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Harron Homes

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Grounded advice

Biodiversity Management Plan

Bleachcroft Way, Barnsley

Harron Homes

Report Reference: ER-4066-07A

5/1/2023

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Report Reference:	Biodiversity Management Plan Bleachcroft Way, Barnsley
Report Reference:	ER-4066-07A
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Date:	30/05/2022 05/01/2023 Rev A MJD

The information which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional *bona fide* opinions. This report does not constitute legal advice.

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Introduction

The following Biodiversity Management Plan has been produced for Harron Homes for their proposed development on land at Bleachcroft Way, Barnsley.

The Plan is produced in accordance with Chapter 11 of British Standard 42020. Reports which set out how wildlife interests will be enhanced, restored and maintained go under a variety of names, generated by the planning case officer or their internal consultant. As these names refer to the same output we standardise the name of our reports regardless of what appears in a planning condition as '**Biodiversity Management Plan**s' (BMPs), the term is referenced in BS42020 Clause D.4.5.

Proposals

Proposals are for a residential development of 238 dwellings and associated works.

Scope of Plan

This plan relates to the scheme outlined in the Proposed Sie Layout drawing no. PL-001 Rev. U as shown in the figure opposite.

Aims of the Plan

1) To maximise the Site's biodiversity value, through creating a range of semi-natural habitats within the site greenspace and boundary habitat areas; and

2) To demonstrate how habitat retention, enhancement and management can deliver biodiversity units as set out in the Biodiversity Net Gain calculation for the development.

Delivering the Plan

Harron Homes is responsible for the creation and establishment works for an initial five-year period and management to achieve target conditions over the full 30 year duration of the plan.

Harron Homes will appoint a company working under the direction of an Ecological Clerk of Works (ECoW) to oversee the delivery of this plan prior to any work commencing on-Site.

The ECoW would be a qualified ecologist and member of the Chartered Institute of Ecology and Environmental Management, or be otherwise approved by the LPA.





Proposed Site layout

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Extent and Location of habitat creation and enhancements

The plan below shows the Site's post-development habitat features which are created through planting and soft landscaping, then enhanced though management set out in this Biodiversity Management Plan. These habitats, hedgerow and river features have been used to calculate the post-development biodiversity unit scores under the DEFRA Metric 2.0 scheme under which the development has been assessed. In conjunction with the Landscape Masterplan. The following sections in this plan detail the required specification for each habitat type and the target condition required to achieve the intended objectives. Note some features which contribute to the overall biodiversity units such as street trees and amenity grassland are to be maintained under standard amenity management set out in the development landscape plans and are not included in this plan.



Post Dev Habitat

- f2e - reedbeds
- g3c - other neutral grassland
- h3h - mixed scrub
- 1170 - street tree
- w1d - wet woodland
- w1g - other woodland-broadleaved

Post Dev Hedge

- Native Species Rich Hedgerow

Post Dev River

- R9 Rivers & Streams (Other)
- mask

NB. Street tree locations are indicative and will be set out in the Landscape Plans

Woodland Restoration Plan

A separate Woodland Restoration Plan (dashed boundary area) has been produced in response to the accidental clearance of an area of riparian woodland adjacent to Dob Syke, a watercourse that runs along the south-eastern boundary. The restoration plan specifies restoration planting and management for an initial period of three years after which the woodland habitats in this areas will revert to management under this plan as for other broadleaf woodland created in the boundary buffer areas.

Key measures required to restore the woodland are:

- Protection from further damage
- Sensitive treatment of weed problem

Measures to enhance long term value of woodland are:

- Localised over-deepening of depressions to make wetter areas
- Diversifying the tree and shrub species though planting



Broad-leaved and wet woodland

Rationale

New native woodland planting to increase area of woodland habitat.

Objectives

1. Creation of c. 0.38 ha of new native woodland habitat within boundary buffer strips.
2. Enhancement of c. 0.17 ha of existing wood, scrub and grassland habitat to broadleaved woodland.
3. Reaching a DEFRA condition score of **Fairly Good** by year 32. (9/12 Condition criteria targeted as below).

Specification (new buffer planting)

Soil (retained and protected)

Weeds: new tree and shrub planting station apply translocated herbicide

Planting: from Pegasus Environment Landscape Masterplan Schedule for *Native Woodland and Shrub Mix*

	Condition Assessment Criteria: Woodland broad habitat type	Targeted
1	Complete canopy cover	**No**
2	Natives dominant. Non-native and invasive species less than 10%	**Yes**
3	A diverse age and height structure of the trees	**No**
4	Free from bark stripping; browsing; in the last five years, less than 20% of vegetation being browsed	**Yes**
5	Successful regeneration	**Yes**
6	Standing and fallen dead wood of over 20 cm diameter present including fallen large dead branches/stems and stumps	**Yes**
7	Wetland habitat if they exist within the wood has little sign of drainage or channel straightening.	**N/A**
8	Protected from damage by agricultural and other adjacent operations	**Yes**
9	No evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction	**Yes**
10	Invasive non-native plants are below 5%	**Yes**
11	No signs of significant nutrient enrichment present	**Yes**
12	More than 3 different native trees and 3 shrub species in average 10m	**Yes**
	Fairly Good Condition:	**9/12**



Planting of areas within the Dob Syke corridor subject to separate planting scheme within the Woodland Restoration Plan



Broad-leaved and wet woodland

Management

Year 1-2

Make sure everyone involved in the management of the new woodland knows where the trees are to avoid mowing them or causing any accidental damage.
Keep a 0.5m diameter around each tree clear of weeds to minimise competition during establishment.
If there is a prolonged dry spell, check soil moisture and water each tree station to saturation at a sufficient frequency to ensure the health of the tree.
Check the trees continue to grow upright and don't lean.
Check tree guards and stakes are firmly secured in the ground.
Check trees for pest damage and remove any grass or weeds growing inside the tree guards.

Year 3-30

Monitor and replace dying trees.
Ensure presence of standing or fallen dead wood >20cm diameter as soon as possible
Remove any Invasive Non-native weeds that may colonise.

Monitoring

Ecological Clerk of Works year 3 then monitoring visits every 5 years to check trajectory to target condition. Output ECoW report year 3 and 5, then every 5 years to 30

Remedial action options

- Increase weed control if undesirable species establish
- Re-seed and replant locally
- Soil scrape to reduce nutrients



Mixed Scrub (Planting)

Objectives

1. Creation of c. 0.04 ha of Mixed Scrub adjacent to the Dob Syke woodland corridor.
2. Reaching a DEFRA condition score of **Moderate** by year 5. (3/6 Condition criteria targeted).

Specification

Preparation (Creation): soils to be spread using back actor, spread and firmed. Not driven over and compacted.

Preparation (Enhancement): Whips to be planted directly into prepared ground. Herbicide treatment to be used only where undesirable species are an issue.

Planting Schedule: Areas marked on the plan opposite will be planted with species form schedule 1 below.

Schedule 1 Scrub planting

Scientific	English	%	Stock	Groupings
Sorbus aucuparia	Rowan	15	1+1 BR	random
Corylus avellana	Hazel	15	1+1 BR	random
Prunus spinosa	Blackthorn	15	1+1 BR	random
Crataegus monogyna	Hawthorn	20	1+1 BR	random
Viburnum opulus	Guelder Rose	15	1+1 BR	random
Salix cinerea	Grey willow	20	1+1 BR	random

	Condition Assessment Criteria Scrub habitat type	Targeted?
1	There are at least 3 woody species, with none comprising more than 75% cover.	Yes
2	There is a good age range - mix of saplings, young and mature shrubs.	No
3	Pernicious weeds and invasive species make up less than 5% cover.	Yes
4	Scrub has a well developed edge with ungrazed tall herbs	Yes
5	There are many clearings and glades	No
		3 / 5 Moderate



Mixed Scrub (Management)

Defra Metric Condition Assessment (Version 2.0)

The table below outlines the condition assessment criteria for scrub habitat, and outlines how moderate condition will be targeted.

Management

Years 1 - 5: Standard landscape establishment - see Pegasus Landscape Plans. Any failures replaced in the next autumn period.

Hand pull or weed wipe three times a year to kill off weeds - spear thistle, creeping thistle, broad-leaved dock, clustered dock, wood dock, curled dock, nettle, ragwort, and others, according to ECoW recommendations. Operatives must be proven competent in weed identification.

Years 6 - onwards: ECoW to advise on the need for selective thinning to control any species that may be becoming dominant. Any one species not to be allowed to comprise more that 75% cover.

ECoW to advise on the need for further weed control. Increase weed control measure if pernicious weeds or invasive species look to be contributing more than 5% cover.

Monitoring

Ecological Clerk of Works year 2 and 5 monitoring visit to check trajectory to condition assessment.

Output

ECoW report year 2 and 5.

Remedial action options

- Increase weed control if undesirable species establish.
- Re-seed and replant locally.
- Increased thinning of canopy species.



Wildflower Meadow (Seeding)

Objectives

1. Enhancement of c. 0.11 ha of existing poor condition grassland to species rich wildflower meadow.
2. Reaching a DEFRA condition score of **Fairly Good** by year 12. (10/12 Condition criteria targeted).

Preparation (Grassland creation): Soils will be checked by ECoW for suitability: this to be a friable low nutrient load neutral soil.

No more than 5cm of topsoil will be spread over the subsoil profile. Spread using back actor, spread and firmed. Not driven over and compacted. All soil handling and spreading to be supervised and sanctioned by ECoW.

Seed mix: Emorsgate EM2 - General Purpose Meadow Mixture will be sown across all areas marked on the plan opposite.

Sowing: Seed according to supplier's instructions. Seed will either be broadcast by hand or by approved lightweight machinery at c. 40kg/ha. Following seeding, the area will be lightly rolled to incorporate the seed with the growing substrate.

The table below outlines the condition assessment criteria for grassland habitat, and outlines where uplift is targeted.

	Condition target	Targeted?
1	Clearly and easily recognisable as a good example of this type of habitat.	Yes
2	Appearance and composition very closely matches the characteristics for the specific Priority Habitat	No
3	Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency.	Yes
4	Undesirable species and physical damage is below 5% cover.	Yes
5	Cover of bare ground less than 10%	Yes
6	Cover of bracken less than 20% & cover of scrub and bramble less than 5%.	Yes
	Condition Fairly Good:	**5/ 6**



Wildflower Meadow (Management)

Management

Year 1

Five cuts, collect arisings and remove from Site.

Hand pull or weed wipe three times in Year 1 to kill off weeds - spear thistle, creeping thistle, broad-leaved dock, clustered dock, wood dock, curled dock, nettle, ragwort, and others, according to ECoW recommendations. Operatives must be proven competent in weed identification.

Year 2 - onwards

Two cuts, once in August and again in October. Arisings to be collected and removed from site, or retained on Site in a single rot pile. Collecting and removing arisings will be critical to the grassland's success. Leaving arisings in situ will allow a thatch layer to develop, which will prevent wildflower seed germinating in future years.

Continue to spot treat competitive weed species each year until under control according to ECoW.

Monitoring

Ecological Clerk of Works Year 2 and 5 monitoring visit to check trajectory to condition requirement.

Output

ECoW report year 2 and 5.

Remedial action options

- Increase the number of cut and collects - to reduce nutrients
- Scarify soils after first cut in August - to remove thatch
- Increase weed control if undesirable species establish
- Soil scrape to reduce nutrients
- Re-seed and replant locally

Meadow cutting regime







Attenuation area

DEFRA: Grassland (other)

Rationale

Creating flower rich grassland capable of tolerating occasional inundation to attract invertebrates and impede water flow.

Preparation (Grassland creation): Soils will be checked by ECoW for suitability: this to be a friable low nutrient load neutral soil.

No more than 5cm of topsoil will be spread over the subsoil profile. Spread using back actor, spread and firmed. Not driven over and compacted. All soil handling and spreading to be supervised and sanctioned by ECoW.

Seed mix: Emorsgate EM8 - General Purpose Meadow Mixture will be sown across all areas marked on the plan opposite.

Sowing: Seed according to supplier's instructions. Seed will either be broadcast by hand or by approved lightweight machinery at c. 40kg/ha. Following seeding, the area will be lightly rolled to incorporate the seed with the growing substrate.

Management

Year 1 Five cuts, collect arisings and remove from site.
Use a weed wipe three times in year 1 to kill off weeds - Spear thistle, creeping thistle, broad-leaved dock, clustered dock, wood dock, curled dock, nettle, ragwort and others according to ECoW recommendations. Operatives must be proven competent in identifying.

Year 2 onwards
Two cuts, once in August and again in October - remove arisings. Continue to spot treat competitive weed species each year until under control according to ECoW.

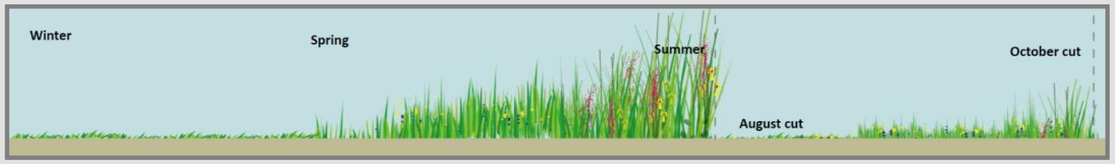
Monitoring

Ecological Clerk of Works year 2 and 5 monitoring visit to check trajectory to condition requirement.
Output
ECoW report year 2, 3 and 5 monitoring visit to check trajectory to condition requirement.

Remedial action options

- Increase weed control if undesirable species establish
- Increase cutting frequency to reduce nutrient load
- Cut in spring if autumn cut is not possible
- Re-seed locally

Meadow cutting regime



	Condition target	Targeted?
1	Clearly and easily recognisable as a good example of this type of habitat.	Yes
2	Appearance and composition very closely matches the characteristics for the specific Priority Habitat	No
3	Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency.	Yes
4	Undesirable species and physical damage is below 5% cover.	Yes
5	Cover of bare ground less than 10%	Yes
6	Cover of bracken less than 20% & cover of scrub and bramble less than 5%.	Yes
	Condition Fairly Good:	**5/ 6**





Species-rich Grassland

DEFRA: Grassland (other neutral)

Rationale

Restoring an area of former flower rich grassland

Objectives

1. Enhancement of c. 0.51 ha of grassland, bracken and scrub habitat to species rich grassland.
2. Reaching a DEFRA condition score of **Fairly Good** by year 10.

Specification

Scrub Removal: Areas of existing scrub within the area to be cut to ground and stumps treated to prevent regrowth. Dead wood from clearance relocated to dead wood piles within new boundary woodland areas.

Bracken and other weed control: Spray off with translocated non persistent herbicide during the same growing season.

Seeding - areas cleared of scrub and bracken:

- Scarify and seed with a meadow species seed mix such as Emorsgate EM2—Standard General Purpose Meadow Mix at the recommended application rate 40g / sqm.

Seeding - Areas of existing grassland:

- Scarify and over-sow with a meadow species mix as above but at a reduced application rate of 20% ie. 8g / sqm, in order to increase diversity of grass and flower species present.

Management

Year 1 -Re-seeded areas: Five cuts, collect arisings and remove from site.

Use a weed wipe three times in year 1 to kill off target weeds - Spear thistle, creeping thistle, broad-leaved dock, clustered dock, wood dock, curled dock, nettle, ragwort and others according to ECoW recommendations. Operatives must be proven competent in identifying.

Year 2 onwards

All areas - Two cuts, once in August and again in October - remove arisings. Spot treat competitive weed species each year until under control according to ECoW.

Scrub and bracken control to continue as required to prevent recolonisation across the grassland.

Monitoring

Ecological Clerk of Works year 2, 5 and 10 monitoring visit to check trajectory to condition requirement.

Output

ECoW report year 2, 3 and 10 monitoring visit to check trajectory to condition requirement.

Remedial action options

- Increase weed control if undesirable species establish
- Increase cutting frequency to reduce nutrient load
- Cut in spring if autumn cut is not possible
- Re-seed locally

	Condition target	Targeted?
1	Clearly and easily recognisable as a good example of this type of habitat.	Yes
2	Appearance and composition very closely matches the characteristics for the specific Priority Habitat	No
3	Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency.	Yes
4	Undesirable species and physical damage is below 5% cover.	Yes
5	Cover of bare ground less than 10%	Yes
6	Cover of bracken less than 20% & cover of scrub and bramble less than 5%.	Yes
	Condition Fairly Good:	**5/ 6**





Native Species-rich Hedgerow (planting)

Rationale

Planting and managing a native species and structurally diverse hedgerow.

Objectives

1. Creation of 239m of species-rich native hedgerow.
2. Reaching a DEFRA condition score of **Moderate** by year 5.

Specification

Soil protected in situ.

Weeds: Maintain a weed free strip under establishing hedge.

Seeding: N/A

Planting: from Pegasus Environment Landscape Masterplan Schedule for Native Hedgerow Mix.

Management

Year 1 keep a 1m strip centered on the hedge free of weed growth using translocated non persistent herbicide. Two visits in the growing season.

Year 2 No further weed treatment. Under sow with Emorsgate seeds Hedgerow mix EH1 at 4g per m square. Lightly rake.

Year 3 Cut 50% of hedge in late winter. Identify any trees that can be left to grow into hedgerow standards. Mark with a flag to prevent cutting. Look to achieve a random scattering of standards averaging at 1 per 40m.

Year 4-10 Cut the remaining uncut 50% of each identifiable hedge in late winter. Keep flags to prevent cutting until a very obvious standard has developed. Repeat cutting treatment alternating areas cut between years.

Monitoring

Ecological Clerk of Works year 2 and 4 monitoring visit to check trajectory to moderate condition assessment.

Output ECoW report year 3, and year 5 condition report.

Remedial action options

- Increase weed control if undesirable species establish
- re-seed and replant locally
- Vary cutting profile.



	Favorable condition attributes	Criteria	Targeted?
A1	Height	>1.5m average along length	Yes
A2	Width	>1.5m average along length	Yes
B1	Gap – hedge base	Gap between ground and base of canopy <0.5m for >90% length	Yes
B2	Gap – hedge canopy continuity	Gaps make up <10% of total length and no canopy gaps >5m	Yes
C1	Undisturbed ground and perennial vegetation	>1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length & present on one side of hedge at least	Yes
C2	Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of area of undisturbed ground	Yes
D1	Invasive and neophyte species	>90% of hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Yes
D2	Current damage	>90% of hedgerow of undisturbed ground is free of damage caused by human activities	Yes





Canal Basin Reedbed

DEFRA: Reedbeds

Rationale

Creating reedbed habitat which can provide habitat for a range of specialist wetland species.

Objectives

1. Enhancement of 0.27ha of existing scrub and reedbed to entire reedbed habitat.
2. Reaching a DEFRA condition score of **moderate** by year 10.

Specification

Water level management:
The ability to provide some control water levels within the canal basin will ensure long term success through the ability to flood competitive weeds and provide optimal growing conditions for establishing reeds. This may be achieved through an engineered hydrological link to the adjacent flood basin and surface water management strategy. Depth control from 0 —30cm is typically desirable.

Dredging and soil preparation:
Areas of existing scrub and dense burr-reed within the old canal basin will require clearance followed by dredging of accumulated sediments to achieve the target open water depth. Young reeds require water logged soils, which can be progressively flooded as the reeds establish.

Weed control:
Invasive weed control will be needed to be planned to ensure species such as Himalayan balsam which favour damp soils are adequately controlled through the establishment phase.

Planting and establishment:
Reedbed establishment can be achieved through a number of planting methods from seed, plant plugs, stem cuttings and rhizome. Example planting density around 10-15 /sqm for cut shoots. Planting will require a specialist contractor and may be achieved through collaboration with other locally managed reedbeds such as the Dearn Valley RSPB reserves. Use of locally sourced stock should be prioritized.

Access:
Fencing should be installed to prevent access from the site.

Management

Reedbed management typically comprises water control to periodically flood competitive terrestrial weeds or emergent scrub, and reed cutting to provide open water and regenerative growth. Annual management will be determined through monitoring to establish requirements for seasonal management.

Monitoring

Ecological Clerk of Works year 2, 5 and 8 monitoring visit to check trajectory to condition requirement.
Output: ECoW report

Remedial action options

- Increase weed control if undesirable species establish - water level management or herbicide .
- Restocking with reed if sufficient percentage of stock fails to establish.

References: Hawke CJ and Jose PV. 1996 *Reedbed Management for Commercial and Wildlife Interests* RSPB Publication

	Condition Assessment Criteria Wetland habitat type	Targeted?
1	There is no artificial drainage, which would include ditches that are now revegetated and streams that have been depend and widened.	Yes
2	The water level and its management should result in surface water throughout the year.	Yes
3	Cover of undesirable species (common nettle, docks, creeping/spear thistles, common ragwort and Indian (Himalayan) balsam) should be less than 10%.	N/A
4	Cover of scrub should be less than 10%.	Yes
5	Cover of bare ground should be less than 10%.	Yes
6	No more than 25% of the fen area should have a continuous cover of litter (i.e. dead vegetation).	N/A
7	On bogs sphagnum moss cover should be between 40% - 100%.	N/A
8	Flowering cottongrass plants frequent in spring (where present), or flowering heather plants at least frequent in autumn (where present).	N/A
9	Reedbed vegetation should include at least 60% common reeds.	Yes





Dob Syke

DEFRA: Rivers and Streams other

Rationale

Objectives

Primary: Reaching a DEFRA condition score of **moderate** by year 8.

Specification

Enhancement of 700 metres of Dob Syke is substantially achieved through implementation of the Woodland Restoration Plan which specifies the reinstatement and enhancement of woodland and riverside vegetation in the Dob Sike corridor.

The Restoration Plan identifies condition uplift through the removal of invasive weeds - Himalayan balsam in particular - and the removal of accumulated litter and waste throughout the riparian corridor. Control of invasive weeds will be carried out under a separate Invasive Weed Management Plan which will identify areas of infestation and set out seasonal treatment and controls.

Management

Year 1 - 3 in accordance with the planting schedules and programme of works in the Woodland Restoration Plan.

Year 4 – 30 Management of the riparian zone will continue in response to requirements identified through monitoring on a 5 yearly basis. This is likely to be a continuation of controlling litter and INNS.

Monitoring

Ecological Clerk of Works monitoring according to 3 year restoration plan - extended to year 30 following review of targets and objectives in Year 3 - to check trajectory to condition requirement.

Output

ECoW report year 3 following initial reporting phase required under the Restoration Plan, then every 5 years to year 30.

Remedial action options

- Increase weed control if undesirable or overly competitive species establish
- Carry out further litter control in bankside habitats.
- Re-seed or plug plant locally where plant establishment fails or would be beneficial.



Himalayan balsam control is a key enhancement to the river corridor habitat



Hedgehog Provision

Rationale

Hedgehogs have seen significant declines over the last few decades, with one of the major factors being loss of habitat. This species is listed under Section 41 of the NERC Act (2006) as a 'Species of Principle Importance'.

New POS and private gardens provide excellent habitat for hedgehogs. While previously these gardens were accessible to this species by virtue of hedgerow planting, a shift in industry practice to hard borders (fences and walls) has inadvertently excluded hedgehogs from this extensive foraging resource. Simply providing a means of access into and between these new gardens and POS can very easily and cheaply increase the amount of habitat available to hedgehogs, as shown in the figure opposite.

Specification

At least one hedgehog access hole (measuring at least **13cm x 13cm**) will be installed in each new garden and boundary fence line, allowing rear gardens and POS (marked blue and yellow opposite) to remain connected.

This will be done by contractors during the fence's installation. These will be either purpose made panels such as those supplied by Jackson Fencing, or be cut into standard fences by contractors during installation. Where concrete gravel boards are used, either purpose built ramps to access holes in the fence panels or underpasses beneath the boards will be made.

All holes will be labelled 'Hedgehog Highway' (see photos below) so home owners know why they are there. This will reduce the risk of holes being sealed.







Bird boxes

Rationale

Ready made nesting boxes can be incorporated into developments to provide shelter and breeding sites for declining garden birds, such as swift, house sparrow, and starling.

Specification

Box Type	No.	Plan ref.
Manthorpe Swift Box	70	Orange dots*

*Each dot represents **3 boxes**.

Although designed to attract swifts, Manthorpe boxes have been shown to also be used by house martins, house sparrows, and starlings.



Location Notes

Boxes installed in groups of three.

Sited as high as possible on new build, ideally directly below the apex of the verge.

Boxes will not be positioned directly above windows, to prevent potential conflict with new homeowners.

Installed

During construction.



Bat boxes

Rationale

Ready made roosting boxes can be incorporated into developments to provide shelter and breeding sites for crevice dwelling bats, such as pipistrelles.



Specification

Box Type	No.	Plan ref.
Integrated Eco Bat Box	40	Blue dots



Location Notes

Sited as high as possible on new builds, ideally directly below the eaves or verges.

Boxes will not be positioned directly above windows, to prevent potential conflict with new homeowners.

A range of elevations have been selected, so as to provide a variety of potential roost environments.

Where possible, boxes have been positioned so as to face onto retained boundary hedgerows or new rear gardens. This fronts them onto favourable habitat and enables boxes to be discreet.

Front elevations, or elevations fronting onto new roads, have been avoided, to avoid illumination from street lights.

Installed

During construction.

