

Whitechapel Road Vertical Meadow Wrap

Whitechapel Road, Tower Hamlets

London Borough of Tower Hamlets, NHS, Vertical Meadow

**BIG Biodiversity Challenge Award Category: Innovation Award**

### Project overview

The Vertical Meadow Wrap, installed on Whitechapel Road in September 2023, represents a pioneering collaboration between the London Borough of Tower Hamlets (LBTH) and the NHS. This innovative project, in line with LBTH's Code of Construction Practice, mandates the greening of hoardings on strategic sites, showcasing how construction can seamlessly integrate with nature.

### What were the biodiversity conditions on site prior to the enhancement?

Before the Meadow Wrap installation, the site was enclosed by standard ply hoarding, offering no ecological value. Situated in a densely populated urban area plagued by high levels of antisocial behavior and a scarcity of green spaces, the Council responded innovatively by implementing 50 square meters of Meadow Wrap, transforming the space into a vibrant habitat for pollinators, insects, and birds.

### What were the reasons behind this project?

The mandate from Tower Hamlets for green hoardings on large construction sites aimed to offset biodiversity loss and inspire developers. We sought to demonstrate that greening hoardings is both practical and cost-effective. Our Meadow Wrap grows native wildflowers, creating essential habitats for pollinators and contributing to urban biodiversity. Using Agrisound, an acoustic monitoring tool, and visual ecological surveys, we are rigorously tracking the ecological and social benefits of this pioneering urban greening initiative.



*Graffiti covered hoarding pre-installation*



*Same area a few months later*

## What were the biodiversity measures taken?

The Vertical Meadow Wrap incorporates a multifaceted and innovative approach to enhancing biodiversity, designed for adaptability and scalability.

### 1. Design and Installation:

- Plug-and-Play System: The wrap features a plug-and-play design for easy installation, simply stapled to hoardings and connected to water and power sources. This ensures adaptability to various site sizes with minimal effort.
- Sustainable Materials: The growing medium is crafted from sustainable felt made from recycled clothing, underscoring our commitment to eco-friendly practices.

### 2. Collaboration with Experts:

- Wildlife Trusts and Buglife: We partnered with these organizations to select plant species that support urban biodiversity, ensuring optimal habitats for local wildlife.

### 3. Unique Design Features:

- Calcareous Grass and Flower-Rich Meadow: Unlike conventional pre-grown plant installations, our wrap cultivates a unique calcareous grass and flower-rich meadow, providing specialized habitats and enhancing aesthetic appeal.

### 4. Monitoring and Sustainability:

- Continuous Refinement: We refine our monitoring techniques to develop a self-sustaining system poised for autonomous management, ensuring long-term biodiversity benefits.
- Ecological Surveys: Using Agrisound, an acoustic monitoring tool, and visual surveys, we rigorously track the ecological impact, documenting thriving populations of bees, hoverflies, butterflies, and other invertebrates.

### 5. Ecological and Social Benefits:

- Biodiversity Net Gain: The wrap's design ensures a significant biodiversity net gain for the site, transforming a previously barren area into a vibrant ecological habitat.

### 6. Practical Application:

- Ease of Installation and Maintenance: Transported by bicycle courier to minimize environmental impact, the wrap was installed in two days by a team of three. It is monitored remotely post-installation, with weekly on-site health checks ensuring its ongoing vitality.

The Vertical Meadow Wrap exemplifies a forward-thinking approach to urban biodiversity enhancement, making it a model for future greening initiatives.



*Bee observed on our wall*



*Various species supporting biodiversity*

### Further information

Our product is designed for quick, low-impact installation. Transported by bicycle courier from Tufnell Park, the installation was completed in just two days by a team of three. Post-installation, the meadow is monitored remotely by the Vertical Meadow team, with weekly on-site health checks.

Previously barren, the site now hosts a vibrant, flowering meadow attracting numerous insects. Our aim is to bridge the biodiversity gap during construction periods, often overlooked in urban settings. Installed later in the year, the wall's growth accelerated in April, transforming a neglected corner into a lively focal point. This project demonstrates the potential of greening initiatives to rejuvenate urban spaces innovatively.

### Project Team

London Borough of Tower Hamlets, along with the NHS and Vertical Meadow

### What was the motivation for carrying out the enhancement?

Beyond compliance with the Code of Construction, the project sought to address graffiti and litter issues. As the plants matured, the Meadow Wrap naturally deterred graffiti and reduced littering, showcasing a form of natural regeneration. Our mission is to reintroduce biodiversity into urban areas, significantly benefiting residents, visitors, and pollinators in Tower Hamlets.



*Warp covering hoarding pre growth*



*Members of the public passing by and admiring the Vertical Meadow*