

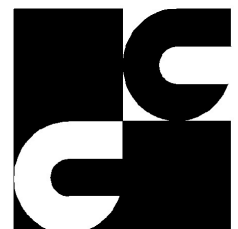
**CHANGE OF USE TO A3
LAND & BUILDINGS
JUNCTION OF BRITON FERRY ROAD
AND SCHOOL ROAD
NEATH, SA11 2EB**

**GREEN INFRASTRUCTURE ASSESSMENT
AS REQUIRED BY
PLANNING POLICY WALES
EDITION 12**

2682 – PA - 10

CLC
DESIGN, CONSTRUCTION MANAGEMENT
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INTRODUCTION

The present site is fully covered with the Existing Building and service areas which have a hard surface of various grades of tarmacadam.

ACTION

It will be possible to create a small green improvement by creating an area of planting to the North of the site as indicated on the attached plan by removal of hard surface tarmac. This will be outside the required operational area in order to service both units.

PROPOSALS

The hard surface will be removed and self-draining setts will surround the proposed area.

Hard surface and soils will be removed and replaced with 300mm subsoil and 300mm prepared top soil. The full area will then be seeded with Landlife Wildflowers 100% seed mix in accordance with the document that follows. Maintenance will be to the recommendations in the Landlife Document.

BIODIVERSITY IMPROVEMENT

Bat boxes will be installed as indicated. IFF Schwegler Unit.

LWBP Butterfly & Bee 100% Wildflower Seed Mix



LWBP contains twenty six native British wildflower species, consisting of mainly perennial species and a handful of annual and biennial species to create a permanent area of pure wildflowers.

The species included in this mixture create an attractive display from May to October and is suitable for creating habitats for bees, butterflies and other pollinating insects. It contains a wide range of species to create a diverse environment and range of food to support local wildlife.

LWBP supports bees, butterflies and other pollinators as it contains 81% of species recommended by the Royal Horticultural Society (RHS) as 'Perfect for Pollinators'.



Mixture Contents:

Common Name	Latin Name	Quantity	Flowers	Height	Type
1 Agrimony, Common	Agrimonia eupatoria	1%	Jun - Sep	50 - 150cm	Perennial
2 Borage	Borago officinalis	7%	Aug-Sep	60 - 80cm	Annual
3 Clary, Wild	Salvia verbenaca	4%	May - Aug	30 - 40cm	Perennial
4 Clover, Red	Trifolium pratense	3%	May - Sep	20 - 60cm	Perennial
5 Clover, White	Trifolium repens	1%	Jun - Sep	15 - 20cm	Perennial
6 Corn Cockle	Agrostemma githago	8%	May - Aug	50 - 70cm	Annual
7 Cornflower	Centaurea cyanus	6%	Jun - Oct	20 - 80cm	Annual
8 Daisy, Ox-eye	Leucanthemum vulgare	5%	May - Sep	20 - 100cm	Perennial
9 Foxglove, Wild	Digitalis purpurea	3%	Jun - Aug	50 - 100cm	Biennial
10 Knapweed, Common	Centaurea nigra	6%	Jun - Sep	30 - 80cm	Perennial
11 Knapweed, Greater	Centaurea scabiosa	5%	Jun - Sep	50 - 90cm	Perennial
12 Loosestrife, Purple	Lythrum salicaria	1%	Jun - Sep	100 - 200cm	Perennial
13 Marjoram, Wild	Origanum vulgare	1%	Jul - Oct	20 - 50cm	Perennial
14 Meadow Cranesbil	Geranium pratense	1%	May-Aug	40 - 60cm	Perennial
15 Musk Mallow	Malva moschata	5%	May - Sep	20 - 150cm	Perennial
16 Poppy, Common	Papaver rhoeas	5%	May - Jul	50 - 70cm	Annual
17 Ragged Robin	Lychnis flos-cuculi	2%	May - Aug	30 - 90cm	Perennial
18 Sainfoin	Onobrychis viciifolia	7%	Jul - Sep	30 - 40cm	Perennial
19 Scabious, Field	Knautia arvensis	7%	Jul - Sep	30 - 200cm	Perennial
20 Scabious, Small	Scabiosa columbaria	3%	Jul - Aug	20 - 60cm	Perennial
21 Teasel	Dipsacus fullonum	1%	Jul - Aug	100 - 200cm	Biennial
22 Trefoil, Bird's-foot	Lotus corniculatus	2%	Jun - Aug	10 - 40cm	Perennial
23 Vetch, Kidney	Anthyllis vulneraria	2%	May - Oct	15 - 50cm	Perennial
24 Viper's Bugloss	Echium vulgare	2%	May - Oct	50 - 100cm	Biennial
25 Yarrow	Achillea millefolium	5%	Jun - Oct	20 - 100cm	Perennial
26 Yellow Rattle	Rhinanthus minor	7%	Jun - Sep	20 - 50cm	Annual

Contains:



For information on this or any other mixtures in the Landlife Wildflowers range, contact us on 01205 281 902 or email info@wildflower.co.uk

Wildflower seed in Landlife Wildflowers mixtures is of UK native origin.

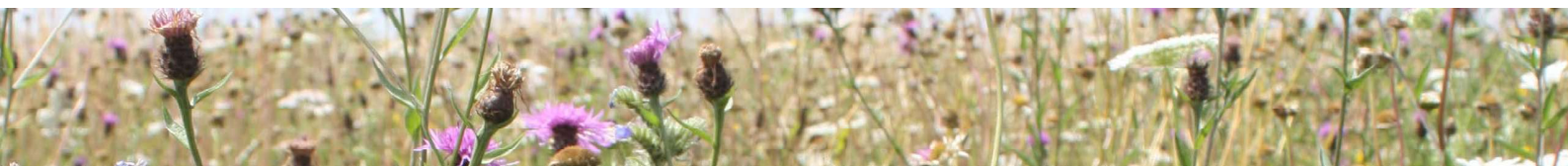
The definition of UK native seed provided by Natural England is: *British native-origin seed refers to seed originally collected from wild populations in Great Britain (from sites with no known history of sowing of amenity or agricultural varieties) and either sown directly, or grown on as a field crop to provide further seed. It includes seed collected in 'green hay'. It excludes certified amenity or agricultural varieties of native species.*

Landlife Wildflowers UK native wildflower seed is sourced in two ways:

- 1) Seed collections from the wild which are field sown or sown in modules before being field planted as spaced plants. These are then harvested and cleaned to increase seed germination, vigour and purity.
- 2) Meadow collections are taken with owner permission or under license if the meadow is within a registered area. These seeds are then processed to remove excessive admixture and graded so they can be used in measurable amounts in prescribed mixtures.

Contents of wildflower mixtures will vary according to seed and species availability

Sowing Rate: 3g/sqm



Prepare the Ground

LWBP Butterfly & Bee Wildflower Seed Mix performs best in low nutrient soils, which haven't been heavily fertilised in the past. For best results sow into bare soil after clearing all existing plants and weeds from the area.

Cultivate the ground to a depth of 10cm to relieve compaction and create a fine level tilth, free from obstructions (to allow for mowing at a later stage). Finish the seedbed by treading or lightly rolling the area, so that it is firm enough to stand on without leaving indentations.

Where weeds have been prevalent, allow a flush of weeds to germinate and remove these before sowing. In areas of high fertility, it may be necessary to remove the topsoil and sow into the subsoil. High nutrient soils encourage weeds and fast growing grasses which may outcompete the wildflowers in this mixture.

LWBP can be used to overseed into existing grassland, provided the sward comprises only fine leaved grasses and does not include ryegrass, agricultural species or weeds. Cut the grass as short as possible and thoroughly scarify or rake the ground to remove any thatch, moss and other debris from the area.

Sowing

BSBP should be sown between March and November. Spring and autumn provide ideal conditions as moisture and warmth are in good supply. If overseeding into grass, it is best to sow during autumn when grass growth has slowed down.

Distribute seed with a handheld or pedestrian spreader, at the recommended sowing rate of 3g/sqm. Mix the wildflower seeds with an inert carrier (such as sharp sand), at a ratio of four parts sand to one part seed (by weight). This makes it easier to achieve an even distribution and also provides a visual marker, making it easier to see any missed patches and avoid seeding areas twice.

Regularly mix the seed when sowing, as seeds will naturally separate due to variations in size and weight.

Once sown, ensure good 'seed to soil' contact by lightly raking to a depth of 0.5cm or rolling the area. When overseeding this encourages the seeds to fall down to the ground underneath.

It is also possible to broadcast, drill or hydroseed this mixture for larger or hard to reach areas. However, broadcast spreading throws heavier seeds further so this may impact the distribution and when drilling, the seed must not be buried deeper than 0.7cm.

Sowing Rate

The sowing rate of 3g/sqm is designed to produce optimum results. Reducing the sowing rate is likely to result in invasion from weed species. Increasing the sowing rate generally leads to reduced diversity as the more aggressive species will outcompete slower growing plants.

This rate also applies when overseeding into grassland as many seeds may fail to germinate due to the increased competition from the existing grasses, and some seeds not reaching the soil surface.

Maintenance First Year

LWBP contains mainly perennial species, which can be slow to establish and are unlikely to flower in the first year. Annual species such as Borage, Corncockle, Cornflower and Field Poppy will generally flower in year one.

During the first year remove any weeds which grow before they run to seed, either by topping, mowing or by hand for smaller areas. Weed growth is common due to the action of disturbing the ground (rather than being caused by contaminated seed mixtures).

The area can be cut once the flowers have died back in the autumn. We recommend leaving the area undisturbed for as long as possible, ideally until February / March (before the first spring growth). The dead flowers and stems provide a diverse environment which is a haven for wildlife through the winter months. In particular, it provides habitat for butterflies such as the Red Admiral and the Clouded Yellow which remain in their chrysalis during the winter months.

Cut the area down to around 10cm using a scythe, strimmer or mower, leaving the cuttings for up to a week before removing. This will allow them to dry and shed seeds back into the soil.

Second Year

After twelve months the sward should be well established and requires little additional maintenance. Simply follow the same annual cut pattern (either in spring or autumn depending on your preference).

As an ongoing process, observe and remove any weeds which invade the area.

Over time, some species within the mixture may become more dominant due to environmental factors and natural selection. To encourage diversity, simply reduce the number of dominant plants in order to restore the balance.

Overseeding

If overseeding into grassland, we recommend incorporating at least two 10cm cuts each year; at the beginning of March and November. This reduces the grass canopy, allowing light and air to reach the wildflowers and encourage growth. Where aggressive grasses are dominating, it may be necessary to employ a more regular cutting regime to ensure the wildflowers are not smothered.



As members of Flora Locale, Landlife Wildflowers follows a strict code of practice to ensure wildflower seed is of UK native origin and is harvested and grown responsibly to aid conservation and help protect native UK wild plants.



In LWBP 81% of the wildflower species included are recognised by the Royal Horticultural Society as supporting many of the 1500 species of pollinating insects across the UK.

