

51 Vicars Road

Details of the planting strategy as required in
Conditions 4 & 5 and supporting information

Document: 250-71001

March 2019

Rick Mather Architects

123 Camden High Street London NW1 7J5

Project Details

Site Address: Flat A, 51 Vicars Road, NW5 4NN

Existing Residential Area: 37sqm
Proposed Residential Area: 78sqm

Proposal: A single storey residential extension to the rear of the garden flat, and associated landscaping works.

Listing/Conservation Status: Not listed nor in a conservation area.

Planning History: Consented application 2014/7750/P
Amended Application (variation of Condition 3 of above application) 2017/0498/P

This document has been prepared to offer additional information as required by conditions 4 and 5 of the decision notice 2017/0498/P dated 22 March 2017.

Executive Summary

This document offers the additional information required in the decision notice regarding application **2017/0498/P**.

The conditions that require this information are:

- Condition 4: Full details in respect of the green roof in the area indicated on the approved roof plan shall be submitted to and approved by the local planning authority before the relevant part of the development commences.
- Condition 5: Full details in respect of the planting area on the southern and eastern elevations of the proposed extension in the area indicated on the approved plans, including soil depth and suitable drainage shall be submitted to and approved by the local planning authority before the relevant part of the development commences.

The proposed project is as much a landscape element as a building. A lot of coordination between the design team and green roof specialists Bauder has taken place, in order to ensure that the following systems described in this document perform as intended.

As time passes and the plants mature, the greenery will conceal the new structure in an organized and managed manner which will allow the owners to keep clean and maintain.

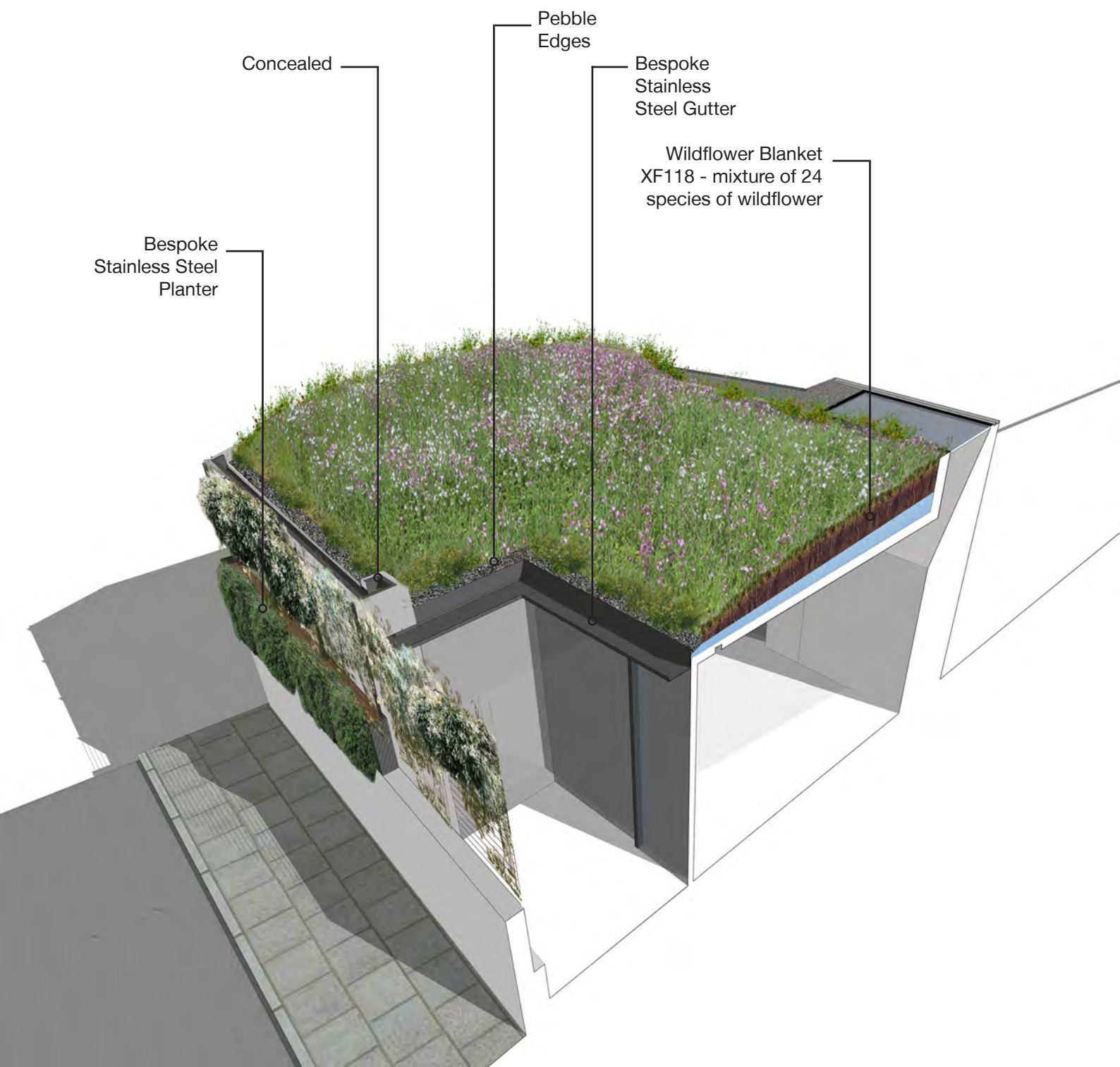
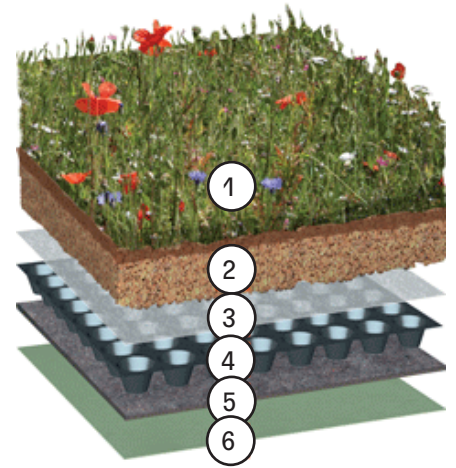


Condition No. 4

Bauder Green Roof System

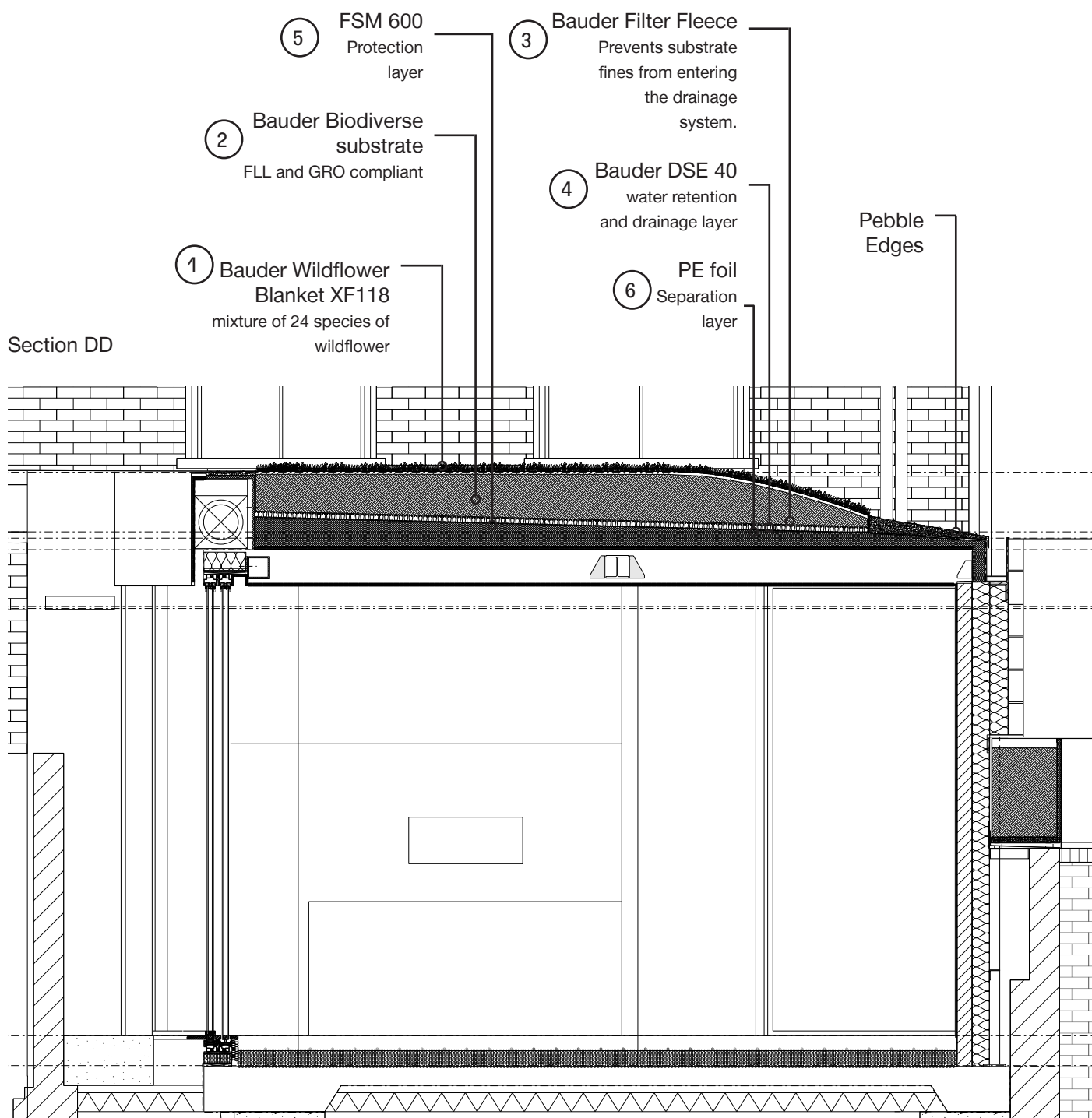
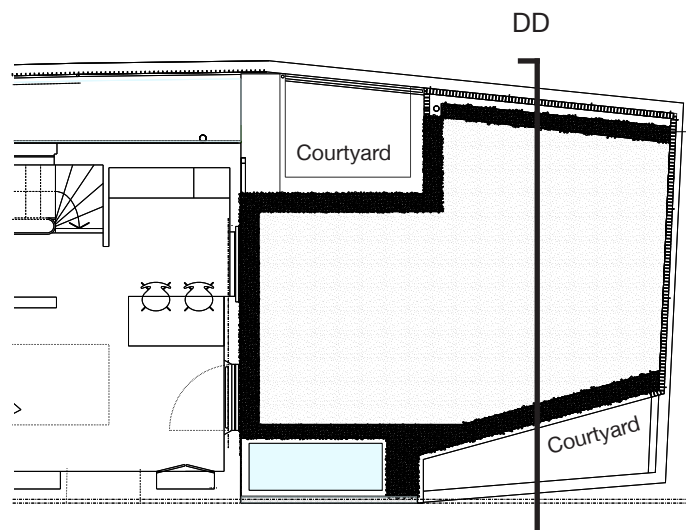
According to condition number 4 on the decision notice, full details of the green roof system that will be used must be submitted.

The extensive green roof system by Bauder will be used and installed by the company's approved contractors, Barry Cass Roofing.



As shown in the section below and the visualization, this multi-layered system will ensure that the 24 species wildflower blanket covers the entirety of the roof, except for a small strip of pebbles against the existing building and the gutter.

With a soil depth ranging from 250mm to 50mm the roof fulfils the necessary depth for successful growth of the native species proposed which consists of hardy wildflowers, annuals and herbs.



Condition No. 4

Bauder Green Roof System

Maintenance of the Green roof will be carried out as per the following guidelines provided by the manufacturer Bauder.



BAUDER BIODIVERSITY GREEN ROOF SYSTEMS

XF118 Wildflower Blanket, KS Plus seed mix and wildflower plug plants

The following is a guide to the maintenance necessary to keep a biodiverse green roof in a condition broadly similar to that in which it was first installed. The information relates to installations that have been completed for one full growing season and where establishment maintenance has been effective. For clarity, establishment maintenance relates to tasks continuing on after installation, where a defined period of regular watering and minor maintenance is required until the planting has rooted into the growing medium, adapted to its location and can be considered established.

What to Expect from a Bauder Biodiverse Green Roof System

There is a common misconception that extensive green roofs, and sedum plants in particular, are always green and that from ground level they resemble grass. This is misleading, as they consist mainly of low growing, drought tolerant sedum plants and may also include other species such as Saxifrage, wild flowers, grasses, moss and herbs.

General Maintenance

The level of maintenance of the horticultural element of this type of green roof will vary significantly, dependent upon the various species of vegetation incorporated and the purpose for which it was initially installed. Whilst the original intent may have been to allow the green roof to grow wild, the problems that this can create with the build-up of dead or unwanted vegetation and the impact that this has to the appearance and type of vegetation on the roof will often dictate the need for basic maintenance to be carried out.

The Bauder biodiversity green roofs which are currently being installed to meet either BREEAM or Sustainable Homes codes will include a species mix selected to provide a balanced plant community on the roof and will require basic maintenance if this is to be sustained in the long term.

Maintenance is best carried out annually, during springtime and additionally in late autumn should the particular roof location be affected by local trees that produce surface leaf litter. Some deposited leaf litter may be considered as contributory to the bio-diverse environment, which is acceptable so long as provision is made to ensure that this has no negative effect on other plants and the roof drainage performance.

The following procedures should be carried out in order to ensure the roof is maintained in good condition and to protect the validity of the waterproofing system guarantee.

Note - Specifically designated biodiversity areas should be disturbed as little as possible during maintenance so as not to upset any micro-habitats that may have colonised.

Preliminary Maintenance Procedures

- Ensure safe access can be gained to the roof and that relevant Health and Safety procedures are followed when working at roof level. It is advised that the contractor should always seek proof of current maintenance for any man-safe roof access systems prior to proceeding with the work on site.
- In order to avoid a build-up of bio-mass on the roof it is recommended that all dead vegetation is removed with a strimmer and provision made for the debris to be safely lowered to the ground and disposed of.
- We recommend removing unwanted leaf litter that has fallen onto the roof surface from overhanging trees both in the spring and autumn, to ensure that this does not smother the vegetation beneath.
- Open the lids of all Inspection chambers, to inspect and ensure that all rainwater outlets and downpipes are free from any blockages and that water can flow away freely.
- Ensure that any protective metal flashings and termination bars remain securely fixed in place. Advise the client of the need to repair or renew as necessary.
- Examine all mastic sealant and mortar pointing for signs of degradation. Advise the client of the need to repair or renew as necessary.
- Check that all promenade tiles and paving slabs are securely fixed to the roof surface and in good condition.
- Ensure that any new items of plant/equipment on the roof are mounted on suitable isolated slabs and that any fixings used to secure the plant/equipment in place do not penetrate the waterproofing. If in doubt, please contact Bauder for further advice.
- The Building owner should keep a record of all inspections and maintenance carried out on the roof. Any signs of damage or degradation to the waterproofing should be reported to Bauder immediately, in order that arrangements can be made for remedial work to be carried out if necessary.
- Damage to the landscaping should be reported to the building owner. If this damage includes Bauder components, then Bauder may be contacted for remedial advice.
- Works to adjoining areas - When carrying out any maintenance to adjoining roof areas, care must be taken not to damage either the green roof landscaping or the waterproofing system. If it is considered that either element has been affected, then Bauder should be contacted for advice. Any waterproofing damage caused after completion of the original installation may invalidate the guarantee.
- Alterations - Any unauthorised alterations to the waterproofing system will invalidate the guarantee. If such a situation should arise, then Bauder should be contacted so that we may advise on the alteration and how it should be incorporated without affecting the guarantee.

Plant Related Maintenance Tasks

1. **Plant encroachment.**

Any vegetation which has encroached into drainage outlets, inspection chambers, walkways and the vegetation barriers (pebbles) should be removed. If movement/settlement of the pebble vegetation barrier has occurred, additional washed stone pebbles similar to the existing are to be added.

2. **Plant maintenance**

In the absence of specific instructions from the building owner or their designated consultant, advice should be sought from both the project landscape designer and the plant supplier and any maintenance carried out according to their specific recommendations.

3. **Maintenance of the Bauder XF118 Wildflower Blanket.**

If the Bauder XF118 Wildflower Blanket has been installed the minimum recommended maintenance of the vegetation is as follows:

In the late autumn the vegetation is to be strimmed back to a 50-70mm height and the unwanted waste matter removed and lowered to ground level for composting/disposal.

In late March/April apply an 80g/m² dressing of Bauder slow release organic fertiliser to the vegetated surface.

Note - Should it be decided that the XF118 Wildflower Blanket is to be left unmaintained to naturalise, we would advise that this will lead to a substantial build-up of dead vegetation on the roof that will over time significantly reduce the number of vegetation species within the blanket.

4. **Weeding**

With the exception of saplings, which should always be removed, weeds in a biodiverse green roof should be considered as a problem only of aesthetics, unless they are particularly invasive. If considered undesirable, they can be removed.

5. **Fertiliser**

Where the vegetation has been provided by Bauder, our organic slow release fertilizer should be applied at a rate of 80g/m² in the early spring. For all other vegetation it is recommended that advice be sought from the landscape designer and plant supplier and that any fertiliser required is to be applied according to their specific recommendations.

6. **Irrigation**

The need for irrigation in a biodiverse green roof system is dependent upon the client requirement for the visual appearance of the vegetation. If it is intended that the roof should have colour and interest for the longest period through the growing season, then irrigation will significantly aid in achieving this. Should the requirement be only to deliver biodiversity, then the provision of sufficient watering points at roof level to allow for only occasional watering in periods of prolonged drought can be considered sufficient.



Support

Modern biodiversity green roof installations will normally require only minimal maintenance. Bauder is happy to offer advice on any issues concerning your green roof and enquiries should be forwarded to our Technical Department at the address below. We believe our products and systems are of the highest standard and are always prepared to discuss any queries or concerns that may arise. Providing photographs or drawings to accompany your queries will help speed our response.

Please note: In the event of any query arising which it is thought may affect the condition of the system, then Bauder should be contacted at the address below. We cannot accept responsibility for any problem or failure due to use outside those parameters for which the system was designed or 'acts of god' beyond our control e.g. extreme weather conditions or damage through pests.

BAUDER GREEN ROOF MAINTENANCE SERVICE

With over 30 years' experience in the design and supply of green roofs throughout the UK and Ireland Bauder can offer unparalleled experience and expertise in green roof maintenance including sedum, biodiverse and wildflower.

Having established the largest UK facility cultivating green roof vegetation blanket we have unique knowledge and horticultural expertise for roofscape vegetation. With national coverage of over 50 field personnel, you can be assured of a prompt reliable service to fully meet your requirements.

Our Service

Bauder's experienced team will provide you with a tailor-made maintenance programme for your green roof. A typical Bauder Maintenance Programme Includes:

- Full inspection and evaluation of your green roof
- Application of organic slow release granular fertilizer
- Removal of leaves and debris
- Removal of unwanted vegetation
- Inspection and clearance of outlets
- Examination and testing of irrigation

This work is undertaken by Bauder's experienced maintenance engineers who will carry out the necessary risk assessments and comply with all current health and safety legislation throughout the duration of the work. Finally, you will be provided with a bespoke report with photographic verification outlining the condition of the planting and any areas requiring on going treatment.

To discuss your specific requirements, please call our green roof service team for a no obligation quote.

T: 0845 271 8801 **E:** greenmaintenance@bauder.co.uk

Bauder Limited

70 Landseer Road, Ipswich, Suffolk England IP3 0DH
T: +44 (0)1473 257671 **E:** technical@bauder.co.uk
bauder.co.uk

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T: +353 (0)42 9692 333 **E:** info@bauder.ie
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Condition No. 5

Planted Areas

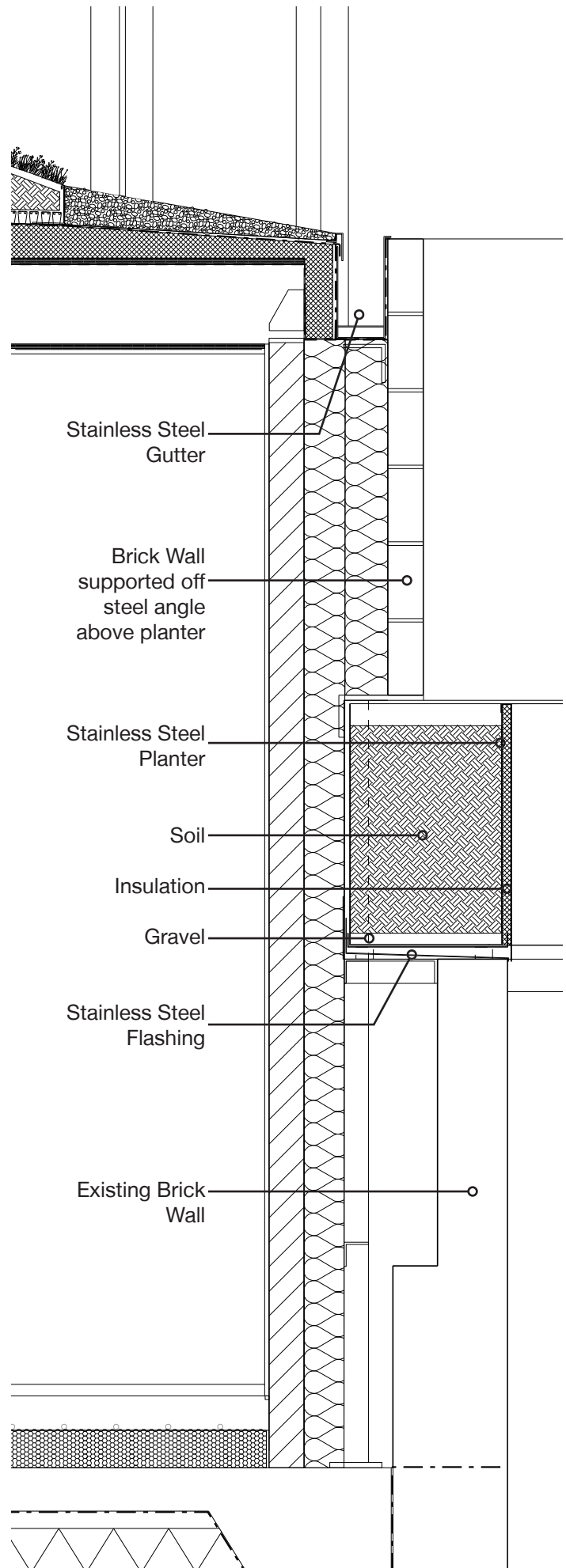
According to condition number 5 of the decision notice, full details of the planted areas on the southern and eastern elevations must be submitted. The growth on these faces will be supported by a large planter on the eastern elevation measuring 4.6 metres long, 0.45 metres wide and 0.7 metres deep.

The width of 0.45 metres is particularly important for the growth of the Clematis Armandii plants which will be planted. These plants will grow to cover the entire eastern and southern elevations of the proposed extension. It was important to provide access for maintenance and drainage which raised the planter from behind the existing brick wall to on top of it. The planter's material finish will be black patinated stainless steel to match the patina of the existing dark bricks below.

The planter has been designed to be manufactured in stainless steel which will be patinated to produce a blackened coating, this will complement the naturally blackened bricks of the wall below.

Insulation located on the inside of the planter will ensure the roots are protected in periods of extreme heat and frost while a water retention tray will ensure there is always adequate moisture to sustain them. An automated watering system will ensure the plants are regularly watered.

Finally, the southern and eastern elevations will offer growing cables for the Clematis Armandii to climb onto, supported off stainless steel fins embedded into the brickwork.





Clematis Armandii

Mulch

Flower Plant
Soil Mix

Gravel Layer

Additional Plants
should more density
be needed.
(Trailing Rosemary
shown)

East Elevation

Description



< Existing Condition

The brick wall enclosing the garden of the property has taken on a dark patina. The design takes this into account and aims to preserve the patina and ensure that the new extension complements its colour. The brick wall changes from the standard brick colour to black at its top matching the dark tones of the Church of St. Martin which is visible in the background. The existing Clematis Armandii plants, which have been proved to flourish in the particular spot are supported off stainless steel fins and steel cables. When they are fully bloomed, the supporting structure is completely hidden.

Impression of building
with Clematis Armandii fully grown



Corner View

Planting



< Existing Condition

The Clematis Armandii plants have been growing on the property successfully. They positively affect the house's image from the street and offer privacy to the owners. The ability of this climber plant to conceal large areas will be exploited in order to ensure the extension of the house will be as discrete as possible.

Currently, one mature stem of Clematis Armandii covers the southern elevation of the garden. This plant has been preserved and will be re-routed to grow on the new southern elevation and support structure. The new clematis armandii plants on the east elevation planter will also aid in the full coverage of the south elevation.

Proposed View >

The design takes the growing of the climber plants into account and ensures they will have enough supports to grow on the east and south elevations of the building.

Stainless steel fins with metal cables running through them at regular intervals will offer the plants consistent supports. In this way the same amount of greenery, if not more will be offered, even though the property will have been extended.

Impression of building
with Clematis Armandii fully grown

