

43 Beechwood Drive, Meopham, DA13 0TX

1. The site has been used as a residential site for more than 30 years but it is understood that biodiversity mitigation should be maintained for its duration should a replacement dwelling be approved.
2. Wetlands can help us restore nature and boost biodiversity, protect communities from flooding and drought, clean our water, make us feel better and combat climate change. Wetlands act as sponges, holding water on the land and are, mainly used to help prevent flooding and increase drought resilience. However, diverting excess water into a wetland, directs the rainwater back into the ground, and reduces the demand on our drains and sewers.

Mini-wetlands can provide drinking water for wildlife during water-stressed periods and provide important stepping stone habitats for semi-aquatic species such as newts and frogs when other wetted areas have dried up, allowing temporary refuge in drought. It can also and in our case, improve water quality and assist in helping to clean our water and restore wildlife by filtering out any potential pollutants.

The most suitable wetland for the application site would most probably be a bog garden as it is a fantastic alternative to a pond and safer for small children. It can also be directed to an area where water needs to be collected. The bog garden can create something more attractive that also provides a valuable wildlife habitat.

Creating a Bog Garden

All that is required is:

- A length of rope or hose
- Peat-free compost
- Garden grit or gravel
- A piece of pond liner (you can re-use old liner with holes)
- Damp-loving plants such as yellow iris which is great for perches and to give summer colour, Purple loosestrife and meadowsweet which is good to create height, Creeping jenny which is especially great ground cover, Marsh marigold which has good early blooms in spring and Hemp agrimony which gives a fantastic autumn colour.

We will then:

Outline the area, which is most suitable, and for which should be away from overhanging trees as you need as much sun as possible. This can be clarified on a site plan once planning is approved. We will then dig a shallow hole 45-50cm deep. This will suit the roots of most damp-loving perennials. Then line with a pond liner that is slightly bigger than the space, pierce 2-3 times for drainage. We will then add a 3cm layer of grit or gravel. This will help prevent the soil from blocking the drainage holes.

We will then put the soil back in the hole, trim back the liner and mix in just a small amount of compost. Too many nutrients will make the fast-growing plants of your bog garden hard to control. Then we will plant up your garden and keep watering the plants until established but only if they are drying out. The area will then be left so it can get naturally waterlogged over winter. The excess water which is pumped out from the Package Treatment Plant will be diverted to the Bog Garden via a small hose and dissipated.

We will use herbaceous plants as they work best with water such as:

Athyrium filix-femina **AGM:** 80cm x 1m (32in x 3¼ft)

Acorus gramineus 'Variegatus': 30cm x 50cm (1ft x 20in)

Carex elata 'Aurea' **AGM:** 70cm x 50cm (28in x 20in).

Primula florindae (Si) **AGM:** 1.2m x 1m (4ft x 3¼ft)

Iris ensata 'Rose Queen' **AGM:** 1m x 50cm (3¼ft x 20in)



PLEASE NOTE THAT THIS IS A SUGGESTION AS THE MOST EFFECTIVE WETLAND ON A DEVELOPED AREA BUT CAN BE DISCUSSED FURTHER IF REQUIRED.

Maintenance

One of the most important aspects of maintaining a bog is keeping it moist. The proposed will be naturally wet so we will not have an issue with this. During periods of higher climate, a bog garden would normally become dry and if this happens then we would water the bog. Due to the water feed being a continuous flow, this is not intended to be an issue.

In winter, you do have to protect your bog plants from cold. To do this we will cover the bog in a thick layer of leaf or pine needle mulch, and this will be done before temperatures drop too much. This will protect plants and will rot into the soil to enrich it. We will also, remove some of the dead foliage in winter to keep the garden tidy and to prevent the older plants rotting down.