## 1. Details of materials, species, planting density, habitat features, and substrate

- **a.** The Bauder 'Biodiverse Roof System' has been proposed for the following blocks on Tybalds Estate:
  - Blemundsbury
  - Devonshire
  - Windmill
  - Springwater
  - Richbell

Supporting Information	Drawing Number
Detailed Arrangement - Roof Plan South	LL434-300-0005
Note: This roof type is labelled '2' in the key	
Q37 specification to brown roofs Tybalds	N/A
Estate Rev A	

The build-up of material, species, and plants is detailed below:

#### - Separation and Protection layers:

Biodiverse Roof System fitted above PE foil and FSM600 Protection Mat

#### - Biodiverse Roof Build up:

As per the original Bauder specification but with great depth of substrate and a variety of surface finishes.

40mm DSE40 drainage layer

Bauder filter fleece

Bauder (FLL Compliant) Biodiverse roof substrate: Varied substrate depth between 80mm - 150mm known to support the wildflowers seeds specified [see list below] AL150 Drainage trim.

#### - Habitat Creation:

#### Seeded Areas:

80% of the roof area to be seeded (as per roof plan) using Bauder Flora 5 seed mix. Seeded rate of 5gms per sqm with additional fertiliser and tackifier to aid establishment (rate of Bauder Flora 5 mix required: 100gm per sqm)

Bauder Flora 5 Seed. This mix contains 40 species of Wildflower, herbs and sedum seeds. (See data sheet attached)

#### - Bauder Flora 5 Urban Seed Mix (Please refer to enclosed data sheet)

The mix gives an excellent match to the requirement of Camden's Green Roof Policy. The product is new (Launch Date October 2016) see draft Data Sheet.

It is certified RHS Perfect for Pollinators, as well as conforming the Flora Locale Code for British Providence seed collection. The Mix is designed to give plant establishment the very best chance and contains a careful mix of Mycorrhizal fungi, carrier, nutrient and bonding compound.

- **b.** The <u>'XF300 Sedum Blanket System'</u> has been proposed for the following blocks on Tybalds Estate:
- Mews Houses
- Mews Bookend (flats)
- New Blemundsbury Houses
- New Blemundsbury (flats)
- New Devonshire

Supporting Information	Drawing Number
Detailed Arrangement – Roof Plan North	LL434-300-0004
Note: This roof type is labelled '3' in the key	
Planning - Q37 specification to all green roofs	N/A
Tybalds Estate Rev A	

The build-up of material, species, and plants is detailed below:

## - Separation and Protection layers:

Green Roof System fitted above PE foil and FSM600 Protection Mat

#### - Sedu2 Roof Build up:

As per the original Bauder specification but with great depth of substrate and a variety of surface finishes.

20mm DSE20 drainage layer

Bauder filter fleece

Bauder (FLL Compliant) Extensive roof substrate: substrate depth 80mm [see list below] Bauder XF300 Sedum Blanket

AL80-100 Drainage trim.

#### - Bauder XF300 Sedum blanket

Bauder XF300 contains a mix of 13 Sedum varieties grown in Norfolk for 12 months prior to harvest. (See Data Sheet). Harvested and delivered to site within 24 hours. This gives an instant greening effect. Beneficial in areas which are overlooked.

Proposed coverage (as per the attached roof plans) <30% of the total green roof area.

## - Species found in Bauder XF300 Sedum Blanket

Sedum album
Sedum floriferum
Sedum hybr. Czar's Gold
Sedum montanum
Sedum pulchellum
Sedum reflexum
Sedum rupestre
Sedum sexangulare

Sedum spurium 'coccineum' [Purple Carpet]

Sedum spurium 'Summer Glory'
Sedum stenopetalum
Sedum stoloniferum
Saxifraga granulata

Sedum Hispanicum

# 2. A statement of the design objectives, including justification of roof type/species selection:

Sedum Blanket System (Roof type 3):

The small roof areas on the Northern roof areas would be difficult to establish with any sort of wildflower/biodiverse build up, these very small areas are likely to dry out quickly leading to dead areas around the edge of the block and poor scruffy swath which residence would be reluctant to keep. Typically biodiverse systems benefit from larger areas where different micro habitats can be created.

The areas are adjacent to the patio roof areas on the Northern properties and will require a high aesthetic value (again this is not readily achieved with biodiverse areas). The human activity at roof level will reduce the benefit for foraging birds. However a sedum green roof solution is far more drought tolerant. Sedum is a low growing ground cover plant suited to small areas increases the greening of the project significantly and helps to produce a varied mosaic of habitat. Whilst sedum blankets contains non-native sedum species they do offer an excellent food source for pollinators and habitat for many spider and insect species.

Bauder Biodiverse Roof System (Roof type 2):

The detailed Biodiverse roofs planned for the Southern roof areas will give a broad range of habitats with deep and shallow rooting plants able to establish. The varied surface finishes will provide additional habitats to insects and invertebrates mimicking the habitat found on many brown field sites. By sowing with a London specific seed mix (Sources from Flora Locale compliant suppliers) care has been taken to provide the best chance to establish a variety of habitat. This area will act as a ready source of food for both pollinator species and the birds which feed on them.

Chris Roddick, Bauder Limited