

Habitat Management and Monitoring Plan

Survey site:

Hillybarn Farm, The Mount, Ifield, Crawley, West Sussex RH11 0LF

Client:

Sammy Bristow

Report date:

05/08/2026

The survey results and recommendations contained within this report are valid for 18 months.

Project:

This report is prepared to inform a planning application with the Horsham District Council. This proposal can be described as full Erection of 4no. new build dwellings and amended access details. (Alternative to permission granted under DC/22/1918 Prior Approval of Proposed Change of Use of Agricultural Building to form 5 dwellinghouses)..

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Guidelines

A Habitat Management and Monitoring Plan (HMMP) is a key document in the long-term stewardship of habitats created, enhanced, or restored as part of a development. It is essential in the context of Biodiversity Net Gain (BNG), a legal requirement under the Environment Act 2021, which mandates that developments must deliver a minimum 10% net gain in biodiversity and ensure its maintenance for at least 30 years. The HMMP outlines how newly created or enhanced habitats will be managed, monitored, and maintained to achieve their intended ecological value over time, ensuring compliance with BNG commitments.

The HMMP is designed to align with UK regulatory frameworks, including Natural England's guidance on habitat management, local planning authority policies, and the National Planning Policy Framework (NPPF) such as the 'British Standard 42020 (2022) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, section 15 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.

(BS 42020:2022)

In consequence of the scale and intensity of the proposed development, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

Version control			
Status	Issue	Name	Date
Final	1.0	Harry Brindle, BSc (Hons) Consultant Ecologist	12/08/2026

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Ltd were commissioned by Philip Rowe to produce a Habitat Management and Monitoring Plan (HMMP) for a proposed development at Hillybarn Farm, The Mount, Ifield, Crawley, West Sussex, RH11 0LF (hereafter referred to as the site).

The site has been subject to previous ecological assessments of relevance to this report, comprising:

- A Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) (Arbtech Consulting Ltd, 2025).
- A Biodiversity Net Gain Assessment (BNG) (Arbtech Consulting Ltd, 2026).

1.2 Project Description

The planning application pertaining to the site describes the development as: Erection of 4no. new build dwellings and amended access details. (Alternative to permission granted under DC/22/1918 Prior Approval of Proposed Change of Use of Agricultural Building to form 5 dwellinghouses) - (hereafter referred to as the proposed development). A plan showing the proposed development is provided in **Appendix 1**.

1.3 Site Context

The survey site is centred on National Grid Reference TQ 23101 38235 and has an area of approximately 2.5ha, situated within a larger total ownership boundary comprised of ~13ha, however the entirety of this was not subject to survey at the time of the assessment. The site consists of a disused agricultural plot, including a poultry barn, traditional orchard and modified enriched grassland, with off-site adjacent line of trees to the west. Located within a rural setting, the immediate surroundings of the site are dominated by natural and semi natural habitats such as arable fields, woodlands, hedgerows and tree lines. Several small rural roads are located within the surroundings, however an absence of significant urban infrastructure is found within. The wider landscape context includes significant woodland parcels to the north of the site, Gatwick Airport 3km to the north-east, along with the urban settlement of Langley Green to the far east. A site location plan is provided in **Appendix 2**.

1.4 Scope of This Report

This Habitat Management and Monitoring Plan (HMMP) has been prepared to support the delivery of Biodiversity Net Gain (BNG) in accordance with the Environment Act 2021 and the approved Biodiversity Gain Plan for the development. BNG has been calculated using the Statutory Biodiversity Metric, and all habitat creation, enhancement, and retention detailed within this HMMP is intended to achieve and maintain the target habitat types and condition assessments specified within the approved metric.

The habitats managed under this HMMP are required to be maintained for a minimum period of 30 years from the completion of establishment works. Target habitat condition scores set out in the Statutory Biodiversity Metric define the required standard of success for each habitat parcel. Monitoring outcomes will be assessed against these target condition criteria.

Where monitoring identifies that habitats are not progressing towards, or are failing to achieve, their target condition, remedial management actions will be implemented in accordance with the adaptive management framework set out in this HMMP. This ensures that the required biodiversity gains are secured and maintained for the full management period.

Any biodiversity gains delivered off-site, where required to meet statutory BNG obligations, are secured through separate legal mechanisms and do not rely on the successful delivery of this HMMP.

2.0 Ecological Baseline Conditions Relevant to This Report

The baseline ecological conditions of relevance to this report were determined as a result of the PEA PRA and BNG Assessment.

2.1 Habitat Degradation

The site has not been subject to any degradation since 30th January 2020, and as such, the baseline biodiversity value of the site is derived from the site as observed during the Preliminary Ecological Appraisal (Arbtech Consulting Ltd., 2026).

2.2 BNG and Proposed Habitat Creation

The development, as currently proposed, is anticipated to result in a 10.13% net gain for area-based habitat units and a +86.72% net gain in watercourse-based units. The post-development habitat coverage and their target conditions in accordance with the BNG Assessment are detailed in **Table 1** below.

Table 1. Proposed post-development habitats.

Broad Habitat		Proposed Habitat Type	Area	Condition
Retained	Grassland	Modified grassland	0.9001ha	Good
	Urban	Developed land; sealed surface	0.2001ha	Condition N/A
Created	Urban	Vegetated garden	0.397ha	Condition N/A
	Grassland	Traditional orchards	0.151ha	Moderate
	Individual trees	Rural tree	0.0204ha	Moderate
Enhanced	Grassland	Other neutral grassland	0.82467ha	Good

2.3 Significant on-site Enhancements

Significant on-site enhancements are defined as habitat creation or habitat enhancement measures that make a material contribution to the biodiversity net gain (BNG) delivered by the development, relative to the pre-development baseline biodiversity unit value as calculated using the Statutory Biodiversity Metric. The retention of existing habitats, where no improvement in condition or distinctiveness is achieved, does not constitute a significant on-site enhancement for the purposes of BNG.

For this development, the following measures are considered to represent significant on-site enhancements:

- The creation of habitats of medium & high distinctiveness.
- Enhancements to baseline habitats that increase their distinctiveness.

2.4 Scope for Management

Urban habitat types that generate negligible post-development biodiversity units do not require specific management or monitoring and are not considered further within this HMMP. Habitats of low distinctiveness and retained baseline habitats do not require targeted enhancement to meet BNG objectives; however, their retention is necessary to maintain compliance with the approved BNG assessment. These habitats will therefore be subject to periodic monitoring over the 30-year management period. Created and enhanced habitats of medium distinctiveness or above constitute significant on-site enhancements and will be subject to specific management and monitoring to ensure they achieve their target condition within the 30-year term.

Considering the above, the following management and monitoring is required for post-development habitats:

- **No management or monitoring**
Proposed developed land; sealed surface and vegetated gardens.
- **Monitoring only**
Retained modified grassland.
- **Management and Monitoring**
Proposed modified grassland enhancement, traditional orchard, scattered trees.

3.0 HMMP

3.1 Site Monitoring

Site monitoring detail is provided in **Table 2** below.

Table 2. Site monitoring

Mitigation	Specification				
Persons Responsible and Lines of Communication	The details of the responsible persons and organisation(s) for delivering this management plan are outlined below.				
	Table 2.1. Organisation responsible for providing HMMP				
	Project Ecologist or Other Professional Responsible for HMMP				
	Name or Initials		Harry Brindle, BSc (Hons) Consultant Ecologist		
	Organisation		Arbtech Consulting Ltd		
	Responsibility	Start Date:	Commencement of works	End Date:	30 years following completion of the last establishment works
	Arbtech Consulting Ltd is responsible for producing this HMMP and providing ecological advice for the creation, management, and monitoring of the habitats on site, as well as other constraints to achieving the site's aims, e.g., any protected species presence. Any other competent persons required are to be appointed by the landowner. This will ensure that the HMMP is implemented in full and that all created habitats are in a fit state to meet objectives.				
	Statement of Competency				
	Arbtech Consulting has provided ecological consultancy services since 2006 and has expertise with Biodiversity Net Gain, including the statutory metric, BNG plans and management plans. The author of the HMMP is an ecologist of 3 years' experience and is an Accredited Agent on Natural England Bat Licence Number: (2018-33540-CLS-CLS).				
	Table 2.2. Landowner or land manager				
	Landowner or Land Manager				

Name or Initials		N/A		
Organisation		Sammy Bristow		
Responsibility	Start Date:	Commencement of works	End Date:	30 years following completion of the last establishment works

Table 2.3. Organisation Responsible for Implementing the HMMP

Organisation Responsible for Implementing the HMMP				
Name or Initials		N/A		
Organisation		Sammy Bristow		
Responsibility	Start Date:	Commencement of works	End Date:	30 years following completion of the last establishment works

Sammy Bristow has been selected as the Development Biodiversity Champion for the habitat creation phase of the development. Sammy Bristow will be responsible for ensuring all actions outlined in this document are implemented. Any queries with regards to the mitigation and enhancement prescriptions will be addressed to the project ecologist, and communication will be retained between the Sammy Bristow and the project ecologist throughout the project. Sammy Bristow will be responsible for understanding when an Ecological Clerk of Works is required on site to supervise works, requirements of which are detailed within each mitigation section where necessary.

Once the development is complete, Sammy Bristow will act as the Post-Development Biodiversity Champion and will be responsible for implementing the proposed long-term management. Sammy Bristow will be responsible for ensuring all recommended management is undertaken and any associated remedial measures are completed where necessary.

Table 2.4. Organisation responsible for reviewing HMMP

LPA or Responsible body Reviewing HMMP	
Name or Initials	N/A
Organisation	Horsham District Council

	<table><tr><td>Responsibility</td><td>Start Date:</td><td>Commencement of works</td><td>End Date:</td><td>30 years following completion of the last establishment works</td></tr></table> To ensure that the HMMP and legal agreement are followed, the objectives of the HMMP are delivered, and to take enforcement action should a breach occur.	Responsibility	Start Date:	Commencement of works	End Date:	30 years following completion of the last establishment works
Responsibility	Start Date:	Commencement of works	End Date:	30 years following completion of the last establishment works		
Creation Period	Habitat enhancement and creation works will be scheduled to take place following the completion of major development works to ensure newly created habitats are not damaged during construction activities. On-site biodiversity gain works will be implemented within 6 months of the completion of construction, and the 30-year management period will commence from the date of completion of all biodiversity enhancement works. The proposed timeline is as follows: Pre-Development (Prior to Construction) - Identify and protect any existing ecological features that must be retained - Implement measures and avoid to areas designated for habitat creation to prevent soil compaction or contamination. Post-Development (After Major Construction Works) Soil Preparation - Remove any construction debris and de-compact soil as necessary. - Introduce appropriate soil treatments to optimise conditions for target grass and tree species. - Introduce plug plants of key forbs to accelerate species establishment. Initial Establishment and Maintenance (First 1–2 Years) - Implement a sensitive cutting regime as to not destroy the habitats. - Control competitive species such as dominant grasses to encourage plant diversity. - Avoid the use of herbicides and artificial fertilisers to maintain habitat integrity. - Water habitat during dry periods Long-Term Management - Continue appropriate management strategies outlined in Table 3. - Adjust management practices if required, having discussed this with the SQE. This phased approach ensures that the habitat establishment aligns with best practices and maximises biodiversity benefits while avoiding damage from construction activities.					
Post-Development Monitoring	Post-development site visits will be undertaken by a Suitably Qualified Ecologist (SQE) over the 30-year management period to confirm the successful installation, establishment and ongoing management of habitats and species-specific enhancements. Monitoring visits will be completed in years 1, 2, 5, 10, 15, 20, 25 and 30 following occupation of the development.					

	The success of habitat creation and enhancement will be assessed with reference to the target habitat condition criteria defined within the Statutory Biodiversity Metric. Monitoring will focus on habitat structure, species composition and evidence of appropriate management, rather than absolute species richness targets, and will be informed by professional judgement of the SQE. Success indicators may include, but are not limited to: • Establishment of characteristic species appropriate to the target habitat type; • Habitat structure consistent with the intended condition category (e.g. sward height variability, age and structural diversity of trees and shrubs); • Absence, or effective control, of invasive non-native species or dominant undesirable species; and • Evidence that management prescriptions are being implemented at the required frequency and intensity. A monitoring report will be produced following each SQE visit, detailing findings, photographic evidence and any required remedial actions. Remedial management may be triggered where monitoring identifies a failure to meet interim or target habitat condition criteria, where habitat establishment has been compromised by unforeseen factors (such as drought, flooding, soil compaction, vandalism or disease), or where management prescriptions have not been implemented as specified. Where remedial action is required, the SQE will recommend proportionate corrective measures, which may include adjustments to management regimes, re-seeding or re-planting, soil remediation, or enhanced control of undesirable species. The scale of evidence required to confirm implementation of remedial actions will be defined by the SQE and may include additional site visits or photographic evidence provided by the Post-Development Biodiversity Champion.
Adaptive Management	Adaptive management is a structured and systematic approach to natural resource management that involves the ongoing monitoring and evaluation of management actions, followed by informed adjustments to improve outcomes over time. It is an iterative process whereby management actions are implemented, monitored against defined objectives, and reviewed to inform subsequent management decisions. Monitoring results will be used to inform any necessary changes to management practices in order to support the achievement of Biodiversity Net Gain (BNG) targets set out in the statutory biodiversity metric and this Habitat Management and Monitoring Plan (HMMP). Monitoring also enables the early identification of unforeseen external influences that may affect the delivery of objectives, such as the emergence of plant disease, the spread of invasive species influenced by climate change, or changes to site accessibility resulting from flooding. In addition to formal monitoring, observations and records arising from routine site management are a critical component of effective adaptive management. Appropriate mechanisms should be established to ensure that such information is captured, reviewed, and incorporated into revisions of management prescriptions, and subsequently reflected in monitoring reports.

	Regular, robust monitoring and reporting to the responsible authority will enable potential issues to be identified at an early stage, allowing timely and proportionate management responses to be implemented. Where external factors significantly affect the achievement of BNG objectives, any proposed amendments to management prescriptions or targets should be agreed with the responsible authority. Following such reviews, all changes will be clearly documented within this management plan and the associated management and monitoring schedule.
Legal Responsibility	It is expected that compliance with this HMMP will be legally enforced through a planning condition or Section (s) 106 agreement. As part of this legal agreement, habitat creation and management detailed within this HMMP will need to be retained and appropriately managed for the entire 30-year term to meet legislative objectives outlined in the Environment Act (2021). Should any future development at the site be proposed that will impact habitats that deliver the required gain as part of the planning conditions/s106 agreement, this will need to be considered and suitably compensated for in accordance with any future plans.

3.2 Habitat Creation and Management

Best practice habitat creation and management over a 30-year term to ensure a BNG consistent with that reported within the BNG Assessment is provided in **Table 3** below. The final BNG Habitat Plan is provided in **Appendix 3**.

Table 3. *Habitat Creation and Management Prescriptions*

Ecological receptor	Specification
Habitats with N/A or poor target conditions	It is noted that developed land; sealed surface and vegetated gardens, do not require any specific management to achieve their BNG objective. This is because developed land; sealed surface is of negligible biodiversity value and vegetated gardens are predefined to have a N/A condition assessment. As such, management prescriptions for these habitat types are not included in this HMMP.
Individual trees	Overview: It is proposed to plant 5 small trees in moderate condition. Objectives: - To plant individual trees in moderate condition by passing condition criteria A, B, C, and F (as a minimum) in accordance with the Individual Trees Habitat Type Condition Sheet and BNG Assessment. - To plant trees that will provide pollinating, foraging, and refuge opportunities for protected and/ or notable species groups, including invertebrates, bats, and birds. Tree planting Creation Method: Ground preparation and planting The locations for tree planting will be cleared and reduced to compacted permeable bare ground in preparation for planting. Planting substrate must comprise site-won material with any deficiencies made up of imported topsoil compliant with BS 3883:2015. Each tree will be pit planted upright within the centre in accordance with BS 4428:1989, within a hole at least 500mm greater than the root system when fully spread and at a depth 250mm greater than the root system. Root balls will be soaked thoroughly in water and loosened to expose restricted roots before planting. The planted trees will then be backfilled, ensuring there are no air pockets around roots or any roots protruding out of the ground. Timing The land will be prepared during the summer, ready for planting between November and March. Planting trees before the new year helps ensure better rooting and subsequent establishment, including faster growth during the first growing season.

- **Species**

All tree species will be native and sourced from a nearby supplier to ensure local provenance. Suitable species include, but are not limited to, Alder *Alnus glutinosa*, Silver birch *Betula pendula*, Wild cherry *Prunus avium*, Crab apple *Malus sylvestris*, Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna*, Hazel *Corylus avellana*, Rowan *Sorbus aucuparia*, Goat willow *Salix caprea* and English Oak *Quercus robur*.

Risks:

- Tree failure and/or poor establishment - poor stock quality, drought stress, or unsuitable soil conditions may lead to mortality
- Damage from pests, diseases, or vandalism - disease and vandalism can reduce survival rates
- Inappropriate species selection - trees not suited to local soil, hydrology, climate, or landscape context may fail or cause long-term management issues.
- Extreme weather - drought, flooding, high winds, or frost can negatively affect the establishment of young trees
- Damage during maintenance - mowing and strimming may damage stems or roots
- Inadequate aftercare and monitoring - lack of watering, inspections, or replacement planting may compromise the long-term success of trees.

Management prescriptions covering a 30-year term:

Table 3.1: New tree planting management prescriptions.

Management	When	Rationale	BNG condition criteria compliance
Prepare planting area in summer, in preparation for autumn/ winter planting.	Year 1 – June/ July/ August	To ensure the ground is dry and workable.	n/a
Plant native trees only within prepped areas in Autumn, whereby the canopy oversails the vegetation	Year 1 – September/ October/ November	To ensure trees take root and establish prior to the first growing phase, the following spring.	A & F
Standard trees will be staked and	Year 1 – Immediately prior to	Protect roots from damage.	B & D

	tied using a 75mm diameter stake with the bark removed. The stakes will be long enough to allow for 600mm of the stake to be driven into each pit. Stakes will be fitted prior to tree planting to prevent root damage.	planting.		
	Ensure the stakes and ties are not restricting growth and are not damaged. Replace where necessary.	Year 2 onwards – Checked annually for the first 5 years.	Ensure growth isn't stunted.	B & D
	Remove stakes and ties.	Year 5 in Spring – April/ May	Allow trees to grow unperturbed once established.	B & D
	At the end of each growing season, all plant failures are to be 100% replaced	Year 2 onwards - Checked annually for the 30-year term after each growing season in Autumn.	To ensure the success of planted trees.	B & D
	Remove weeds	Year 2 onwards - Checked annually for the 30-year term after each growing season in Autumn.	Reduce competition for resources.	B & D
	Application of bark mulch at a depth of 50 mm	Year 2 onwards - Checked annually for the 30-year term after each growing season in Autumn.	Reduce competition for resources.	B & D
	Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow	D
	Watering should be undertaken before and after planting out, and as necessary for the continued	Annually - for the 30-year term, when required following	Ensures plants do not dry out and subsequently fail.	B

	thriving of all planting.	prolonged periods of drought.	
	Undertake any pruning requirements outside of the nesting bird season, which is between March and September inclusive.	At all times.	Ensure no active bird nests are impacted by maintenance works. E

Modified grassland

Overview:

It is proposed to retain 0.9001ha of modified grassland in good condition.

Objectives:

- To maintain grassland that will be suitable for amenity purposes whilst also providing pollination, foraging, and commuting opportunities for protected and/ or notable species groups, including badgers, herptiles, hedgehogs, invertebrates, bats, and birds.
- To undertake landscaping works in compliance with BS 4428:1989 – The Code of Practice for General Landscape Operation.

Risks:

- Dominance of undesirable or competitive species – aggressive grasses or ruderal species may outcompete target species, reducing botanical diversity
- Colonisation by invasive or problem species – invasive non-native or undesirable species may establish following soil disturbance, reducing habitat condition by failing criterion G
- Extreme weather – prolonged drought, heavy rainfall, flooding, or unseasonal weather may negatively affect the establishment and ongoing condition of the grassland

Management prescriptions covering a 30-year term:

Table 3.2: *Modified Grassland management prescriptions.*

Management	When	Rationale	BNG condition criteria compliance
Cut monthly during the growing season	Between April and October. Cutting frequency may be adjusted following monitoring, where required to achieve the target condition.	Cutting monthly will allow a neat and tidy appearance whilst allowing more species to effectively colonise.	A, C, F, & G.
Turn and dry the cut grass over 3-5 days before removing arisings off-site	Following cuts in May and September.	This allows any seeds present to drop, encouraging species diversity and invertebrates to relocate unharmed.	A.
Do not apply chemical	At all times.	The use of chemical fertilisers	D & E.

	fertilisers will encourage vigorous grasses and weeds to grow or cause large areas of bare ground due to inhospitable growing conditions.
Other Neutral Grassland	Overview: It is proposed to enhance 0.82467ha of modified grassland into a neutral grassland. Objectives: - To achieve a good condition for enhanced existing grassland by passing all condition criteria A, B, C, D, E, & F in accordance with the Grassland – Medium, High, and Very High distinctiveness Habitat Type Condition Sheet and BNG Assessment. - To create grassland that will provide pollination, foraging, and commuting opportunities for protected and/ or notable species groups, including badgers, herptiles, hedgehogs, invertebrates, bats, and birds. - To undertake landscaping works in compliance with BS 4428:1989 – The Code of Practice for General Landscape Operation. Enhancement Method: Seeding To be undertaken in the spring between April and May or in the Autumn between September and October. The following seed rates are recommended: 40kg/ha or 4g/m² Proposed seed mix: It is recommended that the Emorsgate EM10F ‘Tussock Wildflower Mix’ (or similar specification) is utilised. This seed mix includes 21no. wildflower species suitable for neutral soil conditions. Notably, the species mix includes yellow rattle, which is known to suppress dominant grass species and will allow existing grasses and herbs within the seed bank to colonise whilst preventing dominance and thus increasing species and structural diversity. Risk: - Failure to establish target sward – unsuitable soil conditions, excessive nutrient levels, drought, waterlogging, or inappropriate seed mix may result in poor establishment - Dominance of competitive grasses – coarse or agricultural grasses may outcompete forbs, preventing achievement of the target condition - Encroachment of undesirable or invasive species – invasive non-native or ruderal species may establish following soil

disturbance, reducing habitat condition

- Inappropriate management regime – cutting at unsuitable times, insufficient frequency, or failure to remove arisings may limit flowering, seed-setting, and species diversity
- Nutrient enrichment – nutrient inputs from adjacent land uses, fertiliser drift, runoff, or retained cuttings may increase grass dominance and reduce botanical diversity
- Extreme weather events – drought, prolonged wet conditions, flooding, or unseasonal weather may adversely affect establishment and long-term condition
- Physical disturbance – trampling, vehicle movements, or site operations may cause soil compaction, bare ground, or localised degradation
- Inadequate aftercare and monitoring – failure to undertake monitoring, adaptive management, or remedial works may prevent the grassland from achieving or maintaining the target condition.

Management prescriptions covering a 30-year term:

Table 3.3: Wildflower meadow creation management prescriptions.

Management	When	Rationale	BNG condition criteria compliance
Cut meadow twice annually	Late March / early April and late August/ early Sept	This ensures the meadow does not grow excessively long and become rank but allows wildflowers to set seed and invertebrates to breed. This will also allow a diverse sward of varying lengths to naturally occur in accordance with the growth characteristics of each species. Cutting twice annually will also prevent encroachment of scrub and bracken.	A, B, F, & G.
Cut grass as to provide a heterogeneous habitat structure, aiming to maintain at least 20% of	Late March / early April and late August/ early Sept	To retain a diverse sward whilst limiting impacts to protected species potentially present at ground level and ensuring the	B

	grass <7cm and 20% >7cm. As such, each cutting phase must cut 20% of the area to ground level, 60% of the area to 15cm, and the remainder to 30cm. These areas must be rotated each year to maintain a diverse sward. Turn and dry the cut grass over 3-5 days before removing arisings off Site Post cut This allows the seeds to drop, encouraging species diversity and invertebrates to relocate unharmed. Do not apply chemical fertilisers At all times. The use of chemical fertilisers will encourage vigorous grasses and weeds to grow or cause large areas of bare ground due to inhospitable growing conditions, A, B, & F. C			
Traditional Orchard	Overview It is proposed to create 0.151ha of traditional in moderate condition. Objectives - To create traditional orchard in moderate condition by passing condition criteria A, B, C, D (as a minimum) in accordance with the Orchard Habitat Type Condition Sheet. - To create a traditional orchard that will provide foraging and refuge opportunities for protected and/ or notable species, including invertebrates, nesting birds and hedgehogs. Traditional Orchard Creation Method Ground preparation and planting for trees The locations for tree planting will be cleared and reduced to compacted permeable bare ground in preparation for planting. Planting substrate must comprise site-won material with any deficiencies made up of imported topsoil compliant with BS 3883:2015. Each tree will be pit planted upright within the centre in accordance with BS 4428:1989, within a hole at least 500mm greater than the root system when fully spread and at a depth 250mm greater than the root system. Root balls will be			

	soaked thoroughly in water and loosened to expose restricted roots before planting. The planted trees will then be backfilled, ensuring there are no air pockets around roots or any roots protruding out of the ground. • Timing The land will be prepared during the summer, ready for planting between November and March. Planting trees before the new year helps ensure better rooting and subsequent establishment, including faster growth during the first growing season. • Ground preparation and planting for ground flora Deep ploughing to a minimum depth of 30cm will bring the lower subsoil to the surface through soil inversion. After inversion, the area needs further preparation by harrowing to create a fine, firm seedbed for sowing. The seeding will follow the manufacturer's guidelines such as Emorsgate EM10F 'Tussock Wildflower Mix' (or similar specification), with sowing occurring in either autumn or spring. The seed mix can be evenly spread by hand and tread in or distributed by machinery if feasible. During the first growing season, a cut in mid to late summer is recommended to help seeds establish and to remove weed species from the seed bank. All arisings should be removed and composted to prevent soil enrichment. Post-sowing rolling is crucial to compress the soil, retain moisture in the seedbed, and enhance seed-to-soil contact for successful germination. The chosen seed mix should include yellow rattle to reduce the competitiveness of dominant grasses and promote a varied sward structure, fostering a species-rich grassland. Risks: • Poor establishment and/or tree failure – poor-quality stock, unsuitable soil conditions, drought, waterlogging, or planting at an inappropriate time may result in high mortality • Inappropriate variety or species selection – varieties not suited to local soil, climate, or pollination requirements may fail to establish or reduce long-term productivity and biodiversity value • Damage from pests, disease, or browsing – rabbits, deer, livestock, fungal pathogens, or insect pests may damage young trees and reduce establishment success • Competition from weeds and grasses – excessive weed growth may suppress young trees and reduce flowering and fruiting • Damage during maintenance operations – mowing, strimming, or machinery may damage stems, roots, or tree guards • Extreme weather – drought, frost, flooding, or high winds may negatively affect establishment, flowering, and fruit set • Failure of protective measures – absence or failure of tree guards, fencing, or mulching may increase risk of browsing, desiccation, or vandalism • Inadequate aftercare and monitoring – lack of watering, inspections, pruning, replacement planting, or pest management may compromise long-term orchard health, structure, and ecological value.
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Management prescriptions for new trees covering a 30-year term:**Table 3.4:** Traditional orchard management prescriptions.

Management	When	Rationale	BNG condition criteria compliance
Plant native whips between November and March.	Year 1	Planting should be carried out between November and March. Specimens should be spaced approximately 1.5m apart	N/A
If required, provision of stakes and biodegradable guards. Guards to be left on for a minimum of 5 years	Year 1 - 5	To protect young establishing shrubs from damage	E
Stakes will be checked, and any broken or damaged stakes will be removed and replaced where necessary	When required -checked annually in Autumn	To maintain the protection of shrubs	E
Watering will be undertaken before and after planting out, and as necessary for the continued thriving of all planting.	When required. Provide more water during periods of drought and less water during times of prolonged rain	Ensures plants do not dry out and subsequently fail	A
Annually, prune scrub species until they are established	Year 3+	To prevent woodiness, remove dead branches, and promote a dense, bushy structure	D
Ensure young and middle-aged trees are left to develop naturally with little human intervention to ensure they develop features consistent with veteran trees.	To be monitored annually over the 30-year term in late autumn.	Maintain a regenerating woodland containing multiple age classes and a three-storey (upper, middle, lower) or complex (unstratified) structure, with at least 2 veteran trees per block of	A & E

		woodland retained as existing trees or promoted as future veterans. Ensure tree mortality remains under 10% and pests, diseases and crown die back are prevented insofar as possible.	
Leave all naturally occurring deadwood in-situ	At all times.	To ensure a frequent source of deadwood at varying degradation states.	B
Remove weeds	Year 1+. Checked twice annually in early spring and in Autumn, and treatment applied when required	Reduce competition for resources and nutrients, etc., by weeds	C & H
Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow	C
Maintain the grassland through annual hay cuts or low-density grazing unless a management review suggests an alternative approach. This dynamic review will ensure that the condition of the grassland is not compromised by inappropriate management practices. The stock density should be reviewed annually as part of the monitoring process. If the grassland condition is improving, maintain the current grazing density. If the grassland condition is stable or	Year 1+	This ensures the grassland does not grow excessively long and become rank but allows wildflowers to set seed and invertebrates to breed. This will also allow a diverse sward of varying lengths to naturally occur in accordance with the growth characteristics of each species.	C, F & H

	declining, the stock density must be reduced to alleviate pressure on the grassland.			
	At the end of each growing season, all plant failures are to be 100% replaced	When required - checked annually in Autumn	To maintain amenity and wildlife value	A & B

4.0 Bibliography

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Appendix 1: Proposed Habitat Plan



Appendix 2: Site Location Plan



Appendix 3: Proposed Development Plan

