

A Green Infrastructure Statement

on behalf of
Mr. Darren Abraham

for
The Patches
Heolgerrig
Cyfarthfa
Merthyr Tydfil
CF48 1SA



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Project Overview

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The assessments made assume that the site(s) and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Little Wing Ecology (CYF).

Green Infrastructure

This document presents a green infrastructure statement. This statement is proportionate to the scale and nature of the development and describes how green infrastructure has been incorporated into the proposal. The statement provides an effective way of demonstrating positive multi-functional outcomes which are appropriate to the development site.

In accordance with the provision of Chapter 6 of Planning Policy Wales (Distinctive and Natural Places) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site. The proposed scheme seeks to follow the Stepwise Approach as detailed within the updated Chapter 6 of PPW.

The ecological condition of the Site has been identified through a Preliminary Ecological Appraisal Report (Little Wing Ecology [CYF] (v1) – August 2025). Planning Policy Wales (12) emphasises the importance of high-quality replacement planting and securing a net gain in biodiversity. This will be achieved with the improvement of a species poor native hedgerow along the northern, and eastern boundary to include the introduction of additional woody species, a species-rich under canopy (herbaceous) seed-mix and species rich seed mix for lawned areas. This mix of native shrubs and herbs will contribute to supporting biodiversity locally and maintaining connectivity across the site (east-west).

Avoid: The location of the groundworks has been identified and developed with the intention of minimising impacts on the existing biodiversity and landscape features of the location, and features such as the existing hedgerow have been incorporated rather than removed. The most significant area of notable habitat loss is of an overgrown bramble scrub, which borders the existing hedgerow at plot A.

Minimise: To prevent any adverse impact upon the potential roosting, commuting and foraging habitats for bats adjacent to the proposed unit (post development), specifically at the hedgerow feature; a sensitive lighting scheme is recommended and where necessary should be incorporated into the plans. The lighting plan for the site should be functional and directional only and kept to a minimum, servicing the public areas of the proposed development (as required for safety and security). It is to be achieved using baffles and screens, if necessary, to ensure no light spill on any retained or planted vegetation (including off-site vegetation). The sensitive lighting scheme follows advice detailed in 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023)¹.

Mitigate: Habitat creation measures have been integrated into the site layout proposal to compensate for minor habitat losses. These measures include a sensitive landscape design within the amenity space, incorporating native and diverse grass seed mixes for lawns and under-canopy areas, the planting of native trees and shrubs² Within the extant hedgerow), and the installation of structural enhancements such as roosting and nesting boxes.

Compensation: on-site compensation for impacts on nesting birds and roosting bats will be delivered by way of:

- new roosting opportunities for bats,
- new nesting opportunities for birds,
- new foraging opportunities for bees (and other invertebrates), and:
- the creation of a species-rich hedge with under canopy seed-mix consummate with the northern and eastern boundary.
- The addition of a species-rich seed mix at amenity space/lawns.

Implementation and Maintenance: The owners of the site will implement these plans and maintain the enhancement features in perpetuity. Should the bird or bat box fail or become damaged they will be replaced. Likewise, the planting scheme will be implemented and maintained by the owners.

Summary: It is concluded that appropriate and proportionate mitigation/compensation is to be delivered on-site through habitat creation and enhancement.

¹ <https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released>

² <https://hedgelink.org.uk/hedgerows/hedgerow-biodiversity/>

The proposed ecological mitigation and enhancements fit with the DECCA Framework by;

- Increasing diversity within local ecosystems by providing additional species and opportunities to further improve net-gain biodiversity. This will be achieved through structural enhancements to create a range of environmental conditions which will therefore have the potential to support a different and more diverse assemblage of species compared to baseline conditions.
- Improving/maintaining connections within and between ecosystems, by creating new habitat in locations that will directly link with existing habitats of value, e.g., existing hedgerows and tree lines.
- Improving ecosystem resilience and adaptability to future pressures, through the planting of trees (carbon capture, shading), the management of surface water runoff (continued vegetation cover, surface water interception) and the creation of greater variations in ground cover and vegetation structure capable of offering niche habitats to a wide range of flora and fauna.

Therefore, because of the ecological measures embedded within the proposed scheme, it is expected that there will be a demonstrable net benefit for biodiversity. The Site has been identified as being of low value, with immediate on-site impacts adequately mitigated on-site, and net gain being achieved primarily through the addition of features. All habitats retained/created/enhanced on site, will be subject to domestic management, with this management plan being proportionate for this setting and maintained in perpetuity.

Biodiversity Enhancement

Under the Environment (Wales) Act 2016, public authorities (including local councils and the National Parks), 'must seek to maintain and enhance biodiversity in the exercise of functions; in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.' This replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, which states that; 'All public authorities have a statutory duty to conserve biodiversity in all of their functions.'

Local authorities are legally required to make efforts to protect and enhance wildlife and its habitat and this is executed, in part, through the requirement of an ecological assessment for planned development sites and, therefore, we recommend the following principles of design should be followed.

Specific Enhancement Measures

In accordance with the provisions of Chapter 6 of 'Planning Policy Wales' (Distinctive and Natural Places) and Local Planning Policy, biodiversity enhancement measures will be incorporated into the landscaping scheme of the proposed works to maximise the ecological value of the site and achieve measurable biodiversity net gain.

Enhancement for Bats: To provide roosting habitat for crevice-dwelling bat species, such as the common pipistrelle (*Pipistrellus pipistrellus*), one 'Integrated Eco Bat Box'³ or similar artificial roost will be installed as high as possible on the southern or western elevation of each new unit. In general, bats seek thermally advantageous locations, and for this reason boxes should be positioned where they will receive full or partial sun exposure, although installing features in a variety of orientations will provide a range of climatic conditions. Bat boxes should be positioned at least 3m above ground level (ideally 6m) to prevent disturbance from people and potential predators. The most suitable location is at the southern elevation, directly below the eaves.

Enhancement for Birds: To provide additional nesting opportunities for breeding birds, one '1SP Schwegler Sparrow Terrace'⁴ or similar woodcrete construction nest box will be attached as high as possible on the northern or eastern elevation gable of each new unit. This will compensate for the loss of nesting habitat within the existing building structure and provide opportunities for cavity-nesting species.

Enhancement for Hedgehogs: To maintain and enhance connectivity for hedgehogs and prevent habitat fragmentation, one hedgehog access hole (approximately 13cm×13cm) will be incorporated at the base of each

³ <https://www.nestbox.co.uk/products/integrated-eco-bat-box>

⁴ <https://www.nhbs.com/1sp-schwegler-sparrow-terrace>

new garden fence. This measure will ensure continued movement corridors for this protected species across the developed site.

Enhancements for Birds and Invertebrates (Planting and Landscaping): To mitigate for the potential loss of scrub habitat, maintain ecological connectivity, and increase local biodiversity, additional woody species will be introduced to the existing hedgerow to increase species diversity. For hedgerow installations, a double-row planting configuration is recommended, with rows positioned at least 40cm apart and planted at a density of 4-6 plants per metre, highlighting the importance of hedgerows for UK Biodiversity Action Plan (BAP) priority species.

To provide enhanced foraging habitat for bats, the planting scheme will include species that attract night-flying insects, such as evening primrose (**Oenothera biennis**), goldenrod (**Solidago virgaurea**), honeysuckle (**Lonicera periclymenum**), and fleabane (**Pulicaria dysenterica**).

A species-rich under-canopy seed mix will be incorporated with all tree planting installations, and a species-rich seed mix will be utilised for all new green spaces and lawn areas to maximise botanical diversity and invertebrate habitat provision.

Implementation and Maintenance: The property owners will be responsible for the implementation of these enhancement measures and the ongoing maintenance of all enhancement features in perpetuity. Should any feature fail or become damaged through natural weathering or other causes, it will be promptly replaced to ensure continued biodiversity benefit.

Conclusion of Biodiversity Net Gain

The proposed enhancement measures detailed above will maintain ecological connectivity across the site, increase local biodiversity through habitat diversification, and provide additional nesting and foraging opportunities for a range of wildlife species. Through the implementation of these targeted interventions, the development will achieve measurable biodiversity net gain for the site, contributing positively to the local ecological network and fulfilling policy requirements for environmental enhancement.

Management and Maintenance of Green Infrastructure Enhancements

Long-Term Management Commitment: The habitat enhancements detailed above will be managed and maintained for a minimum period of 25 years, ensuring their long-term effectiveness and contribution to green infrastructure objectives.

Funding and Implementation: The owners will integrate the management and maintenance of these enhancements into its general maintenance budget, ensuring consistent and sustainable implementation.

Post-Implementation Monitoring: A monitoring visit by a suitably qualified ecologist will be conducted in the year following completion of works to evaluate the establishment and maintenance of the habitat enhancements.