

Scheme of Ecological Enhancement

For: Construction of 5no flats, parking, landscaping, and associated works

At: Site of 2, Tregarn Road, Langstone, Newport, NP18 2JS

Local Planning Authority Reference: 23/0418

Introduction

This Scheme of Ecological Enhancement has been prepared to satisfy the pre-occupation condition attached to planning permission ref. 23/0418, which requires submission and approval of ecological enhancement details before any flat is occupied. The purpose of the scheme is to demonstrate how biodiversity will be enhanced on-site in accordance with Policy GP5 of the Newport Local Development Plan (2011-2026), Planning Policy Wales (Edition 11), and Section 6 of the Environment (Wales) Act 2016. These regulations place a duty on developers and public authorities to seek to maintain and enhance biodiversity and promote ecosystem resilience. This document outlines the ecological features to be implemented as part of the approved development, sets out the rationale behind each measure, and provides details of timing, installation, and ongoing management. It builds upon the approved landscape layout to ensure that the scheme delivers tangible and long-term ecological benefits that integrate sensitively with the site's design and setting. The overarching objectives of this enhancement scheme are to create a development that contributes positively to the local ecological network, provides new resources for birds, bats, and invertebrates, and establishes planting that benefits pollinators and small mammals throughout the year. The enhancements proposed are simple but effective, low in maintenance requirements, and proportionate to the scale and nature of the development.

Site Context and Ecological Potential

The site lies within a well-established residential area on Tregarn Road, Langstone, which features mature garden vegetation, scattered trees, and hedgerows typical of suburban fringe habitats. These areas collectively support a range of common wildlife species, including nesting birds, foraging bats, hedgehogs, and various invertebrates. Although the site itself was largely developed, with limited ecological value prior to construction, its location within a wider mosaic of private gardens and

green infrastructure presents an opportunity to strengthen ecological connectivity and enhance the diversity of species able to use the site.

The approved landscaping scheme (Drawing No. OGA08, dated August 2022) already incorporates ornamental beds, hedgerows, and soft landscaping areas, forming a suitable basis for further ecological enrichment. The enhancement measures described below are designed to complement these existing proposals, creating a cohesive and ecologically functional landscape that blends biodiversity with visual amenity.

Proposed Ecological Enhancements

1. Bird and Bat Boxes

- Bird and bat nesting opportunities are increasingly scarce in modern built environments, largely due to the absence of suitable cavities in new construction materials.
- To counter this, a series of artificial nesting and roosting features will be integrated into the building fabric.
- Two bird nesting boxes, suitable for species such as house sparrows or swifts, will be installed on the east and south elevations of the building.
- These will be positioned at least 3.5 metres above ground level and away from windows, to reduce disturbance and provide safe nesting spaces.
- The boxes will be of high-quality, weather-resistant construction, preferably made from timbercrete or integrated brick types such as the Schwegler 17A or equivalent.
- The choice of south and east-facing elevations ensures exposure to morning sunlight and protection from prevailing winds and rain.
- In addition, one integrated bat brick will be installed on the northern elevation, more than 4 metres above ground level.
- This aspect provides a cooler and more stable thermal environment, favoured by species such as common and soprano pipistrelles, which are frequently recorded in similar residential settings across Newport.
- The bat roost will be incorporated flush into the wall surface to minimise aesthetic impact and avoid conflicts with external lighting.
- Care will be taken to ensure that light spill from both internal and external sources does not directly illuminate the bat roost or adjacent eaves, maintaining the dark flight corridors that bats require.
- Collectively, these features will provide long-term nesting and roosting sites,

promoting continuity of bird and bat populations within the area and compensating for the lack of natural cavities in modern construction.

2. Pollinator-Friendly Planting

- To ensure the landscaped areas contribute directly to biodiversity, all ornamental planting will incorporate pollinator-friendly species selected for their nectar and pollen value and for providing interest throughout the seasons.
- A rich combination of flowering perennials and shrubs will be used, such as lavender (*Lavandula angustifolia*), verbena (*Verbena bonariensis*), sage (*Salvia nemorosa*), coneflower (*Echinacea purpurea*), and yarrow (*Achillea millefolium*).
- These species attract bees, butterflies, and other pollinating insects while maintaining an attractive aesthetic suitable for a residential setting.
- Planting will be designed to ensure a succession of blooms from early spring through to late autumn, thereby maximising feeding opportunities for invertebrates.
- This diverse planting palette also provides structural variety and visual richness that enhances the amenity value of the development.
- The beds will be mulched annually with bark to retain moisture and suppress weeds, and plants will be replaced or supplemented as necessary to maintain a healthy and vibrant planting scheme.
- All planting stock will be sourced from reputable UK nurseries that do not use neonicotinoid pesticides, ensuring compatibility with biodiversity objectives and reducing potential harm to pollinators.

3. Invertebrate Habitat (Bug Hotel)

- To further enhance the microhabitat diversity within the site, an invertebrate refuge (or 'bug hotel') will be installed within the private garden of Flat 1.
- Constructed from reclaimed timber, hollow stems, bamboo canes, and natural materials, it will provide shelter and overwintering habitat for a range of beneficial insects such as solitary bees, ladybirds, lacewings, and beetles.
- The bug hotel will be positioned in a partially shaded location against the boundary fence, protected from direct rainfall but still exposed to some sunlight to create varied temperature conditions.
- By providing refuge for invertebrates, this feature will indirectly support the broader food web - particularly birds and bats that rely on insect prey - thus enhancing ecological resilience on the site.

Timing and Implementation

All ecological enhancement features will be installed prior to the first occupation of any flat, ensuring the scheme is complete and functioning from the outset.

Ornamental planting will be carried out as part of the main landscaping works, during the next suitable planting season (typically October to March). The bird and bat boxes, as well as the bug hotel, will be installed during the final construction phase, once elevations and external areas are safe and accessible. A photographic record of all completed measures will be retained and can be provided to the Local Planning Authority as evidence of compliance.

Long-Term Management and Maintenance

The ongoing success of this scheme relies upon continued care and maintenance. All planted areas will be maintained by the appointed landscape management contractor or property management company. Watering will be undertaken during establishment and in prolonged dry spells, particularly within the first two growing seasons. Any plants that fail to establish will be replaced during the next suitable planting season with the same or similar species to maintain biodiversity integrity. Bird and bat boxes will be inspected visually every two years for signs of damage or obstruction, and any necessary repairs or replacements will be undertaken within three months of identification. Similarly, the bug hotel will be checked annually and refurbished as required to ensure ongoing suitability. The development's management company will retain responsibility for these ecological features as part of the site's long-term landscape management plan, ensuring their continued contribution to local biodiversity for the lifetime of the development.

Conclusion

In conclusion, this Scheme of Ecological Enhancement demonstrates a clear and well-integrated approach to improving biodiversity within the development at 2 Tregarn Road. Through the installation of bird and bat boxes, the inclusion of pollinator-friendly planting, and the provision of invertebrate habitats, the scheme ensures meaningful ecological gain that aligns with the aims of Policy GP5 of the Newport LDP and PPW 11. These measures not only provide immediate habitat

opportunities but also contribute to the long-term ecological network and resilience of the area. Once implemented and maintained, the site will deliver a net enhancement for wildlife compared to its pre-development baseline and demonstrate the applicant's commitment to sustainable development and environmental stewardship in line with national and local policy objectives.