



GI STATEMENT

Subject	Plot 7 Cae Deri, Merthyr Tydfil VC	Date	22/11/24
Ref		Previous versions:	
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ASSESSMENT AGAINST POLICY -PLANNING POLICY WALES: STEPWISE APPROACH AND GREEN INFRASTRUCTURE STATEMENT

On the 11th October 2023, ahead of PPW12 being published, the new Chapter 6 came into force with immediate effect. Net benefit must be secured via planning applications using the step-wise approach, including the acknowledgement of off-site compensation measures and the need to consider enhancement and long- term management. Green Infrastructure Statements will be used to demonstrate the step wise approach. The following information will be used in order to show compliance with policy.

Please note, this GI Statement has been compiled based on habitats that were present prior to clearance of the site in 2024. Therefore the statement contained herein will refer to habitats present in 2022.

Proposed Development: Plot 7, Cae Deri, Heolgerrig, Merthyr Tydfil

Site description: semi-improved grassland surrounded by scattered trees and hedgerow

Surrounding Area description: The site is immediately adjacent to existing residential development. The site is made up of semi-improved grassland surrounded by scattered trees and hedgerows.

The wider landscape is made up of further residential development, associated infrastructure, intertwined with grassland, tree corridors and broad-leaved woodland.

Development Impacts: Site lighting, loss of grassland,

Step wise approach

Step 1- Avoidance- Impacts cannot be avoided on existing habitats due to small size of site and due to the principle of development being consented via outline permission.

Step 2- Minimise- Impacts have been minimised by retaining the boundary vegetation and mitigating lighting.

Step 3- Mitigate/Restore- Mitigation will be via appropriate method statements to ensure no harm to protected species (clearance undertaken in 2024 in line with method statements with permission from the LPA) and the retention of the site boundaries. Any site lighting will conform to the following guidance to prevent any indirect impacts on foraging bats <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/> . A hibernaculum will be included within the final design. 13x13cm gaps will be created at the bases of all fences for hedgehogs.

Step 4- Compensation on site- Two wildflower meadows will be planted within the landscaped area of the property to benefit invertebrates. The wildflower areas will be seeded with Emorsgate EM3 and EM34.

Species within the grassland prior to clearance include bracken, springy turf moss, hedge bindweed, rosebay willowherb, great willowherb, red fescue, common nettle, rough and smooth meadow grass, cocksfoot, perennial ryegrass, ivy, ribwort plantain, wood avens, meadow buttercup, common sorrel, crested dogstail, broadleaved dock, curled dock, marsh thistle, greater plantain, perennial ryegrass, yarrow, dandelion, autumn flowering hawkbit, creeping thistle, creeping bent, timothy, cocksfoot, scaly male fern, springy turf moss, spear thistle, common bent, common sorrel, self heal, foxglove, creeping cinquefoil, bittercress sp. , gorse, wild raddish, hard rush and soft rush.

The combination of EM3 and EM34 and EL1 will create a net gain for floral species with the species composition being as follows: Crested Dogstail, Red Fescue, Smaller Cat's-tail, Poa pratensis – Smooth-stalked Meadow-grass, Selfheal, Meadow Buttercup, Yellow Rattle, Red Campion, Bladder Campion, Dandelion Tufted Vetch, Common Vetch, Musk Mallow, Black Medick, Sainfoin, Wild Parsnip, Ribwort Plantain, Hoary Plantain, Salad Burnet, Cowslip, A Viper's-bugloss, Meadowsweet, Hedge Bedstraw, Lady's Bedstraw, Meadow Crane's-bill, Scabious, Oxeye Daisy, Yarrow, Agrimony, Kidney Vetch, Common Knapweed, Greater Knapweed, Wild Carrot, Quaking Grass, Upright Brome, Glaucous Sedge, Cocksfoot, Yorkshire Fog, Perennial Ryegrass, common bent, sweet vernal grass, lesser trefoil, wild red clover, goats beard, bulbous buttercup, ribwort plantain, birdsfoot trefoil, fairy flax, pale flax, oxeye daisy, rough hawkbit, catsear, eyebright, smooth hawksbeard, common mouseear, common knapweed kidney vetch, white clover, field scabious, betony

Proposed Lawned areas will be seeded with EL1 – Flowering Lawn Mixture, this contains slow growing grasses with a selection of wild flowers that respond well to regular short mowing.

A total of 60 species will be present on site compared to the 40 previously identified.

There is one birch tree that has been lost to the development. To compensate for this, four trees will be planted within the development, the trees will be birch, hazel, dogwood and oak.

MANAGEMENT OF HABITATS

EL1

Ground Preparation

Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Good preparation is essential to success so aim to control weeds and produce a good quality seed bed before sowing.

To prepare a seed bed first remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll or tread to produce a level firm surface.

Sowing

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

First Year Management

The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing.

Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds. Dig out any residual perennial weeds such as docks.

Management Once Established

Mow regularly as a lawn but not too short (25-40mm). To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Mowing may be suspended earlier in the year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site.

EL1 is a complete mix composed of 20% wild flowers and 80% slow growing grasses (by weight). The flower and grass components are also available to order separately as EL1F for the flower component and EG1 for

the grass component. For quicker establishment of grass cover EL1 may be sown with an additional 10g/m² EG1 or lawn mixtures EG21 or EG22. Higher grass sowing rates will however reduce the time and space available for flower establishment, especially in good growing conditions.

EM3

Description

This meadow mixture contains a very wide range of species. It may be used to create a very diverse sward where conditions vary across a site. It is also useful in situations where precise soil and site characteristics have not been established before sowing.

Ground Preparation

Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Good preparation is essential to success so aim to control weeds and produce a good quality seed bed before sowing.

To prepare a seed bed first remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface.

Sowing

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

First Year Management

Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

Management Once Established

In the second and subsequent years EM3 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing.

Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.

EM34

Ground Preparation

Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. The lime loving species in this mixture will thrive on shallow soils with a high limestone or chalk content.

Good preparation is essential to success so aim to control weeds and produce a good quality seed bed before sowing. To prepare a seed bed first remove weeds using repeated cultivation then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface.

Sowing

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

First Year Management

Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost, early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

Management Once Established

In the second and subsequent years EM35 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. On poor shallow soils one or two cuts at the end of the summer, or occasional light grazing, may be all that is required to maintain diversity and interest.

On deeper soils best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing. Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower.

After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

Newly planted trees and hedgerows

Manage ment Area	Specification and Timing	Frequency				
		1	2	3	4	5
Newly Planted Trees	Establishment					
	After initial planting dead wood, damaged branches and snags are to be removed and soil to be firmed around the base of the plants. After initial planting.	✓	-	-	-	-
	Provide irrigation as needed. During growing season in years 1 to 3 (minimum) and additionally as needed.	✓	✓	✓	-	-
	Adjust and replace all stakes, ties and tree guards. Years 1 and 2 during each scheduled maintenance visit as required.	✓	✓	-	-	-
	Check for abrasions and chaffing with tree stakes, guards and ties. Loosen tree ties and as required. Trees found to be rubbing against each other should have their crossing over limbs removed. During each scheduled maintenance visit as required.	-	-	-	✓	✓

Manage ment Area	Specification and Timing	Frequency				
		1	2	3	4	5
	Where trees have become sufficiently established, remove tree stakes and ties and dispose of off-site at a suitable recycling facility. September/October. (All remaining plant stakes and ties to be removed at year 5).	-	-	-	✓	✓
	General Management					
	Safety inspection (and dated record keeping) of all trees or woody vegetation within falling or failing distance of public footpaths, access tracks, property or on woodland boundaries. Annually and within 72 hours of high winds (with the potential to cause tree damage/ failure).	✓	✓	✓	✓	✓
	Report presence invasive species or pests/diseases. During each scheduled maintenance visit as required.	✓	✓	✓	✓	✓
	Record and report presence of ill-health / stress. During each scheduled maintenance visit as required.	✓	✓	✓	✓	✓

Manage ment Area	Specification and Timing	Frequency				
		1	2	3	4	5
	Minimum 500mm diameter area around all new trees to be kept weed free by topping up of mulch and hand weeding. Biannually during years 1 to 5 in April/ May and July, or as required during each scheduled maintenance visit.	✓	✓	✓	✓	✓
	Re-firm plants affected by wind-rock, frost heave or snow. As required in February/ March.	✓	✓	✓	✓	✓
	Identify new trees which have failed to establish and cause of failure. Submit proposals to alleviate future planting failures. September / October.	✓	✓	✓	✓	✓
	Undertake replacement tree planting in accordance with original specifications (unless otherwise agreed). Note: Maintenance tasks for all new planting to be re-set to year 1 / establishment. October to March during suitable weather / planting conditions.	✓	✓	✓	✓	✓

Manage ment Area	Specification and Timing	Frequency				
		1	2	3	4	5
	Undertake formative pruning (refer to Table 3). Arisings to be removed from Site or chipped and used for mulching within other landscape areas. November to February.	✓	✓	✓	✓	✓
	Collect litter and foreign materials and dispose of off-site to a suitable recycling facility (where possible). During each scheduled maintenance visit.	✓	✓	✓	✓	✓
Formal Hedge	Establishment (where applicable)					
	After initial planting dead wood, damaged branches and snags are to be removed and soil to be firmed around the base of the plants. After initial planting.	✓	-	-	-	-
	Provide irrigation as needed. During growing season.	✓	✓	✓	✓ as required	✓ as required
	Adjust and replace all stakes, ties and guards. During each scheduled maintenance visit.	✓	✓	✓ as required	✓ as required	✓ as required

Manage ment Area	Specification and Timing	Frequency				
		1	2	3	4	5
	Check for abrasions and chaffing with stakes, guards and ties. Loosen ties and as required. Plants found to be rubbing against each other should have their crossing over limbs removed. During each scheduled maintenance visit.	-	-	-	✓	✓
	Where plants have become sufficiently established, remove stakes and ties and dispose of off-site at a suitable recycling facility. September/October. (All remaining stakes and ties to be removed at year 5).	-	-	-	✓	✓
	General Management					
	Report presence invasive species or pests/diseases. During each scheduled maintenance visit as required.	✓	✓	✓	✓	✓
	Identify new plants which have failed to establish and investigate cause of failure. Submit proposals to alleviate future planting failures. At the end of each growing season.	✓	✓	✓	✓	✓

Manage ment Area	Specification and Timing	Frequency				
		1	2	3	4	5
	Undertake replacement planting in accordance with original specifications (unless otherwise agreed). Note: Maintenance tasks for all new planting to be re-set to year 1. October to March and during suitable weather / planting conditions.	✓	✓	✓	✓	✓
	Keep planting areas free of weeds, using hand weeding. Any perennial weeds shall be controlled by spot treatment using appropriate herbicide. Biannually in April/ May and July, or as required during each scheduled maintenance visit.	✓	✓	✓	✓	✓
	Hedgerow plants initially to have any long growth pruned back to encourage a dense formation of side branches. November to February.	✓	✓	✓	-	-
	Pruning by topping and siding to maintain the desired height and width. November to February.	-	-	-	✓	✓
	Application / topping up of bark mulch at a depth of 50mm. March/ April and September, if required.	✓	✓	✓	✓	✓

Management Area	Specification and Timing	Frequency				
		1	2	3	4	5
	Provide irrigation as needed. During growing season.	✓	✓	✓	✓ as required	✓ as required
	Collect litter and foreign materials and dispose of off-site to a suitable recycling facility (where possible). During each scheduled maintenance visit.	✓	✓	✓	✓	✓

Biodiversity Enhancements Proposed

Native tree and shrub planting will be included within the final design.

It is proposed that the landscape area is managed and enhanced to benefit wildlife. In the first year, the selected areas will be scarified, with the seed sown in the autumn or spring at a sowing rate of 4grams/m². In the first year. The areas will be mown once every 8 weeks in the first year using hand tools and to a height of 40-60mm with the cuttings removed if dense. If the seed is sown in the autumn and overseeded with yellow rattle, spring and summer cuttings should be avoided in the first year. Species such as dock will be dug out from the planted areas. Following this, these habitats will be cut twice per year, using hand tools once in March/April and again no earlier than 15th July in order to mimic hay meadow management and improve the site for reptiles and other species groups.

Further native hedgerow planting will be included within the final design. This will be managed for a minimum of 5 years. The hedgerow will comprise of blackthorn, hawthorn, hazel, oak and dogwood.

Bat and bird boxes will be included within the final design as per the BE Ecological report and associated plans. The following sparrow terrace or similar will be attached to the north western elevation of the properties <https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box>

The following bat block

https://www.nhbs.com/batblock?bkfno=246596&ca_id=1495&adlocale=uk&gclid=CjwKCAiAnO2MBhApEiwA8q0HYTrIltmUdfXSmZQgvmupqeYj1cFwdN5KLrnJOB2F_rfrsEINTpQV1BoCx1EQAvD_BwE or similar will be integrated in to the western elevation of the property.

Monitoring

Monitoring of habitats species at the Site shall be undertaken to ensure their continued value during the operation of the Development. At the end of year 5 an ecological audit of habitats shall be undertaken by a suitably qualified ecologist to ensure that those habitats which have been retained and created are meeting the standard they should be.

Further monitoring shall be undertaken for at least a 25-year period, In addition to the above, general monitoring of the condition of those areas of soft landscaping to be provided should be undertaken and recorded.

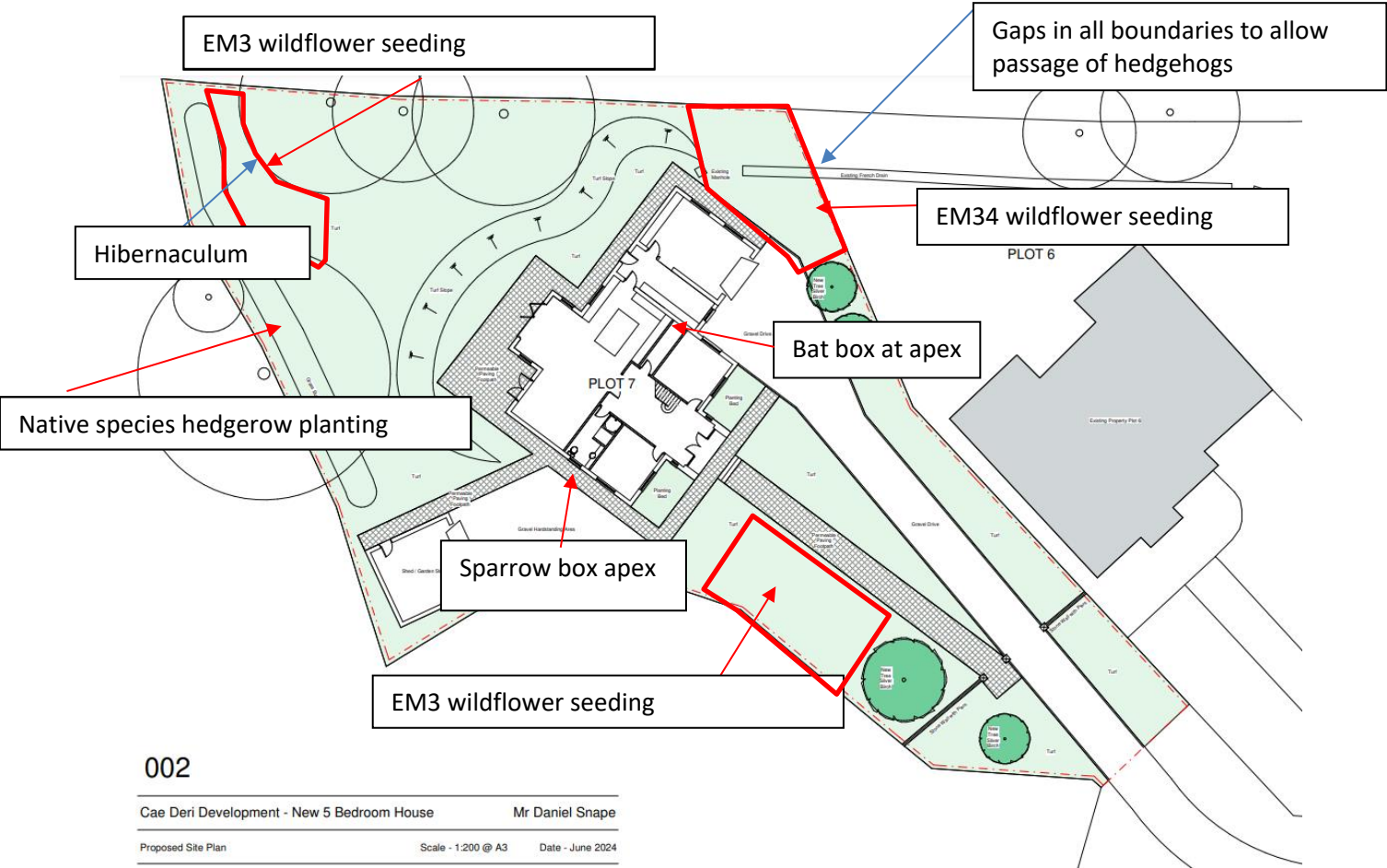
The general condition monitoring should be undertaken in the form of an annual review. As part of the annual review a letter report should be produced. As a minimum, this should summarise those key management works which have been undertaken during that period, together with an assessment against those aims and objectives and management specification. Any observations with regard to general habitat condition, including deterioration of habitats should be noted, together with any recommendations for any remedial measures if required. The council and ecologist should be notified of any recommended remedial measures so that these can be agreed and implemented at the earliest opportunity and ensure that targeted habitat conditions would still be met.

Funding

The installation and management of the site will be funded by the current owner. The owner has no plans currently to sell the property and is building the house for his own purposes. The funding of the management will be passed on to any and all successors in title.

The proposed scheme acknowledges the requirement to achieve a Net Benefit for Biodiversity and from the beginning this has been built into the planning of the project. It is recognised that the footprint of the scheme removes an area of grassland. The applicant aims to deliver biodiversity enhancements at the local scale by offering the enhancements stated above on the site. The site will be subject to enhancements along with long term appropriate management.

As result of the ecological measures within this report, it is expected that there will be a demonstrable net benefit for biodiversity. The habitats to be impacted have been identified as being of relatively low value. All habitats will be retained/created/enhanced on site.



NB: All other lawn areas to be seeded with EL1 flowering lawn mix

If you have any questions or queries, please do not hesitate to contact

Thank you,

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