

Habitat Management and Monitoring Plan

Survey site:

Milton Place, Gravesend, Kent DA12 2BT

Client:

Hill Partnerships Ltd

Report date:

14th October 2025

Project:

This report is prepared to inform “*the construction of 76 dwellings and associated infrastructure*” with **Gravesham Borough Council**.

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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 (2013) '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, paragraph 174 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, 2013)

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.

Validity

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Version control			
Status	Issue	Name	Date
Draft	0.1	Kat Aburrow BSc Consultant Ecologist	14/10/2025
Final	1.0	Kelly Clake (Dip H.E), Senior Ecologist	12/02/2026

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was commissioned to produce a Habitat Management and Monitoring Plan (HMMP) for a proposed development WON Milton Place, Gravesend, Kent DA12 2BT (hereafter referred to as the site).

This report should be read in conjunction with the following documents:

- JBA24-183_EC001 - Ecological Impact Assessment - Milton Place, Gravesend, Kent – Revision B (James Blake Associates, 2025)
- JBA 24-183-LEMP1 - Landscape and Ecological Management and Maintenance Plan: Guide to the Management of Landscape and Ecological Areas at Milton Place Car Park, Gravesham, Kent. – Revision C (James Blake Associates, 2025)
- Planning Statement for Milton Place Car Park, Gravesham: Full Planning Application for the construction of 76 dwellings and associated infrastructure (Invicta Planning, 2025)
- JBA24-183_EC002 - The Statutory Biodiversity Metric - Milton Place Car Park, Gravesham, Kent, DA12 2PQ (James Blake Associates, 2024)
- MPG-IDP-ZZ-XX-D-L-00100 - Overall Landscape General Arrangement (2)
- Planting Plan – 12701-FPCR-XX-ZZ-DR-L-0006 (FPCR environment & design, 2025)

1.2 Project Description

This report is prepared to inform a planning application with the Gravesend Borough Council. The proposal is for the construction of 76 dwellings and associated infrastructure. A plan showing the proposed development is provided in **Appendix 1**.

1.3 Site Context

Site context description is directly taken from the Ecological Impact Assessment by James Blake Associates (2025):

“The site is approximately 1.3 hectares in size and is located to the north of Ordnance road, west of Milton Place the eastern side of Gravesend town centre, located in Gravesham Borough in the County of Kent. The wider landscape includes the town of Gravesend, residential and commercial buildings and arable land. The River Thames (Gravesend reach) is approximately 0.3km north of the site.

The site comprises the former BT depot site in the southwest corner, existing Council car park (148 spaces), an area of green space and the skatepark on the eastern corner of the site. The site is located within the Gravesend Town Centre Opportunity Area and also lies within the Milton Place Conservation Area.

The site itself mainly consists of hardstanding carpark and skate park, unused brownfield land, managed grassland, with hedgerows shrubs and boundary trees.”

A site location plan can be found within the Ecological Impact Assessment.

1.4 Scope of This Report

The aims of this HMMP are to provide habitat management and enhancement prescriptions to ensure the effective installation and long-term success of the proposed new habitats in accordance the associated BNG assessment. Furthermore, this HMMP aims to provide definitive detail relating to species-specific mitigation and enhancement requirements as informed by previous ecological assessment. This, combined with the associated BNG assessment will therefore demonstrate an effective Biodiversity Net Gain in compliance with legislation (Environment Act 2021).

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 previous ecological assessments undertaken at the site.

2.1 Habitats recorded on Site

Full descriptions of the habitats recorded on site are given within “JBA24-183_ECO01 - Ecological Impact Assessment - Milton Place, Gravesend, Kent – Revision B (James Blake Associates, 2025)” and consist of the following:

- Modified grassland
- Introduced shrub
- Scattered trees
- Line of trees
- Non-native and ornamental hedgerow
- Developed land; sealed surface

2.2 Habitat Retention, Enhancement and Creation

A net gain of >10% has been achieved for habitat units through the following design strategies:

- Retention of modified grassland
- Planting of 97 urban trees
- Creation of other neutral grassland/wildflower meadow
- Planting of introduced shrubs and vegetated gardens
- Planting of mixed scrub
- Creation of a sustainable drainage system
- Planting of a native hedgerow

3.0 Habitat Management and Monitoring Plan

The responsibility for implementing the management regime described within this Habitat Monitoring and Management Plan (HMMP) lies with the applicant, Hill Partnerships Ltd, or any successor in title. It is the responsibility of the applicant to ensure that all monitoring and reporting requirements are carried out by a suitably qualified and experienced professional. The council or any subsequently formed local authority under devolution is responsible for reviewing the monitoring reports submitted to the authority and assessing whether enforcement action is required if the management actions and objectives described in this gain plan are not met throughout the 30-year period.

3.1 Enhancement

Enhancement of the site and subsequent management prescriptions to ensure the ongoing biodiversity value post-construction are detailed in **Table 1** below.

Table 1: Habitat Creation and Enhancement Prescriptions

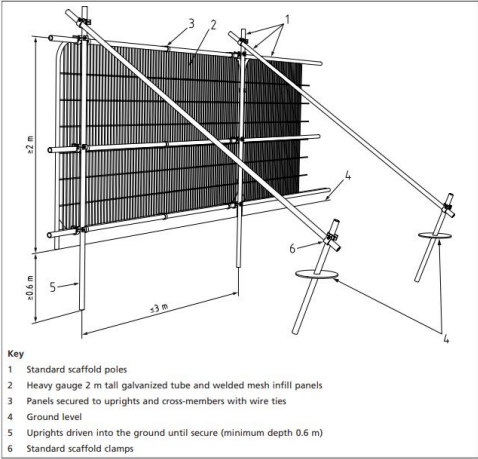
Ecological receptor	Specification
Retained Trees	Trees around the site boundary will be retained as shown on the proposed landscape and planting plans (FPCR environmental and design, 2025). It is considered necessary to install protective fencing in order to effectively delineate these boundaries during works to prevent indirect impacts through encroachment of activity such as excessive vehicular and pedestrian movement, and materials storage. Protective fencing will be required, in accordance with BS 5837:2012 - “Trees in relation to design, demolition and construction – Recommendations”. The fencing specification is included within Figure 1 overleaf. The fencing must be installed prior to any development works and be left in-situ until the development is complete.  Figure 1. Default protective barrier specification (British Standards Institute 2012).

	Table 1.1. Retained tree management prescriptions over a minimum 30-year term.			
	Management	When	Rationale	BNG condition criteria compliance
	Protect root zones from compaction by avoiding heavy machinery, storage of materials, or pedestrian access. Use fencing or mulch rings where appropriate.	At all times	Prevents damage to fine feeder roots essential for water/nutrient uptake. Preserves long-term health and structural stability.	D, F
	Maintain grassland or low vegetation under canopy using light-touch methods	1–2 times annually	Reduces competition for moisture/nutrients while preserving habitat value and avoiding root disturbance.	F
	Retain all standing and fallen deadwood within safety limits. Hollow trunks and dead limbs should be retained where there is no risk to people or property.	Ongoing	Deadwood supports fungi, beetles, birds, and bats.	E
	Avoid crown lifting, pollarding, or heavy pruning unless required for safety or access. Retain natural form where possible.	As needed; outside bird nesting season (Sept–Feb)	Minimises stress to mature trees and avoids creation of large wounds.	B, C, D, E, F
	Do not use fertilisers or pesticides within the rooting zone.	At all times	Preserves soil damage and prevents chemical harm to roots.	F
Retained modified grassland	Overview: It is proposed to retain 0.167ha of modified grassland in poor condition throughout the site. Objectives: - To retain amenity grassland in moderate condition in accordance with the Grassland – Low distinctiveness Habitat Type Condition Sheet and BNG Assessment. - To create 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. Management prescriptions covering a 30-year term: Table 1.2: <i>Modified Grassland management prescriptions.</i> <table><tr><th>Management</th><th>When</th><th>Rationale</th><th>BNG condition criteria compliance</th></tr><tr><td>Cut monthly during the growing season</td><td>Between April and October. Cutting frequency may be adjusted following monitoring, where required to achieve the target condition.</td><td>Cutting monthly will allow a neat and tidy appearance whilst allowing more species to effectively colonise.</td><td>A, C, F, & G.</td></tr><tr><td>Turn and dry the cut grass over 3-5 days before removing arisings off-site</td><td>Following cuts in May and September.</td><td>This allows any seeds present to drop, encouraging species diversity and invertebrates to relocate unharmed.</td><td>A.</td></tr><tr><td>Do not apply chemical fertilisers</td><td>At all times.</td><td>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.</td><td>D & E.</td></tr></table>	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 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.	D & E.
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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.	D & E.														
Tree and Shrub Planting	A total of 97 small urban trees will be planted, as shown on the proposed landscape and planting plans (FPCR environmental and design, 2025).																

Objectives

- To plant a range of trees that will provide pollinating, foraging, commuting, and refuge opportunities for protected and/or notable species groups including amphibians, bats, birds, hedgehogs, and reptiles.
- Ensure that good horticultural practice is employed to encourage the long-term health and vitality of all trees and shrubs.
- Ensure well-balanced crowns and/ or natural shape by preventing over-competition.

Creation Method

- **Ground preparation and planting**

Each tree will be planted within a hole three times as wide of the supplied pot and of a similar depth. Root balls will be soaked thoroughly in water before planting and root balls will be loosened to expose restricted roots before planting. The planted trees and shrubs will then be backfilled ensuring there are no air pockets around roots or any roots protruding out of the ground.

- **Timing**

It is best to prepare the land during the summer ready for planting between November and March. Planting trees and shrubs before the new year helps ensure better rooting and subsequent establishment including faster growth during the first growing season.

Table 1.3: Tree management prescriptions over a minimum 30-year term.

Management	When	Rationale	BNG condition criteria compliance
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
If required, provision of stakes and guards. Guards to be left on for a minimum of 5 years	N/A	Protect from damage	D
Stakes will be checked and any broken or damaged stakes during this time would be removed (as above) and replaced with ties re-fixed	When required; checked annually in Autumn.	Maintain protection	D

	Remove weeds	When required; checked twice annually in early spring and in Autumn.	Reduce competition for resources nutrients etc. by weeds	F
	Application of bark mulch at a depth of 50 mm	Immediately after planting and then when required; checked annually in Autumn.	Reduce competition for resources nutrients etc. by weeds	C, E,F
	Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow	D
	Apply a light dressing of well-rotted manure	Annually in the winter	Note the overuse of manure fertilisers will encourage vigorous grasses and weeds to grow.	B, C
	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 draught and less water during times of prolonged rain.	Ensures plants do not dry out and subsequently fail.	B, C, D, F
Other Neutral Grassland	It is proposed to create 0.01ha of other neutral grassland in moderate condition across the site, which will be planted with a wildflower seed mix as shown on the proposed landscape and planting plans (FPCR environmental and design, 2025). Objectives To create a successful grassland that will provide habitat for pollinating invertebrate species, that will in turn, provide foraging opportunities for protected and/ or notable species groups including amphibians, bats, birds, invertebrates and hedgehogs.			

- Employ techniques that use organic fertilizers and minimise the use of chemicals wherever possible.

Enhancement Method:

- **Ground preparation and planting**

A soft strip of the current vegetation present will be undertaken and removed from the area to provide a bare soil substrate for sowing the seed mix. The bare soil will be subject to light rolling or trampling to provide a firm base for seeding.

- **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: 50kg/ha or 5g/m²

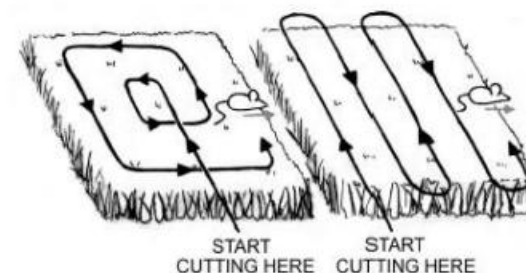
- **Proposed seed mix:**

It is proposed to seed the meadow with “EM8 Meadow mixture for wetlands” seed to incorporate a mix of forbs and grasses within the other neutral grassland. The mixture contains no dominant grass species.; it is considered reasonable to assume a species diversity of 6-8 species per m².

Table 1.3. Other neutral grassland management prescriptions over a minimum 30-year term.

Management	When	Rationale	BNG condition criteria compliance
Cut neutral grassland once annually in late summer (August–September), with arisings left for 3–5 days to allow seed drop before removal. A secondary early spring cut (April) may be introduced if needed to control excessive growth. At least 10–20% of the area should be left uncut on rotation each year to provide habitat refuge.	Late summer (main cut), optional early spring cut	Encourages species-rich grassland by allowing flowering plants to set seed and reducing nutrient build-up. More regular cutting maintains a tidy appearance suitable for residential settings while supporting biodiversity. Rotational uncut areas provide refuge for invertebrates and small mammals. Cutting will also follow a routine as demonstrated below- to prevent entrapping and killing any wildlife within	A, B, D, E

the meadow.



Cut grass as to provide a heterogeneous habitat structure aiming to maintain at least 20% of 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.

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 natural germination of seeds.

B

Remove weeds, bracken and sprouting scrub

twice annually in early spring and in Autumn.

Reduce competition for resources nutrients etc.

A, C, D, E, F

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. Cuttings will have to be removed to prevent nutrient enrichment of the soil which will affect meadow quality

A, E, F

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

C

	due to inhospitable growing conditions
Native hedgerow	Overview: It is proposed to create 179m of native hedgerows in moderate condition across the north of the site, as shown on the proposed landscape and planting plans (FPCR environmental and design, 2025). Objectives: • To create native hedgerows of moderate condition. • To create dense hedgerows that will provide foraging, commuting, and refugia opportunities for notable species groups including bats, birds, badgers, and hedgehogs. • To ensure native species only are planted. • Ensure cultural techniques are employed which use a variety of mulches and organic fertilisers and which minimise the use of chemicals and peat wherever possible. Creation Method: • Ground preparation Prepare the ground by digging over a strip approximately 60-90cm (2-3ft) wide and one spit (or spade blade) deep. Soils that become waterlogged in winter may require a permanent drainage system. Alternatively, form the soil into a ridge about 15-20cm (6-8in) high and 50-70cm (20-28in) across to plant into. • Planting Plants will be positioned set back from hardscaped boundaries to allow space for the hedgerow to develop and mature prior to requiring any significant management/ cutting back. Plant density will focus on achieving a hedgerow width >1m; as such, plants will be planted in a staggered double row approximately 45-60cm apart, where individual plants are planted 90cm apart within each row. Proposed species include hawthorn and blackthorn. • Timing It is best to prepare the land during the summer ready for planting between November and March. Planting before the new year helps ensure better rooting and subsequent establishment including faster growth. Table 1.5. Native hedgerow management prescriptions over a minimum 30-year term.

	Management	When	Rationale	BNG condition criteria compliance
	If required, provision of stakes and guards. Guards to be left on for a minimum of 5 years	N/A	Protect from damage	A1 & A2
	Stakes will be checked and any broken or damaged stakes during this time would be removed (as above) and replaced with ties re-fixed	When required; checked annually in Autumn.	Maintain protection	D2
	Remove weeds	When required; checked twice annually in early spring and in Autumn.	Reduce competition for resources nutrients etc.by weeds	D1
	Application of bark mulch at a depth of 50 mm	Immediately after planting and then when required; checked annually in Autumn.	Reduce competition for resources nutrients etc.by weeds	D1
	Apply a light dressing of well-rotted manure	Annually in the winter	Note the overuse of manure fertilisers will encourage vigorous grasses and weeds to grow.	A1 & A2
	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 draught and less water during times of prolonged rain.	Ensures plants do not dry out and subsequently fail.	A1, A2, B1, & B2
	Check and replace any plant failures once a year	For the first 5 years	To ensure no gaps form.	A1, A2, B1, & B2
	Once the hedgerow reaches an average height of 1.5m or above along the hedgerow length, this height or above must be retained.	To be checked annually once hedgerow reaches 1.5m in height.	To ensure the hedgerow is not maintained at a low level of worse value to biodiversity.	A1

	Once the hedgerow reaches an average width of 1.5m or above along the hedgerow length, this width or above must be retained. To be checked annually once hedgerow reaches 1.5m in width. To ensure the hedgerow is not maintained at a thin density of worse value to biodiversity. A2 Flailing to be avoided- due to increase risk of disease entering individuals. Management to include a mixture of pruning, live head and dead hedge layering once at a suitable size. Once hedge has reach desired size, to be undertaken in winter months after any berry producing plants have finished. No cutting between 1st March and 31st September. Laying recommended every 5-10 years To increase hedge density and to prevent high volumes of damage which will reduce hedgerow health and quality over time.
Mixed scrub	Overview It is proposed to create 0.135ha of mixed scrub in moderate condition across the site as shown in Appendix 2. Objectives - To create mixed scrub of moderate condition in accordance with the BNG Assessment. - To plant native scrub that will provide pollinating, foraging, and refuge opportunities for protected and/ or notable species groups including amphibians, bats, birds, hedgehogs, invertebrates, and reptiles. Creation Method Ground preparation and planting Each new scrub sapling will be planted within a hole three times as wide as the supplied pot and of a similar depth. Root balls will be loosened to exposed restricted roots and oaked thoroughly in water before planting. The planted saplings should then be backfilled ensuring there are no air pockets around roots or any roots protruding out of the ground. Timing Planting will be undertaken between November and March. Planting shrubs before the new year helps ensure better rooting and subsequent establishment including faster growth during the first growing season the following Spring and Summer.

- **Plant Sourcing and Density**

Plants must be sourced from a local supplier and be of local provenance. It is recommended that new plants are planted in groups of three at a density of 3 plants per m².

Recommended management prescriptions over a 30-year term

Table 1.6. New scrub management prescriptions.

Management	When	Rationale
Rotational coppicing of the scrub, whereby a separate 20% section of the scrub is cut to ground level each year.	Annually in early Spring,	To prevent a homogenous habitat structure and retain open glades.
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.
If required, provision of stakes and guards. Guards to be left on for a minimum of 5 years	Immediately after planting.	Protect from damage
Stakes should be checked and any broken or damaged stakes during this time would be removed (as above) and replaced with ties re-fixed	When required; checked annually in Autumn.	Maintain protection
Remove weeds	When required; checked twice annually in early spring and in Autumn.	Reduce competition for resources nutrients etc.by weeds
Application of bark mulch at a depth of 50 mm	Immediately after planting and then when required; checked annually in Autumn.	Reduce competition for resources nutrients etc.by weeds
Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow

	Watering should 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 draught and less water during times of prolonged rain. Ensures plants do not dry out and subsequently fail.
	Check and replace any plant failures once a year For the first 5 years To ensure no gaps form.
Attenuation basin	Overview It is proposed to create an attenuation basin (0.026ha) in the north of the site. This will be created and managed to enhance biodiversity while providing effective stormwater management. The bioswale will use native SuDS (Sustainable Drainage Systems) plant species seed mix to improve infiltration, reduce runoff, and support local wildlife. Objectives - To establish a functional attenuation basin ecosystem that incorporates native species and achieves a net gain for biodiversity in accordance with the BNG Assessment. - To provide habitat for pollinators and invertebrates, supporting foraging opportunities for bats, birds, hedgehogs, and other notable wildlife species. - To create a self-sustaining system with minimal maintenance requirements by employing techniques that prioritise organic fertilisers and limit the use of chemical treatments. Creation Method Ground Preparation <i>Excavation:</i> A shallow trench, 30–45 cm deep with sloping sides (3:1 or 4:1 ratio), will be dug following the land’s natural contours to slow and capture water flow. <i>Layering:</i> Base Layer: Coarse gravel or crushed stone to aid infiltration. Top Layer: Sand, compost, and topsoil mixture suitable for plant growth will be added above the gravel. Soil in planting zones will be lightly compacted or rolled to create a stable base for vegetation. Timings Seeding and planting will occur in April/May or September/October, during calm, frost-free, and dry weather conditions. Planting and Seeding

Neutral Grassland Zone: To maximise biodiversity and support SuDS functionality, a SuDS-specific meadow seed mix will be used. These mixes are designed for areas subject to occasional wet and dry conditions, making them ideal for bioswale environments.

Recommended Seed Mix Options:

- <https://www.turfonline.co.uk/product/suds-and-slopes-seed-mix/>
- <https://wildflowerturf.co.uk/products/establishanewhabitat/meadowsow/suds/>

These mixes contain a diverse range of native grasses and wildflowers suited for effective stormwater management, erosion control, and biodiversity enhancement.

Seeding Rates:

- Apply seed at the recommended rates provided by the mix supplier (e.g., 4g/m²).
- Bulk seed with an inert carrier, such as sand, to ensure even distribution.
- Seed will be sown in two equal sowings in transverse directions to ensure full coverage.
- After seeding, lightly roll the soil to ensure good seed-to-soil contact without burying the seed.

Management Prescriptions

Table 1.7: Bioswale management prescriptions.

Management	When	Rationale
Water newly established plants in dry spells during the first growing season.	During first season	Ensures successful establishment of plants during their vulnerable initial growth stages.
Remove invasive or problematic species such as thistles or dock that outcompete desired plants.	Annually	Maintains species composition and prevents dominance by undesired species.
Mow or cut vegetation annually in late summer. Remove cuttings after 24–48 hours to prevent nutrient buildup in the soil. Avoid mowing all areas at once.	Late summer	Encourages reseeding of desirable species while maintaining habitat for invertebrates and wildlife.
Inspect bioswale inlet and outlet for sediment buildup and remove excess sediment.	Annually	Maintains water flow and filtration capacity of the bioswale.

	Avoid the use of chemical fertilisers.	At all times	Prevents promotion of vigorous, unwanted grass growth and maintains conditions favourable to neutral grassland species.
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3.2 Timing/Monitoring

Monitoring Term

Monitoring will take place for at least 30 years post-development to ensure that the net gain is maintained for at least the minimum legal term.

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:

1. 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.
2. Post-Development (After Major Construction Works)
 - Soil Preparation
 - Remove any construction debris and de-compact soil as necessary.
 - Introduce appropriate soil treatments to optimize conditions for target grassland species.
 - Seed Sowing and Planting (in autumn or spring)
 - Sow seed mix suited to the local conditions.
 - 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.
 - Long-Term Management
 - Continue appropriate management strategies outlines in table 1.
 - Adjust management practices if required having discussed this with the monitoring individual.

This phased approach ensures that the habitat establishment aligns with best practices and maximizes biodiversity benefits while avoiding damage from construction activities.

New Habitats

Monitoring and reporting will take place on years 2, 5, 10, 15, 20, 25, 30 following the year that major development works are completed and the 30-year BNG period begins.

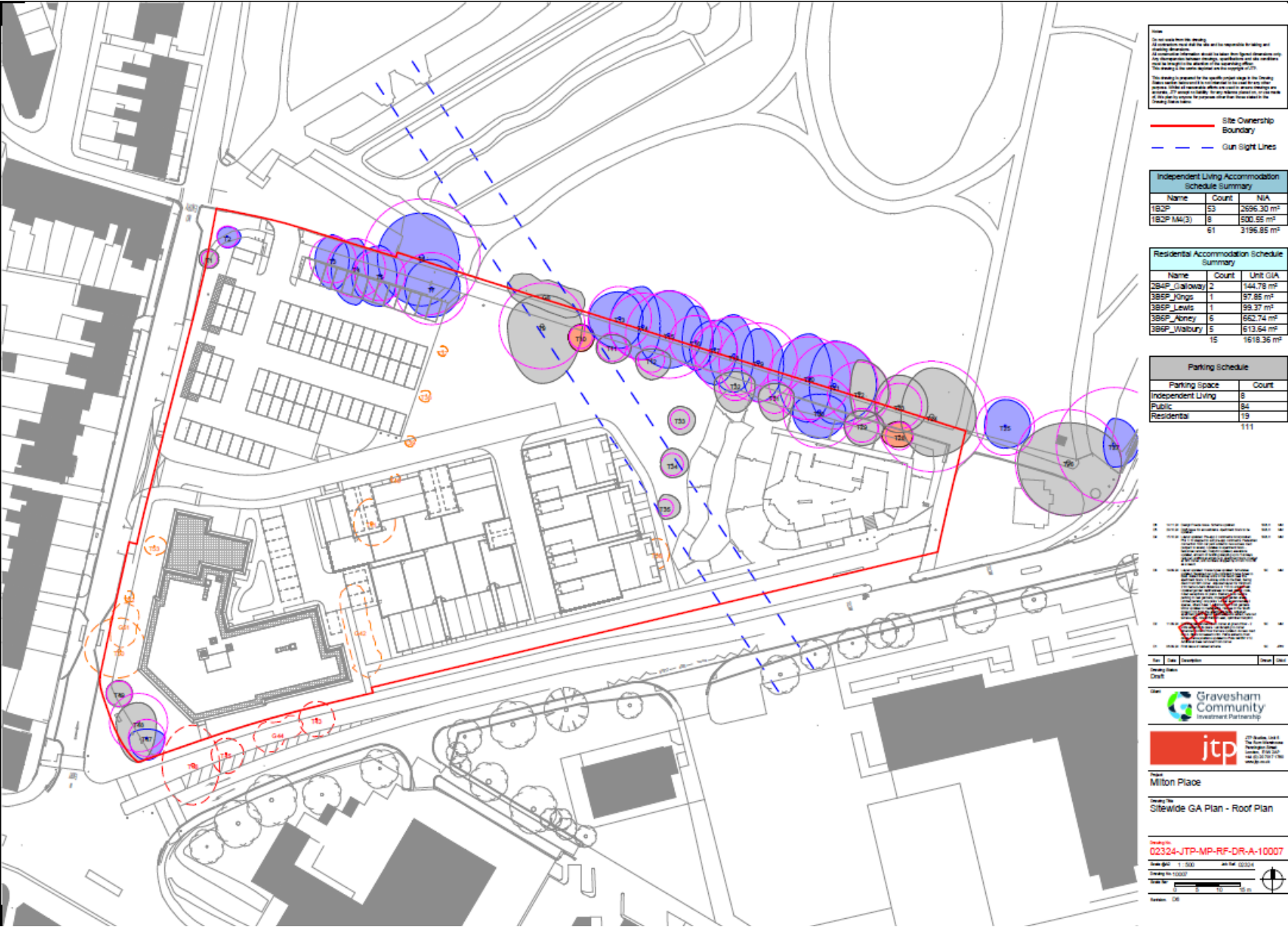
Monitoring reports as referenced above shall be sent to the local authority by November 1st of each year in which monitoring is undertaken. As a minimum these reports shall contain:

- A summary of management actions taken over the previous monitoring period and their timing
- A summary of problems encountered in meeting management objectives and any mediation actions taken or planned to address problems
- A current UK habitat condition assessment for each post-development habitat accompanied by the following supporting evidence:
 - species composition and % cover quadrat data for grassland habitats following sampling methods of the National Vegetation Classification
 - species composition and whole feature assessment of hedgerow habitat and trees
 - photographs of each habitat parcel.
 - Conditions will be compared to previous monitoring reports to highlight the direction of travel for each attribute target.

4.0 Bibliography

- British Standards Institute. (2013). BS 42020, Biodiversity – Code of practice for planning and development. <http://www.eoebiodiversity.org/pdfs/BS42020.pdf>
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Appendix 1: Proposed Development Plan



Habitat Management and Monitoring Plan

