

Green Infrastructure Statement & Ecological Enhancement Details

Proposed Roof Works and Extension at Wynot, Llandevaud, NP18 2AE

1. Introduction

This statement has been prepared to accompany a planning application for a new roof and residential extension at Wynot, Llandevaud, NP18 2AE. It sets out how the development incorporates green infrastructure principles and outlines proposed ecological enhancements to ensure the scheme delivers environmental benefits, in line with:

- **Planning Policy Wales (Edition 11)**
- **Environment (Wales) Act 2016**
- **Well-being of Future Generations (Wales) Act 2015**
- **Newport Local Development Plan (LDP)**

2. Site Context

Wynot is a detached residential property located within a rural setting in Llandevaud, Newport. The site benefits from surrounding open countryside and a generous garden with trees, hedgerows, and lawn areas. No statutory ecological designations apply to the site, but the area contributes to the wider ecological network in the countryside.

The proposal involves upgrading the existing roof and constructing a modest single-storey extension to improve energy efficiency and living space while enhancing the ecological value of the property.

3. Green Infrastructure Strategy

The following measures are proposed to align with green infrastructure priorities and contribute to environmental resilience:

a. Sustainable Drainage

- New roof drainage will incorporate a **rainwater harvesting butt** for garden irrigation.

- Where appropriate, **permeable paving** or gravel will be used around the extension to reduce surface runoff and support infiltration.

b. Thermal Efficiency and Low-Carbon Design

- The roof and extension will use **high-performance insulation**, improving thermal retention and reducing energy use.
- **Air-source heat pump readiness** and solar panel compatibility are considered in the design.
- Where possible, **natural and sustainably sourced materials** will be used in the build.

c. Landscape and Planting Enhancements

- The extension will preserve existing garden features and allow for new **native planting**, which contributes to biodiversity and pollinator support.
- Ornamental planting will be supplemented with species such as **wildflower mixes**, **hawthorn**, **rowan**, and **holly**.

4. Ecological Enhancement Measures

Recognising the rural location and potential for enhancing local biodiversity, the following ecological interventions will be implemented:

a. Integrated Wildlife Features

- A **bat box** (e.g., crevice or Kent-style) will be installed under the new eaves or in a sheltered gable location.
- A **bird nesting box**, suitable for species such as house sparrows or robins, will be installed on an east- or north-facing elevation or nearby tree.
- A **solitary bee hotel** will be installed on a sun-facing wall or fence, at least 1 metre above ground.

b. Habitat Creation

- A **small log pile or brash heap** will be placed in a quiet corner of the garden to support insects, hedgehogs, and fungi.
- Installation of a **mini wildflower meadow strip** (approx. 3–5 m²) in the lawn area to support invertebrate biodiversity.

c. Lighting Considerations

- **External lighting will be minimised and downward-directed** to avoid disruption to nocturnal wildlife, especially bats.

d. Ongoing Maintenance

- New planting will be maintained by the homeowner, with any failures replaced within the first two years.
- Wildlife boxes will be checked annually and maintained as needed.

5. Conclusion

The proposed development at Wynot is sensitive to its rural setting and aims to achieve a measurable ecological and environmental benefit. The extension and roof improvements incorporate green infrastructure principles through sustainable design, native planting, and the inclusion of habitat features. These enhancements support pollinators, birds, bats, and other local wildlife, contributing to the wider green infrastructure network in the Llandeud area.