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Ecological Enhancement Strategy

Land to the west of Nursery Mews, Gravesend, Kent, DA11 7BU

March 2026

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Project: Land to the west of Nursery Mews, Gravesend, Kent, DA11 7BU

Date: 30/03/2026

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Version: 1

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1.0 Non-technical summary

1.1 This Ecological Enhancement Strategy has been prepared to discharge planning condition 9 of Planning Permission 20241000.

1.2 Ecological enhancements include the installation of swift bricks, implementation of a hedgehog strategy and lighting strategy, and proposed planting.

2.0 Introduction

Purpose of the report

2.1 The Ecological Enhancement Strategy aims to ensure it is successfully established and functioning as designed. The objectives include the following:

- Purpose and conservation objectives for the proposed enhancement measures;
- Detailed designs to achieve the stated objectives;
- Location of the proposed enhancement measures;
- Persons responsible for implementing the enhanced measures;
- Details of initial aftercare and long-term maintenance.

Qualifications and Competence of the Author

2.3 The ecologist has over 25 years of conservation experience. They are the founder of a new conservation charity and previously worked as Head of Conservation for a Wildlife Trust, Director of Studies for the Field Studies Council and Course Director and Lecturer for the University of Essex and Cambridge.

2.4 Respected organisations have nationally recognised the ecologist and they have been awarded various fellowships for their *outstanding or significant contribution* to these disciplines, including conservation and biodiversity for the delivery of landscape-scale conservation projects.

2.5 They are currently on the external advisory board for the University of Essex and represent the Chartered Institute of Ecology and Environmental Management at the University of Southampton, judge national ecological projects and are an ecological expert for the Southwood Foundation.

3.0 Ecological Enhancement Strategy

Purpose and conservation objectives for the proposed enhancement measures

3.1 To enhance biodiversity in accordance with the National Planning Policy Framework (NPPF).

Swift Bricks

3.2 Swifts are currently on the UK Red List of conservation concern as their numbers have declined dramatically due to lost habitat. A recommendation of one brick per two dwellings will allow for the swifts' colonial needs. Sparrows, who are also a red-listed species, can utilise these bricks as well. Sparrows are social birds and observation of their nesting habits has shown that they often prefer swift bricks over sparrow terraces¹. Installing swift bricks will provide space for both species and is a cost-effective ecological enhancement. Three will be installed during development above slab level, using either the Ibstock Integral Swift Nest Brick or Action for Swifts S Brick (Appendix 2).

3.3 This location will provide sufficient opportunities for swifts and sparrows to feed. Swifts have a large foraging radius and feed on insects, whereas sparrows primarily eat seeds, which means they can both utilise the surrounding grassland and pockets of woodland. There is also a pond nearby where swifts can feed off low-flying aquatic insects during wet weather.

3.4 The nest bricks will be included within the framework of the build and will be positioned on the north-facing outer wall of plots 1, 2 and 3 (Appendix 1), which will naturally provide protection from strong sunlight and wet winds.

3.5 The bricks will be installed as close as practical under the eaves roofline ideally 4m above ground level and not above windows or doors. A clear flightpath should be established, which will be achievable as the bricks are not directly blocked by buildings or other permanent structures. Swift bricks require very little maintenance as swifts do not defoul the area and only bring in a small amount of nesting material which is then reduced by invertebrates over winter.

3.6 Swifts are gregarious birds that like to nest, feed and migrate in groups. They mate for life and like to return to the same nesting site year after year, so having these nest bricks as a permanent fixture made with durable materials will cater to this. Other small cavity-nesting birds may also use the bricks if not taken by swifts and sparrows, such as starlings.

Hedgehog Strategy

3.7 Hedgehogs regularly occur in urban environments and more rural locations and may use the site for foraging and shelter, with their main active period occurring between April and

¹ Swift Bricks the 'universal' nest brick, 2022

November. As a result, they can benefit from sympathetic habitat management, particularly in built-up areas.

3.8 Caution is needed in case of nesting hedgehogs when clearing the ground before development, particularly piles of deadwood or leaves and areas of long grass or dense vegetation. Areas should be cleared on rotation with scrub left to provide nesting habitat and cover. If this is not possible, piles of dead wood and brash piles can be created in other areas around the site to mitigate the removal of suitable nesting areas.

3.9 Hazards such as open holes, pits, ditches, ponds and drains should be covered over or fitted with ramps to allow for escape. Netting should be kept off the ground to avoid entanglement and any slack netting tied up.

3.10 Road crossing points will be provided at all entrances to the site. The crossings are provided at carriageway level with DDA-compliant dropped kerbs serving them from the pavements, such that the kerb around the site's boundary will not be a continuous barrier.

3.11 To ensure hedgehogs can freely access the site and move between gardens and other green spaces, four hedgehog highways (13x13cm holes) (Appendix 3) will be created at the base of internal fences towards the north of the rear gardens (Appendix 1). These hedgehog highways allow hedgehogs to move safely in search of food, mates, and nesting sites between the gardens. Implementing these access points is crucial for maintaining connectivity between habitats, which is essential for the survival and health of hedgehog populations.

3.12 These access holes should be evenly distributed along the site's internal fences and should remain unobstructed and be regularly checked for any blockages or damage.

Hedgehog House

3.13 Where there is a lack of available, natural shelter, a permanent structure such as a hedgehog house provides hedgehogs with sufficient nesting opportunities. Hedgehog houses must be placed in quiet, shaded areas with cover and with the entrance facing away from prevailing winds. Two 'Natural Rattan Hedgehog Igloo Shelters' (Appendix 4) will be placed in Pocket Parks A and B (Appendix 1), which will be covered by the proposed trees. Dried grass and leaves can be added into the Igloo for use as nesting material. The Igloo can additionally be used for hibernation if a brushwood cover is placed over the shelter in winter. Both the hedgehog highways and hedgehog houses should be installed prior to first occupation.

Sensitive Lighting Strategy

3.14 A sensitive lighting strategy will be implemented to prevent artificial light spill from illuminating dark corridors/areas of vegetation that could be used by nocturnal or crepuscular species. The lighting strategy will incorporate the following measures:

- Use only the minimum amount of light needed for safety.
- No artificial light or light spill onto proposed trees or hedgerows.
- All external lighting will use motion-sensitive timers to prevent unnecessary lighting. The duration of the timers should be kept to 1 minute to limit the duration of lit periods.
- A warm white or amber LED luminaire (2700K) with a sharp cut-off should be used due to its lower intensity, good colour rendition and dimming capability. The luminaire should feature a peak wavelength higher than 550nm to avoid the blue spectrum of light most disturbing to bats.
- A specialist downward directional luminaire should be used. Directional lighting will use LED bulbs and angle the light fully downward to avoid an upward tilt. A hood should be installed on the lights to ensure no upward light distribution. This will include any bollards.
- Narrow spectrum lighting should be used to reduce the range of species affected by lighting. The lights used should emit only minimal ultraviolet and blue light, to avoid attracting insects.
- Any lighting within the designated parking area will not exceed 1 lux.
- Lighting should be mounted at the lowest practicable height to minimise light spread.

Proposed Planting – Urban Trees

3.15 Trees in urban areas can support rich biodiversity, provide connectivity between established reservoirs, and contribute toward maintaining viable urban populations within these sites. Native species provide the greatest benefit for biodiversity due to their adaptation to local conditions and their support of native wildlife.

3.16 The suggested tree planting includes species of ecological value that will enhance the site for biodiversity, with locations noted in Appendix 1. Native species include field maple (*Acer campestre*), wild cherry (*Prunus avium*) and bird cherry (*Prunus padus*). Field maple provides foraging opportunities for birds through the production of seeds, has a dense

structure which can be used for nesting, and supports invertebrates through the decomposition of its leaf litter. It is especially tolerant of pollution and urban stresses, making it particularly suitable for residential developments. Both the wild and bird cherry have early spring blossoms, providing valuable nectar and pollen sources for pollinators such as bees, as well as supporting a wide range of bird species through fruit production.

3.17 Non-native species include *Amelanchier x grandiflora* 'Ballerina', *Cornus kousa*, *Cotinus coggygria* 'Royal Purple', *Cercis canadensis* 'Forest Pansy', and *Ginkgo biloba*. Species such as *Amelanchier x grandiflora*, *Cornus kousa* and *Cercis canadensis* further enhance seasonal interest within the landscape and offer blossom and berries. *Ginkgo biloba* and *Cotinus coggygria* provide structural diversity within the landscape, are aesthetically valuable, and contribute to the urban resilience of the site. For species list, see Planting Plan – Ginger Landscape (Drawing No. L004, Rev F). Tree planting will be implemented prior to occupation.

Proposed Planting – Shrubs/Bulbs

3.18 Shrub planting has been proposed to enhance structural diversity within the site (Appendix 1). Planting shrubs on-site can maximise the connectivity and ecological permeability of the area, increasing the ability of species to move safely between green spaces, gardens and nearby habitats.

3.19 Native species of local provenance offer the biggest benefit to biodiversity and should be utilised where possible. Suggested native species include holly (*Ilex aquifolium*), common dogwood (*Cornus sanguinea*), hawthorn (*Crataegus monogyna*), dog rose (*Rosa canina*), and common wayfaring tree (*Viburnum lantana*). The proposed planting includes a diverse mix of native and ornamental shrubs designed to maximise biodiversity value.

3.20 The suggested species will create year-round structural and seasonal diversity, providing shelter, nesting opportunities, and foraging resources for a wide range of species including birds, invertebrates, small mammals and pollinators. The planting should reflect the indigenous landscape character of the area and use a mixture of species to stimulate natural plant community structures and create a mosaic of microhabitats. For species list, see Planting Plan – Ginger Landscape (Drawing No. L004, Rev F).

3.21 Bluebell (*Hyacinthoides non-scripta*) is also proposed within the area to the south of the parking spaces for plots 1-4. This is a native species which supports early emerging pollinators as it produces early-season nectar.

3.22 Shrub planting should be implemented prior to occupation. A 5-year establishment period is required, with failures replaced like-for-like in the next available planting season. Bi-annual shrub trimming should be carried out to promote bushy regrowth in years 1-5. This should be conducted outside the general breeding bird season (March-August inclusive).

Proposed Planting – Herbaceous

3.23 Herbaceous planting is proposed within both Pocket Parks A and B (Appendix 1), which should be undertaken prior to occupation. This includes a range of nectar-rich species such as *Nepeta faassenii*, meadow cranesbill (*Geranium pratense*), dusky cranesbill (*Geranium phaeum* 'Album'), *Achillea* 'Cherry Queen' and 'Terracotta', and *Bistorta amplexicaulis* 'Alba', which will provide continuing foraging resources for bees, butterflies, ground-feeding birds and other pollinating insects throughout the growing season, and areas of refuge for beetles. Additional species including ornamental grasses and flowering perennials will contribute to structural diversity, creating a variety of microhabitats, to support soil invertebrates, fungi and other wildlife, whilst also improving the aesthetic and ecological value of the boundary habitats. For species list, see Planting Plan – Ginger Landscape (Drawing No. L004, Rev F).

Native Planting – Hedgerows

3.24 Hedgerows are linear habitats and a feature almost unique to the British Isles. Planting hedgerows on-site can maximise the ecological permeability of the area, connecting the site to the wider landscape. This is particularly important in fragmented urban landscapes where continuous habitat is limited.

3.25 Native hedgerows are proposed to enhance the site's ecological value and strengthen habitat connectivity by acting as wildlife corridors, whilst also functioning as a boundary and screen between dwellings. The species proposed include hornbeam (*Carpinus betulus*), beech (*Fagus sylvatica*), and yew (*Taxus baccata*) which will provide a diverse and structurally varied habitat that supports a wide range of wildlife. The dense branching structure of hornbeam and beech will create suitable nesting and sheltering opportunities, while the evergreen yew will provide year-round cover and protection. For species list, see Planting Plan – Ginger Landscape (Drawing No. L004, Rev F). Planting of these hedgerows should be prior to occupation.

4.0 The person responsible for implementing the enhanced measures

4.1 The contractor will facilitate all enhancement measures prior to completion of the development. The occupiers/landscape contractors will retain and manage the landscape management areas in accordance with this Ecological Enhancement Strategy, in perpetuity.

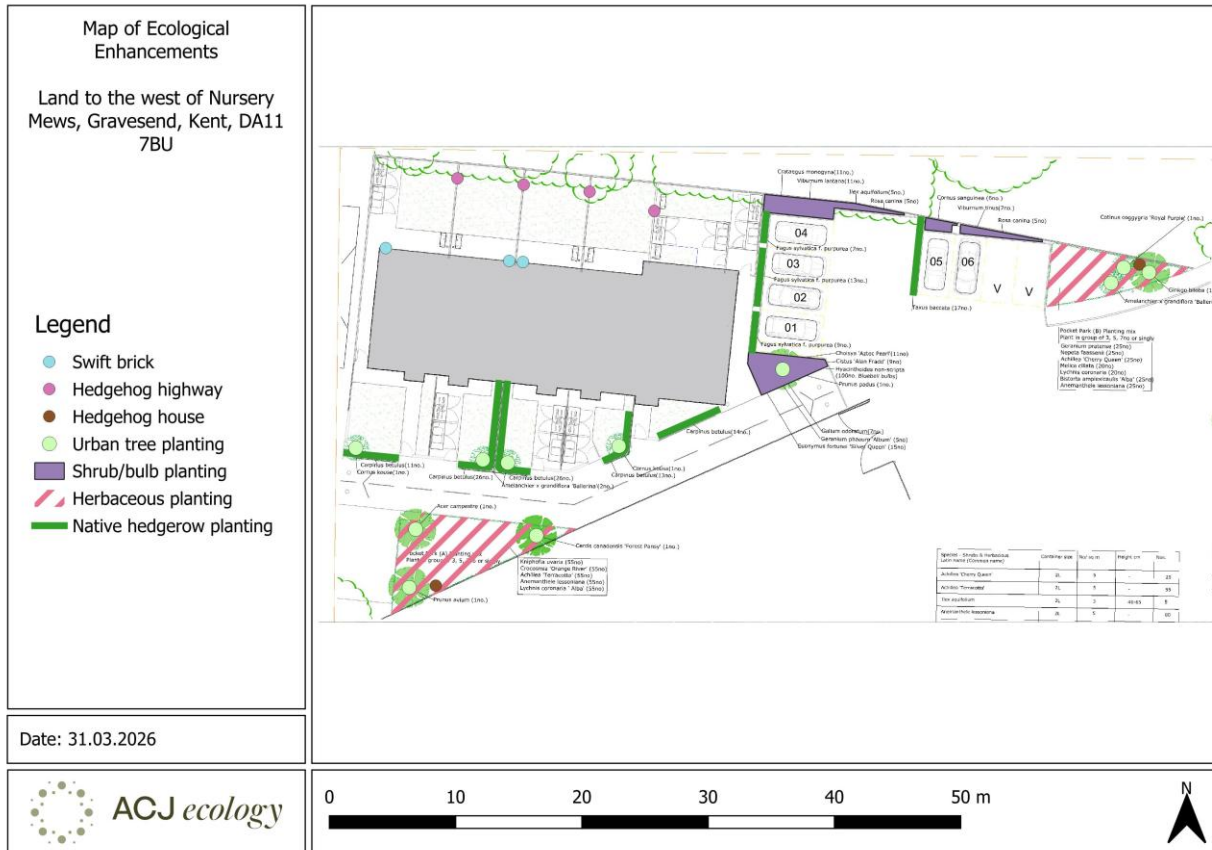
5.0 Ongoing Monitoring and Remedial Measures

5.1 The enhancement measures will be inspected at installation to ensure compliance with this strategy. The occupiers/landscape contractors will periodically check the ecological enhancement measures to ensure they remain secure and functional, with repairs or like-for-like replacement undertaken where necessary.

6.0 Compliance

6.1 This Ecological Enhancement Strategy provides the location, height, orientation and specification of all ecological enhancement features, with reference to plan 'L004 Rev F – Planting Plan' in accordance with Planning Permission 20241000, the principles of the National Planning Policy Framework (2024) and Policy CS12 of the Gravesham Local Plan Core Strategy 2014, which aims to protect and enhance a multifunctional linked network of green spaces, wildlife stepping stones and corridors.

Appendix 1: Map showing location of ecological enhancements

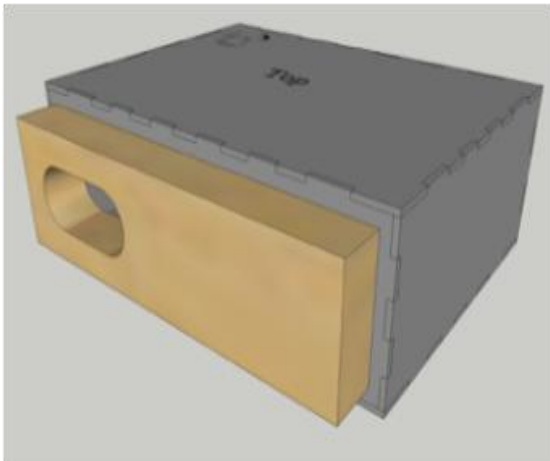


Appendix 2: Swift Bricks

Ibstock Integral Swift Nest Brick



S Brick – Action for Swifts



Appendix 3: Hedgehog Highway

Hedgehog Highway/Gate/Fence/Hole/Tunnel



Appendix 4: Hedgehog House

Natural Rattan Hedgehog Igloo Shelter

