

Introduction

This **Green Infrastructure Plan/Statement** relates to the proposed development at the Land North of A490, Llanfyllin, located along the A490 to the south of Llanfyllin. The application boundary is formed by existing parcels of residential housing to the north and west, transport infrastructure consisting of the A490 to the south, and Derlwyn Lane, a minor road to the north. Existing green infrastructure also contributes towards the formation of the boundary, consisting of hedgerows lining the north, west, and south perimeter, a post and wire fence also delineates the Site boundary to the east. No statutory designations of note were identified adjoining the Site or within 1km of the proposed development. One non-statutory designation was identified within 1km of the Site (Pendalag Wood Local Wildlife Site), the PEA (Preliminary Ecological Appraisal) discussed further below, concluded that the proposals would have no direct or indirect adverse impacts on the local wildlife site.

Policy Context

Planning Policy Wales (PPW)

PPW aims to contribute towards the delivery of sustainable development, embedding the principles of the Well-being of Future Generations (Wales) Act 2015. PPW ingrains Placemaking Wales Charter and how sustainable development can be achieved through implementing placemaking.

Section 6 sets out **green infrastructure** and how it can be integrated into developments, which should be **protected and enhanced** due to the **multi-functional** roles. A **proactive approach to green infrastructure and biodiversity** should be adopted to **help reverse the decline in biodiversity and increase the resilience of ecosystems**.

PPW 12 was published in February 2024 with changes to chapter 6 to address the need to keep up momentum on fulfilling Wales' our COP15 obligations and the Biodiversity Deep Dive recommendations.

Section 6.2 sets out how **green infrastructure** should be given early consideration in development proposals and how it should be integrated into developments.

Section 6.4 describes **biodiversity and ecological networks** and provides a summary of the **Step-Wise Approach** and how it should be used to **"maintain and enhance biodiversity, build resilient ecological networks and deliver net benefits for biodiversity** by ensuring that any adverse environmental effects are firstly avoided, then minimised, mitigated, and as a last resort compensated for."

The stepwise approach to maintaining and enhancing biodiversity

The stepwise approach for this Green Infrastructure Plan/Statement is based on the diagram provided by PPW 12 and is referred to on this drawing:

- Step 1: Avoid** existing or potential important habitats or species and ecological connectivity corridors.
- Step 2: Minimise** loss of any existing or potential important habitats or species, or fragmentation of ecological connectivity.
- Step 3: Mitigate/Restore** effects on identified existing or potential important habitats or species and ecological connectivity corridors.
- Step 4: Compensate** for any unavoidable hard or loss to important habitats or species or the fragmentation of ecological connectivity.

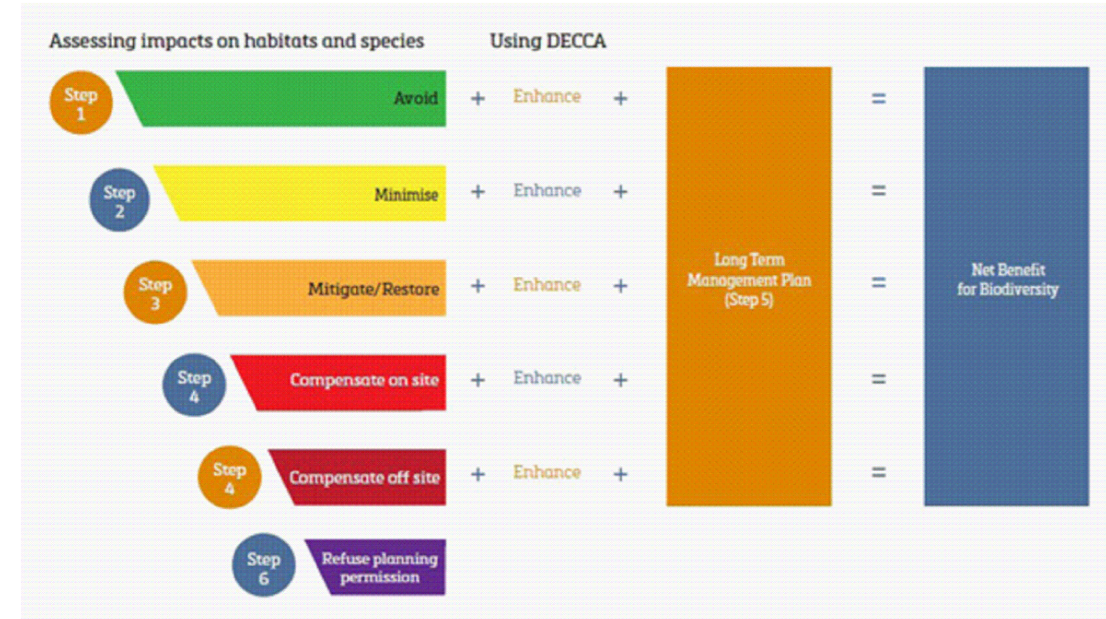


Image referenced from PPW12.

Existing Green Infrastructure

The elements that are considered to form the existing green infrastructure of the site and surrounding context are:

- Hedges within the site.
- Habitat of ecological value.
- Trees and hedges outside the site.

The green infrastructure elements are described below, identifying and assessing existing or important habitat or species and ecological connectivity corridors which have been informed by desktop studies and specialists' reports.

Hedges within the Site

An Arboricultural Report was conducted by Arboricultural Technician Services Ltd (ArbTS) in May 2024. The contents of the report complied with BS5837: 2012 'Trees in relation to design, demolition, and construction' and consisted of Tree Survey Data and a Tree Constraints Plan.

The above Arboricultural Report has been referred to for the preparation of this Green Infrastructure Plan/Statement. See below for a summary of the tree survey conducted which denotes the quantity and quality of trees present on Site at the time of the survey, for the full tree survey please refer to the Arboricultural Report.

RSSB72012 Quality Category	Total Number of Individual Trees Surveyed	Total Number of Tree Pairs of Trees Surveyed	Total Number of Tree Pairs of Trees Surveyed	Total Number of Woodland Areas Surveyed	Total Number of Hedgerows Surveyed	Total
A (High Value - Suitable for retention)	0	0	0	0	0	0
B (Moderate - Suitable for retention)	0	0	0	0	0	0
C (Low Value - Suitable for retention)	0	0	0	0	3	3
U (Unsuitable for retention)	0	0	0	0	0	0
Total A,B,C,U	0	0	0	0	3	3

Summary table referenced from 'Arboricultural Technician Services Ltd Arboricultural Report'.

Following a site visit and review by ArbTS, no trees were present on Site at the time of assessment. Low quality hedgerows (3no. category C) are present however, which line the site perimeter to the north and south. The smaller hedge to the north lining the Site along Derlwyn Lane (Hedgerow H3 in Arb report) consists of Hazel and Hawthorn, whilst the larger hedgerow (Hedgerow H2), lining the rear gardens to the north consists of Hawthorn, Hazel, and Elder. The hedgerow lining the south of the perimeter (Hedgerow H1) along the A490 consists of Sycamore, Hawthorn, Hazel, Yew, Ash, and Elder.

No Arboricultural Impact Assessment, Tree Protection Plan, or Tree Protection Method Statement was prepared as part of this Arboricultural report. It was concluded in the report however that any removal/part removal of hedgerow would need to be mitigated by translocating of the existing hedgerow or planting of new hedgerow. In order to facilitate the access road to the development for use post completion, 21.5m of the existing hedgerow to the south of the Site (Hedgerow H1) would need to be removed and mitigated as part of the proposals.

Habitat of ecological value

A Preliminary Ecological Appraisal (PEA) has been prepared by Powys County Council (January 2023) which provides a point of reference for existence and condition of present habitats together with mitigation and biodiversity enhancements.

The Preliminary Ecological Appraisal (PEA) has been referred to for the preparation of this Green Infrastructure Plan/Statement. The PEA notes that the Site is of low ecological value and predominantly consists of 'species poor improved grassland with scattered tall ruderals which appear to have been used for grazing livestock'. Habitat of note, and summarised as having moderate biodiversity value, is the existing hedgerows forming the Site perimeter (see the Arborists report for more information).

Based on the habitat typologies identified on Site, in the surrounding area, and as part of the desktop survey as outlined in the PEA, the following assessments and evaluations have been provided:

- Habitats** - Existing hedgerows were identified as a "habitat of principal importance for the purposes of conserving biodiversity" (Section 7 of the Environment (Wales) Act 2016), whilst the improved grassland and tall ruderal habitats were concluded to have low ecological value, and existing fences and walls to have negligible ecological value. For more information and a full breakdown of habitats please see the PEA.
- Dormouse** - Habitat has been concluded as low suitability and **presence is negligible**, no further survey work has been recommended.
- Bats** - Overall the Site was assessed as having **negligible potential** for supporting **roosting bats**. However it was concluded that **moderate value** existed for **foraging and commuting bats** due to the hedgerows present. Other potential roosting and foraging features were assessed however it was found they had limited potential, for in depth information can be found within the PEA.
- Otters & Watervole** - Assessed and presence is **concluded as negligible**. No considerations required and no recommendations made.
- Badgers** - Assessed and concluded as **low value** to badgers, there is however potential for the Site to be used by commuting badgers.
- Birds** - Features on site and adjacent were identified as having the potential for use by nesting birds, and bird activity was noted at the time of surveying. No evidence of current or historic nesting activity however was noted. It was concluded that features present within and around the Site are considered to have **moderate/high** value for nesting birds.
- Reptiles** - Habitats present are unfavourable and **low value for supporting reptiles**. No further survey work has been recommended.
- Amphibians** - Habitats present are unfavourable for supporting amphibians, including Great Crested Newts (GCN). Potential of presence has been **concluded as negligible** and no further survey work has been recommended.
- Protected Species** - Suitability for the White-letter Hairstreak Butterfly was assessed and concluded that the proposed development would be **unlikely** to have an impact.

Trees and hedges outside the site

As mentioned in the introduction, a non-statutory designation was identified within 1km of the Site (Pendalag Wood Local Wildlife Site) within the PEA (Preliminary Ecological Appraisal). The PEA also identifies 24 parcels of Ancient Woodland within 1km of the Site, with the closest being 397m away. It was concluded in the PEA that the proposed development would have **no direct or indirect adverse impacts** on the designation.

Highlighted in the Arboricultural Report, an off-site boundary row of trees and elapsed managed hedgerow were identified to the east outside of the Site perimeter. No maintenance recommendations were made within the report for these trees and hedgerows.

Landscape Strategy

The landscape strategy is based on the restoration of the surrounding native hedgerow, introduction of ornamental hedgerow with some species being favourable to pollinators, and the introduction of trees where possible. Native hedgerows will provide screening to perimeter boundary treatments to the north, east, and south, whilst ornamental hedgerows will be planted to delineate boundaries and provide screening of harder boundary treatments around the development. A mix of native and non-native trees will be planted in POS and dwelling front gardens throughout the Site to provide visual interest and provide opportunities for habitat use then the trees reach maturity.

Ornamental, and ground cover planting will also be introduced and located at the front of the proposed dwellings which will consist of evergreen and deciduous pollinating species with the intention to enhance biodiversity through the encouragement of pollinating insects. Species-rich meadow seed mixtures are also proposed, one mix is specified for use within SuDS/Swale areas whilst the other is for amenity areas, these mixes were also selected due to their preference by pollinating insects.

Green Infrastructure Statement

A stepwise approach was utilised in the preparation of the site layout and landscape strategy. The first stage was to **Identify and Assess the value** of existing GI. The retention of existing GI was a priority wherever possible, in accordance with **Step 1: Avoid** and **Step 2: Minimise**. Mitigation for the habitats and species follows the stepwise approach **Step 3: Mitigate/Restore**.

Enhancement opportunities for the habitats and species follows the stepwise approach **Step 4: Compensate**.

Trees & hedges within the Site

Under the current proposals, 21.5 linear meters of existing native hedgerow will need to be removed to accommodate the access road to the development. The remaining extent of the native hedgerow will be avoided and protected during works (in accordance with tree protection measures within BS5837: 2012 'Trees in relation to design, demolition, and construction'), this is to ensure the native hedgerows health and longevity, ensuring that it continues to contribute to the local biodiversity value.

The removal of the hedgerow has also been minimised as much as feasibly possible to accommodate the access road, with the extent being removed limited to what is required to facilitate the access road, associated pedestrian footpaths, and associated visibility splay requirements. To mitigate this loss of native hedgerow and compensate as required by the Environment (Wales) Act 2016, were proposing 101 linear meters of new native hedgerow to be introduced into the scheme, supporting and enhancing opportunities for bat foraging activities, bird nesting, and other environmental uses. Species and specification selected is in line with the ecologists' recommendations set out in the PEA under point 12.2 'Compensation for loss of hedgerow'.

As highlighted by the tree survey, no trees are currently present within the Site. To enhance the local biodiversity of planting in the area, we're also introducing a mix of 17no. new native and non-native trees as part of our proposals. This will provide some verticality to the development, improving visual amenity for users of the development as well as opportunities for wildlife.

Habitat of ecological value

As highlighted in the PEA, recommendations have been included to ensure no negative impact to biodiversity. The points below set out features to be enhanced as part of the Landscape Strategy proposals following the stepwise approach.

- Compensation of the 21.5m existing native hedgerow being removed to accommodate the development. The replacement native hedgerow will follow the specifications set out in the PEA under the point 12.2 'Compensation for loss of hedgerow'.
- Hedgerow being retained will be protected in accordance with the guidance set out in BS5837:2012 Trees in relation to design, demolition, and construction. A Construction Phase Hedgerow Protection Plan will be produced to ensure appropriate protection.

- Any works carried out on existing hedgerows will need to be undertaken outside of the bird nesting season (March-August inclusively). If this cannot be avoided, then a suitably qualified and experienced ecologist must be present immediately prior and during the commencement of works.

- With the Site being assessed as having low potential to support reptiles, reasonable avoidance measures will need to be put in place pre commencing and during works. Reasonable avoidance measures required are listed out within the PEA under the point 12.6 'Reptiles'.

- With the adjacent field having potential for badger access, good practice measures will need to be followed to ensure no negative impact to any potential badgers. The good practice measures are set out in the PEA under the point 12.7 'Badger'.
- Inclusion of bird and bat boxes to be incorporated into buildings where appropriate to the development. Locations, details, and specifications are to be marked out on plans and follow the recommendations set out in the PEA section 12.8.2 under 'Biodiversity Enhancement Opportunities'.

- Boundary treatments in the scheme to be raised 13cm or have a 13cm opening every 3m to allow for ease of movement for smaller animals, such as hedgehogs.

- Careful consideration given to lighting on the scheme to minimise use, avoid light spill onto hedgerows and introduced habitat features. Full conditions, specification, and recommendations set out under the header 12.4 'Wildlife Sensitive Lighting' within the PEA.



Maesydre, Llanfyllin

Green Infrastructure Statement

LA.4

Key

Existing hedgerows to be retained where feasible. Root protection area (RPA) shown in purple.

Existing trees/vegetation to be removed

Proposed trees. Refer to GI.1 for specification. Native and ornamental trees with a combination of flowering and fruiting species to create seasonal interest and help increase biodiversity. Grey dashed line shows eventual spread.

Proposed native hedgerow to help screen boundaries and enhance biodiversity. Any gaps within existing hedges to also be planted with native species shrubs.

Lavender to attract insects and provide a sensory buffer to properties.

Ornamental hedges

Ornamental planting to provide visual interest and help attract pollinators.

Ground cover planting

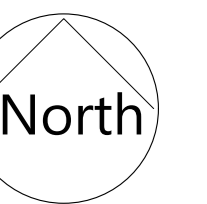
Swale basin to be seeded with Emorsgate EM8 Meadow Mixture for Wetlands, or similar.

Species-rich grass areas such as Emorsgate EM1 Basic Purpose Meadow Mixture, or similar.

Logs and boulders for informal play opportunities

0 5 10 15 20 25 metres

Scale 1:250 @ A1



TC23203_Landscape Plans v3.dwg

7 October 2024

