

HOMES FOR A CHANGING CLIMATE

ADAPTING OUR HOMES AND COMMUNITIES
TO COPE WITH THE CLIMATE OF
THE 21ST CENTURY



WILL ANDERSON



Half of the residents' food needs are grown or produced on site.

growth that sunlight stimulates. Even so, substantial filtration is needed; including a UV filter, to ensure the water is fit for drinking. The tanks can hold enough to keep the residents in drinking water for 250 days. Sewerage relies on separation tanks, which supply both the compost heap and a reed-bed system that eventually flows into the artificial lake in front of the development. The water in this lake has been regularly tested and consistently found to be of excellent quality.

Despite the close proximity of the houses to this lake, the threat from flooding is minimal. The only possible source of flooding is rainwater as there are no nearby rivers to make room for. As almost every surface within the bounds of the development is absorbent, including the walls and roofs of the houses, and as water that drains from the land is constantly moved up to the reservoir, there is little chance of surface water build-up.

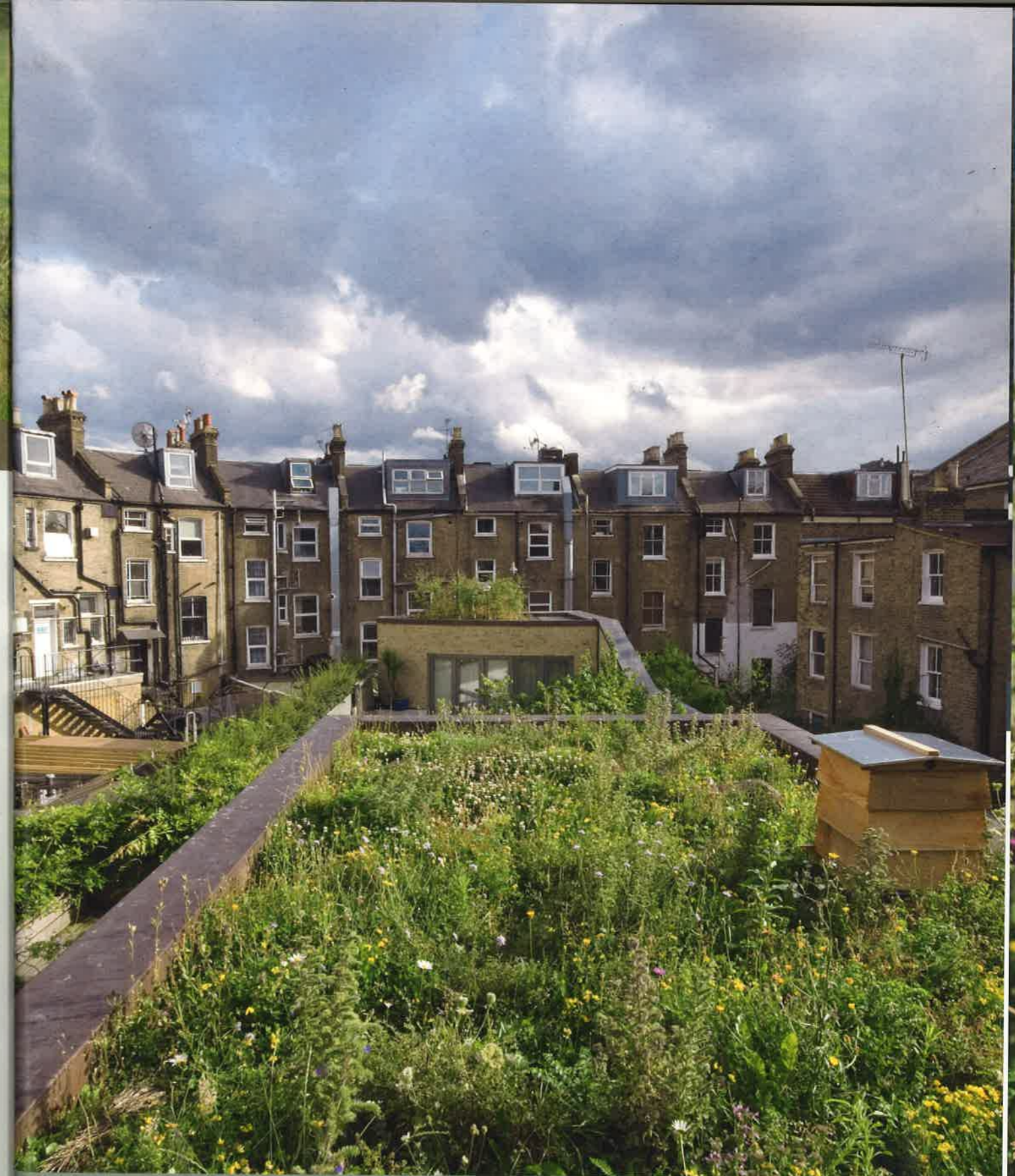
This soft green landscape is used not only for collecting rainwater but also for food production. A substantial vegetable garden, with its own rainwater supply, is complemented by a small flock of sheep. The output from these two sources is enough to provide approximately half of the residents' food. More land could be brought into cultivation, but the residents all contribute to the management of the land in their spare time. None

wants to be a full-time smallholder. The substantial amount of food they do produce is therefore testament to the efficiency of their collective effort.

Without question, collective effort is needed to sustain the Hockerton Housing Project, and anyone moving in must agree to participate in the shared responsibilities of the project: maintaining the water filtration and sewerage systems, servicing the wind turbines, looking after the sheep, and even showing people round and educating groups about sustainable design. Not everyone wants this level of community participation and not everyone wants to live in a gentle rural paradise. Yet even in the anonymous city, the model is potent. However individualistic we want to be, we have to work together if we want to live sustainably and prepare for an uncertain future.

The soft and hairy city

In the heart of the well-to-do London suburb of Islington, the streets bake under the midsummer sun. The handsome terraces, built by speculative developers in the nineteenth and early twentieth century, are packed into the available space, with front doors only a few steps from the pavement edge. There are few front gardens, though some



The glorious green roofs of Justin Bere's home and architectural studio in Newington Green, London.



Foxgloves for the delight of humans and the nourishment of bumblebees.

streets enjoy the shade of mature broadleaved trees. The landscape is defined by masonry, brick and tarmac.

The street frontages are ordered, elegant and, on the whole, well maintained. In contrast, the backs of the homes are a disorderly muddle of extensions, yards, sheds and the occasional micro-garden. The residents do their best to make the most of assorted awkward spaces: narrow side returns, tiny courtyards and unlikely balconies. In among them, shops, industrial units and motor workshops compete for space. Between the back yards of two parallel streets in Newington Green, a Turkish sausage factory once churned out its daily produce. But the factory has gone, its

scrubbed floors and stinking vents replaced by the striking home and studio of Justin Bere, an architect who has the imagination to conceive of the urban landscape as an extension, a reinterpretation, of the natural landscape it replaces.

There are four distinct green roofs on Justin's home-cum-studio. Each is planted to a different depth and sustains a different micro-ecosystem. At the very top of the building, sharing space with a solar panel, the soil is thin and only the hardiest of drought-tolerant, creeping plants survive. One level down, the soil is deeper and an English meadow blooms with daisies, cornflowers, viper's bugloss and the aphid-friendly common vetch. At the other end of the building, hawthorn is under-