



Biodiversity Enhancement Method Statement

of

Unit 10
Jacknell Road
Dodwells Bridge
Industrial Estate
Hinckley

for

Vortex Optical Coatings Ltd

(08/04/2026)

(Rev A 20/08/2026)

2026-03(04)

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Introduction

1.1 Instruction

Ecolocation was commissioned by Mr Rob Middleton on behalf of Vortex Optical Coatings Ltd to provide a Biodiversity Enhancement Method Statement for an area of land Unit 10, Jacknell Road, Dodwells Bridge Industrial Estate, Hinckley, Leicestershire, LE10 3BS (hereafter referred to as the 'Site'). It was understood that the proposals was for an extension to an existing general industrial unit with parking. All matters reserved except (Access, Layout and Scale). This report is supplied pursuant to addressing the Planning Application Validation Requirements in Part 1 as stipulated by Hinckley and Bosworth Borough Council, to satisfy Condition 5 of Outline Approval 25/00589/OUT.

'5. Prior to beneficial use, A Biodiversity Enhancement Layout shall be submitted to and approved in writing by the local planning authority. The content of the Biodiversity Enhancement Layout shall include the following:

- a) detailed designs or product descriptions for biodiversity enhancements; and*
- b) locations, orientations and heights for biodiversity enhancements on appropriate drawings. The enhancement measures shall be implemented in accordance with the approved details prior to occupation and all features shall be retained in that manner thereafter.*

Reason: To enhance protected and Priority species & habitats and allow the LPA to discharge its duties under paragraph 187d of the NPPF 2024 and s40 of the NERC Act 2006 (as amended).'

1.1.1 Preliminary Site Information

The following information was provided from the Design and Access statement dated June 2025 produced by Gba&e: *'The existing building comprises a steel framed structure with profiled steel-sheeted roof and similar grey cladding to walls above door head height with red brickwork below and is currently used by Vortex Optical Coatings Ltd for storage. A security gate currently leads to a private car park associated with the use of this site. The site itself comprises hard surfacing to the edge of a surrounding planted bund on two sides (N & W)...adjoins other sites in similar uses (E & S) ...'*

1.1.2 Site location

The Site (grid reference SP 39701 93908) was located on the edge of an industrial site some 2.63km west of the centre of Hinkley and separate 2.3km southeast from Higham on the hill arable field and small pockets of woodland.



Figure 1: Red Line site boundary.

1.1.3 Proposed Plans

The proposal is to extend the industrial unit to both west and north with an additional 608m² gross external floor area and improve existing parking provision by doubling formally laid-out capacity. Overnight parking spaces are provided with turning space, together with loading/unloading at the two bays provided SITE LOCATION as Existing & BLOCK PLAN as Proposed 4884/01.

1.2 Biodiversity Enhancement Method Statement Purpose

This document aims to provide the information required to ensure that the proposed biodiversity enhancements and mitigations are established and created appropriately and that the features are managed suitably for biodiversity.

A suitably qualified ecological consultant will confirm the implementation of all installations to ensure suitability for the given species.

Responsibility for the retention, inspection, maintenance and replacement of all biodiversity enhancements will be held by the applicant (also being the landowner) and will novate via any future land transfer to future owner(s).

Turn over leaf for proposed site plan.

Proposed Site Plan

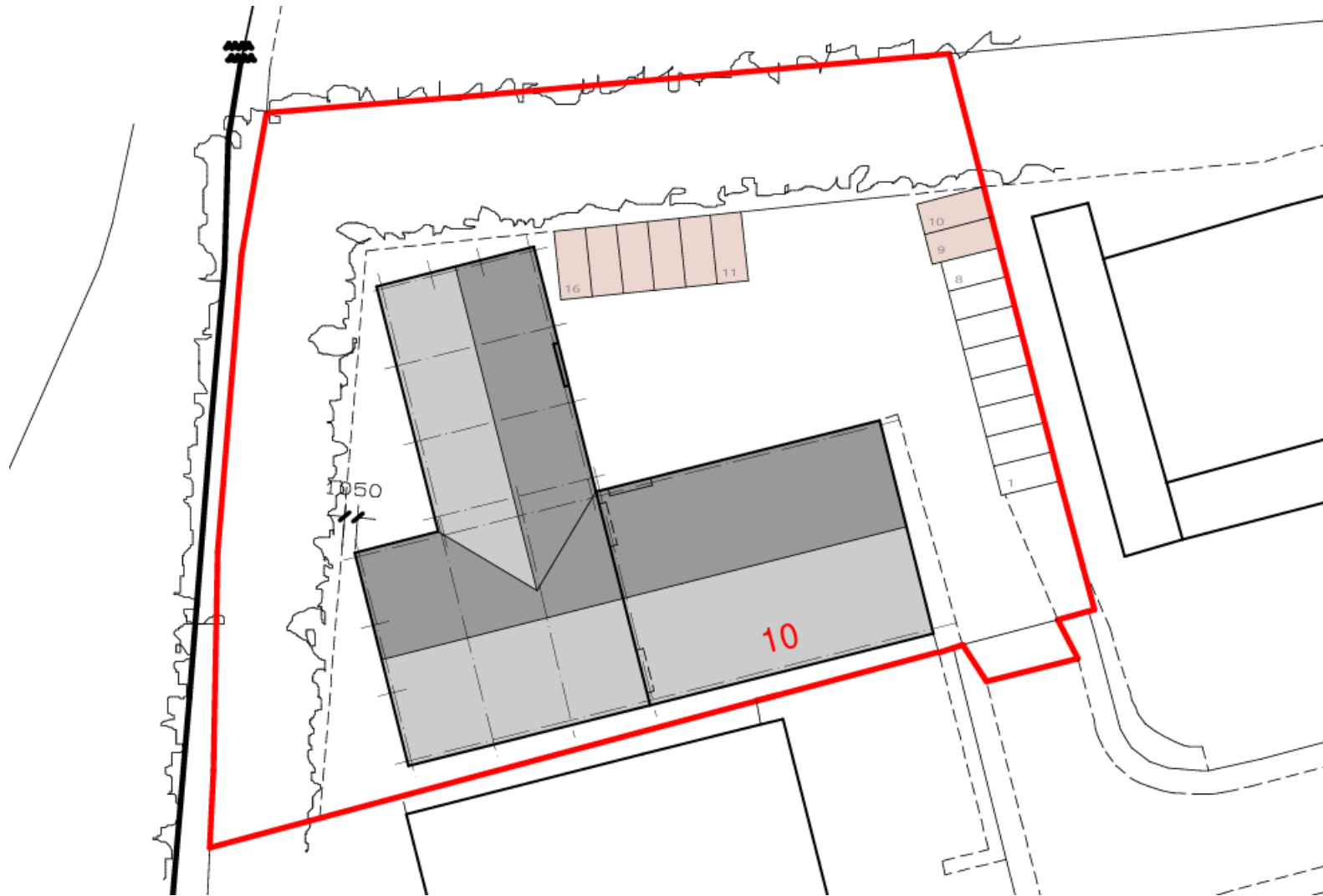


Figure 2: SITE LOCATION as Existing & BLOCK PLAN as Proposed 4884/01.

Installation Guide and further information

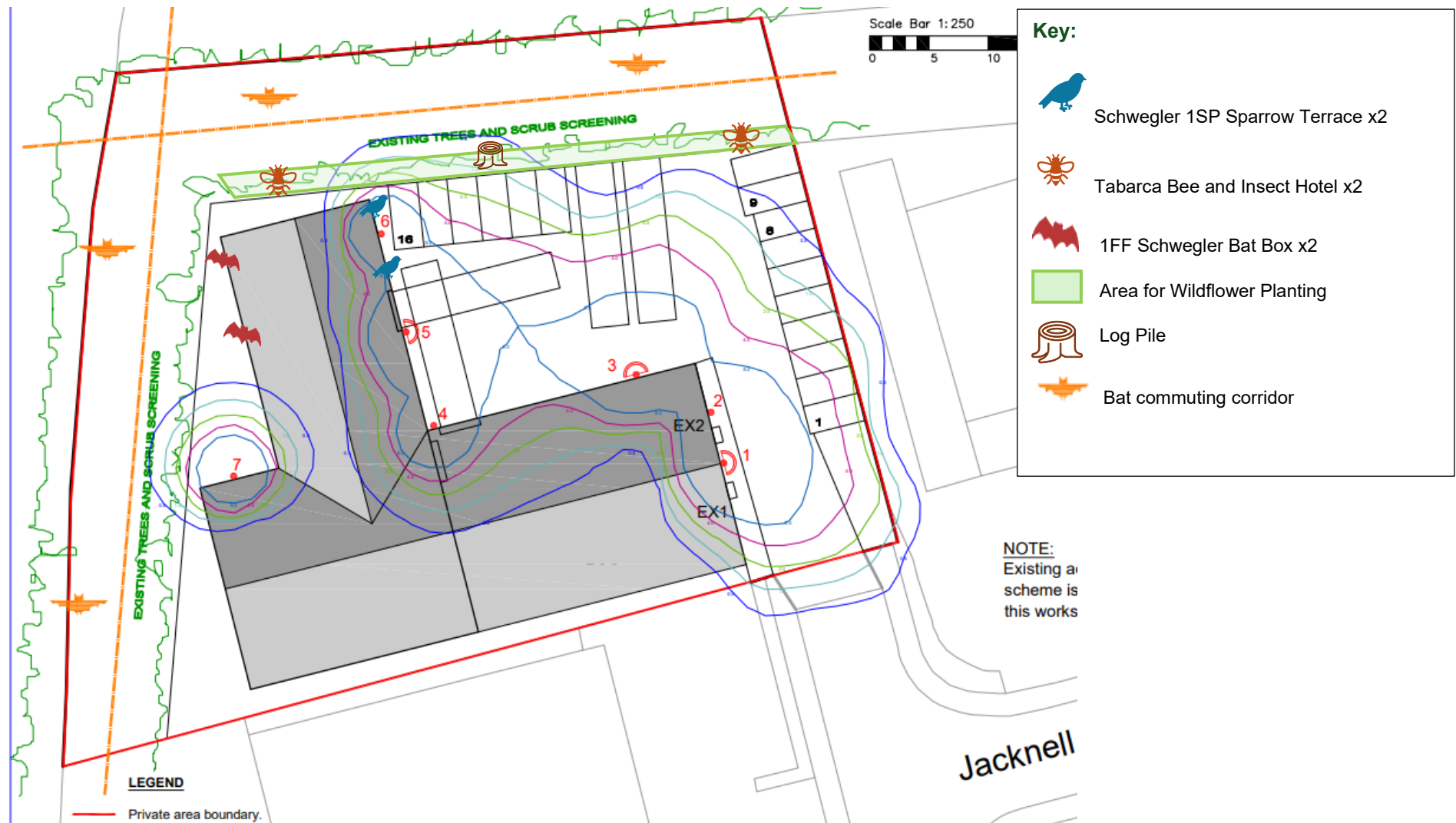
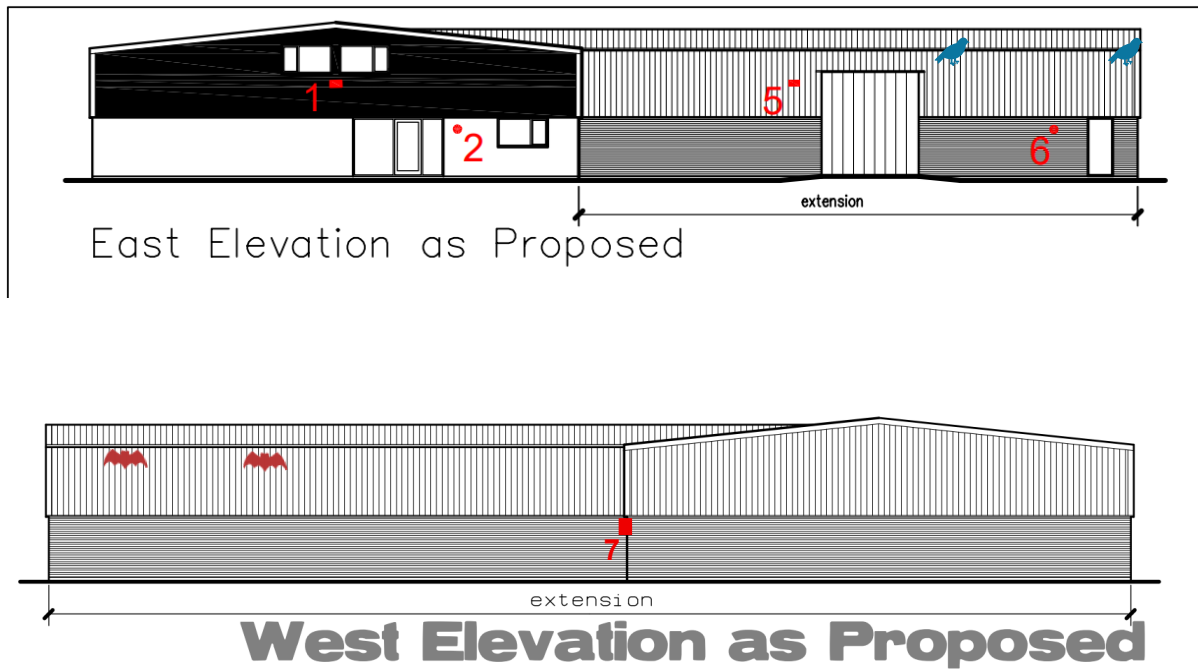


Figure 3: Biodiversity location and light plan.



The nearest external luminaire to the proposed house sparrow terrace is a Gemma Portchester Hood 15W LED bulkhead (2700k, extra warm white), located approximately 3.0m horizontally and 1.2m vertically below the bird box on the same elevation.



Figure 3a: Existing site, sunset, the proposed location of the bat boxes was considered to be a sufficient distance from the south building and would not be shaded from the sun. Yellow line indicates proposed grassed area.

The Outdoor lighting report, by Highway Lighting Solutions Ltd, Dated June 2026 and associated drawing no. HLS-1018 (see appendix) was kindly provided for use in this report. The manufacturer photometric data confirms the maximum luminous intensity of 0cd/klm at 90 degrees, which is a full cut off with no emission at or above the horizontal plane and an upward light ratio of 0%. The nest box entrance sits approximately 22 degrees above the horizontal relative the luminaire and therefore receives no direct illumination. The lighting design is considered compatible with the nesting features and has further PIR sensors. The bat boxes were outside the range of light spread from light fixture no.7 (Gemma Portchester Hood 15W LED) and would not be adversely affected or disturbed by the lighting. The report consisted of luminaires specified at a warm colour temperature of 2700K and fitted with accessories to control upward lighting back spill to protect commuting bats. The lighting was detailed to be on PIR sensors. The mitigation was considered for the scheme in accordance with the Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/23 Bats and Artificial Lighting.

Proposed Feature Long Term Maintenance and Replacement

The use of woodcrete in the proposed features, dramatically reduces the intervention and replacement required for both bat and bird boxes.

All units will be fixed using stainless steel or other non-corroding fixing appropriate for the substrate and installed in accordance with the manufacturer's instructions.

Annual inspection of the boxes will be carried out from ground level using binoculars or super zoom cameras. The inspection will note the date and the condition of the box including the security of the fixing and external condition, and where applicable if the box was in use evidence, from staining, droppings, or nest material in regard to bird boxes. The boxes will be inspected outside of the breeding bird season of March to August and where a terrace is found to be in active use by breeding birds, no works will be undertaken until the young have fledged and the nest is no longer in use. Once confirmed to be not in use by a suitably qualified ecologist, the bird boxes will be cleaned out. This will be undertaken on an annual basis. Cleaning will consist of the removal of old nest material and treatment with boiling water only. The box must be returned in a dry state to the designated location before the start of March in any given year.

In respect of bat boxes, these will not require cleaning out due to the design, allowing droppings to fall out of the box. No internal inspection or reposition of the bat box will take place, other than by a suitably licensed ecologist and only if strictly necessary.

Insect hotels require annual spring inspections to clear vacated tubes, and trim surrounding vegetation, with full structural replacement occurring every 3 to 5 years. Disposable straws and reeds must be replaced annually after insects emerge to prevent parasite and mould build-up, strictly avoiding chemical cleaners.

Where a unit is found on inspection to be damaged, insecure, or degraded, it will be repaired or replaced on a like for like basis with the same or equivalent product in the same location. Bat and bird boxes must be replaced or removed for repair under the supervision and guidance of a licensed bat ecologist (for bat boxes) or suitably qualified ecologist (for bird boxes) only between the months of September and April in a given year. All maintenance and monitoring to be recorded and saved in a suitable filing system and held for a minimum duration of 5 years.

WILDCARE Woodcrete Terrace Nest Box

The woodcrete nest box must be placed at least 2 meters off the ground, at a height where cleaning and maintenance can be carried out safely. It must be facing north or east to avoid prevailing wind, rain and direct sunlight, and it must not be above any windows or doors. This nest box has a 32mm entry hole and will attract sparrows. The time frame for the installation, must be timed to be outside of the nesting bird season (typically 1st March to 31st August).

Cleaning and maintenance of the nest box must only happen once breeding season has finished. The nest box is made from Wood-crete (a durable mixture of wood and concrete), which provides excellent thermal insulation and longevity. They will last at least 20-25 years.



Figure 4 Woodcrete Nest Box ¹.

1 - <https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes/sparrow-terrace.html>

1FF Schwegler Bat Box with Built-in Wooden Rear Panel

Figure 3 shows the suitable locations for the recommended bat boxes for the proposed development, located on the southwest elevation of the proposed extension, to receive the most hours of sunlight. The placement avoids installation above windows and doors, thereby reducing the likelihood of predation by cats. Bat boxes must not be located near streetlights. The access slot of the bat boxes is 24 x 12 cm (L x W), to avoid birds using them. The box must be installed at a minimum height of 3 metres and provide a clear flight path for access and exit. Woodcrete units are effectively management free in normal use, are resistant to weathering, and carry a manufacturing warrant of approximately 20 years.

- Weight: 9.5 kg
- Material: Schwegler Woodcrete
- Supplied with: Galvanised steel hanger and aluminium tree-friendly nail



Figure 5: Woodcrete bat Box ².

2 - <https://www.nhbs.com/1ff-schwegler-bat-box-with-built-in-wooden-rear-panel>

Tabarca Bee & Insect Hotel

Figure 3 represents the suitable locations for the recommended bee and insect hotels for the proposed development. Bee and insect hotels should be installed on a south or south-east direction, at a height of 1-1.5m, on suitable existing established trees, and with no vegetation obstructing holes. It is recommended that the hotels are located within 100m of flowering habitat to provide a food source and ensure the feature is used. The target species most likely to use the hotels are a variety of solitary bee species, including mason bees, leafcutter bees and harebell bees.



Figure 6: Tabarca Bee and Insect Hotel ³

3 - <https://www.birdfood.co.uk/tabarca-insect-hotel>

Consideration could be given to creating **log piles** within areas of open green space to provide suitable habitat for invertebrates and shelter for amphibians, reptiles and small mammals. These should be sited in shady places, and the lowest logs should be buried a few centimetres into the soil to keep them damp.



Figure 7: Log pile

2.0 Biodiversity Enhancement Area

Habitat Creation

Habitat creation is where one habitat type is replaced by another habitat type and includes:

- a loss of baseline habitat that is replaced with another; and/or
- a change in broad habitat type such as a change from ruderal to grassland.

The habitats listed below will be created as part of the proposals. To achieve this, detailed nutrient testing of the soil may be required to ensure the appropriate habitat type and condition can be established. It should be noted that target habitat may be subject to change, based on the results of soil nutrient testing:

- 270m² of 'other neutral grassland' (condition: moderate); flower-rich grassland to replace ruderal vegetation and bareground at the north of the site.
- 7no. small individual native trees; urban/rural (condition: moderate);



Figure 8: Biodiversity Enhancement Planting

2.1 Baseline

The enhancement area designated for wildflowers and tree plantings was approximately 270m² of disused ground, currently dominated by ruderal, ephemeral and poor condition bramble scrub (*Rubus fruticosus agg.*). Successful establishment of a wildflowers and trees will be subject to soil and seed bed preparations outlined below.



Figure 9: Strip of ruderal vegetation to be enhanced to wildflower and tree planting area north boundary.



Figure 10: Northwest boundary proposed wildflower and tree planting.

Biodiversity enhancement will be undertaken, integrating over new plantings at the north boundary of the site, these enhancements directly support the Local Nature Recovery Strategy by strengthening existing green infrastructure and creating wildlife corridors. The introduction of over native trees will provide nesting and foraging on the site once established. Furthermore, the creation and the establishment of a wildflower grassland using a suitable mix such as Shade, Hedgerow & Woodland Wildflower Mix provided by amenity choice. These enhancements measurably improve the site's ecological value and provide habitat for many species including small mammals, birds, reptiles and amphibians.

These are the key flowers from the mix:

- Red Campion
- Common Knapweed
- Hedge Garlic
- Selfheal
- Foxglove
- Yarrow
- Wood Avens

Suitable Grass Species:

- Crested Dogstail
- Tufted-hair Grass
- Wood Meadow Grass
- Chewings Fescue

For further information and details for the seed mix see: [Shade, Hedgerow & Woodland Wildflower Mix | Amenity Choice](#). More details on wildflowers and their management can be found [here](#).

Grassland Creation; Condition

Other Neutral Grassland (Moderate Condition): in order to achieve 'moderate' condition for this habitat, the following condition assessment criteria need to be met; years to targeted condition: 5:

A minimum of 9 native plant species (grasses, sedges and wildflowers) per square metre on average, created or enhanced through:

- soil testing to check habitat will be on neutral, low fertility soils, informing the grassland design and species suitability.

- sowing a species-rich, native grassland seed mix with wildflowers, or by spreading green hay from a local donor site providing appropriate species for the location.

-Wildflowers (and may include sedges) growing over at least 20% of the habitat area.

- Less than 30% of grassland covered by perennial ryegrass (*Lolium perenne*) and white clover (*Trifolium pratense*) combined.
- A diverse range of native grasses and wildflower species managed to prevent more dominant species taking over the grassland.
- Less than 5% scrub and less than 20% bracken cover.
- No invasive non-native plant species as listed on Schedule 9 of the Wildlife and Countryside Act (1981).
- Protection from physical damage so that bare ground and other signs of damage (e.g. excessive littering) covers max., 5% of the total area.

Grassland subject to excessive damage through regular footfall, such as in car parks or in front of building entrances, is unlikely to achieve this habitat type.

Preparation

Prior to works, representative soil samples must be taken and analysed for phosphorous, nitrogen, pH and texture. The soil assessment must identify the pH of the soil to be within the specified range of 5.5-7.5. Should the soil not be within the range and/or high levels of phosphorous identified, a more suitable seed mix may be considered or remediation to improve the soil via importation of a subsoil; or deep cultivation or inversion or the removal of the upper soil and replacement with more suitable top soil.

The existing ruderal vegetation will be cut and removed from site. All vegetation will be cleared outside of the breeding bird season (March to August inclusive) and precautionary methods to safeguard nature will be used. This will include a phased two-stage cutting to a height of 200mm and then again to 50mm, working in a single direction towards the retained vegetation. No works, material storage or vehicle movements will encroach on the area which must be fenced to protect the retained and proposed trees in accordance with BS 5837:2021. The soil will be cultivated to a depth of 150mm removing the stones and debris, the seedbed will be levelled and then firmed and raked to produce a fine tilth.

Establishment

Sowing of the seeds will be undertaken between September and October, or between March to May. Bare soil must be scarified for seed spreading. The sowing must be done in favourable conditions, avoiding waterlogged, frost or drought conditions. The suppliers (Amenity Choice) seed mix will be sown following their specification and guidance, at a sowing rate of 5g/m². As per the guidance stated on Amenity Choice website for the chosen seed mix *"because sowing rates for wildflower seed are low, it is usually helpful to mix the seed with a carrier material such as slightly damp sand. Press the seeds into the soil using a roller or the back of a rake to ensure good seed to soil contact. Keep the soil surface moist but not wet until the seeds have germinated AND established. Irrigate slowly and gently to avoid disturbing the seeds"*.

2.1 Management and Remediation

Mowing

Mowing and removing the clippings can be used to replicate the process of hay cutting and grazing. It is important to remove clippings to avoid nutrients being returned to the soil. Soils for wildflowers are usually low in nutrients to encourage species diversity.

Suggested mowing regime											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Leave uncut unless growth is vigorous		Cut and collect clippings	Allow to flower and seed				Cut and collect clippings	Leave uncut unless growth is vigorous			

Figure 11: Mowing Regime from Amenity Choice shade hedgerow woodland wildflower mix guidance 2026

As part of ongoing management, the wildflower grassland habitat should be cut and collected annually to a height of approximately 40–60mm after flowering in July and August, using methods such as strimming. This maintains species diversity and prevents grass species from becoming dominant. If the sward grows too coarse, an additional cut may be carried out in March. To allow plants to flower, no cutting should take place between April 1st and mid-August. Additionally, an annual inspection should be conducted to identify and appropriately remove any invasive species.

Potential Risks and Remedial Measures

Invasive species spread; grassland may encourage the establishment of invasive species. Remedial measures will be to monitor and remove any invasive species that are identified. Sward not matching UKHab description and/or not achieving the condition criteria.

Trigger: Monitoring survey identifying the above issues. The remedial action would be to consider resowing with appropriate ground treatment prior to sowing of seed mixes as well as to review the mowing regime and consider supplementary seeding or plug planting. The area as aforementioned, will be fenced, this can be by a low timber knee rail so the extent is clear, and the sign postage will mark the area for biodiversity use only.

Individual Trees

Planting will comprise small native trees, locally appropriate to the site. The indicative species list includes:

- Bird Cherry (*Prunus padus*)
- Hornbeam (*Carpinus betulus*)
- English Oak (*Quercus robur*)
- Silver Birch (*Betula pendula*)

In order to achieve 'moderate' condition for this habitat, the following condition assessment criteria need to be met;:

- native tree species;
- protected from damage caused by human activities, such as inappropriate management or vandalism;
- the tree can grow to at least 75% of its expected canopy area in relation to its age, height and species because it is in an area where there is enough space to grow and it is not pruned regularly.

Habitat Establishment

These will be planted as bareroot stock 'whips' during their dormant season, which is typically from November to March, in the absence of heavy frost. The tree pits should be square rather than round to prevent the roots girdling as the tree grows. Tree pits should be at least three times wider than the root ball of the tree to allow sufficient room for growth and the pit not much deeper than the root ball upon planting. Trees must be protected with tree guards and supported with stakes to ensure they are able to grow to maturity.

A number of trees will also be retained. Regular checks should be carried out for signs of disease. If any disease is detected, advice from an arboriculturist should be sought to determine the appropriate treatment. Pruning should only take place outside the bird nesting season, avoiding the period from March 1st to August 31st

Tree saplings must be kept well-watered during establishment, with weed control maintained at the base.

Tree guards of a biodegradable type should be considered to protect saplings from rabbits, with inspections twice a year to remove weeds and any soil buildup inside the tubes. This should continue for the first three years, after which the guards can be removed once the tree is well established.

Tree stakes and ties must be checked annually and after strong winds. Regular checks should be carried out for signs of disease. If any disease is detected, advice from an arboriculturist should be sought to determine the appropriate treatment.

Pruning should only take place outside the bird nesting season, avoiding the period from March 1st to August 31st. Where possible, trees should not be cut until February to preserve valuable winter food for overwintering birds. If a tree fails to establish, replacement planting will be required within the first 5 years.

Potential Risks and Remedial Measures: Planted trees failing to establish;

Trigger: Assessment of condition and structure of new tree planting identifying fail.

Remedial measure: Assessment of health and remedial action from arboriculturist and removal and replacement of tree if required.

Monitoring

The table below sets of the proposed habitats and actions required over the monitoring period.

Habitat	Action	Time
other neutral grassland (wildflower seeding).	Weed control.	As required.
	Cutting and gathering of wildflower habitat during the first year.	May to October.
	Cutting and gathering of wildflower habitat on a yearly basis.	July/August.
Individual trees.	Check stakes and ties monthly, adjust twice annually. Replace any damaged or broke ties.	12 times a year (through years 1 to 5).
	Replace any failed or damaged trees.	As required.
	Formative assessment of condition and structure of new tree plantings.	Once a year for all years.
	Watering.	As required.
	Formative prune to maintain health.	N/a (Years 5).

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The Portchester Hood 15W is a classic and stylish IP65 – IK08 rated vandal resistant circular LED bulkhead.

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Portchester Hood 15W LED Bulhead

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