



Biodiversity Net Gain Assessment HMMP

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Report	Biodiversity Net Gain Assessment & Habitat Management and Monitoring Plan (HMMP)
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1.0 INTRODUCTION

1.1 Background

Ecosupport Ltd were commissioned by David Lloyd Leisure Ltd to undertake a Biodiversity Net Gain Assessment for the proposed development at Southpoint Business Park, Chippenham and detail the results of this assessment within a Habitat Management and Monitoring Plan.

The purpose of this assessment is to quantify the biodiversity value of the site prior to its development, and the predicted value post development. This is measured in biodiversity units, calculated according to the habitats present based on their size, distinctiveness and condition. This enables the quantitative calculation of the predicted change in biodiversity value as a result of the proposed development, with the objective of achieving a net gain in biodiversity.

This report will also address how habitats will be enhanced and created to achieve a net gain in biodiversity units and how these habitats will be managed and monitored for at least 30 years. The following points will be covered (DEFRA, 2023):

- How significant on-site enhancements will be managed, taking into account any legal restrictions and requirements
- When and how habitats will be monitored
- When and how monitoring results will be reported
- When and how management proposals will be reviewed
- How habitats will be restored if the management plan is not working

1.2 Site Location and Description

The site comprises a series of a parcel of land located to the north of the A350 in Chippenham (central grid reference of ST 90576 71142) (**Fig 1**). The site is bordered by hedgerows and a bank leading up to a railway line on the western boundary, by the A350 on the southern boundary, and by a newly built road on the eastern boundary. The northern boundary is marked by fields and hedgerows. The immediate wider environ is a mix of newly developed areas, arable fields and pasture, and residential areas associated with Chippenham.

Figure 1. Approximate redline boundary of the site (Google Maps, 2026).



1.3 Development Proposals

The proposals are for the development of a David Lloyd leisure club and with a tennis court enclosure, external pool, terrace areas, external sports facilities, associated parking, and landscaping (**Fig 2**).

Figure 2. Planting layout and details plan (Weddles, 2026)





2.0 METHODOLOGY

The methodology for the assessment follows the Natural England Statutory Biodiversity Metric habitat condition assessment protocols and uses the Statutory Biodiversity Metric calculation tool to calculate biodiversity losses and gains (Natural England, 2024).

2.1 Habitat Assessment

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation. Grace Roberts MSci and Laura Purnell BSc (Hons) AMRSB carried out the survey on the 3rd of February 2026, to undertake a condition assessment of the habitats present on site. The area of identified habitats is calculated in hectares (ha), ignoring linear features or ditches (the area is measured to the centre line of such features). The length of linear features is measured separately in kilometres (km). The dominant habitat type was selected, according to those defined by UKHab Ltd (2023). Where there was disparity between the UK classification for habitat type and those present within the Statutory Biodiversity Metric calculator tool, this was noted within the condition assessment tables.

2.2 Habitat Distinctiveness

Each habitat was assigned a score for distinctiveness, according to the Statutory Biodiversity Metric calculator tool and User Guide (Natural England, 2024). This ranged from Poor - High for most habitats, or Not Applicable (e.g., Developed Land – Sealed Surface). Using the tool, habitats were assigned a score based on their distinctiveness.

2.3 Habitat Condition

The condition of each habitat was assessed following criteria set out in the Statutory Biodiversity Metric Condition Assessment Supplement (Natural England, 2024), which includes detailed assessment criteria for different habitats. Full results of the condition assessments can be found below. The condition of each habitat was assessed individually on site.

2.4 Strategic Significance

Each habitat was assigned a strategic significance in line with the Statutory Biodiversity Metric User Guide (DEFRA, 2024). The site or adjacent sites are not listed as areas of importance or areas that could become important within the Local Nature Recovery Strategy for Wiltshire and therefore all habitats have been considered as 'not in local strategy'.

2.5 Limitations

The survey was conducted outside the optimum timing for the identification of botanical species (February). However, it is considered this survey represents an accurate classification of habitats, which has been supplemented by extensive previous survey work within optimal season and thus confirms accuracy. This survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Reynoutria japonica*).

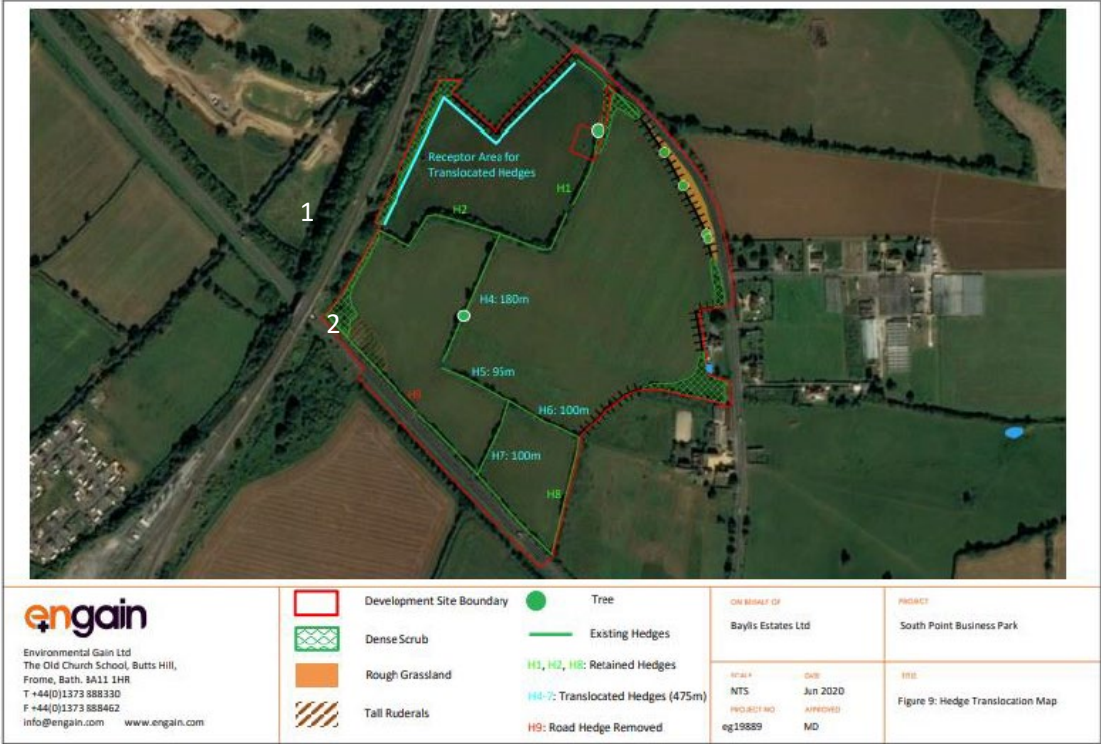
3.0 EXISTING HABITATS AND DEVELOPMENT PROPOSALS

Sections 3.1 & 3.2 provide an outline of the baseline habitats on site and the Condition Assessments undertaken with reference to the Statutory Biodiversity Metric Condition Assessment Supplement (Natural England, 2024). For these assessments, the current habitats on site were categorised according to UK Hab (2023) classifications. The baseline habitats map can be found in **Appendix A**.

3.1 Habitat Degradation

Two hedgerows were previously on site and were translocated as part of previous works in relation to the construction of the new roundabout off the A350 under outline planning permission N/13/00308/OUT (as amended) (**Fig 3**). This was carried out prior to March 2023. The Government’s online BNG guidance states that ‘If activities to implement or in connection with a planning permission are carried out after 25 August 2023 that lower the biodiversity value of the onsite habitat, the pre-development biodiversity value of the onsite habitat is taken to be the biodiversity value immediately before the carrying out of the activities.’ (Paragraph: 036 Reference ID: 74-036-20240214, GOV.UK, 2024). As the date of works was before this, the two translocated hedgerows do not need to be accounted for in the baseline habitat calculation.

Figure 3. Hedge translocation map taken from Engain’s response to ecology comments in regards to planning application PL/2024/03204. Shows H4 and H5 have been translocated from the site as part of works in relation to planning permission N/13/00308/OUT.



There has also been degradation within the grassland due to vehicle access and other damage which has resulted in bare ground (**Fig 4**). For BNG purposes these areas will be counted as modified grassland in the baseline to account for the habitat pre-degradation matching the condition of the surrounding habitat.

3.2 Baseline Habitats

The following habitats were found on site, as shown within the appended plan:

- Modified Grassland (g4) (secondary code 16 Tall Forbs)
- Bramble Scrub (h3d) (secondary code 32 Scattered Trees)

Figure 4. View of the bare ground due to degradation on site (February, 2026).



Figure 5. View of the modified grassland on site (February, 2026).



Figure 6. Tall forbs along the southern boundary (February, 2026).



Figure 7. View of the bramble scrub and trees within the south-western corner (February, 2026)



3.3 Baseline Condition Assessment

A condition assessment was not carried out on the bramble scrub as the condition is automatically set to 'Condition Assessment N/A'. However, condition assessments were carried out on the modified grassland, tall forbs, and individual trees.

3.3.1 Modified grassland

The condition assessment for the modified grassland is shown in **Table 1**, the grassland is considered to be in poor condition.

Table 1. Condition Assessment for modified grassland.

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	No	There are well under 6 species per m ² . While carried out outside of optimal season, the site was previously arable land and has been species-poor grassland for multiple years. This site has very low species diversity.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Yes	Perimeters are longer while the majority is short.
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	While there is physical damage currently within the grassland the value is being taken from the pre-degraded state. Based on the surrounding grassland and previous data it is considered it would meet this criteria.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Yes	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	

G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA ⁴).	Yes	
Number of criteria passed			6
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓	

3.3.2 Tall forbs

The condition assessment for the tall forbs is shown in **Table 2**, the habitat is considered to be in poor condition.

Table 2. Condition Assessment for tall forbs.

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No	Single structural component
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	No	Dominated by single species

C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Yes	None noted
Number of criteria passed			1
Condition Assessment Result (out of 3 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C.	Good (3)		
Passes 2 of 3 core criteria; OR Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
Passes 0 or 1 of 3 core criteria.	Poor (1)	✓	

3.3.3 Individual trees

The condition assessments for the two trees within the mixed scrub are shown in **Table 3**.

Table 3. Condition Assessments for the individual trees.

Condition Assessment Criteria		Tree reference	
		T1	T2
		Criterion passed (Yes or No)	
A	The tree is a native species (or at least 70% within the block are native species).	Yes	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	Yes
C	The tree is mature (or more than 50% within the block are mature).	No	No

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	Yes
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	No
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	Yes
Number of criteria passed		4	4
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	✓	✓
Passes 2 or fewer criteria	Poor (1)		

4.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

4.1 On-Site Proposals

4.1.1 Non-linear Habitats

Table 4 indicates those non-linear habitats due to be *retained* and *created* on site with details provided, where appropriate, as to how the necessary condition criteria will be met if relevant.

Table 4. Non-linear habitats to be *retained* and *created* on site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition

Habitat Type	Action	Area (ha)	Condition	Condition Assessment Notes	Strategic Significance	Location Notes
Modified grassland	Retained	0.2921	Poor	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	North of the proposed car park
Developed land; sealed surface	Created	1.7873	N/A - Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	Buildings and car park
Introduced shrub	Created	0.1451	Condition Assessment N/A	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	Ornamental planting around the site
Other neutral grassland	Created	0.4558	Moderate	Other neutral grassland of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, C and D will be targeted for achievement with sowing of an appropriate seed mix and appropriate management to minimise bare ground, scrub, and bracken and maintain a varied sward height.	Area not in local strategy.	Meadow areas around the SuDS and west boundary
Sustainable Drainage System (SuDS)	Created	0.226	Moderate	A SuDS of moderate conditions will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, C, E1 and E2 will be targeted for achievement of a varied vegetation structure (with a single structural habitat component not accounting for 80% of the total habitat area), plants comprising of mostly native species suitable to wetland situations (if non-native they should not be detrimental to the habitat or native wildlife) and	Area not in local strategy.	Within the proposed meadow to the north

				appropriate management to ensure invasive non-native species do not exceed 5% of the total vegetated area.		
Mixed scrub	Created	0.1972	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, and C will be targeted for achievement through planting native shrub and tree species and appropriate management.	Area not in local strategy.	Around the northern boundaries and adjacent to the carpark
Other woodland; broadleaved	Created	0.4604	Poor	Woodland of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). No specific criteria will be targeted for achievement.	Area not in local strategy.	Near the eastern and southern boundaries
Urban tree	Created	0.2158	Moderate	53 urban trees of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, D and F will be targeted for achievement with appropriate management implemented to prevent adverse impacts to health and trees placed within suitable green space areas were at least 20% of the canopy will oversail vegetation beneath.	Area not in local strategy.	Throughout site
Urban tree	Created	0.1181	Poor	29 urban trees of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria B and F will be targeted for achievement with appropriate management implemented to prevent adverse impacts to health and trees placed within suitable green space areas were at least 20% of the canopy will oversail vegetation beneath. Some of the trees are expected to meet criterion A as well.	Area not in local strategy	Within proposed carpark

4.2 Metric Calculations

Following the incorporation of the above measures into the DEFRA Statutory Biodiversity Metric, **on site there is a net gain of +14.52% (or +1.05 units) in habitats and the trading rules are satisfied (Fig 8)**. It is considered there is no further habitat creation or offsetting required to meet BNG rules.

Figure 8. Screenshot of the 'headline results' output from the BNG assessment undertaken for the site using the Defra Statutory metric following the off-site incorporation.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	1.05
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	14.52%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

5.0 HABITAT MANAGEMENT

This section provides an outline of the habitat management prescriptions to create and enhance the proposed habitats within the site to meet the desired condition criteria for the purposes of delivering biodiversity net gain.

5.1 Protection of Retained Habitats

A section of modified grassland on site is to be retained. There are also habitats of value just outside the boundaries of the site that will be protected from damage during the works. These habitats will be fenced using Heras fencing or similar to prevent access by machinery. Where mature trees are present, they will be protected using standard arboricultural tree protection measures which include protection of the canopy and prevention of root compaction.

No vehicles will enter the protective ring fencing and no materials will be stored within their circumference. All protective fencing must be in place prior to any construction machinery arriving on site, before any works on site get underway, and will remain in place until all work is completed. This will minimise the level of disturbance within the protected areas during the works and ensure the habitats and any wildlife species that may be using them are protected.

5.2 Other Neutral Grassland

5.2.1 Proposed Planting

Species rich grassland will be incorporated in various areas around the site, via sowing of a suitable native wildflower meadow mix Pro Flora 8 'Legacy Country Meadow' (General Purpose), and Pro Flora 17 'SUDS OneMix' in/around the proposed SUDs feature. The sowing of these seeds will be completed either during the Spring (March-May) or the late Summer (August-October) when the temperatures are warm, and the ground is dry. The seed must be surface sown at an even distribution throughout the entire landscaped area.

5.2.2 Management

Wildflower areas do not require any additional watering or fertilizer. Cutting a meadow and removing the clippings retains low nutrient levels in the soil and suppresses coarse grasses which would otherwise out-compete the wildflowers. It is recommended the wildflower grassland undergoes two annual cuts. The growth should be cut back to a height of 50-75mm. The cut grass should be dried on site. Cuttings should be left in situ for approximately one week, after this the arisings are to be removed from site. The boundaries will be cut every 2-3 years between October and February.

First year management: Perennial species take at least a full year to establish. For newly sown areas the first summer will be dominated by annual weeds arising from the soil seed bank and by grass growth. This should be controlled by mowing throughout the first year to minimise competition and weed seed production. All arisings should be removed from site following cutting to reduce nutrient levels in the soil.

Management Once Established: During the second year it is recommended that the grassland left to flower and will be cut in mid to late-summer. However, if a retained buffer area is established along the new scrub or hedgerows, this should not be cut in May or early June due to nesting birds. Mowing in mid-June brings a premature end to the flowers and can compromise nesting birds, which do not fledge until late July, insects and other wildlife. If some mowing has to take place at this time, sections should be cut at different dates to prolong the overall flowering season and give wildlife a chance to move. The second annual cut should be undertaken during late Autumn.

Grassland which is consistently cut late in the season, in August and September, year on year reduces species diversity as late cutting gives more time for coarse grasses and other dominant plants to grow unchecked. To maintain maximum diversity and flowering interest the buffer should be managed in sections at different times from late June to the end of August. Varying the mowing times from year to year is the best way to maintain a diverse balanced sward. A second cut is recommended in late Autumn or early spring to control weed growth.

Targeted bracken and invasive plant removal should also be carried out as needed to prevent encroachment into the grassland.

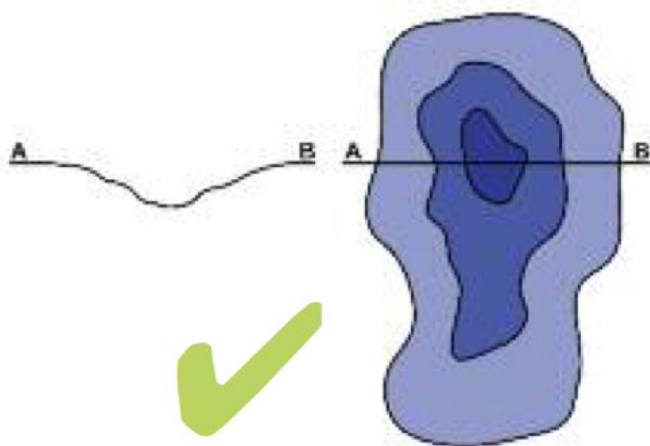
5.3 Sustainable Drainage System (SuDS)

5.3.1 SUDs Creation

Within the open area of proposed other neutral grassland to the north of the site, one SuDS basin is proposed. As noted in **Section 5.2** above, it is being seeded with a wet meadow seed mix.

Ideally the margins of the SuDS should be shallow. The best ecologically valuable ponds have 'gentle shelving edges at less than 1:5 (12°) and preferably less than 1:20 (3°)' (Freshwater Habitats 2013) (**Fig 9**). Creating shelves is one option of obtaining different depths to create diversity.

Figure 9. Design of SUDs showing varying depths at a gently sloping level (Freshwater Habitats 2013)



5.3.2 Management

This habitat will provide a range of plant species which will encourage invertebrate diversity and enhance foraging and sheltering opportunities for amphibians on site. A maintenance regime will be undertaken to establish a varied structure in vegetation and discourage invasive non-native species cover.

5.3.2.1 Wetland meadow

It is expected that the SUDs feature will be managed in the same way as the other neutral grassland. As it is not expected to be fully inundated year-round, most of the feature will be managed as wet meadow. Management will be as per **Section 5.2.2** with frequent cuts during the first year and two annual cuts after this. Targeted invasive species removal will be carried out as needed.

5.3.2.2 Waterbody

In areas where the SuDS is more consistently inundated (in the centre most likely), it is possible that additional management may be carried out to create suitable aquatic habitat. In the early years, blanket weed can cover waterbodies. This will be controlled if necessary and be pulled out carefully. In addition, if any plant starts to dominate it will be thinned out to prevent it taking over the aquatic area. Only one third of a waterbody should be cleared per year.

Once cleared, plants or debris will be left along the edge for a few days to allow any trapped wildlife to return to the water. To avoid seasons when amphibians are hibernating and breeding, waterbody management is best carried out in late September and October.

Whilst a varied vegetation structure is recommended, to prevent overgrowth of possible establishment from scrub around the edges of the SuDS, further management may be required. It is recommended this is achieved by manual cutting as needed to keep scrub from over-dominating the edges.

5.4 Mixed Scrub

5.5.1 Proposed Planting

The newly created areas of mixed scrub across the site will be planted with native shrub species as specified in the planting plan:

Name	Girth/Dia. cm	Height cm	Root Zone	Specification	Mix %	No./m²	Number
Cornus sanguinea		40-60	B	1+1; Transplant - seed raised; branched; 2 brks	10	3	551
Crataegus monogyna		60-80	B	1+1; Transplant - seed raised	15	1	275
Ilex aquifolium		40-60	2L	Leader with laterals	10	3	551
Ligustrum vulgare		40-60	B	0/1; Cutting; branched; 2 brks	10	3	551
Prunus spinosa		60-80	B	1+1; Transplant - seed raised; branched; 2 brks	15	3	826
Rosa arvensis		60-80	B	1+1; Transplant - seed raised; branched; 2 brks	10	2	367
Rosa canina		60-80	B	1+1; Transplant - seed raised; branched; 3 brks	15	2	551
Viburnum opulus		40-60	B	1+1; Transplant - seed raised; branched; 2 brks	15	2	551

The species should be mixed throughout the area to create better diversity of species and structure. The best time to plant is late autumn and it is recommended to avoid freezing temperatures or heat. The scrub will become denser and more connected as it grows up.

5.4.2 General Management

Following establishment, scrub will require minimal ongoing management however the following measures can be employed as necessary:

- New scrub will be weeded following first planting and watered whenever necessary during the first growing season.
- Scrub will be cut back annually as needed to ensure the area does not become overgrown and thinned every five years. Different areas of scrub will be cut back / thinned on rotation in order to ensure a diverse age range (seedlings, sapling, young shrubs and mature shrubs) persists.
- Any existing or later establishing Bramble will be reduced in density and will be maintained at approximately 15% density within the scrub patches.
- Ongoing management will be undertaken to prevent successional scrub developing within the adjacent grassland areas.
- Management must take into account the requirement for maintaining habitat connectivity across the site. Should any such vegetation die or its density become sparse, additional planting will be undertaken, replacing like-for-like.

All management of trees and scrub will be undertaken outside of the bird nesting season, which spans February – August inclusive (Natural England, 2015).

5.5 Individual (Urban) Trees

5.5.1 Proposed Planting

A total of 82 trees will be planted across the site. Species specified in the planting schedule are as follows:

Abbrev.	Name	Girth/Dia. cm	Height cm	Root Zone	Specification	Number
Aca	Acer campestre	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	6
Agl	Alnus glutinosa	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	6
B pe	Betula pendula	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	6
B u j	Betula utilis jacquemontii		250-300	RB	3x; Multi-stem; bushy; 2 stems	4
F s	Fagus sylvatica	6-8	250-300	RB	2x; LS; clear stem 150-175cm; 3 brks	1
L st	Liquidambar styraciflua	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	8
M sy	Malus sylvestris	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	6
P av	Prunus avium	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	12
P 'Sp'	Prunus 'Spire'	14-16	400-450	RB	3x; EHS; clear stem 175-200cm; 5 brks	5
P c 'Ch'	Pyrus calleryana 'Chanticleer'	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	12
Q r	Quercus robur	6-8	250-300	RB	2x; LS; clear stem 150-175cm; 3 brks	1
S c	Salix caprea	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	3
S auc	Sorbus aucuparia	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	8
S auc 'S S'	Sorbus aucuparia 'Sheerwater Seedling'	6-8	250-300	B	2x; LS; clear stem 150-175cm; 3 brks	4
Sub-totals						82

Planting will be carried out in the first year. The best time to plant is late autumn and it is recommended to avoid freezing temperatures or heat. Rootgrow or Bonemeal will be applied to the new plants to encourage healthy root growth. Trees will be planted with stakes and ties for stability.

5.5.2 Management

5.5.2.1 Mycorrhizal Treatment

To ensure a successful establishment of the newly planted trees, it is recommended that mycorrhizal treatment to the tree roots is conducted **during the planting**, this would reduce the risk of tree mortality and increase the long-term tolerance of these trees to periods of drought or adverse soil conditions thus ensuring a higher chance of successful long-term establishment.

5.5.2.2 Weed & Water Management

All newly planted trees must have a 1-metre exclusion zone whereby weeds are routinely and pro-actively removed for the **first 2 – 3 years**. Bark mulch is recommended around each tree and will act as an effective management method to also suppress weed colonisation. All new trees will be watered during any dry periods to encourage establishment during the first three years.

5.5.2.3 Pruning

The trees will be subject to light formative pruning (recommended in October) to ensure that they are developing healthy growth forms (but pruning will not be extensive enough to restrict expected canopy or height for their species).

5.5.2.4 Monitoring and Replacement

Trees will be monitored as part of the BNG monitoring reports. Any plants that are removed, die or become seriously damaged or defective shall be replaced like for like in the next planting season.

During monitoring all stakes and ties will also be monitored and removed once they are no longer considered necessary, by maximum year 5.

5.6 Other Woodland; Broadleaved

5.6.1 Proposed Planting

The following trees and shrubs will be planted within the proposed woodland area as specified in the planting schedule:

Name	Girth/Dia. cm	Height cm	Root Zone	Specification	Mix %	m Ctrs	Number
<i>Alnus glutinosa</i>		80-100	B	1+1; Transplant - seed raised	10	2	104
<i>Betula pendula</i>		80-100	B	1+1; Transplant - seed raised	15	2	156
<i>Corylus avellana</i>		60-80	B	1+2; Transplant - seed raised; branched; 3 brks	10	2	104
<i>Crataegus monogyna</i>		40-60	B	1+1; Transplant - seed raised	15	2	156
<i>Malus sylvestris</i>		60-80	B	1+1; Transplant - seed raised	10	2	104
<i>Prunus avium</i>		80-100	B	1+1; Transplant - seed raised	10	2	104
<i>Quercus robur</i>		80-100	B	1+2; Transplant - seed raised	10	2	104
<i>Salix caprea</i>		60-80	B	0/1; Cutting; branched; 2 brks	10	2	104
<i>Sorbus aucuparia</i>		40-60	B	1+1; Transplant - seed raised	10	2	104

Planting will be carried out in the first year. The best time to plant is late autumn and it is recommended to avoid freezing temperatures or heat.

As poor condition is targeted, no particular condition criteria is required to be met. However, the following management is recommended in order to ensure the woodland develops in a healthy way.

5.6.2 Management

During the first 2-3 years, any weeds within a 1m circumference of each plant should be removed as necessary and plants should be watered during periods of drought during establishment.

5.6.2.1 Thinning

Once the trees grow up, it is encouraged that the woodland will be thinned (i.e. trees removed) to promote regeneration and diversify the structure for long-term health. The optimal canopy target is 75% cover, which allows greater development of the understory to create a more diverse woodland. Once mature, selective thinning of the woodland should be carried out every five years to maintain a canopy target of 75% cover.

The target trees to be removed are those showing signs of disease or poor growth and/or any species beginning to over-dominate the woodland; The specific target trees and areas of woodland will be determined by the supervising ecologist or arborist. Please note, all mature trees will need to be surveyed for PRFs that may be suitable for roosting bats. If any trees have PRFs, it is recommended they are retained if possible and alternative trees are selected for thinning.

5.6.2.2 Invasive Species Management

Should any invasive species establish, they will be removed from the site, as these could have deleterious effects on native species and the wider habitats. Invasive species will generally be removed by a combination of cutting back and removal of cut material from the site, followed by treatment of stumps, roots or regrowth using an approved systemic herbicide (such as glyphosate). This process may need to be repeated over the course of several years. Herbicides should only be used in extreme cases, where alternative methods of invasive species removal / weed treatment are not considered appropriate.

5.6.2.3 Natural Regeneration

Tree and shrub species should be established by natural regeneration where possible e.g., by creating space for new regeneration around existing specimens of the desired trees and shrub species.

5.7 Compliance Check

All habitat creation will be completed within 12 months following the completion of construction works. A compliance visit will be completed by a suitably qualified ecologist once habitat creation has taken place. The check will be conducted annually for the first 5 years post-completion, and every 5-years thereafter until year 30 to ensure the habitat remains in place. The compliance check will be carried out during a suitable time of year and in suitable weather conditions. The ecologist will check the created native hedgerow habitat to assess its health and make an assessment if any recommended changes are required to management.

On completion of the visit, a Biodiversity Net Gain (BNG) monitoring report will be compiled, including the following:

- Assessment of habitats against the objectives defined in this management plan
- Any presence of target species noted during the compliance check

- Date stamped photographic evidence taken from fixed monitoring points, of which will be the central point of each land parcel per habitat type as listed in **Section 4.0**, during the first compliance check after the construction phase
- Detailed site notes including a condition assessment for each habitat type listed in **Section 4.0** (where appropriate) using the condition criteria within the Technical Annex 1 (DEFRA, 2023b, updated 2024).
- Detailed specific recommendations on management actions to promote growth and establishment of target species / habitats including timescales for undertaking actions (if required) and marked site plans to show the actions
- Management of the above recommended actions must be carried out in the next phase and report of any details
- Each BNG monitoring report will be written up in accordance with the BNG Habitat Monitoring Report template provided by Natural England (2023) and will be sent to the LPA.

5.8 Safeguarding

The developer and project manager will be responsible for briefing all site personnel of the ecological sensitivities of the site and implementing the mitigation measures outlined within **Section 5.1**. If any protected species are encountered during the construction works, it will be the responsibility of the project manager to cease works and immediately contact an ecologist for advice.

5.9 Post-Construction Habitat Creation

Table 5 below depicts the indicative timings associated with the habitat creation and enhancements to be undertaken after all construction works on site have been completed. This is considered to be year 1 of the management plan. For those activities that can be undertaken at any time of year, the earliest possible time is recommended. Each area will be created at different times due to the phased nature of the project.

5.10 Management Responsibilities

David Lloyd Leisure Ltd will assume responsibility for the management and maintenance of the newly created and enhanced habitats. When required, responsibility will include ensuring all management works are completed and qualified ecologists, arborists or landscape managers are contracted, etc. An annual management timeline of all habitats has been provided in **Table 6** and management works should continue in perpetuity. Should a management company be appointed to carry out all management works, it will be the responsibility of David Lloyd Leisure Ltd to ensure a competent company is appointed and secure funding and to ensure the management company understands the full requirements as specified in this report. Once appointed, the management works specified in this report will become the responsibility of the appointed management company.

A formal review process will be implemented when objectives and management recommendations are not reached / roles and responsibilities are not fulfilled as agreed. The details of this formal review process are as below:

- A suitably qualified ecologist will visit the site to conduct the compliance check (detailed in

Section 5.7).

- The compliance check will include the write up and submission of a BNG monitoring report
- The ecologist will review the success for BNG that the previous recommendations or management actions have for the target species / habitats
- The project manager is contacted by the ecologist and is informed of the recommendations or management actions which have not been fulfilled to identify what or who is responsible
- The BNG monitoring report will include a section addressing any raised issues identified during the compliance check
- The BNG monitoring report is submitted to the LPA for review and comment

Table 5. Habitat creation and year 1 management and monitoring of the habitats on site

General Activity	Specific Activity	Dates / Timing	Description
Habitat retention Modified grassland (Section 5.1)	Installation of protective fencing	Anytime – pre-commencement of works	Protective fencing will be installed around the retained habitat on site to ensure that they are not damaged during the works
Habitat creation Other Neutral Grassland (Section 5.2)	Planting	Ideally Autumn or Spring	- Ground will be prepared as per planting details - The areas scheduled to be created as other neutral grassland will be sown with Pro flora 8 'Legacy Country Meadow' (General Purpose)
	Year 1 Management	Routinely as needed	- Annual weeds may be arising from the soil seed bank and by grass growth during the first year. - This should be controlled by mowing to 40-60mm throughout the first year to minimise competition and weed seed production.
Habitat creation SuDS (Section 5.3)	Excavation of SUDs	Anytime	1 SUDs feature will be created, excavated with gentle shelving edges during construction works
	Planting	Ideally Autumn or Spring	The SUDs will be sown with Pro Flora 17 'SUDS OneMix'
	Year 1 Management	Routinely as needed	- Annual weeds may be arising from the soil seed bank and by grass growth during the first year. - This should be controlled by mowing to 40-60mm throughout the first year to minimise competition and weed seed production. - If blanket weed establishes in wet areas, it will be gently removed.
Habitat creation Mixed Scrub	Plant native shrub species	Late Autumn	Within the newly created mixed scrub, plant native shrubs will be planted

(Section 5.4)			Species will be mixed diversely around the site to create better diversity of species and structure
	Year 1 Management	Routinely as needed	- Weed around newly planted shrubs as necessary - Water if needed during dry periods during establishment - Replace any dead shrubs like-for-like in the next planting season
Habitat creation Individual (Urban) Trees (Section 5.5)	Planting	Late Autumn	- Trees will be planted as specified - Rootgrow or Bonemeal and mycorrhizal treatment should be applied upon planting to promote root growth. - Stakes and ties will be erected for stability.
	Year 1 Management	Routinely as required	- Trees should be watered as needed during dry periods - Replacement of dead or damaged trees in the next planting season. - Trees will be subject to light pruning in October - Weeding at the tree base and replacement of wood mulch as necessary to suppress weeds
Habitat creation Other Woodland; Broadleaved (Section 5.6)	Planting	Late Autumn	Planting of tree / shrub species as specified, dispersed throughout the area
	Year 1 Management	Routinely as required	- Trees / shrubs should be watered as needed during dry periods - Replacement of dead or damaged trees / shrubs in the next planting season. - Trees /shrubs will be subject to light pruning in October - Weeding at the tree /shrub base encouraged to allow establishment

5.11 Years 2 – 30 Management / Monitoring Table

Once the initial works covering the first year of management / monitoring have been completed as outlined in **Table 5**, the longer-term management objectives for the ecological features on site will need to be implemented (which have been outlined in detail in the above sections). **Table 6** below provides an overview of the actions required and the timings of when they should be complete (covering years 2– 30 post construction).

Table 6. Schedule of monitoring and management in Years 2 – 30 for all habitats (as per **Sections 4.0 and 5.0**).

General Activity	Specific Activity	Dates / Timing	Description
Other Neutral Grassland (Section 5.2)	Years 2-30 Management	Mid to late Summer and Autumn	• Leave to flower until late June to early Sept • Conduct initial hay cut after flowering with growth reduced to 50mm • Manage sections of each grassland parcel at different times from late June to the end of August, varying timings year to year • Carry out a second cut in late autumn or early spring
	Removal of undesirable species	As needed	• Targeted scrub, bracken and invasive species removal will be carried out as necessary.
SuDS (Section 5.3)	Years 2 – 30 Management of Wet Meadow	Spring and mid to late Summer	• Leave to flower until late June to early Sept • Conduct initial hay cut after flowering with growth reduced to 50mm • Manage sections of each grassland parcel at different times from late June to the end of August, varying timings year to year • Carry out a second cut in late autumn or early spring
	Years 2 – 30 Management of Waterbody Area (if present)	Late-Sept to October	• Blanket weed pulled out carefully if required • Any dominating plants will be cleared by thinning no more than one third of a waterbody in a year • Once cleared, plants or debris left along the edge for a few days and then removed
	Removal of undesirable species	Winter i.e. October - February (outside of bird nesting season)	• Targeted scrub, bracken and invasive species removal will be carried out as necessary.
Mixed scrub (Section 5.4)	Cutting back / thinning	Late September – October	• Scrub will be cut back annually as needed to ensure areas do not become overgrown or encroach into the grassland.

			• Thinning will take place routinely every 5 years. • Different areas will be cut back / thinned on rotation to maintain a diverse age range and Bramble will be maintained at about 15% • Any scrub encroaching into adjacent habitats will be cut back as needed.
	Invasive species removal	Late September – October	• Removal of invasive species will be undertaken as necessary if they establish on site.
Individual (Urban) Trees (Section 5.5)	Weed management	Routinely as required	• Remove weeds from a 1m area around the base of the trees for the first 2-3 years.
	Pruning	October	• The trees will be subject to light pruning as required in October to ensure that they are developing healthy growth forms
	Monitoring	Annually in Years 1-5 then every 5 years late Winter – early Spring	• Trees will be inspected during compliance checks • General health will be assessed with remedial action recommended as necessary. • Any plants that are removed, die or become seriously damaged shall be replaced like-for-like in the next planting season. • Stakes and ties will be monitored and removed once necessary or maximum in year 5.
Other Woodland; Broadleaved (Section 5.6)	Weed management	Routinely where required	• To ensure a successful establishment of the newly planted woodland, all trees must have a 1-metre exclusion zone whereby weeds are routinely removed for the first 2 – 3 years. • During weed removal, tree guards (if used) should also be routinely checked to ensure they are maintained in good condition and are firmly positioned within the soil. If the guards begin to split, they must be removed and disposed

			of responsibly. They should be removed by year 5 maximum.
	Years 2 – 30 management	Routinely as required	• Routinely as required trees / shrubs should be watered as needed during dry periods during the first 2-3 years • Once the trees grow up into the canopy (not expected before 10-15 years), the woodland should be thinned (i.e. trees removed) to promote regeneration, aiming for 75% canopy cover • Any invasive species should be removed if they establish
Compliance check (Section 5.7)	Monitoring report	Annually for the first 5 years, then every 5 years until year 30 Must be conducted during a suitable time of year and weather conditions	• A report will be produced by an ecologist to provide details on all management, assessment of habitats, additional management requirements (if required), management to be carried out in the next phase and reporting on any delays • Each report will be sent to the LPA

6.0 REFERENCES

GOV.UK (2024). *Guidance: Biodiversity Net Gain*. Available from:

<https://www.gov.uk/guidance/biodiversity-net-gain>

Natural England (2023). *The Statutory Biodiversity Metric*. Available from:

<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

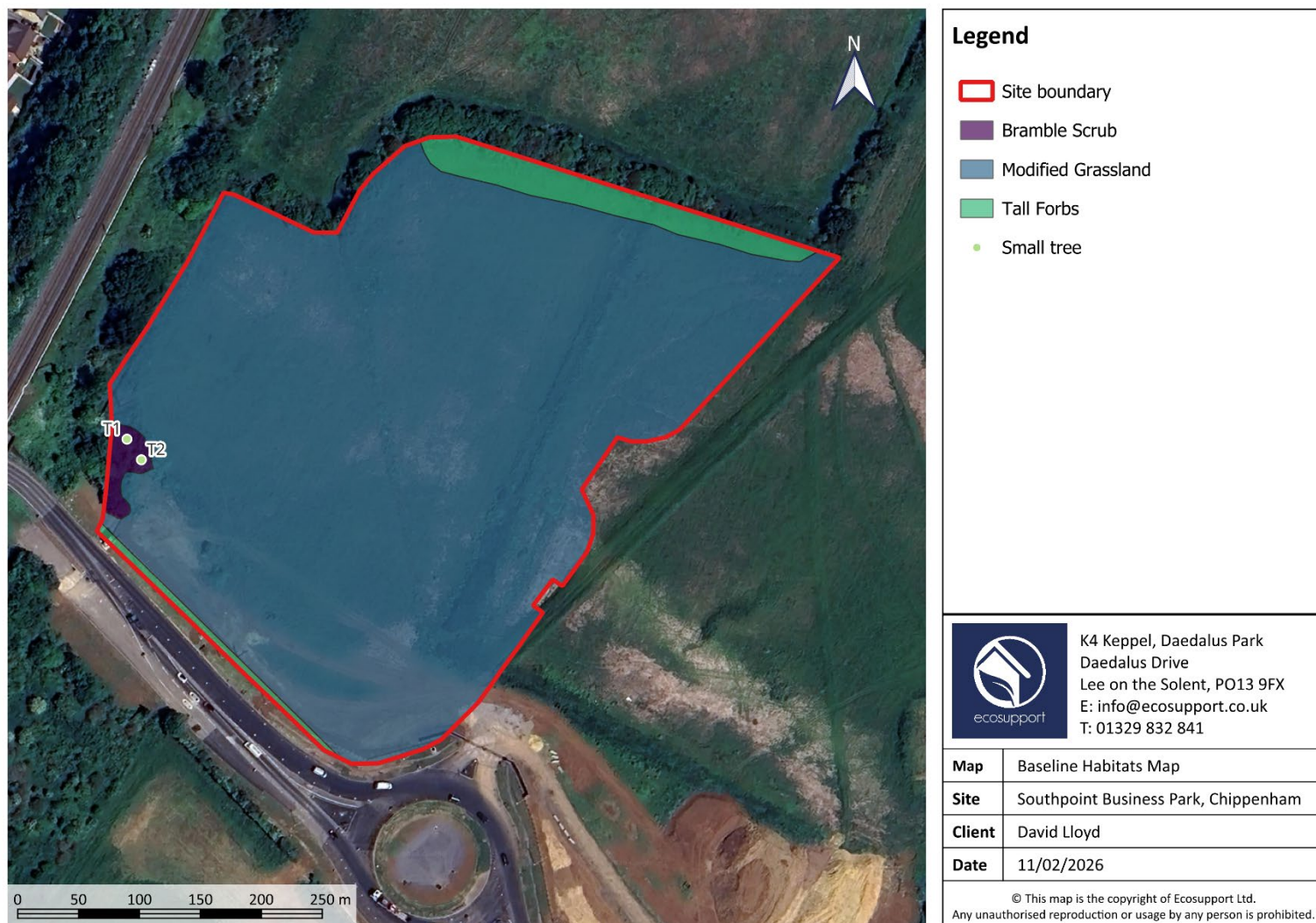
Natural England (2024). *Statutory Biodiversity Metric Tools and Guides*. Available from:

<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

UKHab Ltd. (2023). *UK Habitat Classification – Habitat Definitions Version 2.0* (September 2023).

7.0 APPENDIX

Appendix A – BNG Baseline Habitats Map



Appendix B – BNG Post-Development Map

