

Habitat Management and Monitoring Plan

For use with
Small Sites Metric
(Statutory Biodiversity Metric)

Site Name:	Cheneys Farm Barns, Thong Lane, Shorne, Gravesend, Kent
Date:	20 January 2025
Version:	1
Small Sites Criteria Met	The site fulfils the criteria for use of the Small Sites Metric (Statutory Biodiversity Metric) calculation tool. Yes ☒ No ☐ If 'No' use the Main HMMP Template for the full statutory biodiversity metric instead of this one.

Author:

Client:



Checklist of Contents SM-T01

Please complete the table below to confirm the sections in this Template that have been completed.

Checklist of Contents Completed		Sections completed (please tick)
1.	Project Background	
1a	Project Information	☒
1b	Planning Condition	☒
1c	Roles and Responsibilities	☒
1d	Site Boundary Plan	☒
1e	Land Use Summary	☒
1f	Site Photos	☒
1g	Site Proposals Plan	☒
2.	Management Plan Aims and Objectives	
2a	Site Aims and Objectives	☒
2b	Retained and Enhanced Habitats Protection Measures	☒
2c	Habitat Management Proposals	☒
3.	Establishment and Management	
3a	Creation, Enhancement and Management Targets and Prescriptions	☒
4.	Monitoring	
4a	Monitoring Strategy for Each Habitat, Hedgerow and Watercourse Present On-Site	☒

Version Control SM-T02

Version control is used for updates to the content. Record the initial version and further version control details in this table each time the management plan is adapted throughout the management and monitoring period.

Version	Issue Status	Prepared by / Date
1.0	Issued	K Bresso 20/01/205

1. Project Background

Summarise the key aspects of your management plan in this section. Tables can be extended to suit the specific needs of individual projects.

Project information SM-T01	
Project type	non-residential
Development Name and Address	Cheneys Farm Barns, Thong Lane, Shorne, Gravesend, Kent
Author	K Bresso of KB Ecology
Landowner	BB Contracts Attention: Mark Brown Unit 20 Rochester Trade Park Rochester Airport Industrial Estate Maidstone Road Rochester Medway ME1 3QY
Land Management Organisation	To be appointed by landowner
Period covered by this management plan	30+ year period following the start of creation date of the proposed habitats
Planning authority	Gravesham Borough Council
Planning reference	20240700
Central OS grid reference	TQ 672 706
Total Site Area	2,183.5sqm

3. The development shall not commence until a Habitat Management and Monitoring Plan (HMMP), prepared in accordance with the approved biodiversity gain plan has been submitted to and approved in writing by the Local Planning Authority. This strategy shall include the following components:
- (a) a non-technical summary;

(b) the roles and responsibilities of the people or organisation(s) delivering the HMMP;

(c) the planned habitat creation and enhancement works to create or improve habitat to achieve the biodiversity net gain in accordance with the approved Biodiversity Gain Plan;

(d) the management strategy and measures to maintain the habitat in accordance with the approved Biodiversity Gain Plan for a period of 30 years from the completion of development; and

(e) Details of the monitoring methodology (including frequency of submitting reports to the Local Planning Authority) in respect to the created or enhanced habitat; and
- The development shall be carried out in accordance with the approved details.
- Reason: To ensure the development delivers a biodiversity net gain on site in accordance with Schedule 7A of the Town and Country Planning Act 1990.

Planning Condition

Details of Planning Conditions to be Discharged by this Document SM-B02

Roles and Responsibilities

Provide details of the responsible people and organisation(s) delivering this management plan and the legal and funding mechanisms in place to secure the habitat outcomes proposed.

Author Responsible for Preparing HMMP SM-B03			
Name or Initials / Role		K Bresso, Ecologist	
Organisation		KB Ecology	
Responsibility	Start Date	End Date	
	20/01/2025	20/01/2025	
Statement of Competency			
Responsible for the production of the HMMP and subsequent reviews as needed. Katia Bresso CEnv MCIEEM, is a qualified professional consultant ecologist with over 20 years of experience.			
Landowner / Management Organisation Responsible for Delivering HMMP SM-B04			
Name or Initials / Role		Mark Brown	
Organisation		BB Contracts – Landowner Unit 20 Rochester Trade Park Rochester Airport Industrial Estate Maidstone Road Rochester Medway ME1 3QY	
Responsibility	Start Date	End Date	
	21/01/2025	Year 30	
Statement of Competency			

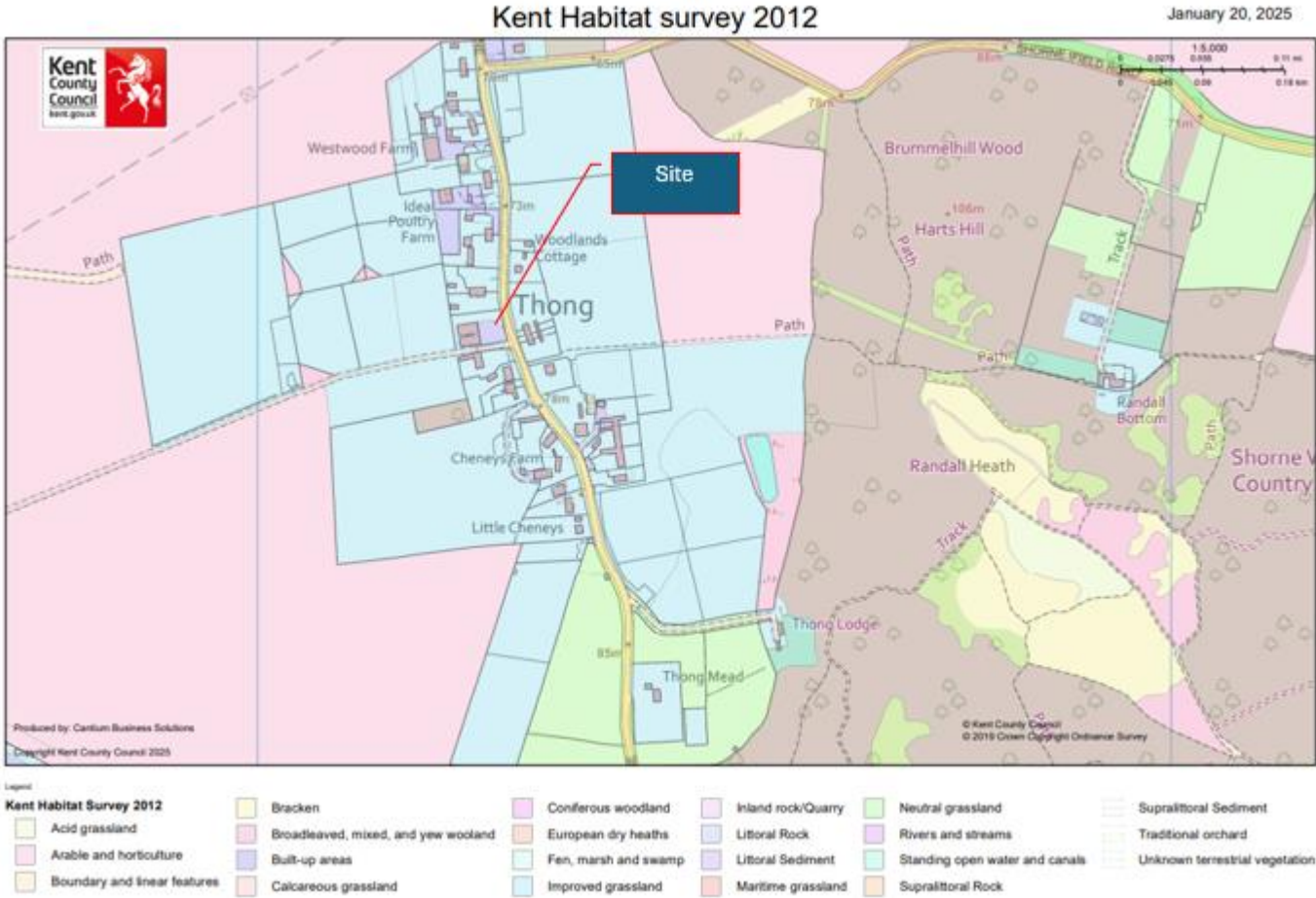
The owner of the site will be responsible for engaging the necessary green roof company and a management company to ensure that the habitats within this plan are delivered within the timescale set out within this management plan.

Site Boundary Plan SM-F01



Site Context Plan SM-F02

Show the location of the site in context with relevant geographical information, such as National or Local planning policies, that have informed Site and landscape design. These may include (but are not limited to) the National and Local Character Areas, Local Nature Recovery Networks and Biodiversity Opportunity Areas. As a minimum, this plan should illustrate any information that has informed the decision on assigning strategic significance. See the Small Sites Metric (Statutory Biodiversity Metric) User Guide for more information.



Land Use

Description of Site Use - Baseline SM-B05

The site consists of two former agricultural barns (now used for storage and visited several times daily) with a concrete apron and area of loose stone surfacing, with ruderal vegetation and grassland. An area of loose stone Type 1 had been recently unearthed to the north of the buildings. Historical aerial photos show that most of the front of the site was as such in 2003 and some of it must have revegetated, as disturbance by reversing trucks and tractors diminished over time.

Description of Site Use - Proposed SM-B06

Demolition of the southern barn and erection of a new steel frame barn with mezzanine floor used for an office space, pedestrian access doors to the east and vehicle access doors to the west. Landscaping to include hedges and tree to the front of the buildings with alterations to parking and hardstanding.

Site Photos SM-F03

Please include two overview photographs of the site in its current form here. Include additional photographs in the appendix if needed. You can adjust the size of these to suit your management plan. Tick if additional photographs are provided in the Appendices ☐ Reference: [Click or tap here to enter text.](#)



Site Proposals Plan SM-F04

As a minimum, show all the proposed habitats to be retained, created or enhanced. The map could be on an aerial photo, or a sketch map showing mapped habitat polygons. Include parcel references if possible. It is also helpful to include a north arrow and scale.

2. Management Plan Aims and Objectives

Overview of Proposed Habitat Aims and Objectives SM-B07

The objectives of this HMMP include:

- Improve arboreal connectivity across the landscape
- Provide habitats which are sustainable and that are low risk in terms of their management
- Provide a plan which is adaptive
- Provide a plan proportionate to the scale of the development

Retained and Enhanced Habitats Protection Measures SM-B08

Retained vegetation will be protected during construction in line with standard arboriculture best practice (BS5837:20122) and in line with any submitted arboriculture report.

Summary of Adaptive Management Approaches SM-B09

Grassland and Biodiverse Green Roof

Monitoring will feed into management to ensure a ‘moderate’ condition is created.
Establishment – monitoring needed to ensure suitable establishment – feedback into management plan in year 1-2, where additional seeding will occur if triggered.
Management – ongoing surveys through year 1 – 5 will monitor management strategy. If species diversity drops, cutting timing can be changed to suit species present or additional species such as yellow rattle can be added.

Individual Trees

Establishment – monitoring needed to ensure suitable establishment – feedback into management plan in year 1-5, where additional management will occur if triggered, such as additional watering.

Day to day observations are possible from residents and will be fed back to management so decline is quickly recorded, outside of the standard methodology.

Habitat Management Proposals

Habitat Baseline Description SM-B10

The site consists of two former agricultural barns (now used for storage and visited several times daily) with a concrete apron and area of loose stone surfacing, with ruderal vegetation and grassland. An area of loose stone Type 1 had been recently unearthed to the north of the buildings. Historical aerial photos show that most of the front of the site was as such in 2003 and some of it must have revegetated, as disturbance by reversing trucks and tractors diminished over time.

A belt of ruderal vegetation with common nettles *Urtica dioica*, poison hemlock *Conium maculatum*, cleavers *Galium aparine* and white dead-nettle *Lamium album*, is present along the north and west boundaries.

An area of grassland was present in the north-east corner (including bristly oxtongue *Picris echioides*, shepherd's-purse *Capsella bursa-pastoris*, rough hawkbit *Leontodon hispidus*, dandelion *Taraxacum agg.*, mugwort *Artemisia vulgaris*, creeping buttercup *Ranunculus repens*, creeping cinquefoil *Potentilla reptans*, red dead-nettle *Lamium purpureum*, yarrow *Achillea millefolium*, ommon vetch *Vicia sativa*, ribwort plantain *Plantago lanceolata*, perennial rye grass *Lolium perenne*, timothy-grass *Phleum pratens*).

Part of the east and south boundaries are lined with *Leylandii* hedges. The west boundary is lined by a bramble covered fence and some bramble scrub is present to the back of the building (some of which had been cleared recently prior to the site visit, to allow access to the structures).

The habitats present included the following:

- Developed land; sealed surface;
- Bare ground;
- Bramble scrub;
- Modified grassland;
- Other neutral grassland (moderate condition);
- Ruderal/Ephemeral.

Retained Habitats SM-B11

60sqm of Other neutral grassland retained (Area B to north)

Enhanced Habitats SM-B12
Not applicable
Created Habitats SM-B13

- Creation of 0.03138ha of Other neutral grassland, including:
 - ✓ Area A to south of entrance 86.8 sq metres of grass with new tree planting.
 - ✓ Area B to north-144.9 sq metres of grass with new tree planting (minus the 60sqm of retained habitat)
 - ✓ Area C of planting near rear of barns 12.9 sq metres
 - ✓ Hedged areas D total 129.2sq metres
- Creation of 240sqm Biodiverse Green Roof E
- Planting of 23 individual trees in A and B that will help support species present, such as birds, but also create invertebrate habitat and variable microclimate conditions and connectivity.
- Planting of 127m of native hedgerow that will help support species present, such as birds, but also create invertebrate habitat and variable microclimate conditions and connectivity.

3. Creation, Enhancement and Management

Creation, Enhancement and Management Targets and Prescriptions SM-T02

Complete the planned prescriptions for each area habitat, hedgerows and watercourse proposed on-site in the table below to confirm how created and enhanced habitats will be established and managed. Include details on how retained habitats will be managed. At a minimum, list each area habitat, hedgerow or watercourse entered into the Small Sites Metric (Statutory Biodiversity Metric) calculation tool in the ‘Habitat/Feature Type’ column in the table below (SM-T02) and provide specific creation or enhancement and management prescriptions. If preferred, provide multiple rows for the same habitat/feature type where different prescriptions are to be used in different parcels/features, hedgerows or watercourse. Refer to the SSM HMMPT [Habitat Guide](#) for additional guidance on target habitat types and conditions to guide your prescriptions. If appending any additional documents that contain prescriptions or work schedules, please tick here and provide a reference: ☐ Reference: [Click or tap here to enter text.](#)

Habitat/Feature Type	Target Condition	Parcel/ Feature Ref	Habitat Creation or Enhancement and Management Prescriptions
Other neutral grassland	Moderate	A B C D	<u>Site Preparation</u> Prepare soil using a rotavator to create a fine till of approximately 150mm. If importing topsoil, ensure suitable sources are obtained, reducing introduction of invasives. Avoid heavy machinery during this time to avoid compaction <u>Sowing</u> Sow a wildflower mix from local provenance at a rate of 5g/m2 by hand casting. This should be done in October/November or March -May. Hand rake over lightly to ensure coverage of seeds. If particularly dry conditions occur during the establishment, water lightly. <u>During initial development</u>, monitor for growth and fill in any areas where growth is not occurring with fresh seed mix. Also, monitor for undesirables and remove by hand pulling. <u>An annual cut</u> should then be taken, removing the arisings to be composted in a suitable location on site, away from the grassland units to reduce nutrient input. The cut should occur from August – September to allow species to set seed. Leaving a third of the grassland uncut each year will allow overwintering habitat for invertebrates. The areas left each year should rotate annually, so no area is left uncut for more than two years, so the species diversity of the sward does not reduce. Cutting can be done with brushcutters or suitable mowers and raking off the arisings. If the sward is becoming grass dominated in years 3-4, add yellow rattle (if not already established) to the developing grassland to help reduce the viability of the dominant grasses and create structure. Yellow rattle seeds should be hand cast in October/November to allow the seeds to freeze and germinate the following year.

			For the area proposed, 0.5g of seed should be used per square metre
Trees and Hedges		A B	Suitable species selection of local provenance to enhance site specific adaption and resilience : Field Maple, Holly, Beech, and Hornbeam Remove vegetation from the planting area if present Prepare soil and dig a hole to accommodate root ball – use of bare root trees Plant roots with some organic compost and add two-inch layer of mulch to retain moisture and suppress competition during establishment Stake and place guard over tree – remove after one year's growth Watering in initial phase as needed and in first summer if needed – monitor for signs of draught stress. Allowing the trees to develop without pruning – minor pruning needed if over hanging the driveway but this will be kept to under 10% of the total tree. Cutting around the trees should be done with a line strimmer or by hand to reduce any damage to the base and the bark. No herbicides to be applied to the surrounding area. Years 2-3 remove the tree guards to avoid restriction on growth
Biodiverse Green Roof	Moderate	E	The roof construction itself will be planned and executed according to specialist rules for waterproofed roofs. It will have a depth of substrate (not including a blanket or turf) that varies between 80 and 150mm, with at least 30% of the roof at 150mm deep and will be planted and seeded with a wide range of dry grassland wildflowers and sedum species with a ratio of 60:40 between wildflowers and sedum species, with the species richness of dry grassland species including more than 25 wildflower species. The roof will also include habitat features such as bricks for solitary nesting bees and deadwood (dead branches and tree trunks are a particularly valuable structural element. Deadwood is used as a habitat by moss, lichens, fungi, beetles, flies, midges, ants and wild bees, among others). Sand pockets and coarse gravel beds can also be provided. Management- the green roof will be inspected at least twice a year in the spring and autumn for weeds and woody plants carried in by the wind and unwanted vegetation will be removed by hand. Mowing with a brushcutter will be carried out once a year in February or March, to a height of about 5 cm. Cuttings will be raked off and removed from the roof.

Risk Register and Proposed Remedial Measures SM-T03

Complete the risk register by identifying likely risks that could impede the successful delivery of target habitats, hedgerows or watercourses. List all risks that could reasonably be anticipated. This should not be an exhaustive list as it will not be possible to anticipate all potential risks.

Risk Factor	Habitat/Hedgerow/Watercourse Type	Trigger for Action	Remedial Measure
Newly planted trees failing to establish	Individual Trees	Individual trees can be monitored and condition assessed. Trigger will be declining features such as signs of drought stress	Initial planting phase should include a mulch to help retain water and then watering as needed through drier seasons during years 1-5 as they establish. If there is a failure to establish, this can be replaced.
Failure for seed to germinate	Grassland / Biodiverse Green Roof	Over 10% of the ground cover does not germinate during year 1-2.	Undertake a second round of sewing, focusing on the bare areas, with preparation of soil, localised to the areas, as needed.

4. Monitoring

Monitoring Strategy for Each Habitat, Hedgerow and Watercourse Present On-Site SM-T04

Provide details of the methods you will use to monitor the progress towards the targets stated in the management plan and as agreed with the Local Planning Authority.

Habitat/Feature Type	Monitoring Methods	Monitoring Interval and Timing
Other grassland Neutral	Before and after photos taken. First photos will be taken during creation phase, then annual photos taken in July from years 1-5, then every 5 years. Annual targeted survey work will be taken on the grassland as described below to ensure that the moderate standard is achieved, primarily focusing on the targets listed, especially the number of species present. Year 1 will provide the baseline. All grassland plots monitored- Undertake quadrat sampling to identify the habitat type that is establishing and then number of species per sqm. Take an estimate of sward heights as a percentage of cover and record the percentage cover of scrub if present.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August
Individual trees	All individual trees to be checked by a suitable surveyor for signs of stress, decline or other health issues. This will be done through a visual inspection of canopy, giving a percentage score of healthy leaf cover as well as an inspection of the bark and main body of the trees.	Years 1-5, biannual checks to assess health and establishment of trees. Surveys to be undertaken in May and then July to cover the main growing season and drier periods.
Biodiverse Roof Green	Before and after photos taken. First photos will be taken during creation phase, then annual photos taken in July from years 1-5, then every 5 years.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August

Monitoring Reporting SM-B14

Organisation Responsible for Submitting the Monitoring Reports	BB Contracts	Organisation Receiving and Responsible for Reviewing Reports	Gravesham Borough Council
--	--------------	--	---------------------------

Report on results of initial grassland, Biodiverse Green Roof and individual tree creation to be sent in Sept of Year Y1.

Report on results of grassland and Biodiverse Green Roof management and individual tree development to be sent in Sept of Year Y2, Y3, Y4, Y5, Y10, Y15, Y20, Y30.

Management Plan to be reviewed as and when needed in the October following each report above.