

Green Infrastructure Statement – Silver Birches Extension

1. Site Context & Baseline

- **Property and Footprint:** The site is a detached dwelling in Penhow. The proposed extension uses the existing approved footprint up to DPC—no new groundworks or disturbance are required.
- **Vegetation:** A mature native hedgerow exists along the eastern and western boundaries. No significant trees or ecological features are within or adjacent to the extension area.
- **Bat Ecology:** The bat survey confirmed a pipistrelle roost underneath the roof tiles adjacent to the extension. Pipistrelles typically roost in crevices under tiles and rely heavily on nearby hedgerows for foraging and commuting. No other protected species or sensitive habitats were recorded.

2. Step-Wise Approach

Avoid

- Extension is confined to the existing footprint up to DPC, avoiding any soil disturbance and preserving the root protection zone of any hedges.

Minimise

- All access and materials will be located on the existing hardstand.
- Rear lighting if required will be low-level and downward-shielded to minimise disruption to bat activity.

Mitigate / Enhance

- **Bat access:** Install three raised ridge bat-access tiles to maintain roost entrances for pipistrelles.
- **Bird habitat:** Install two integrated Vivara Pro sparrow nest boxes within the masonry or soffit to support declining sparrow populations; woodstone boxes provide thermal stability and predator resistance

- Hedgerow infill: Plant 150 native hedgerow plugs along the western boundary to enhance structural diversity. Species mix: 50% Hawthorn, 20% Blackthorn, 10% Hazel, 10% Field Maple, 5% Dog Rose, 5% Holly.

Connectivity & Compensation

- Plug planting integrates with the existing hedge, reinforcing the wildlife corridor.
- New planting (~150 plugs over ~35 m) provides a measurable net biodiversity gain.

Maintenance

- Years 1–2: Monthly watering of plugs, formative pruning, and inspection of nest and bat boxes.
- Year 3 onwards: Annual maintenance outside nesting seasons, including hedge trimming and checks on the installed features.

4. Enhancement Summary Table

Feature	Ecological Benefit
3 raised ridge bat-access tiles	Maintains roost continuity for pipistrelles
2 integrated sparrow nest boxes	Supports nesting of declining bird species
150 native hedgerow plugs	Enhances habitat structure and connectivity
Maintenance plan	Ensures longevity of ecological improvements