



BNG Monitoring & Management Plan

Land Adjoining 4
Brookfields, Providence Hill,
Bursledon

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Report	Biodiversity Net Gain Assessment, Management and Monitoring Plan
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1.0 INTRODUCTION

1.1 Background

Ecosupport Ltd. were commissioned by Colten Care Ltd. to undertake a Biodiversity Net Gain Assessment at 'Land Adjoining 4 Brookfields, Providence Hill, Bursledon' and detail the results of this assessment within a Habitat Management and Monitoring Plan.

The purpose of the Biodiversity Net Gain (BNG) 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, 2023a):

- How off-site gains and / or 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

This report should be read in conjunction with the associated EclA (Ecosupport, 2024).

1.2 Site Location and Description

The site comprises a parcel of land and associated outbuildings to the north of Providence Hill, Bursledon, SO31 8AU (centred on OS grid reference SU 48308 10626) (**Fig 1**). The site is bound by the A27 to the south with residential housing areas lying to the north, east and west. The immediate surrounding environ can be considered largely urban comprising mostly of residential dwellings and their gardens however some small pockets of woodland and grassland are present to the north of the site.

Figure 1. Site boundary (Google Satellite, 2024).



1.3 Development Proposals

The proposals entail the erection of a Residential Care Community, comprising a 73 bed care home (Use Class C2) and 5 x close care cottages (Use Class C2) with associated access, internal access roads, parking, landscaping and infrastructure (**Fig 2**).

Figure 2. Proposed site layout (WLA, 2024).



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 (DEFRA, 2023b).

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. The habitat definitions used were based on those identified during the updated walkover on the 9th January 2024 and reported within the EclA (Ecosupport, 2024). The EclA should be referred to for information on UKHab habitat classifications on site and plant species recorded.

A condition assessment, in line with the Statutory Biodiversity Metric Technical Annex 1, was carried out on site by Adam Jessop MSc MCIEEM, Principal Ecologist with Ecosupport, and Louise Davies BSc (Hons), Project Ecologist with Ecosupport, on the 21st December 2023. 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 (DEFRA, 2023b). 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 Technical Annex 1 (DEFRA, 2023b), which includes detailed assessment criteria for different habitats. Full results of the condition assessments can be found within **Section 3.0**. The condition of each habitat was assessed individually on site but, where the condition was found to be the same across several parcels, these were grouped together.

2.4 Strategic Significance

Each habitat was assigned a strategic significance in line with the Statutory Biodiversity Metric User Guide (DEFRA, 2023b).

2.4.1 Formally Identified Areas

As indicated in **Figure 8**, the northern boundary, southern boundary and western portion of the site lies within an ecological network. Consequently, those baseline habitats considered to be ecologically valuable (e.g. unmanaged grassland and scrub) lying within the ecological network were listed as 'Formally identified within the local strategy'. To determine which post-development habitats were also considered to be 'Formally identified within the local strategy', the below approach was taken.

As noted on the 'On-Site Habitat Baseline' page of the associated Statutory BNG Metric, the baseline habitats within the ecological network comprised of mixed scrub, bramble scrub and unmanaged grassland. On the 'On-Site Habitat Creation' page of the Metric, where similarly valuable habitats (such as other neutral grassland and mixed scrub) are being replaced within the ecological network areas on site, these have been listed as 'Formally identified within the local strategy' as it is considered they will still contribute to the value of the ecological network. However, where habitats of little ecological value (such as introduced shrub and developed land) are being created within the ecological network areas on site, these have been listed as 'Area not in local strategy' because it is not considered that they contribute to the value of the ecological network.

2.4.2 Ecologically Desirable Areas

Where ecologically valuable baseline and post-development habitats were located adjacent to or with connectivity to the ecological network these were listed as 'Location ecologically desirable but not in local strategy'.

2.5 Limitations

There were not considered to be any significant limitations on the results of the habitat survey with all areas of the site accessible. Despite the condition assessment being conducted outside of the optimal season for vascular flowering plants, given the nature of the habitat types present and the species recorded, this is not considered to have affected the accuracy of the site's valuation.

3.0 EXISTING HABITATS AND DEVELOPMENT PROPOSALS

The habitats on site were categorised according to UK Hab Ltd. Habitat Definitions Version 2.0 (2023) as listed below (please refer to the **Baseline Habitats map appended** for information on the locations of these habitats on site):

- Other Woodland; Mixed – Mainly Broadleaved (w1h5) with secondary habitat code 33 (line of trees) and 50 (ditch) (**Figs 3 & 4**)
- Modified Grassland (g4) with secondary habitat codes 32 (scattered trees), 510 (bare ground) (**Fig 5**)
- Mixed Scrub (h3h) (**Fig 6**)
- Bramble Scrub (h3d) (**Fig 6**)
- Bracken (g1c) (**Fig 3**)
- Non-Native and Ornamental Hedgerow (h2b)
- Built-Up Areas and Gardens (u1) with secondary habitat code 827 (introduced shrub)
- Artificial Unvegetated; Unsealed Surface (u1c)
- Buildings (u1b5) (**Fig 7**)
- Other Rivers and Streams (r2b) (**Fig 3**)

Figure 3. Small ditch / brook running along the northern boundary of the site in association with a line of trees with the area of Bracken also visible (taken December 2023).



Figure 4. View of the line of trees running along the northern boundary of the site (visible on the left of this picture) (taken December 2023).



Figure 5. Modified grassland present in the eastern portion of the site with bare ground and scattered trees visible (taken December 2023).



Figure 6. Scrub present in the western portion of the site with bramble scrub present in the foreground and mixed scrub visible to the rear (taken December 2023).



Figure 7. One of the outbuildings on site (taken December 2023).



3.1 Baseline Condition Assessment

The following tables provide detail as to the condition assessments undertaken of the non-linear (**Table 1**) and linear (**Table 2**) habitats present on site with reference to the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).

NB. The ditch / brook was not subject to a condition assessment as the development will not result in any impacts within 10m of this feature. Furthermore, the line of trees visible along the southern boundary of the development within Fig 1 in fact lies outside of the site boundary and has therefore been excluded from this BNG assessment.

Table 1. Existing non-linear habitats present on site including details as to their condition and the condition assessment criteria that have been met / failed as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).

Habitat Type	Area (ha)	Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Modified Grassland	0.091	Moderate	Species present were typical of Modified Grassland (e.g. Cock's Foot, Bent spp., Creeping Buttercup, Common Daisy) with at least 6 species present on average in every square metre. Sward height was varied with limited cover of scrub and bracken and no invasive non-native species noted. However, presence of waste piles resulted in the level of bare ground exceeding 10% and physical damage exceeded 5%. Specifically, Criteria A, B, C, F and G were met.	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	G1 & G2 – Present within the western portion of the site.
Modified Grassland	0.324	Moderate	Mown Modified Grassland with typical species present (e.g. Cock's Foot, Bent spp., Creeping Buttercup, Common Daisy) and an absence of scrub, bracken or invasive non-native species. The ground had been damaged in various places by vehicle usage and storage resulting in bare ground exceeding 10% cover and physical damage exceeding 5%. Specifically, Criteria A, C, F and G were met.	Area not in local strategy.	G3 & G4 – Present within the eastern portion of the site.
Mixed Scrub	0.219	Poor	Scrub comprised of Willow, Hazel, Silver Birch and Bramble with a relatively well-developed edge abutting unmanaged grassland. The scrub had recently established with no mature shrubs present, no notable clearings and presence of Rhododendron and Cotoneaster. Specifically, Criteria A and D were met.	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	MS1 – Present within the western portion of the site.
Mixed Scrub	0.037	Poor	Scrub comprised of Willow, Bramble and Buddleia with no listed invasive non-native species present. The scrub had recently established with no mature shrubs present, no notable clearings and was surrounded by mown grassland. Specifically, Criteria C and D were met.	Area not in local strategy.	MS1 – Located centrally on site surrounded by mown grassland.

Bramble Scrub	0.19	Condition Assessment N/A	-	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	BS1 – Present within the western portion of the site.
Bramble Scrub	0.01	Condition Assessment N/A	-	Area not in local strategy.	BS2 – Present along the eastern boundary of the site.
Bracken	0.016	Condition Assessment N/A	-	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	BRACK1 – Present within the western portion of the site adjacent to the northern boundary treeline.
Introduced Shrub	0.037	Poor	The Statutory Biodiversity Metric automatically assigns 'Poor' condition for Introduced Shrub.	Area not in local strategy.	IS1 – Present within the eastern portion of the site.
Bare Ground	0.121	Poor	Bare ground resulting from vehicle disturbance with little to no vegetation present and an absence of invasive non-native species.	Area not in local strategy.	BG1 – Present within the eastern portion of the site running from the south of the site towards the north-eastern corner.

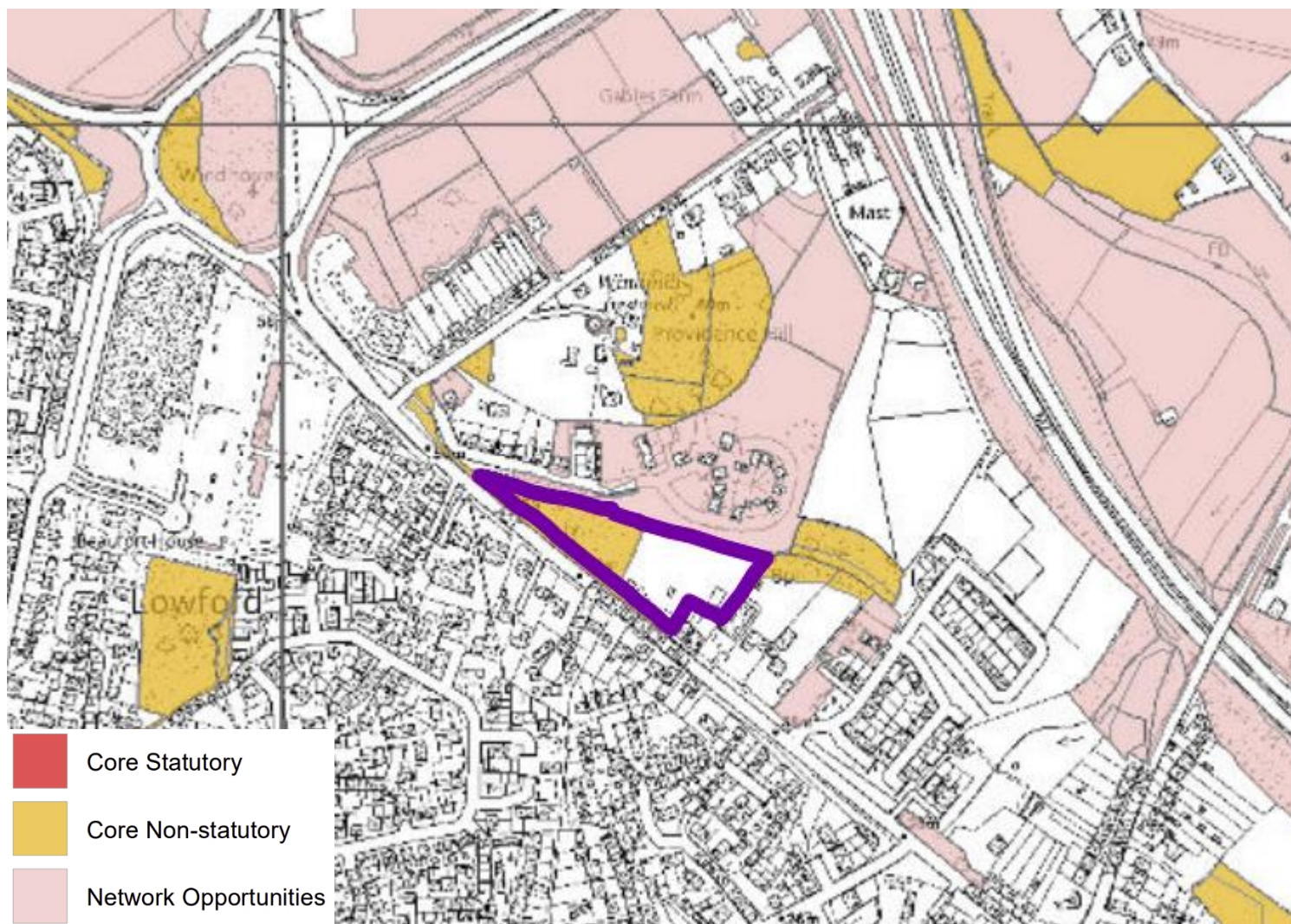
Artificial Unvegetated; Unsealed Surface	0.031	N/A - Other	-	Area not in local strategy.	AU1 – Gravel parking area present at the entrance to the site along the southern boundary.
Developed Land; Sealed Surface	0.005	N/A - Other	-	Area not in local strategy.	B1 & B2 – Two outbuildings present on site.
Urban Tree	0.057	Moderate	10 No. small urban trees and 1 No. medium urban tree. Each of these trees were native, over sailed vegetation and had a predominantly continuous canopy with no particular evidence of adverse impacts to health. However, no ecological niches were noted and the trees were not yet mature.	Area not in local strategy.	G1, G8, G11 & T1 (as per ACD Environmental (2024)) – Scattered throughout the eastern portion of the site.

Table 2. Existing linear habitats present on site including details as to their condition and the condition assessment criteria that have been met / failed as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).

Habitat Type	Length (km)	Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Line of trees – associated with ditch	0.259	Moderate	Line of native trees with a complete canopy, presence of some deadwood and Ivy and no obvious signs of damage or disease. A track was present to the north and lay within 6m of the treeline. Specifically, Criteria A, B, C and E were met.	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	H1 – Along the northern boundary of the site.

Line of trees	0.039	Moderate	Line of native trees with presence of some deadwood and Ivy and no obvious signs of damage or disease. The trees were spaced relatively far apart with canopy gaps making up more than 10% of the total area and a garden was present to the east of the tree line with further human disturbance to the west. Specifically, Criteria A, C and E were met.	Location ecologically desirable – connects to the core non-statutory ecological network.	H2 – Located along the eastern boundary of the site.
Non-Native and Ornamental Hedgerow	0.027	Poor	The Statutory Biodiversity Metric automatically assigns 'Poor' condition for Non-Native and Ornamental Hedgerows.	Area not in local strategy.	H3 – Located along the southern boundary of the site adjacent to the site access.

Figure 8. Screenshot from the ecological network mapping provided by HBIC indicating that the western end of the site and the northern and southern boundary habitats fall within the core non-statutory ecological network (as per orange shading).



4.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

4.1 On-Site Proposals

Following consultation with Colten Care Ltd., in order to minimise the loss of biodiversity on site, the following habitats are being retained, enhanced and created (please refer to the **Post-Development Layout appended** for information on the locations of these habitats). Tables have been provided as appropriate to indicate the targeted condition for each of the habitat types and which criteria will need to be met in order to achieve the desired condition.

Section 5.0 details the proposed planting and ongoing management required to ensure the stated condition criteria are met for each habitat type. A detailed landscape strategy (including planting and management specifications) has not been prepared at this stage however the recommendations within this report have been prepared in conjunction with Terraforma Landscape Architects.

NB. Should planting and management prescriptions need altering slightly when drawing up the detailed landscape strategy, this will first be approved by an ecologist to ensure the recommendations are in line with the Biodiversity Net Gain Assessment.

4.1.1 Non-Linear Habitats

Table 3 indicates those habitats due to be retained, enhanced and created on site with details provided, where appropriate, as to how the necessary condition criteria will be met.

Table 3. Non-linear habitats to be retained, enhanced and created on site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition (the necessary planting and management required to achieve the stated condition criteria is detailed in **Section 5.0**).

Habitat Type	Action	Area (ha)	Target Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Mixed Scrub	Enhanced	0.077	Moderate (Mixed Scrub)	The existing mixed scrub will be enhanced to moderate condition in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B, C and D will be targeted for achievement with invasive species removed, further native species planting and appropriate management to maintain a range of ages and encourage a well-developed edge.	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	MS1 – Located at the western end of the site.
Other Neutral Grassland	Created	0.203	Moderate	Other neutral grassland of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). 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.	Formally identified in local strategy – an ecologically valuable habitat that will be created within the area designated as part of the core non-statutory ecological network (Fig 8).	ONG1, ONG2 & ONG4 – Located along the northern and southern boundaries of the site.
Other Neutral Grassland	Created	0.01	Moderate	Other neutral grassland of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). 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.	Location ecologically desirable – connects to the core non-statutory ecological network via hedgerow and shrubs.	ONG3 – Located centrally on site.

Mixed Scrub	Created	0.085	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B, C and D will be targeted for achievement with native species planting and appropriate management to remove invasive species, maintain a range of ages and encourage a well-developed edge.	Formally identified in local strategy – an ecologically valuable habitat that will be created within the area designated as part of the core non-statutory ecological network (Fig 8).	MS2-MS4 – Located along the northern and southern boundaries of the site.
Mixed Scrub	Created	0.038	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Given the more formal location, only criteria A, B, and C will be targeted for achievement with native species planting and appropriate management to remove invasive species and maintain a range of ages.	Area not in local strategy.	NS1, NS2 & NS6 – Located adjacent to the main care home in the eastern portion of the site.
Mixed Scrub	Created	0.032	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Given the more formal location, only criteria A, B, and C will be targeted for achievement with native species planting and appropriate management to remove invasive species and maintain a range of ages.	Formally identified in local strategy – an ecologically valuable habitat that will be created within the area designated as part of the core non-statutory ecological network (Fig 8).	NS5 & NS3 – Located adjacent to the close care units in the western end of the site and along the access road.
Mixed Scrub	Created	0.007	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Given the more formal location, only criteria A, B, and C will be targeted for achievement with native species planting and appropriate management to remove invasive species and maintain a range of ages.	Location ecologically desirable – connects to the core non-statutory ecological network via other neutral grassland.	NS4 – Located adjacent to the main footpaths and access roads on site.

Mixed Scrub	Created	0.053	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B, C and D will be targeted for achievement with native species planting and appropriate management to remove invasive species, maintain a range of ages and encourage a well-developed edge.	Location ecologically desirable – connects to the core non-statutory ecological network along the northern boundary of the site.	WU1 – Located underneath the tree line along the eastern boundary of the site.
Introduced Shrub	Created	0.098	Condition Assessment N/A	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Area not in local strategy.	N/A – Located throughout the site.
Introduced Shrub (Ornamental Ground Cover)	Created	0.04	Condition Assessment N/A	This refers to the areas of ornamental ground cover (i.e. flower bed) to be created. As no specific category is available for this habitat type within the Statutory Biodiversity Metric, introduced shrub has been selected as the closest appropriate category. No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Area not in local strategy.	N/A – Located throughout the site.
Ornamental Lake or Pond	Created	0.006	Poor	Ornamental ponds of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). General biodiversity enhancement measures will be recommended however no specific criteria will be targeted for achievement in this instance given the ornamental nature of the ponds.	Area not in local strategy.	P1-P3 – Located centrally and around the main care home on site.

Rain Garden	Created	0.005	Poor	A rain garden of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria C will be targeted for achievement with management implemented to minimise invasive species cover.	Area not in local strategy.	RG1 – Located around the central ornamental pond on site.
Modified Grassland	Created	0.002	Poor	Modified grassland of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). This is expected to be reinforced grassland with occasional vehicle usage anticipated. Specifically, criteria C, F and G will be targeted for achievement with management implemented to minimise cover of scrub, bracken and invasive species.	Area not in local strategy.	MG1 – Adjacent to the main access road into the site.
Individual Trees (Urban)	Created	0.0896	Moderate	22 No. urban trees of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B and D will be targeted for achievement with native species planting and appropriate management implemented to prevent adverse impacts to health and maintain a continuous canopy.	Formally identified in local strategy – an ecologically valuable habitat that will be created within the area designated as part of the core non-statutory ecological network (Fig 8).	N/A – Located throughout the site.
Individual Trees (Urban)	Created	0.0163	Moderate	4 No. urban trees of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B and D will be targeted for achievement with native species planting and appropriate management implemented to prevent adverse impacts to health and maintain a continuous canopy.	Location ecologically desirable – connects to the core non-statutory ecological network.	N/A – Located throughout the site.

Individual Trees (Urban)	Created	0.1751	Moderate	43 No. urban trees of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B and D will be targeted for achievement with native species planting and appropriate management implemented to prevent adverse impacts to health and maintain a continuous canopy.	Area not in local strategy.	N/A – Located throughout the site.
Vegetated Garden	Created	0.017	Condition Assessment N/A	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Area not in local strategy.	N/A – Gardens around the close care units in the western portion of the site.
Artificial Unvegetated; Unsealed Surface	Created	0.032	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Area not in local strategy.	N/A – Forming the natural footpath around the main care home.
Developed Land; Sealed Surface	Created	0.195	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Area not in local strategy.	N/A – Located throughout the site (roads, driveways etc.).

Developed Land; Sealed Surface	Created	0.182	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Area not in local strategy.	N/A – Forms the buildings on site.
Façade-Bound Green Wall	Created	0.0151	Poor	A green wall of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criterion C will be targeted for achievement with management implemented to minimise invasive species cover.	Area not in local strategy.	GW1 & GW2 – Along the boundary of the sunken garden and extending across the western portion of the site.

4.1.2 Linear Habitats

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

Table 4. Linear habitats to be retained, enhanced and created on site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition (the necessary planting and management required to achieve the stated condition criteria is detailed in **Section 5.0**).

Habitat Type	Action	Length (km)	Target Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Line of Trees – Associated with Ditch	Retained	0.259	To be retained in current moderate condition.	To be retained in current moderate condition.	Formally identified in local strategy – forms part of the core non-statutory ecological network (Fig 8).	H1 – Along the northern boundary of the site.
Line of Trees	Enhanced	0.039	To be enhanced to a Native Hedgerow with Trees of moderate condition.	To be enhanced to a Native Hedgerow with Trees of moderate condition through planting of a native species hedge along the length of the tree line. Specifically, criteria A2, B1, B2, D1 and D2 will be targeted for achievement with management implemented to maintain a width of at least 1.5m, limit horizontal and vertical gappiness, remove invasive species and prevent damage.	Location ecologically desirable – connects to the core non-statutory ecological network.	H2 – Located along the eastern boundary of the site.
Native Hedgerow	Created	0.04	Moderate.	Native hedgerows of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A2, B1, B2, D1 and D2 will be targeted for achievement with management implemented to maintain a width of at least 1.5m, limit horizontal and vertical gappiness, remove invasive species and prevent damage.	Formally identified in local strategy – an ecologically valuable habitat that will be created within the area designated as part of the core non-statutory ecological network (Fig 8).	H4 & H5 - Located centrally on site.

Native Hedgerow with Trees	Created	0.019	Moderate.	Native hedgerow of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A2, B1, B2, D1 and D2 will be targeted for achievement with management implemented to maintain a width of at least 1.5m, limit horizontal and vertical gappiness, remove invasive species and prevent damage.	Location ecologically desirable – connects to the core non-statutory ecological network.	H6 – Located along the eastern boundary of the site, forming an addition to the enhanced native hedgerow with trees (H2).
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4.2 Metric Calculation

Following the incorporation of the above measures into the DEFRA Statutory Biodiversity Metric, **on site there is a net gain of +11.76% in habitats (or +0.54 habitat units) and a net gain of +21.30% in hedgerows (or +0.30 hedgerow units) and the trading rules are satisfied (Fig 9)**. Therefore, a more than sufficient gain for biodiversity has been achieved on site and no further measures are required.

Figure 9. Screenshot of the 'headline results' output from the BNG assessment undertaken for the site using the DEFRA Statutory Biodiversity Metric.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.54
	<i>Hedgerow units</i>	0.30
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	11.76%
	<i>Hedgerow units</i>	21.30%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

5.0 HABITAT MANAGEMENT

At the current stage, a detailed landscape scheme is not yet available and, therefore, the below sections provide general recommendations with regard to the management of the habitats on site. Should the provision of a detailed landscape scheme be conditioned in the future, the information within the below sections will be used to inform the landscape strategy to ensure it remains consistent with the Biodiversity Net Gain assessment.

5.1 Protection of Retained Habitats

All of the habitats to be retained or enhanced will be protected from damage during the works. The ecological buffer zone along the northern boundary of the development area and the retained western scrub will be fenced using Heras fencing or similar to prevent access by machinery. Where large 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 ecological buffer zones during the works and ensure the habitats and any wildlife species that may be using them are protected.

5.2 Mixed Scrub

5.2.1 Proposed Planting

Within the areas of Mixed Scrub to be enhanced (Parcel Reference: MS1) and created (Parcel References: MS2-MS4, NS1-NS6, WU1), native planting will be undertaken to ensure at least 3 native woody species are present with no one species dominant. Species to be planted include Dogwood (*Cornus sanguinea*), Hazel (*Corylus avellana*), Broom (*Cytisus scoparius*), Privet (*Ligustrum vulgare*), Grey Willow (*Salix cinerea*), Elder (*Sambucus nigra*), Gorse (*Ulex europaeus*) and Wayfaring Tree (*Viburnum lantana*) as per the Landscape Strategy (Terraforma Landscape Architects, 2024).

Shrubs will be planted in groups of 3-5 plants (Terraforma Landscape Architects, 2024) with large spacing between groups to avoid creating dense clusters. 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.

Within the area of scrub to be enhanced (Parcel Reference: MS1), new planting will take place following removal of existing invasive/undesirable species.

5.2.2 Invasive / Undesirable Species Removal

The mixed scrub to be enhanced (Parcel Reference: MS1) currently contains a small amount of Rhododendron, Cotoneaster and Buddleia. These species will be removed and replaced with native planting.

Throughout all of the mixed scrub parcels, removal of invasive species will be undertaken as necessary if any are to establish on site.

5.2.3 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).

Within the woodland understorey scrub and the scrub located within the ecological buffer zones (Parcel References: WU1, MS1-MS4), a well-developed edge will also be encouraged. This will be achieved by maintaining a lower density of shrubs towards the edges of the scrub parcels and employing a less intensive mowing regime for the surrounding grassland (as described in **Section 5.3.2**) in order to encourage a longer sward height.

5.3 Other Neutral Grassland

5.3.1 Proposed Planting

Four areas of other neutral grassland of 'moderate' condition are proposed to be created throughout the site (Parcel References: ONG1-ONG4). These grasslands will be established via sowing of a wildflower mix such as Emorsgate EM4 – Meadow Mixture for Clay Soils (or similar approved by an ecologist) which comprises of other neutral grassland indicator species such as Common Bent (*Agrostis capillaris*), Crested Dog's Tail (*Cynosurus cristatus*), Common Knapweed (*Centurea nigra*) and Agrimony (*Agrimonia eupatoria*).

The sowing of these seeds will be completed either during the spring or the autumn or spring 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.

5.3.2 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 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.

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 (species indicative of sub-optimal condition) 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.

Management Once Established: After the first year, the wildflower areas will be mown in Spring to 100mm and will then be left to flower through to late July/August. This is beneficial for nesting birds, which do not fledge until late July, as well as insects and other wildlife. After flowering, the area will undergo a hay cut with growth reduced to 50mm (Terraforma Landscape Architects, 2024).

To maintain maximum flowering interest and a varied sward height, sections of each grassland parcel should be managed 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 and minimise cover of sub-optimal species.

Targeted scrub and bracken removal will also need to be carried out as necessary to prevent encroachment into the grassland.

5.4 Ornamental Pond

Three ornamental ponds will be created across the site (Parcel References: P1-P3). These are targeted to be of 'poor' condition and consequently no specific condition criteria need to be met. Nevertheless, to maximise their benefit for biodiversity on site, the following measures are recommended (Pond Conversation, 2013; WWT, 2023):

- Plant a mix of native submerged and floating plants such as Spiked Water-Milfoil (*Myriophyllum spicatum*), Water Violet (*Hottonia palustris*), Common Water-Crowfoot (*Ranunculus aquatilis*) and Frogbit (*Hydrocharis morsus-ranae*).
- Avoid planting non-native species, particularly those that are invasive as there is potential for these to spread into nearby waterbodies (such as the ditch along the northern boundary of the site).
- If adding a substrate to the pond, use sand or washed gravel which can form an important habitat for invertebrates.
- Where possible, maintain shallow edges and plant native marginal species such as Water Forget-Me-Not (*Myosotis scorpioides*), Watermint (*Mentha aquatica*), Yellow Flag Iris (*Iris pseudacorus*), Bogbean (*Menyanthes trifoliata*) and Lesser Spearwort (*Ranunculus flammula*).

5.5 Rain Garden

A rain garden (Parcel Reference: RG1) will be created around the central pond on site. Recommended species to plant include Yellow flag iris (*Iris pseudocorus*), Daylily (*Hemerocalis*), Purple loosestrife (*Lythrum salicaria*), Bistort (*Persicaria bistorta*), Coneflower (*Echinacea pupurea*), Meadowsweet

(*Filipendula ulmaria*), Primrose (*Primula vulgaris*), Penstemon (*Penstemon digitalis*) and Granny's Bonnet (*Aquilegia vulgaris*).

Rain gardens are typically low maintenance, however, to ensure the rain garden is functioning properly, the following measures are recommended (Bray *et al.*, 2012; WWT, 2023b):

- Vegetation must be watered regularly in the first three months following establishment. Following this, vegetation should only need to be watered following extended periods of dry weather or drought.
- Unwanted weeds must be removed by hand within the first two years.
- The rain gardens must be mulched within the first year to prevent weeds and retain moisture.
- Any plants that are removed, die or become seriously damaged or defective during the monitoring period of planting shall be replaced like for like in the next planting season.
- If necessary, vegetation can be pruned / cut annually during late Summer / Autumn to remove any overgrowth and dead plants - this will encourage new growth.
- If any invasive species are to establish, these will be removed.

5.6 Modified Grassland

5.6.1 Proposed Planting

A single area of modified grassland of 'poor' condition is due to be created adjacent to the main access road on site (Parcel reference: MG1). This grassland is set to be reinforced and will be seeded with Emorsgate EG22 – Strong Lawn Grass Mixture or similar (approved by an ecologist).

5.6.2 Management

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.

Given the formal location of this grassland and its potential purpose for overflow parking, it is expected to be regularly maintained to a height of 30-50mm during April to August and 50-70mm for the remainder of the year (Terraforma Landscape Architects, 2024).

First year management: During the first year the grassland areas must be regularly maintained to the above noted heights every 3-4 weeks (or more frequently as needed) to prevent the establishment of weeds. All arisings must be taken from site to prevent the addition of too many nutrients into the soil. If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble.

Management Once Established: Once the seed is established after the first year, regular mowing is still expected which will result in a shorter sward height however grass should not be cut lower than 30mm.

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

5.7 Individual (Urban) Trees

5.7.1 Proposed Planting

A total of 69 No. native trees will be planted across the site. Recommended species include Field Maple (*Acer campestre*), Silver Birch (*Betula pendula*), Hawthorn (*Crataegus monogyna*), Wild Cherry (*Prunus avium*) and Oak (*Quercus robur*).

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.

5.7.2 Management

5.7.2.1 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.

5.7.2.2 Weed 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.

5.7.2.3 Pruning

The trees will be subject to light pruning as required 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).

5.7.2.4 Monitoring and Replacement

Trees will be inspected every 3 years by a suitably experienced arborist **during late winter – early spring of each year when required**. These monitoring visits will assess the general health of the trees and determine if any remedial action is required, including noting any presence of disease. As part of these monitoring visits, the arborist will produce a monitoring report which will be sent to the LPA outlining the results and appropriate recommendations (i.e. remedial works, removal /replacement). Any plants that are removed, die or become seriously damaged or defective shall be replaced like for like in the next planting season.

5.8 Façade-Bound Green Wall

Green walls will be incorporated onto the façade of the retaining walls on site (Parcel References: GW1-GW2). No specific planting is required to achieve 'poor' condition however it is expected that species will comprise a mix of shade-loving perennials.

Management and maintenance for green walls is generally minimal, consisting largely of weed control, pruning if necessary, and removal of leaf litter from the ground. Invasive species will not be planted within the green walls, however, should they colonise, targeted removal will be undertaken.

The green walls will be inspected during the first year to assess their condition and determine if any remedial action is required. Any plants that are removed, die or become seriously damaged or defective during the monitoring period shall be replaced like for like in the next planting season.

5.9 Hedgerows

5.9.1 Proposed Planting

A line of trees is set to be enhanced to a native hedgerow with trees (Parcel Reference: H2) with an additional length of hedgerow with trees being created at its southern end (Parcel Reference: H6). Two native hedgerows are also set to be created along the central retaining wall on site. These will lie outside of private gardens and will be readily accessed for management from adjoining public open spaces.

Species will include; Blackthorn (*Prunus spinosa*), Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Privet (*Ligustrum vulgare*) and Field Maple (*Acer campestre*).

It is recommended that the ground is prepared by digging a strip approximately 60 – 90 cm in width. All weeds present in the soil are to be removed during soil preparation.

5.9.2 Hedgerow Management

The most favourable approach to managing hedgerows for the benefits of biodiversity is to encourage minimal interference and ensure when there is any cutting, it does so after autumn fruiting (so late winter is preferable). The key points of the management prescriptions will therefore be as follows (adopting recommendations as outlined within Bright and MacPherson 2002):

- Cutting will be done on a 3-year cycle (part of the hedges on site cut during the first year, another part of the hedges cut during second year and no cutting during the third year), to provide sustained foraging opportunities across the site every active season. Hedgerows will be allowed to develop into a tall, dense, bushy structures and maintained at a height of 3 – (preferably 4) meters.
- A proportion of hedges (at least 30%) should be left to grow for at least 7 – 10 years.
- Not all hedgerows should be cut in any one year, so some heavy fruiting hedges are always present. Flails should not be used if possible meaning management works will likely involve cutting using hand tools
- Coppicing or laying should be used to manage any of the hedgerows on site which become gappy or sparse
- If the size of the hedgerow needs to be reduced, avoid cutting the top and cut one side.

In more formal locations, hedges may need to be maintained more regularly than is stated above and this is permitted provided that the criteria set out in **Table 4** are achieved as described.

Targeted removal of invasive species will be carried out as necessary.

5.9.3 Monitoring

Annual monitoring will take place of the newly planted hedgerow for the first 3 years, with bi-annual monitoring between 4-10 years. This will be carried out by a suitably experienced ecologist during late winter – early spring of each year. These monitoring visits will assess the general health of the hedgerow and determine if any remedial action is required (some of which are outlined below such as replacement planting or altering the frequency of cuts).

5.9.4 Replacement

Any plants that are removed, die or become seriously damaged or defective during the 10- year monitoring period of planting shall be replaced like for like in the next planting season.

If hedgerows become very thin, coppicing of selected plants / laying of short lengths of hedgerow may be required and will be beneficial to promote vigorous, dense regrowth. Such works must be undertaken during the period October – February to avoid the breeding bird season.

5.10 Compliance Check

A compliance visit will be completed by a suitably qualified ecologist once the construction phase of the development has been completed. The check will be conducted annually for the first 5 years post-completion, and every 5-years thereafter until year 30. The compliance check will be carried out during a suitable time of year and in suitable weather conditions. The ecologist will check the condition of all of the habitats on site to assess if they have been achieved 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).
- 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.

5.11 Safeguarding

The developer and project manager will be responsible for briefing all site personnel of the ecological sensitivities of the site and implementing the habitat enhancement, creation and management measures outlined within **Sections 4.0 & 5.0**. 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.

5.12 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.

5.13 Management Responsibilities

Colten Care 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. If the land is to be transferred, the new landlords shall bear responsibility for the management and maintenance of habitats within their curtilage. If not, the responsibility shall remain with Colten Care Ltd. All management works as described above will need to be secured by a Section 106 agreement for the site that will legally oblige Colten Care Ltd. or other agreed party to carry out the works. An annual management timeline of all habitats has been provided in **Table 6** and management works should continue in perpetuity.

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 Habitat 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 Habitat Monitoring report will include a section addressing any raised issues identified during the compliance check
- The BNG Habitat Monitoring report is submitted to the LPA for review and comment

Table 5. Schedule of habitat retention, enhancement and creation works to be carried out in first year (as per **Sections 4.0 and 5.0**).

General Activity	Specific Activity	Dates / Timing	Description
Habitat Retention (Section 5.1)	Installation of Heras fencing for protection	Anytime	Heras fencing to be erected along the boundary of the western mixed scrub and the northern ecological buffer to prevent these areas from being damaged during works.
Habitat Enhancement & Creation Mixed Scrub (Section 5.2)	Installation of Heras fencing for protection	Anytime	Heras fencing to be erected along the boundary of the western scrub (Parcel MS1) to prevent this area from being damaged during works.
	Plant native shrub species	Late Autumn	- Plant at least 3 different native shrub species. - Plant in groups of 3-5 with large spacing.
	Removal of undesirable species	Anytime	Any undesirable species present within MS1 will be removed and replaced with native species.
	Year 1 Management	Spring and Summer	- Weed around newly planted shrubs as necessary. - Water whenever necessary during the first growing season. - Replace any dead shrubs like-for-like.
Habitat Creation Other Neutral Grassland (Section 5.3)	Creation of grassland	Ideally Autumn or Spring	The areas of other neutral grassland will be sown with Emorsgate EM4 – Meadow Mixture for Clay Soils.
	Year 1 Management	Routinely as required	Control annual weed growth by mowing to 50-75mm throughout the first year to minimise competition and weed seed production.

Habitat Creation Ornamental Pond (Section 5.4)	Plant native species	Anytime	- The ornamental ponds on site are targeted to be of poor condition and consequently no specific criteria must be met. - Nevertheless, to encourage biodiversity, ponds should be planted with native submerged and floating plants. - Where possible, maintain shallow edges and plant native marginal species
	Year 1 Management	Anytime	Should any invasive species establish, these will be removed.
Habitat Creation Rain Garden (Section 5.5)	Rain garden creation	Spring or Autumn	Plant with native water-tolerant species.
	Year 1 Management	Routinely as required	- Water vegetation regularly during the first 3 months. - Remove unwanted weeds by hand. - Apply mulch to the new rain garden during the first year. - Replace any dead plants like-for-like. - Should any invasive species establish, these will be removed.
Habitat creation Modified Grassland (Sections 5.6)	Planting	Ideally Autumn or Spring	Establish the grassland through sowing of Emorsgate EG22 – Strong Lawn Grass Mixture.
	Year 1 Management	Routinely as required	- Control annual weed growth by regular mowing throughout the first year to minimise competition and weed seed production. - If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble.
Habitat creation Individual Trees (Sections 5.7)	Planting	Late Autumn	- Plant native tree species. - Apply Rootgrow or Bonemeal to encourage healthy root growth.

			Apply Mycorrhizal treatment to the tree roots.
	Year 1 Management	Routinely as required	- Remove weeds from a 1m exclusion zone around each newly planted tree. - Apply mulch around the base of the tree as required.
Habitat creation Façade-Bound Green Wall (Sections 5.8)	Green wall creation	Anytime	- The green walls on site are targeted to be of poor condition and consequently no specific criteria must be met. - Nevertheless, to encourage biodiversity, green walls should be planted with a variety of species. - No invasive species will be planted
	Year 1 Management	Routinely as required	- Should any invasive species establish, these will be removed. - Remove any unwanted weeds.
	Year 1 Monitoring	Summer	Inspect during the first year and replace any dead plants like-for-like in the next planting season.
Habitat creation Hedgerows (Sections 5.9)	Planting	Late Autumn	- Prepare ground by removing all weeds and digging a strip approx. 60-90cm wide. - Plant with native shrub species.
	Year 1 Management	Winter i.e. October - February (outside of bird nesting season)	- Begin 3 year cutting cycle in which a portion of the hedges on site are cut in the first year, another portion in the second year and no cutting in the third year. - Use hand tools and avoid the use of flails.
	Year 1 Monitoring	Late Winter – Early Spring	- Hedgerows will be inspected by a suitably experienced ecologist to assess the general health of the hedgerow. - Remedial action will be taken as necessary. - Any plants that are removed, die or become seriously damaged will be replaced like-for-like in the next planting season.

5.14 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
Mixed Scrub (Section 5.2)	Cutting back / thinning	Winter i.e. October - February (outside of bird nesting season)	- Scrub will be cut back annually as needed to ensure areas do not become overgrown. - Thinning will take place routinely every 5 years. - Different areas will be cut back / thinned on rotation to maintain a diverse age range. - Any scrub encroaching into adjacent habitats will be cut back as needed.
	Bramble management	Winter i.e. October - February (outside of bird nesting season)	Bramble will be cut back as necessary to maintain a density of no more than 15%.
	Invasive species removal	Winter i.e. October - February (outside of bird nesting season)	Removal of invasive species will be undertaken as necessary if they establish on site.
	Shrub replacement	Late Autumn	Any dead shrubs or areas that become sparse will be planted with new native shrubs, replacing like-for-like.
Other Neutral Grassland (Section 5.3)	Years 2 – 30 Management	Spring and mid to late Summer	- Mow to 100mm in Spring. - Leave to flower until late July / August. - Conduct single 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.
	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.

Ornamental Ponds and Rain Gardens (Sections 5.4 & 5.5)	Pruning / cutting	Late Summer / Autumn	If necessary, vegetation can be pruned / cut annually during late Summer / Autumn to remove any overgrowth and dead plants - this will encourage new growth.
	Undesirable species removal	Routinely as required	- Unwanted weeds will be removed by hand. - Removal of invasive species will be undertaken as necessary if they establish on site.
	Plant replacement	Spring or Autumn	Any dead plants or areas that become sparse will be planted with new native plants, replacing like-for-like.
Modified Grassland (Section 5.6)	Years 2-30 Management	Year-round	The grassland will be subject to regular mowing to a height of 30-50mm during April-August and 50-70mm for the remainder of the year.
	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.
Individual Trees (Section 5.7)	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	Every 3 years, late Winter – early Spring	- Trees will be inspected by a suitably experienced arborist. - General health will be assessed with remedial action recommended as necessary. - Arborist will produce a monitoring report to be sent to the LPA. - Any plants that are removed, die or become seriously damaged shall be replaced like-for-like in the next planting season.

Façade-Bound Green Wall (Sections 5.8)	Years 2-30 Management	Routinely as required	- Removed unwanted weeds. - Prune as necessary to encourage growth. - Remove leaf litter from the ground beneath the wall. - Should any invasive species establish, these will be removed.
Hedgerows (Sections 5.9)	Years 2-30 Management	Winter i.e. October - February (outside of bird nesting season)	- Continue the 3 year cutting cycle. - A proportion of hedges (at least 30%) should wherever possible be left to grow for 7-10 years. - Maintain a height of 3-4m wherever possible. - Use hand tools and avoid the use of flails. - Use coppicing or laying to fill gaps. - If hedgerow size needs to be reduced (e.g. in more formal areas), avoid cutting the top and cut only one side.
	Monitoring	Late Winter – Early Spring Annually in Years 1-3 Bi-annually in Years 4-10	Suitably qualified ecologist will assess the health of the hedgerow and recommend any necessary remedial action
	Replacement Planting	Late Autumn ideally, in suitable weather (for planting) Winter i.e. October - February (outside of bird nesting season) (for coppicing / laying)	- Removed, dead or damaged specimens will be replaced like for like in the next planting season. - Coppicing / laying will be used to gap up / thicken any thin hedgerows.

Compliance Check (Section 5.10)	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 detailing assessment of habitats against criteria stipulated in Section 4.0 and any necessary remedial actions or adjustments to ongoing management. • The report will be submitted to the LPA. • Any necessary actions must then be completed prior to the next compliance check.
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6.0 REFERENCES

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Legend

- Site Boundary
- Bramble Scrub
- Mixed Scrub
- Bracken
- Modified Grassland
- Introduced Shrub
- Artificial Unvegetated; Unsealed Surface
- Bare Ground
- Developed Land; Sealed Surface (Buildings)
- 11 No. Urban Trees
- Line of Trees
- Non-Native / Ornamental Hedgerow
- Line of Trees - Associated with Ditch



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Map	Baseline Habitats (BNG)
Site	Land Adjoining 4 Brookfields, Providence Hill
Client	Colten Care Ltd.
Date	12/04/2024

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Legend

- Site Boundary
- Other Neutral Grassland
- Mixed Scrub
- Mixed Scrub (Native Shrub Planting)
- Mixed Scrub (Woodland Understorey)
- Modified Grassland
- Introduced Shrub
- Introduced Shrub (Ornamental Ground Cover)
- Ornamental Pond
- Rain Garden
- Vegetated Garden
- Artificial Unvegetated; Unsealed Surface
- Developed Land; Sealed Surface (Roads etc.)
- Developed Land; Sealed Surface (Buildings)
- 69 No. Urban Trees
- Facade-Bound Green Wall
- ... Native Hedgerow
- Line of Trees - Associated with Ditch
- Native Hedgerow with Trees (Enhanced)
- Native Hedgerow with Trees (Created)



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Map	Post-Development Layout (BNG)
Site	Land Adjoining 4 Brookfields, Providence Hill
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Date	12/04/2024

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