Right on track

Situated beside a railway line, this productive garden complements a home designed as a model for sustainable living. Happily, beauty is at the heart of its design too

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In brief

What A mixed fruit, vegetable and ornamental garden designed along ecologically sustainable lines.
Where Central London.
Size 8,000 square metres.
Soil Initially poor and filled with building refuse but improved by constant composting.
Climate Dry and hot in summer, cold and shaded but rarely freezing in winter.
Hardiness rating USDA 8.

Designer Emma Griffin's naturalistic planting makes the most of dappled shade, with *Allium hollandicum* 'Purple Sensation' and white *Allium nigrum* contrasting with the orange *Geum* 'Mrs J Bradshaw'.

What will the future look like? In four years it will be 2019, the timeline of the science-fiction film *Blade Runner*. Made in 1982, director Ridley Scott's bleak dystopian vision was hi-tech and nature-free. I think the cities of the future will be far greener. As fuel costs rise we'll have to find ways to produce more food closer to home, and the rural will invade the urban with vertical farms and tower-block orchards. Individually, we're likely to waste less, grow more and possibly learn how to build things for ourselves. We might end up living and working in a house designed like this.

On a plot of land beside railway tracks that bring the East Coast mainline into King's Cross, London, architect Sarah Wigglesworth has created an office space for her architectural practice, a home for herself and her husband Jeremy Till, and a garden designed to be both productive and beautiful. The house was designed as a model of sustainable living in an ultra-urban setting. It was built using recycled materials aimed at the self-builder: straw bales faced with a combination of plastic and metal corrugated sheeting to insulate the walls, and crushed waste concrete contained in metal cages, called gabions. The latter act as pillars under the house. They sit on springs and help reduce vibration from the railway. The office wall facing the track is faced with cement bags to help absorb the noise from trains. The garden is irrigated using rainwater collected from down pipes that feed into two 3,000-litre capacity underground tanks.

Innovative design aside, it's the way nature combines with the architectural intent behind this modern building that interests me. The garden was initially planted up by Sarah and Jeremy in 2000, following a chequerboard idea mixing ornamental planting and grasses with strips of lawn, designed for an aerial view. It swiftly proved too complicated and difficult to maintain, and so Sarah's sister, the garden designer Emma Griffin was asked to devise something more practical. The initial colour scheme changed from black-red at the east end to white at the west end with pinks in between. While some ▷

1 The house is insulated with straw bales faced with corrugated metal and clear plastic. Outside steps lead down into the garden, where raspberry canes grow exuberantly.

2 The very poor soil in this bed has been improved over time. Now the feathery grass *Eragrostis curvula*, *Gaura lindheimeri* 'Whirling Butterflies', the coppery orange spikes of *Verbascum* 'Clementine' and *Salvia officinalis* 'Purpurascens' (common sage) all thrive here.

3 Metal rebars are welded together to make a frame for climbing beans in the raised beds. Using this common building material in the garden echoes the way these materials have been made a very visible part of the house's construction.

4 The garden works well as a potager. Both beauty and usefulness are expressed in a border where the ornamental onion *Allium nigrum* mingles with herbs such as chives *Allium schoenoprasum* and *Salvia officinalis* 'Purpurascens'.

5 Deep shade can be a problem, but here it is made a virtue of with the creation of a successful fernery planted with *Dryopteris filix-mas*, *Lamprocapnos spectabilis* (previously known as *Dicentra spectabilis*) and *Polygonatum odoratum*.

6 A small brick terrace made of warm red Rudgwick brick provides an outside eating area. The same brick has been used to build a wallside bed containing magnolia and clematis.

7 *Rosa* Winchester Cathedral (= 'Auscat') and *Digitalis purpurea* create a cottage garden effect against the backdrop of an ultra-modern house.

8 Feather reed-grass *Calamagrostis* x *acutiflora* 'Karl Foerster' provides structure for the perennials bed, overhung by a silver birch. Seen from above, the white dots of *Allium nigrum* show up well against the emerald hillocks of the grass *Hakonechloa macra*.

Design ideas

Practical tips from Sarah Wigglesworth (left) and Emma Griffin for a more sustainable garden

Utilise all your space, and work every inch of three-dimensional space in your garden. You can maximise your growing area by **training espaliered apple and plum trees (2)** against retaining walls. Try to **use vertical as well as horizontal space** by growing climbing plants (beans, gourds etc) up strong metal supports **(3)**. And don't ignore shady areas. Ferns, including *Dryopteris filix-mas*, and other shade-loving plants, such as *Trachystemon orientalis*, *Polygonatum odoratum* and *Lamprocapnos spectabilis*, grow wonderfully in the deep shade of tall buildings **(5)**. Think about **collecting rainwater** into a large tank sunk underground. Increase the green footprint of your house by **growing a green roof** (in this case an impermeable membrane was laid across the roof with a thin layer of soil on top. Link your garden to your house so it becomes an easily accessible extension to your home. Here an **outside staircase (7)** links the raised building to the garden. Consider **raising all or simply part of the building (8)** as this provides you with extra space beneath (here it's home to chickens).

The house is raised up on stilts providing a large storage space that functions as a mini farmyard beneath the house, with plenty of room for a chicken run and a dry area to store wood.

Right A thyme path leads between the raised beds, which are planted with five varieties of potato.

▷ plants in this scheme remain, there is now a new approach to colour with *Tulipa* 'Orange Emperor' and *Narcissus triandrus* 'Ice King' providing spring colour followed by *Allium hollandicum* 'Purple Sensation', and glowing orange *Geum* 'Mrs J Bradshaw'. "I like a more relaxed approach," says Emma. From upstairs in May the window view is of the climbing rose 'Madame Alfred Carrière' whose swags of heavy white blooms break up the blind end-of-terrace wall opposite.

Emma's brief was to increase the food growing area, while retaining some features of the old garden. Improving the poor soil was one of the biggest challenges. The foundations of previous buildings were just below the surface; one bed was full of lime, sand and mortar while another was filled with clay soil and rocks. One area became very hot and dry in summer and killed almost everything planted there. Sarah and Jeremy also wanted to keep the original cobbled courtyard behind the entrance gates, as well as two *Betula utilis* var. *jacquemontii*, a hornbeam hedge, espalier damson and apple trees and four bamboos (*Phyllostachys aurea*). A big success is the new fernery, a border that runs in the deeply shaded space at the back of the house.

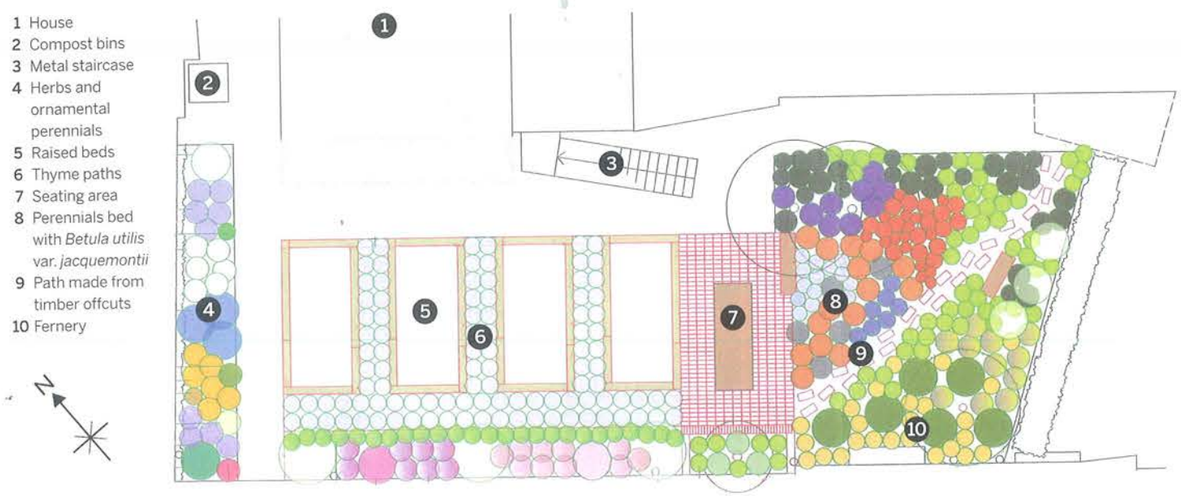
One of the clever things about this garden is the way building materials link its design to the house. Raspberries, potatoes, courgettes and currants grow in four raised beds edged in oak sleepers. In the beds are iron poles welded together to make a support for beans and climbing plants. These are rebars, the rust-coloured grooved iron poles that are common construction kit, and hark back to the site's original use as a forge that made ball bearings. "I like how it links strongly to the textures and feel of the building," says Emma. □

USEFUL INFORMATION

Address 10 Stock Orchard Street, London N7 9RW.
Open 10 October 2015.
Designer emmagriffingardens.com.

GARDEN PLAN

1 House
2 Compost bins
3 Metal staircase
4 Herbs and ornamental perennials
5 Raised beds
6 Thyme paths
7 Seating area
8 Perennials bed with *Betula utilis* var. *jacquemontii*
9 Path made from timber offcuts
10 Fernery



Eco features

1 Nothing is wasted in this garden. The **timber offcuts** from the raised beds were faced with chicken wire, to make them grippy, and used as stepping stones through the flower garden.

2 In good years with fruit, vegetables and eggs in plenty, Sarah and Jeremy are almost **self sufficient**. "The greenest thing we do is grow vegetables," says Jeremy. Rebars provide support for beans and peas.

3 Sarah and Jeremy have opted for **pure breed chickens**, Rhode Island Reds and Buff Sussex (pictured right), as they lay just enough eggs – unlike many hybrid species, which have a tendency to lay too many.

4 Three **compost bins** at the side of the house deal, separately, with waste from both garden and house.

5 The **roof meadow** was originally planted with ox-eye daisies (*Leucanthemum vulgare*) but these are now mixed with numerous species of wild grass and other self-seeders. "The meadow dies back in hot weather and comes back to life in a week," says Jeremy.