



Green Infrastructure Statement

**Plough House, Druidstone Road, Old St. Mellons,
Michaelston-Y-Fedw, CF3 6XD**

Replacement dwelling in the countryside

1.0 Introduction

This Green Infrastructure Statement (GIS) has been prepared in support of a full planning application for a replacement dwelling at Plough House, Druidstone Road. It has been prepared in accordance with Planning Policy Wales (Edition 12) and demonstrates how the proposal maintains and enhances green infrastructure (GI) and delivers a net benefit for biodiversity.

The statement follows the step-wise approach set out within PPW, seeking to avoid, minimise and mitigate impacts on existing ecological features, and where possible, provide enhancement.

2.0 Existing Green Infrastructure

The site comprises an established residential curtilage set within a wider rural landscape characterised by agricultural fields, hedgerows and mature tree belts.

The site benefits from a strong existing green infrastructure framework, including:

- Mature boundary trees and woodland belts, including beech, pine and mixed species planting, forming a continuous visual and ecological screen to the south and west
- Dense hedgerow and shrub planting along Druidstone Road and the access lane, providing effective screening and habitat connectivity
- Areas of managed grassland, currently of low ecological value
- Existing ornamental planting within the garden

These features collectively provide a well-established network of habitats and contribute to local biodiversity and landscape character. The Landscape Visual Appraisal confirms that this vegetation plays a key role in visually containing the site and limiting wider landscape impacts .

3.0 Design Approach and Step-Wise Method

The proposal has been developed in accordance with the step-wise approach required by PPW:

Avoidance

The design retains all existing boundary trees, hedgerows and significant vegetation. No removal of key landscape features is proposed, ensuring that the primary green infrastructure framework remains intact.

Minimisation

The siting of the proposed dwelling and associated works has been carefully considered to avoid encroachment into root protection areas and to minimise disturbance to existing vegetation. Construction impacts will be controlled through appropriate tree protection measures.

Mitigation

Where minor impacts may occur during construction, these will be mitigated through standard good practice measures, including protective fencing and careful management of working areas.

Enhancement

The proposal introduces a range of new green infrastructure elements that strengthen the ecological value of the site and contribute to biodiversity net benefit.

4.0 Proposed Green Infrastructure Enhancements

The landscape strategy builds upon the existing framework to deliver measurable ecological and visual improvements. Key enhancements include:

- New native mixed hedgerow planting (approximately 128 linear metres), reinforcing site boundaries and improving habitat connectivity
- Additional native tree planting, including locally appropriate species, contributing to long-term canopy cover and ecological resilience
- Species-rich grassland and wildflower areas, providing foraging habitat for pollinators and improving biodiversity value
- Pollinator-friendly planting around the dwelling, supporting invertebrate species and enhancing visual amenity
- Retention and management of existing vegetation, ensuring long-term continuity of established habitats

These measures respond directly to the recommendations of the Landscape Visual Appraisal and contribute to the integration of the development within the wider landscape.

5.0 Biodiversity Features

In addition to landscape planting, the proposal incorporates built-in ecological enhancements, including:

- Integrated bat roosting features within the roof structure
- Bird nesting boxes incorporated within the external fabric of the building
- Native planting designed to support local wildlife and pollinator species

These measures provide additional habitat opportunities and contribute to the overall biodiversity value of the site.

6.0 Long-Term Management

A detailed planting and maintenance strategy has been prepared to support the establishment of new planting and ensure long-term success. This includes:

- A five-year establishment and management plan
- Regular monitoring and replacement of failed planting where necessary
- Appropriate maintenance of hedgerows, trees and grassland areas

This approach ensures that the proposed green infrastructure will mature and strengthen over time, delivering lasting environmental benefits.

7.0 Conclusion

The proposal retains the existing green infrastructure framework and introduces a comprehensive range of enhancements that improve ecological value, strengthen landscape integration and support biodiversity.

The development has been designed in accordance with the step-wise approach set out in Planning Policy Wales and delivers a clear net benefit for biodiversity. As such, the proposal fully accords with national and local planning policy relating to green infrastructure and the natural environment.