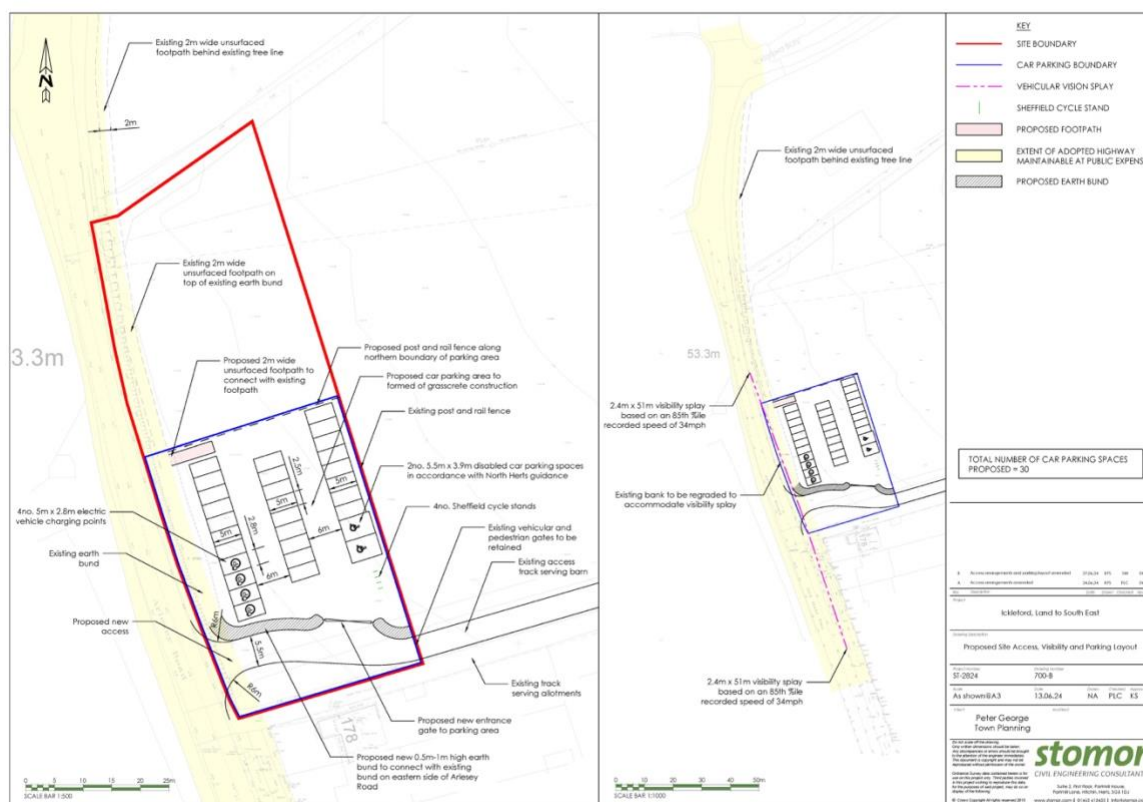


Report for: Bruce Parker

Commissioned by: Tom Donovan – Peter George Town Planning

Biodiversity Net Gain Assessment



Proposed Site Access, Visibility and Parking Layout (Stomor Civil Engineering Consultants, 2024)

Land at New Pound Farm, Old Hale Way, Ickleford, Herts, SG5 1XT

Report No: 3228-1

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SUMMARY

On the instructions of Bruce Parker, Morgan & Stuckey Ecological Consultants carried out a Biodiversity Net Gain (BNG) Assessment for the Land at New Pound Farm, Old Hale Way, Ickleford, Hertfordshire SG5 1XT.

Proposals for the site include the redevelopment of the site into car parking space for the adjacent community allotments.

The proposed development will result in a 16.49% BNG loss in Habitat Area Units with the trading rules not satisfied and a 30.27% BNG gain in Hedgerow Linear Units.

To meet the requirements, a further 0.63 habitat units will be required. Of this, at least 0.50 units must be of Medium Distinctiveness Grassland habitat (or a higher distinctiveness habitat).

This will not be possible to achieve on site and units will need to be sourced off-site.

Recommendations for the site can be found in Section 5.

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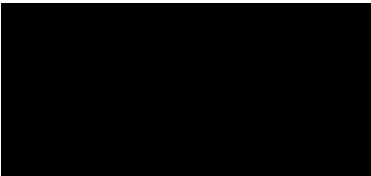
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DOCUMENT CONTROL

Document Title:	Biodiversity Net Gain Assessment Land at New Pound Farm, Old Hale Way, Ickleford, Hertfordshire SG5 1XT
The Client:	Bruce Parker

Morgan & Stuckey – ecological consultants, have prepared this report in accordance with the instructions of Bruce Parker ("the Client") in accordance with their Email instruction dated Monday 29th Jan 2024 at 16:49. This report is confidential and non-assignable by the Client and **Morgan & Stuckey** shall not be responsible for any use of the report or its contents for any purpose other than that for which it was prepared and provided. Should the Client require to pass copies of the report to other parties for information, the whole of the report should be so copied, but no professional liability or warranty shall be extended to other parties by **Morgan & Stuckey** in this connection without the explicit written agreement thereto by **Morgan & Stuckey**.

Report Number 3228-1	Status FINAL	Date of issue 09/07/2024
Prepared by	Clifford Stuckey BSc (Hon's) PhD MCIEEM CEnv Ecologist	
Reviewed by		
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Biological Records of species identified during this survey, the date, their location and a brief description of the circumstances of their identification, may be passed on to Biological Records Centres, local wildlife groups, the Wildlife Trust, Natural England and other interested parties unless written instructions not to do so are received within 30 days of receipt of this report.

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1 INTRODUCTION

1.1 INSTRUCTIONS AND OBJECTIVES

On the instructions of Bruce Parker, Morgan & Stuckey Ecological Consultants carried out a Biodiversity Net Gain (BNG) Assessment for the Land at New Pound Farm, Old Hale Way, Ickleford, Hertfordshire SG5 1XT.

Proposals for the site include the redevelopment of the site into car parking space for the adjacent community allotments.

The aim of this report is to determine the Biodiversity Net Gain (BNG) for the proposed development and, where necessary, provide recommendations for increasing net gain.

BNG is an approach to developments that aims to measurably improve the natural environment from its previous state. The mitigation hierarchy is followed to first avoid the loss of biodiverse habitats, secondly to enhance and create biodiverse habitats on site and thirdly to seek off-site compensation as a last resort.

2 METHOD

2.1 BIODIVERSITY NET GAIN

This report uses the Statutory Biodiversity Metric (DEFRA, 2023) to make the calculations for the baseline biodiversity units and the post-development biodiversity units, to quantify the net gain of the development.

Supporting documentation for the Statutory Biodiversity Metric (listed below) is used and adhered to:

- Statutory biodiversity metric: draft user guide
- Statutory biodiversity metric condition assessments

2.1.1 DATA SOURCES

QGIS Open-Source software and Google Earth are used to measure and calculate the habitat areas and lengths.

The Ecological Impact Assessment (Morgan & Stuckey, Ecological Consultants, 2023) was used to determine the baseline habitats.

Proposed Site Access, Visibility and Parking Layout (Stomor Civil Engineering Consultants, 2024) was used to determine the post-development habitats.

2.2 SURVEYOR INFORMATION

This report and the BNG calculation have been carried out by Dr Clifford Stuckey BSc (Hons), PHD, CEnv, MCEEIM.

2.3 LIMITATIONS

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour and the ecological survey of this site has not produced a complete list of plants and animals. Nevertheless, the results of the ecological survey allow evaluation of nature conservation value, assessment of the significance of potential impacts that may arise from the proposals and consideration of appropriate mitigation measures.

3 RESULTS

3.1 SITE LOCATION AND SETTINGS

The site is centred on OS NGR TL18593116, post code SG4 0AA, in Hitchin, Hertfordshire

The site is surrounded by moderate density residential housing, arable fields, a large area of allotments to the south and occasional woodland areas further afield.

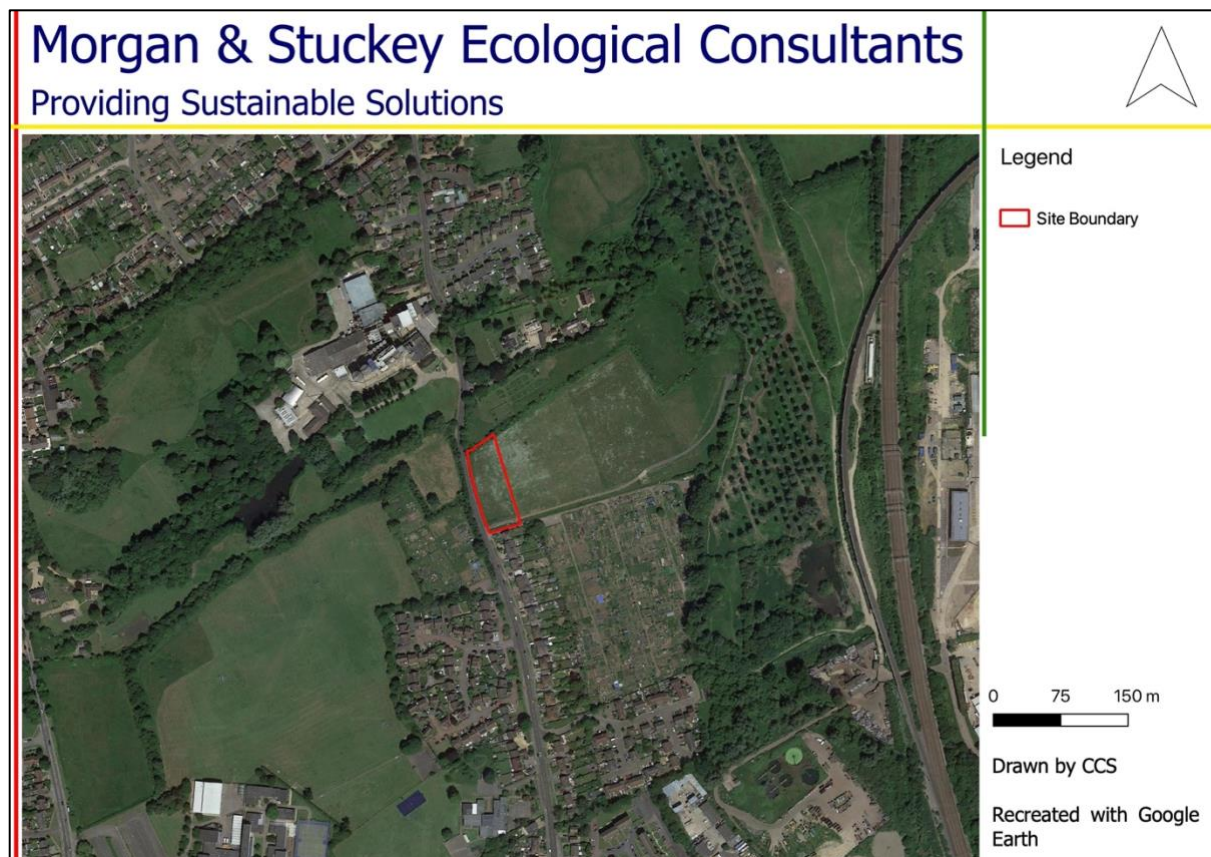


Figure 3-1 Proposed development area with red boundary.

3.2 DESK STUDY

3.2.1 MAGIC

Interrogation of the Multi-Agency Geographic Information for the Countryside (MAGIC) showed that the site falls into the SSSI Impact Risk Zone for Oughtonhead Lane SSSI, Knocking Hoe SSSI, Wain Wood SSSI & Deacon Hill SSSI.

Two Local Nature Reserves fall within the search area:

- Purwell Meadows ~1.7km southeast
- Oughtonhead Common ~800m west

There are several areas of Deciduous Woodland near the site. The closest area is found ~250m northeast.

A significant area of Costal and Floodplain Grazing March is located ~630m north.

An area of good quality semi-improved grassland is located ~250m east.

Two Natural England Protected Species licences (NEPS) for bats (common pipistrelle and soprano pipistrelle) were granted within the search area.

1. License no. EPSM2012-5071 ~940m west – Common Pipistrelle – 2012-2013
2. License no. 2016-21240-EPS-MIT ~1.6km southwest – Soprano Pipistrelle - 2016-2021

MAGiC

SG4 0AA

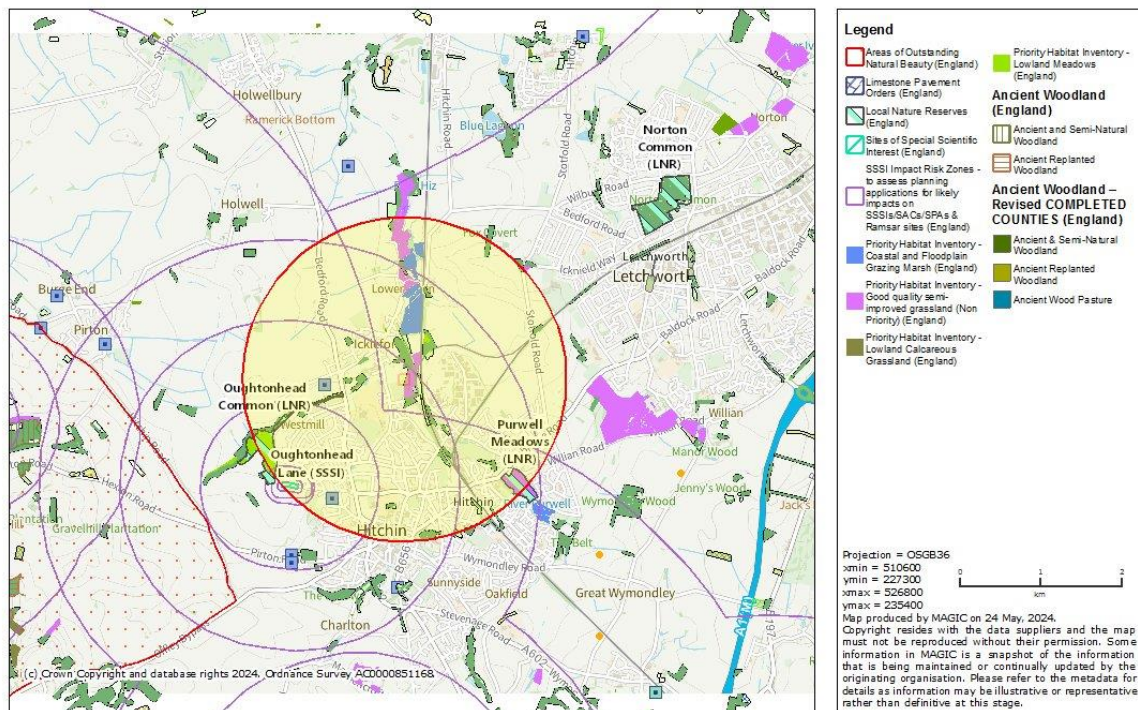


Figure 3-2 MAGIC Map

3.3 STRATEGIC SIGNIFICANCE

There is no documentation found to indicate that the site falls into an area of strategic significance.

3.4 BNG ASSESSMENT

3.4.1 BASELINE UNITS

The site is comprised of an area of grassland with a gravel access track and native hedgerow along two boundaries.

The pre-development habitats on site were entered into the Statutory Biodiversity Metric and the results are summarised below.

Table 3.1 Baseline Area Units

UKHab Classification	Condition	Area (ha)	Units
Artificial unvegetated, unsealed land	N/A	0.017	0.00
Other neutral grassland	Moderate	0.296	2.37
Total area units			2.37

Table 3.2 Baseline Linear Units

UKHab Classification	Condition	Linear (km)	Units
A - Native hedgerow	Good	0.033	0.20
B - Native hedgerow	Moderate	0.092	0.37
Total linear units			0.57



Figure 3-3 Baseline Habitats

3.4.2 POST-DEVELOPMENT UNITS

The post-development habitats proposed for the site were entered into the Statutory Biodiversity Metric and the results are summarised below.

The parking area is proposed as grasscrete, this has been entered into the metric as 50% artificial unvegetated, unsealed land and 50% modified grassland in poor condition.

Table 3.3 Post-development Area Units

UKHab Classification	Condition	Area (ha)	Units
Artificial unvegetated, unsealed land	N/A	0.021	0.00
Artificial unvegetated, unsealed land	N/A	0.055	0.69
Modified grassland	Poor	0.055	0.69
Other Neutral Grassland	Moderate	0.023	1.61
Baseline units enhanced			
Other Neutral Grassland	Good	0.159	1.72
Total Area Units			1.98

Table 3.4 Post-development Linear Units

UKHab Classification	Condition	Linear (km)	Units
N/A			
Baseline units retained			
A - Native hedgerow	Good	0.033	0.20
Baseline units enhanced			
B - Native hedgerow	Good	0.092	0.54
Total Linear Units			0.74

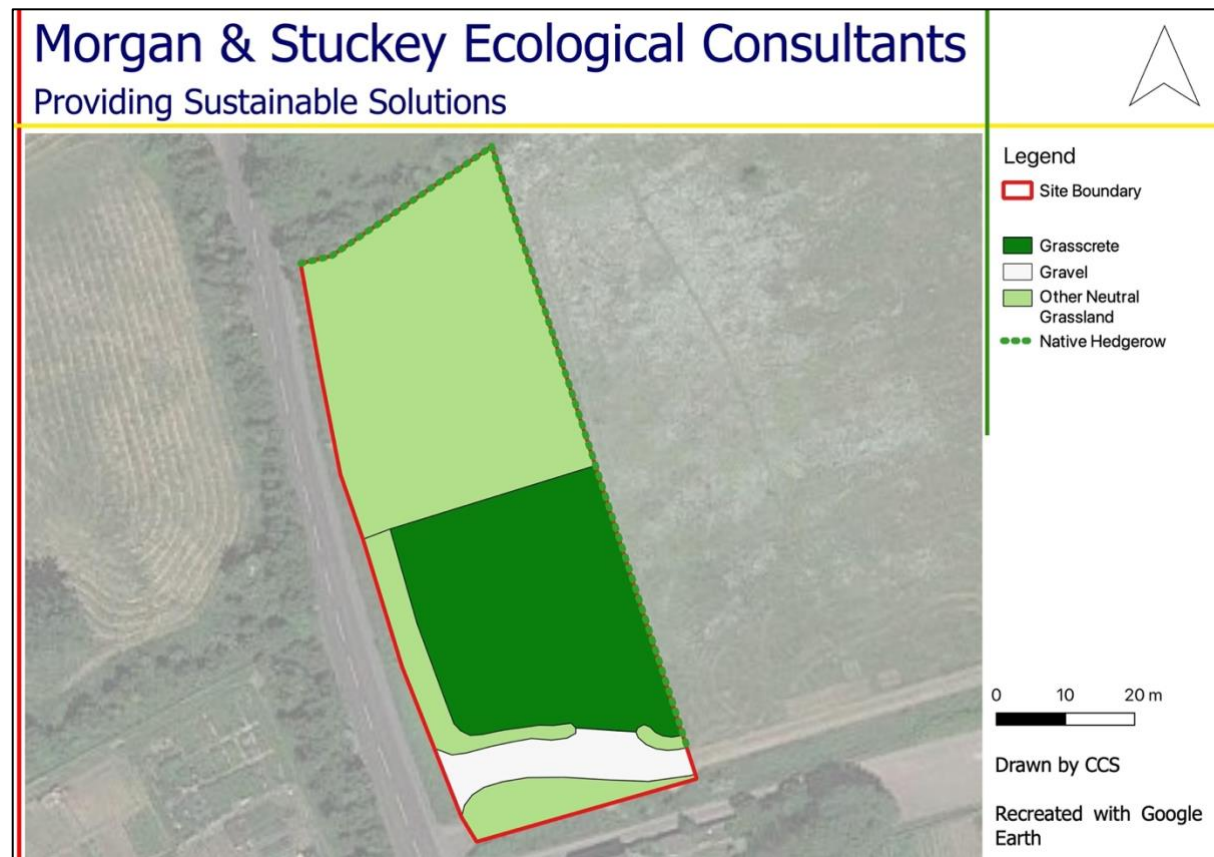


Figure 3-4 Post Development Habitats

3.4.3 BNG GAIN/LOSS

The proposed development will result in a 16.49% BNG loss in Habitat Area Units with the trading rules not satisfied and a 30.27% BNG gain in Hedgerow Linear Units.

Land at New Pound Farm, Old Hole Way, CO

Headline Results

Scroll down for final results

Return to results menu

On-site baseline	Habitat units	2.37		
	Hedgerow units	0.57		
	Watercourse units	0.00		
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	1.98		
	Hedgerow units	0.74		
	Watercourse units	0.00		
On-site net change (units & percentage)	Habitat units	-0.39	-16.49%	On-site net gain is less than target set
	Hedgerow units	0.17	30.27%	
	Watercourse units	0.00	0.00%	
Off-site baseline	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Habitat units	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.39		
	Hedgerow units	0.17		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
FINAL RESULTS				
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.39		
	Hedgerow units	0.17		
	Watercourse units	0.00		
Total net % change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-16.49%	Total net gain achieved is less than target set	
	Hedgerow units	30.27%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	2.37	2.69	0.63
Hedgerow units	10.00%	0.57	0.62	0.00
Watercourse units	10.00%	0.00	0.00	0.00
				No additional hedgerow units required to meet target
				No additional watercourse units required to meet target
Input errors/rule breaks present in metric				

Figure 3-5 Metric Headline results

4 DISCUSSION & CONCLUSION

4.1 BIODIVERSITY NET GAIN (BNG)

The area of grassland to the north will be enhanced with a species-rich grassland mix and the boundary hedgerows will be retained, with the newly planted hedgerow along the eastern boundary enhanced to good condition.

The parking area will consist of grasscrete (entered into the metric as 50% artificial unvegetated, unsealed land and 50% modified grassland in poor condition) and the boundary mounds will be grassed with a similar grassland to that existing.

The footpath along the western boundary will be retained.

This results in a 30.27% BNG gain in Hedgerow Linear Units, however, there is a loss of 16.49% in Habitat Area Units with the trading rules not satisfied due to the loss of other neutral grassland habitat.

To meet the requirements, a further 0.63 habitat units will be required. Of this, at least 0.50 units must be of Medium Distinctiveness Grassland habitat (or a higher distinctiveness habitat).

This will not be possible to achieve on site and units will need to be sourced off-site.

Recommendations for these habitats can be found in Section 5.

5 RECOMMENDATIONS

5.1 OTHER NEUTRAL GRASSLAND

The area of grassland to the north will be enhanced with a species-rich grassland mix.

Below are recommendations for the sowing and management of this habitat, taken from Emmorsgate Seeds <https://wildseed.co.uk/additional-information/sowing-and-aftercare-mixtures/>

MEADOW CREATION BY SOWING ONTO PREPARED SOIL

Ground Preparation: Select ground that is not highly fertile and does not have a problem with perennial weeds. Remove any existing vegetation by repeated cultivation or turf stripping. Then plough, surface cultivate or dig to bring up clean soil, harrow or rake to produce a medium tilth, and roll or tread to produce a firm surface. Aim to produce a firm, weed free, medium tilth, seedbed.

Sowing Rate: Sow at 4g/m² in a landscaping or garden setting. A reduced rate of around 2g/m² may be used in an agricultural setting or on large areas.

Sowing: Sow in the autumn or the spring, or at any other time of the year if the ground conditions are good. Divide the quantity of seed and sow half in one direction over the entire area and the remainder across the whole area in the other direction. The seed must be sown on the surface and can be applied by seed drill, seed fiddle, or broadcast by hand. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good seed/soil contact.

Aftercare: Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So, resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year.

In the second growing season, and each year thereafter, leave the meadow uncut and un-grazed from the end of March to mid-summer, allowing the sown species to flower in June and July. After flowering, cut and remove the vegetation. This may be taken off as hay or cut and stacked nearby to rot. The meadow may then be kept mown or grazed through to the end of March in the following year. Moderate winter poaching is beneficial. Flowering in the second growing season will be very good, and as the years go by, and with good management, species diversity will increase.

Cutting date can be varied from year to year, bringing it forward to early July if the meadow becomes rank, or taking a later cut in early August if the structure is good. Perennial weeds can be controlled by selective scything or topping. Cut perennial weeds at flowering and before seed set.

5.2 HEDGEROWS

The newly planted hedgerow along the eastern boundary will be supplemented with additional native species planting. Recommended species for the hedgerows include:

- Hawthorn *Crataegus monogyna*

- Blackthorn *Prunus spinosa*
- Hazel *Corylus avellana*
- Holly *Ilex europaeus*
- Wild Privet *Ligustrum vulgare*
- Field Maple *Acer campestre*
- Guelder Rose *Viburnum opulus*
- Wayfaring Tree *Viburnum lantana*
- Dog Rose *Rosa canina*
- Spindle *Euonymus europaea*

The following guidance is adapted from The Wildlife Trusts:

<https://www.wildlifetrusts.org/wildlife/managing-land-wildlife/how-manage-hedgerow-wildlife>

Ideally the hedgerows should be planted between November-March when the trees aren't losing their leaves or producing buds. In the first spring, the shrubs should be cut down to 45-60cm above the ground to encourage a thick hedge. Replace any failures in the following November-March.

Once established, no cutting should take place between March-September as this is peak bird nesting season. Ideally, any maintenance work should be delayed until January/ February as hedgerow berries provide an autumn/ winter food source for birds.

Trim hedges on a two- or three-year rotation as flower buds often form on second-year growth and this will ensure there are flowers for pollinators in spring and berries for birds in autumn. Hedges cut every three years can produce two and a half times as much blossom as those cut annually.