Pre-Planning Biodiversity Gain Plan

for

Land at Manor House
Church Street
Burbage

for

Mr S & Ms C Bennett

(19/09/2025)

2023-10(03)

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This report has been prepared in accordance with the Biodiversity Net Gain User Guidelines and is compliant with the CIEEM Code of Professional Conduct.

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Introduction

Ecolocation were commissioned by Simon & Catherine Bennett to provide a biodiversity net gain assessment for an area of land at Manor House, Church Street, Burbage in Leicestershire (hereafter referred to as the 'Site'), which it was understood would be subject to a future planning application to perpetuate an existing outline consent for residential development. The Statutory Metric released July 2025 was used to quantify the biodiversity impact of the proposed development. This was conducted based on an extended habitat walkover survey by suitably qualified field surveyor, Kelly Goldsmith, on the 31st of July 2025.

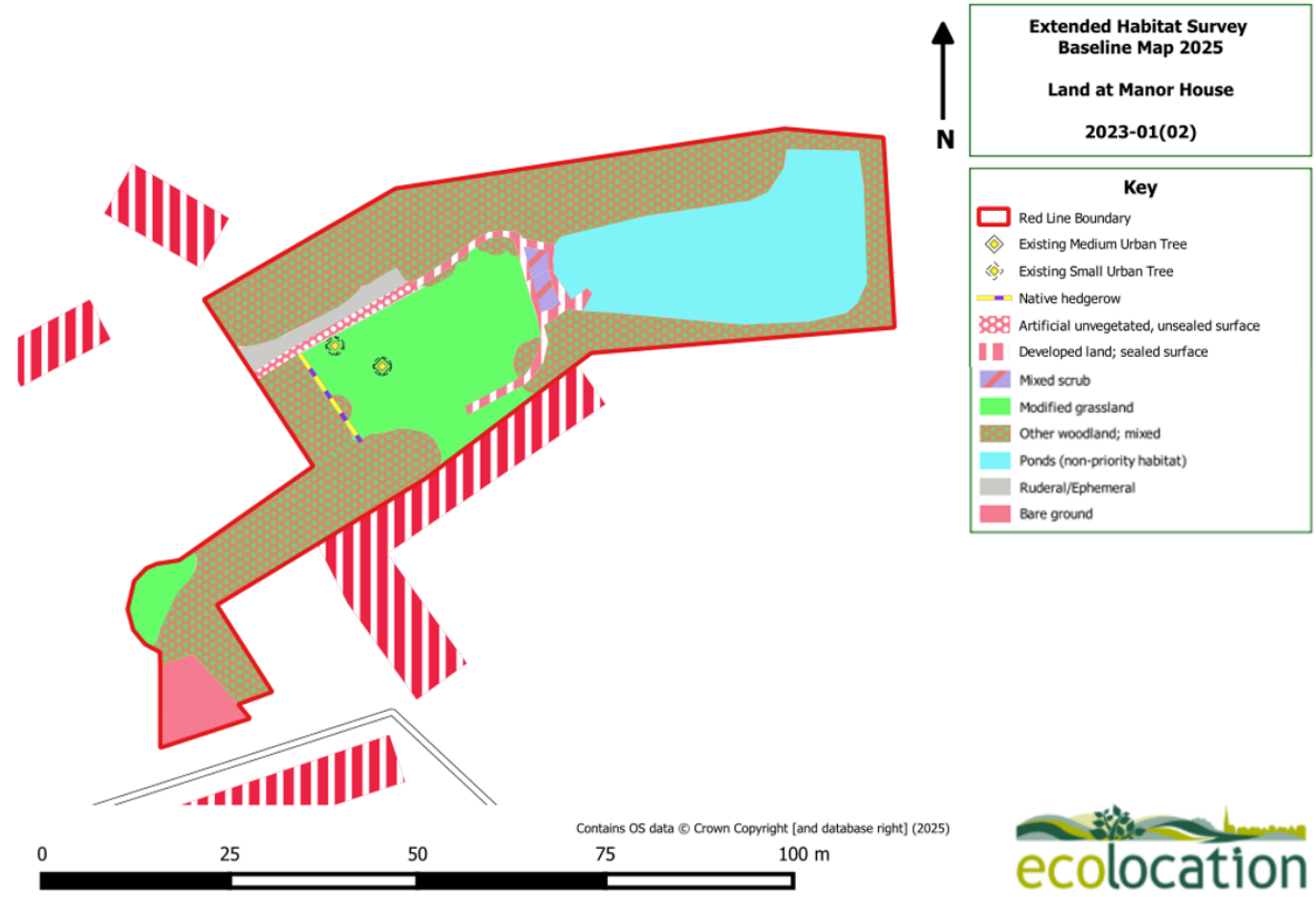


Figure 1: Extended Habitat Map, 2025

Table 1: Baseline Habitat Recorded Areas in Hectares.

Habitat Type	***Area (Ha)***	***Retained (Ha)***
Artificial unvegetated, unsealed surface	0.0035	0.0035
Bare ground	0.0089	0
Developed land; sealed surface	0.0065	0
Modified grassland (moderate)	0.020	0
Mixed scrub	0.0014	0
Modified grassland (poor)	0.037	0
Other woodland; mixed	0.16	0.147
Ponds (non-priority habitat)	0.066	0.066
Ruderal/Ephemeral	0.0063	0.0063
Urban tree	0.0041	0
Hedgerow	***Propose Length (km)***	
Native Hedge	0.010	0.010

The proposed development is for one new detached dwelling with associated access, garden, green roof and boundaries. The existing hedges will be retained, and a new proposed species rich hedge will be planted at the west of the site, with one small poor condition tree being lost to the development. The proposed broad landscaping scheme is indicated below:

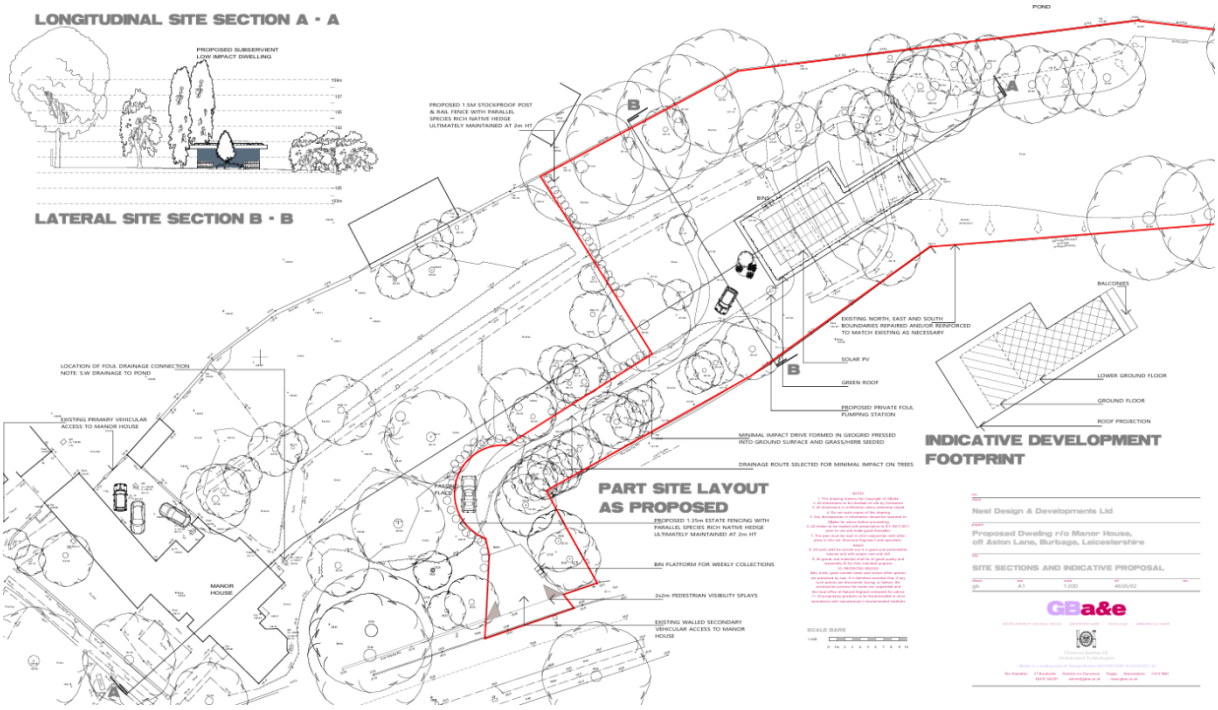


Figure 2: Proposed landscaping Plan: SITE SECTIONS & INDICATIVE PROPOSAL

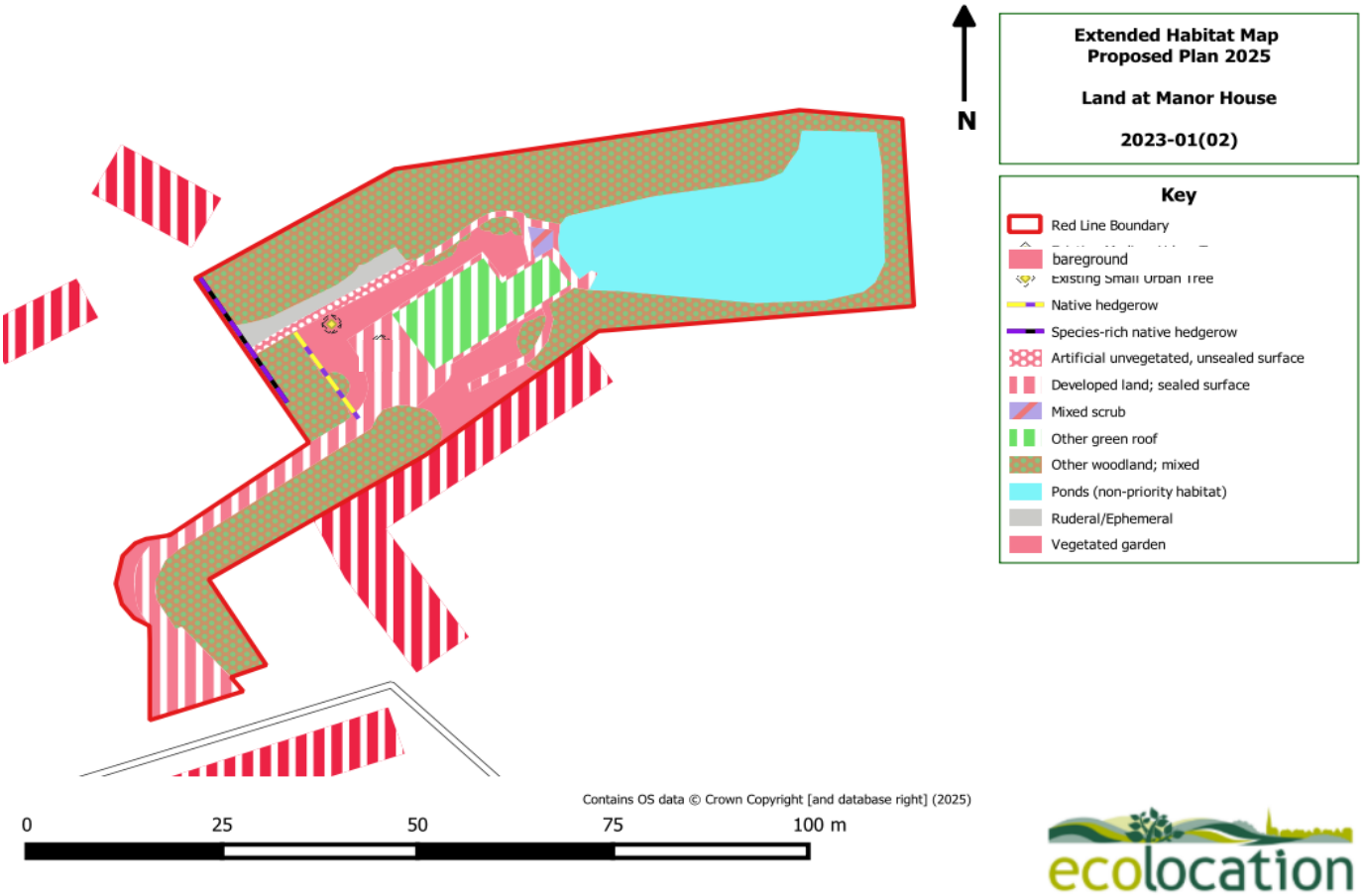


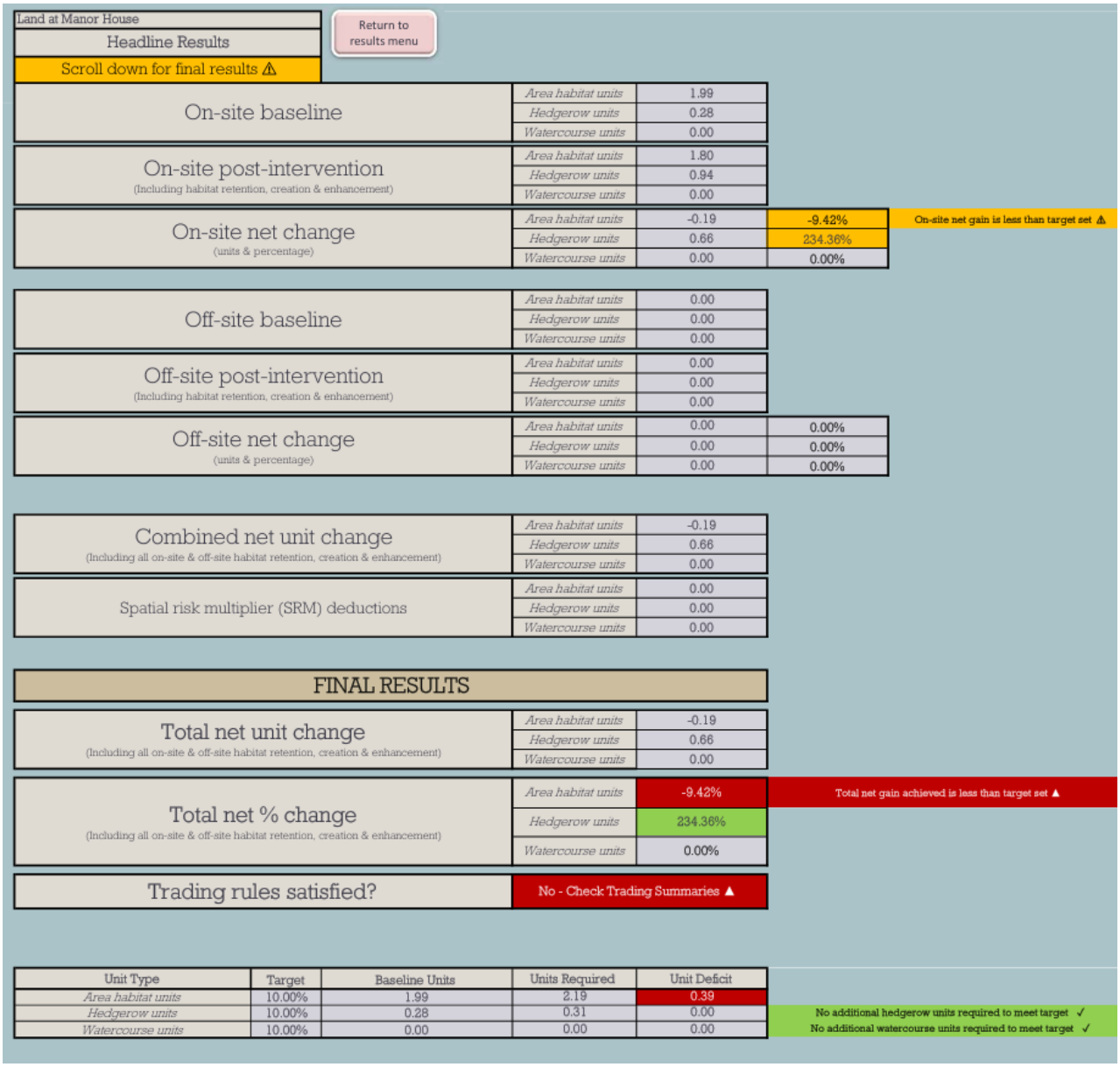
Figure 3: Extended Habitat Map, proposed plan 2025

Table 2: Proposed Habitat Recorded Areas in Hectares.

Habitat Type	***Propose Area (Ha)***
Developed land; sealed surface	0.039
Vegetated garden	0.025
Other; green roof	0.016
Bare ground	0.0023
Hedgerow	***Propose Length (km)***
Species Rich Native Hedge	0.017

The outline landscape enhancement provides mitigation for the additional built environment proposed. The BNG for the site using the DEFRA statutory metric are shown in the headline results below:

Headline results 2023-01(02) Development as Proposed



Land at Manor House

Headline Results

Scroll down for final results ⚠

Return to results menu

On-site baseline	Area habitat units	1.99		
	Hedgerow units	0.28		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	1.80		
	Hedgerow units	0.94		
	Watercourse units	0.00		
On-site net change (units & percentage)	Area habitat units	-0.19	-9.42%	On-site net gain is less than target set ⚠
	Hedgerow units	0.66	234.36%	
	Watercourse units	0.00	0.00%	
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	-0.19		
	Hedgerow units	0.66		
	Watercourse units	0.00		
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	-0.19	
	Hedgerow units	0.66	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-9.42%	Total net gain achieved is less than target set ▲
	Hedgerow units	234.36%	
	Watercourse units	0.00%	
Trading rules satisfied?	No - Check Trading Summaries ▲		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	1.99	2.19	0.39	
Hedgerow units	10.00%	0.28	0.31	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Limitations

The development proposal is for 1no. new dwelling, hard standing, garden, and retained habitat areas. The details of soft landscaping species will include the use of all native species to be planted. The choice of locally native species, extensive scrub, tree planting using native and biodiverse species will positively impact the value of the habitats.

The proposed landscaping plan will result in a net loss of -9.42% for habitats in the absence of mitigation due to the loss of modified grassland, one small poor condition tree, mixed scrub and a small section of mixed woodland. A gain for hedgerow was achieved by planting a new species rich native hedge of 0.017km length at the west of the site, creating a net gain of 234.36% for hedgerow.

Recommendation

The following are mitigation is recommended in order to attain a net biodiversity gain of 10% for habitats, or more:

- 6no., new native species small landscape trees planted within fenced designated biodiversity area at the south of the site.
- Implement the proposed new hedgerows as species-rich, mixed native
- Other, mixed woodland habitat to be enhanced at the north of the site for a total of 0.10ha of moderate condition woodland enhanced to good condition woodland, with a date to target condition of 27 years.

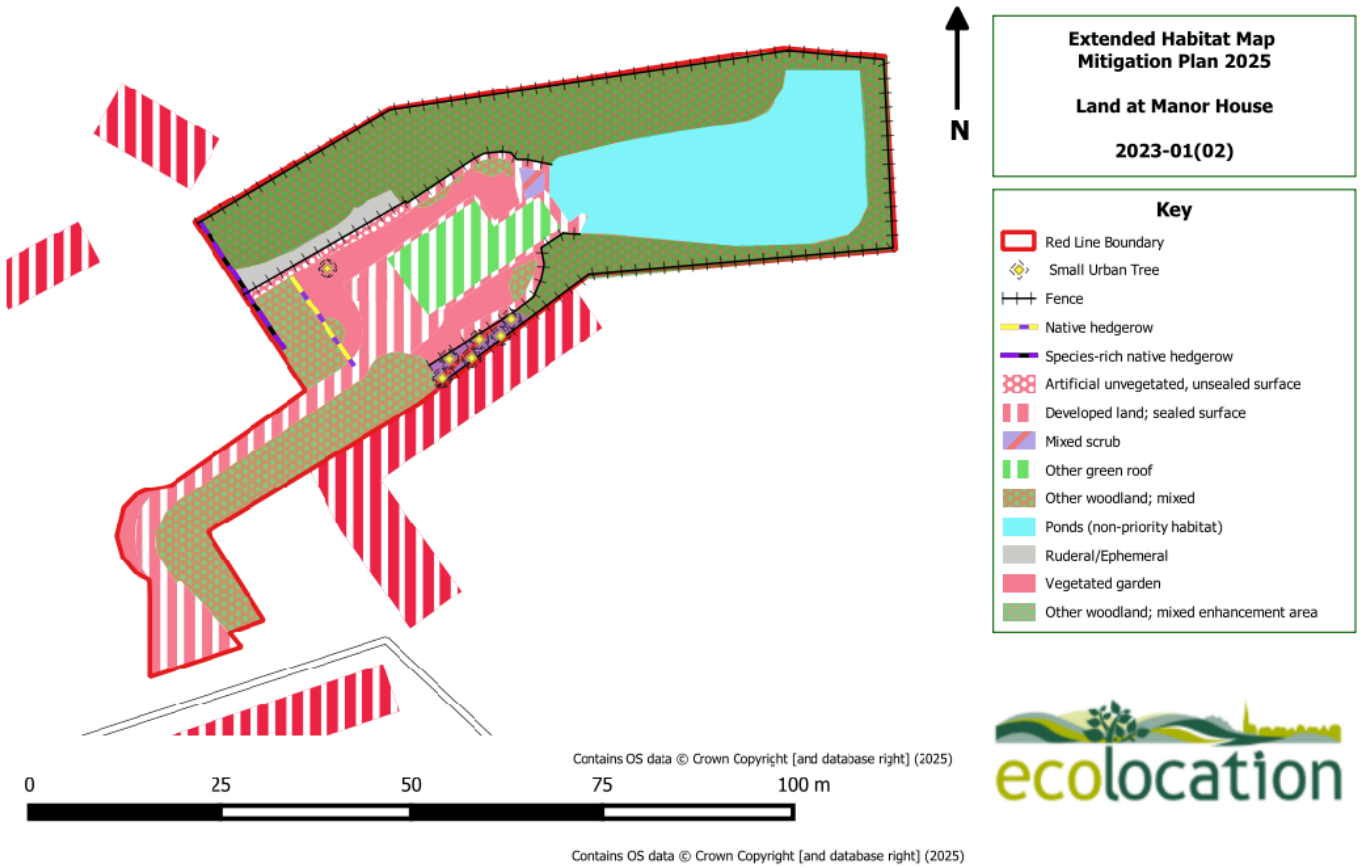


Figure 4: Proposed mitigation plan habitat map.

Table 3: Proposed mitigation plan habitats.

Habitat Type	*Area Proposed (Ha)*	*Area Retained at baseline (Ha)*	*Enhanced (Ha)*
Artificial unvegetated, unsealed surface		0.0035	0
Bare ground	0.0023	-	0
Developed land; sealed surface	0.039	-	0
Vegetated Garden	0.024		
Mixed scrub	0.004	-	0.00093
Modified grassland	0.037	-	0
Other woodland; mixed	-	0.047	0.10
Ponds (non-priority habitat)	-	0.066	0
Ruderal/Ephemeral	-	0.0063	0
Urban tree (6 Small Moderate Trees)	0.0244	-	0

Assumptions

The assessment was conducted based on the following assumptions:

- 100% native species will be used.
- The newly built residential garden will be vegetated garden.

The landscape enhancement scheme with the implemented mitigation when analysed using the DEFRA metric v4.0 (document 2023-01(02).2 supplied separately) provides a BNG gain of 10% and hedgerow gain of 234.36% conforming to the NPPF requirements of a 10% gain in biodiversity. See headline results below:

Headline results 2023-01(02) Post Development Mitigation

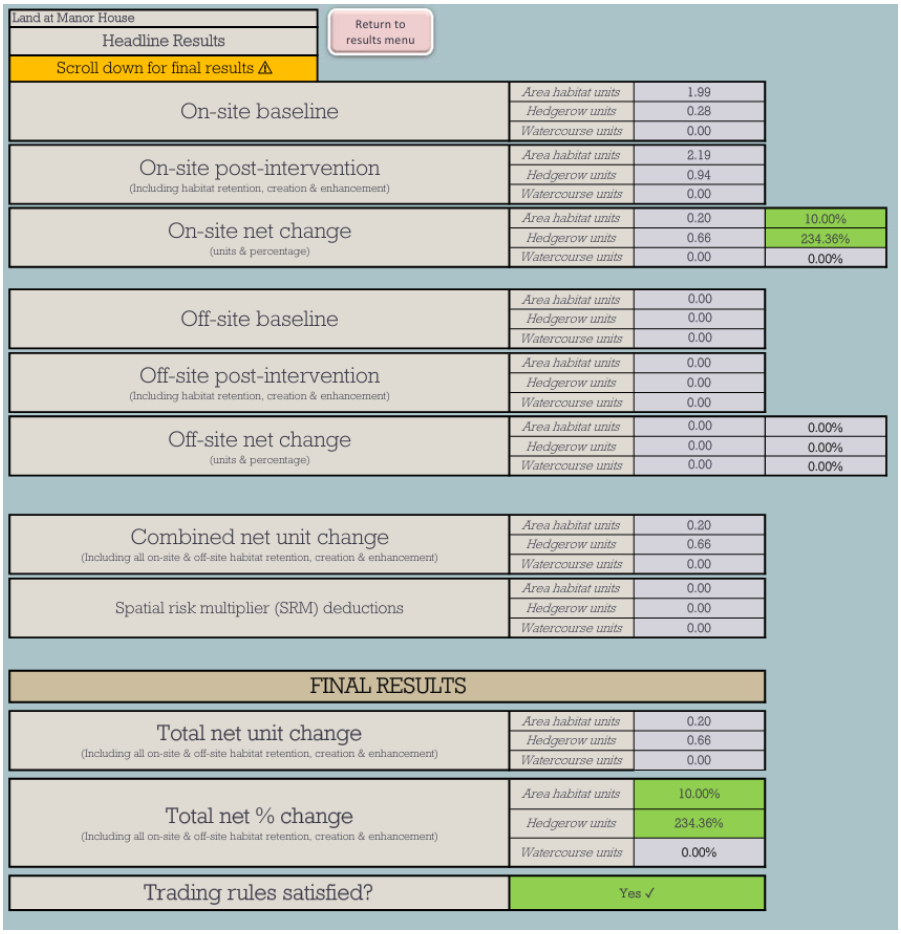


Figure 5: 2023-01(02) headline results using mitigation plan

Conclusion

The proposed development when mitigated using the stated recommendations can provide a BNG of 10% for habitats and 234.36% for hedgerow conforming to the applicable NPPF requirements and Environment act 2021.

Appendix 1: Mitigation Condition Assessment

The Statutory Biodiversity Metric Condition Assessments, July 2025 was used to assess the condition of habitats on site and forecast reasonable target conditions for proposed mitigation habitats including mixed scrub, individual trees and other mixed, woodland habitats.

Proposed Mixed Scrub:

Name	Code	UKhabs Definition
Mixed Scrub	**h3h**	Dense scrub comprising a mixture of species without a single species dominant or stands with a dominant species not listed in h3a-h3k.

Condition Assessment Criteria	Description	Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).[1] - At least 80% of scrub is native, - There are at least three native woody species[2], - No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* (only in its restricted native range), or box *Buxus sempervirens*, which can be up to 100% cover).	Yes	For Mixed Scrub ensuring Suitable shrub mix of species include guelder rose (*Viburnum opulus*), dogwood (*Cornus sanguinea*), hazel (*Corylus avellana*), holly (*Ilex aquifolium*), sweet briar (*Rosa rubiginosa*), yew (*Latin taxus*), wild privet (*Ligustrum ovalifolium*), purging buckthorn *(Rhamnus cathartica*) and butcher's broom *(Ruscus aculeatus)* are planted and established. Manage scrub areas by periodic cutting and monitoring to ensure no single species comprises more than 75% cover. Time to target condition 5 years.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present.	Yes	Initial planting of suitable seed mix and larger transplants. Planting shrubs in staggered densities, allowing for natural regeneration will allow for the self-seeding and establishment of seedlings and young shrubs Species recommended above has a mix of species with different growth rates encouraging variety of structural stages within the 5 years to target condition.
C	There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) and species indicative of suboptimal condition[6] make up less than 5% of ground cover.	Yes	Monitoring and removal of invasive species.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	No	
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Yes	Scrub managed and planted to provide suitable glades or rides.
		Number of criteria passed	

Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	✓	Moderate Condition Achievable
Passes 2 or fewer criteria	Poor (1)		

Existing Other mixed Woodland:

Name	Code	UKhabs Definition
Other mixed Woodland	**w1h**	A mixture of broadleaved and coniferous trees in which neither make up >80% of the tree cover.

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score	
A	**Age distribution of trees**	Three age-classes[1] present.	Two age-classes[1] present.	One age-class[1] present.	2	young and intermediate (40+)
B	**Wild, domestic and feral herbivore damage**	No significant browsing damage evident in woodland[2].	Evidence of significant browsing pressure is present in less than 40% of whole woodland[2].	Evidence of significant browsing pressure is present in 40% or more of whole woodland[2].	3	
C	**Invasive plant species**	No invasive species[3] present in woodland.	Rhododendron *Rhododendron ponticum* or cherry laurel *Prunus laurocerasus* not present, and other invasive species[3] <10% cover.	Rhododendron or cherry laurel present, or other invasive species[3] ≥10% cover.	2	Cotoneaster spp., and Robinia spp., laurel spp., present
D	**Number of native tree species**	Five or more native tree or shrub species[4] found across woodland parcel.	Three to four native tree or shrub species[4] found across woodland parcel.	Two or less native tree or shrub species[4] across woodland parcel.	3	
E	**Cover of native tree and shrub species**	>80% of canopy trees and >80% of understory shrubs are native[5].	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native[5].	<50% of canopy trees and <50% of understory shrubs are native[5].	2	
F	**Open space within woodland**	10 - 20% of woodland has areas of temporary open space[6]. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted[7].	21 - 40% of woodland has areas of temporary open space[6].	<10% or >40% of woodland has areas of temporary open space[6]. But if woodland <10ha has <10% temporary open space, please see Good category[7].	2	
G	**Woodland regeneration**	All three classes present in woodland[8]; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced	One or two classes only present in woodland[8].	No classes or coppice regrowth present in woodland[8].	2	Coppice Hazel present

		coppice regrowth.				
H	**Tree health**	Tree mortality 10% or less, no pests or diseases and no crown dieback[9].	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present[9].	Greater than 25% tree mortality and or any high-risk pest or disease present[9].	2	
I	**Vegetation and ground flora**	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.	2	Bluebell (Hyacinthoides spp.,) present strong indicator sp., Wood avens present. Majority of flora nettles, ground elder, dead nettles including some ivy, holly and laurel
J	**Woodland vertical structure**	Three or more storeys across all survey plots, or a complex woodland[11].	Two storeys across all survey plots[11].	One or less storey across all survey plots[11].	2	
K	**Veteran trees**	Two or more veteran trees[12] per hectare.	One veteran tree[12] per hectare.	No veteran trees[12] present in woodland.	1	
L	**Amount of deadwood**	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities[13].	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	1	
M	**Woodland disturbance**	No nutrient enrichment or damaged ground evident[14].	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground[14].	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground[14].	2	
				Total Score (out of a possible 39)		
Total score >32 (33 to 39)				Good (3)		26
Total score 26 to 32				Moderate (2)		
Total score <26 (13 to 25)				Poor (1)		

Enhanced Other mixed Woodland:

Name	Code	UKhabs Definition
Other mixed Woodland	**w1h**	A mixture of broadleaved and coniferous trees in which neither make up >80% of the tree cover.

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score	
A	**Age distribution of trees**	Three age-classes[1] present.	Two age-classes[1] present.	One age-class[1] present.	2	young and intermediate (40+)
B	**Wild, domestic and feral herbivore damage**	No significant browsing damage evident in woodland[2].	Evidence of significant browsing pressure is present in less than 40% of whole woodland[2].	Evidence of significant browsing pressure is present in 40% or more of whole woodland[2].	3	
C	**Invasive plant species**	No invasive species[3] present in woodland.	Rhododendron *Rhododendron ponticum* or cherry laurel *Prunus laurocerasus* not present, and other invasive species[3] <10% cover.	Rhododendron or cherry laurel present, or other invasive species[3] ≥10% cover.	3	Cotoneaster spp., and Robinia spp., laurel spp., removed and where applicable replaced with native species.
D	**Number of native tree species**	Five or more native tree or shrub species[4] found across woodland parcel.	Three to four native tree or shrub species[4] found across woodland parcel.	Two or less native tree or shrub species[4] across woodland parcel.	3	
E	**Cover of native tree and shrub species**	>80% of canopy trees and >80% of understory shrubs are native[5].	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native[5].	<50% of canopy trees and <50% of understory shrubs are native[5].	2	
F	**Open space within woodland**	10 - 20% of woodland has areas of temporary open space[6]. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted[7].	21 - 40% of woodland has areas of temporary open space[6].	<10% or >40% of woodland has areas of temporary open space[6]. But if woodland <10ha has <10% temporary open space, please see Good category[7].	3	Ensured 10 – 20% of woodland has open space.
G	**Woodland regeneration**	All three classes present in woodland[8]; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland[8].	No classes or coppice regrowth present in woodland[8].	3	Coppice Hazel present Enhanced to have all three classes present.

H	**Tree health**	Tree mortality 10% or less, no pests or diseases and no crown dieback[9].	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present[9].	Greater than 25% tree mortality and or any high-risk pest or disease present[9].	2	
I	**Vegetation and ground flora**	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.	3	Bluebell (Hyacinthoides spp.,) present strong indicator sp., Plant, encourage and maintain recognisable NVC plant community.
J	**Woodland vertical structure**	Three or more storeys across all survey plots, or a complex woodland[11].	Two storeys across all survey plots[11].	One or less storey across all survey plots[11].	3	Increase complexity of woodland with plantings.
K	**Veteran trees**	Two or more veteran trees[12] per hectare.	One veteran tree[12] per hectare.	No veteran trees[12] present in woodland.	1	
L	**Amount of deadwood**	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities[13].	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	3	Planning, monitoring and managing i.e selective cutting.
M	**Woodland disturbance**	No nutrient enrichment or damaged ground evident[14].	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground[14].	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground[14].	2	
				Total Score (out of a possible 39)		
Total score >32 (33 to 39)				Good (3)		33
Total score 26 to 32				Moderate (2)		
Total score <26 (13 to 25)				Poor (1)		

A condition of moderate was recorded for existing woodland, by implementing a suitable management plan such as focusing on increasing deadwood, reducing disturbance, increasing recognizable ground flora through planning, woodland regeneration, increasing storeys present, reducing temporary open space and removing invasive species, a target condition of 'good' would be achievable within the 27-year time frame.

Pond:

Name	Code	UKhabs Definition
Ponds (non - priority habitat)	**41**	Permanent and seasonal standing water bodies that are <2 ha in extend AND that do NOT meet any of the following criteria. (1) Habitats of international importance: Ponds that meet criteria under Annex 1 of the Habitats Directive. (2) Support species of high conservation importance: Red Data Book species; UK BAP species; species fully protected under the Wildlife and Countryside Act – Schedules 5 and 8; Habitats Directive Annex 2 species; a Nationally Scarce wetland plant species; or three Nationally Scarce aquatic invertebrate species. (3) Exceptional assemblages of key biotic groups: Ponds supporting exceptional populations or numbers of key species. Based on (i) criteria specified in guidelines for the selection of biological SSSIs (currently amphibians and dragonflies only), and (ii) exceptionally rich sites for plants or invertebrates (i.e. supporting >30 wetland plant species or >50 aquatic macroinvertebrate species)

Condition Assessment Criteria		**Criterion passed**	**Notes (such as justification)**
Core Criteria - applicable to all ponds (woodland[1] and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Yes	
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.	No	Habitat <10m wide
C	Less than 10% of the water surface is covered with duckweed *Lemna* spp. or filamentous algae.	No	Duckweed present across large amount of the surface.
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Yes	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams[2], pumps or pipework.	Yes	
F	There is an absence of listed non-native plant and animal species[3].	Yes	None planted. Any naturally occurring removed via management regime
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Yes	None
Additional Criteria - must be assessed for all non-woodland ponds:			
H	Emergent, submerged or floating plants (excluding duckweed)[4] cover at least 50% of the pond area which is less than 3 m deep.		
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.		
	Number of criteria passed	5	

Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓	
Results for woodland ponds which require assessment of 9 criteria			
Passes 7 criteria	Good (3)		
Passes 5 to 6 criteria	Moderate (2)	5	Moderate
Passes 4 or fewer criteria	Poor (1)		

Name	Code	Definition
Individual Trees	**N/a**	Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching. Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category."

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Yes	
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).	Yes	
C	The tree is mature (or more than 50% within the block are mature)[1].	Yes	Yes small, planted trees at target condition – 27 years.
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.	Yes	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Yes	Reasonable Assumption that Trees Planted will have natural ecological niches

F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	Trees will be planted within vegetation such as scrub
	Number of criteria passed		
Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**	The condition assessment shows that 6 criteria can reasonably be met by the target 27 years, which would class the trees as good condition. Due to uncertainties in forecasting, the recorded post development target condition will be set to Moderate needing to pass 3 or 4 criteria.
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	✓	Target Condition Achievable
Passes 2 or fewer criteria	Poor (1)		
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			