing features that are valuable for wildlife. It also states that, where appropriate

and well-designed, landscaping plans and habitat creation can help create new, and enhance existing, wildlife corridors.

South Downs Local Plan (adopted 2019)

- 6.3.5. The South Downs Local Plan (SDLP) covers the entire National Park. This document is currently under review. The local plan is the key document in the EHDC / SDNP planning strategy. It sets the long-term vision, objectives and broad strategy for the accommodation of future development in the district in the period to 2033.
- 6.3.6. The following policy of the South Downs Local Plan is relevant to Biodiversity Net Gain.
- 6.3.7. Strategic Policy SD9 Biodiversity and Geodiversity. This policy states that development proposals will be permitted where they seek to conserve and enhance existing biodiversity. Proposals should seek to retain and enhance features of interest and ensure appropriate long-term management of features. Opportunities for net gains in biodiversity should be identified and incorporated into planning and contribute to the restoration and enhancement of existing habitat, improving connectivity between habitats at both local and regional ecological network levels.

6.4. Environment Act 2021

6.4.1. The Act details a legal requirement for all developments to ensure that a minimum of 10% net gain in Biodiversity is delivered. While Section 6 of the Environment Act states that Biodiversity Net Gain is required for new developments, this is not a mandatory requirement until such time as the Secretary of State adopts a regulation determining it so; this is expected in February 2024.

7. SUMMARY AND CONCLUSIONS

- 7.1. Ecology Solutions was commissioned in July 2023 by Birdworld Ltd and Haskins Garden Centres Ltd to undertake a Biodiversity Net Gain assessment for the redevelopment of Birdworld and Haskins Garden Centre, Farnham Road, Holt Pound, Hampshire.
- 7.2. The site has planning permission for partial redevelopment. The new proposals involve redevelopment of the entire site, including the reconfiguration and relocation of the existing garden centre and Birdworld.
- 7.3. The site is comprised of the Haskins Forest Lodge Garden Centre and Birdworld. The garden centre includes an existing building, associated car parking, and external horticultural area consisting of greenhouses and displays of plants. Birdworld comprises a range of natural and artificial habitats, including buildings (both vacant and in use), amenity grassland, hardstanding, car parking, mature trees and a variety of environments for birds, including sand and water.
- 7.4. Overall, when assessed against the Biodiversity Metric 4.0, the development proposals will deliver a net gain in habitat units of +12.36%, a net gain in hedgerow units of +27.41%, and a net gain in watercourse units of +74.65%.
- 7.5. The enhanced, retained, and created habitats will maintain and enhance green infrastructure across the site and provide elevated opportunities for foraging and nesting birds, bats, Hedgehogs and invertebrates.
- 7.6. In conclusion, it is considered that the development would be compliant with national and local policy, together with emerging best practice and legislation.