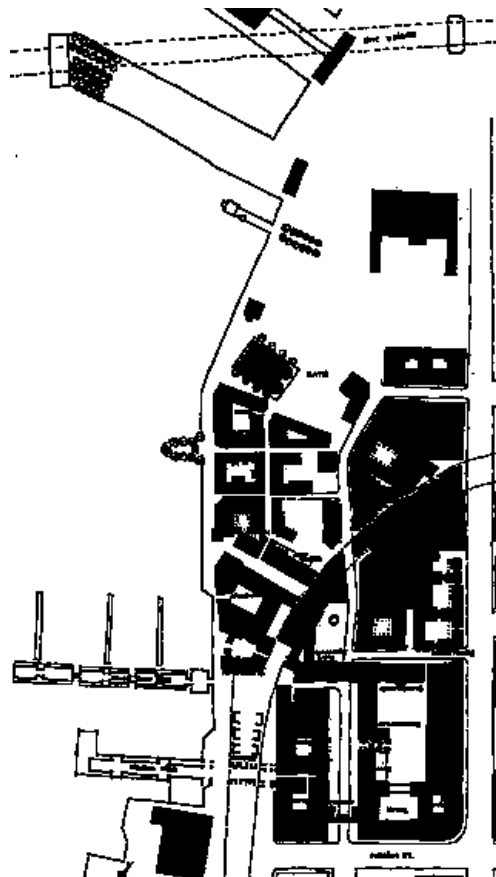


building, an outdoor space, a garden, a wall, a road, a window, a complex of several of these at the same time ... In general, a centre has some kind of elementary symmetry, especially bilateral symmetry ... This does not mean that all centres are perfectly symmetrical. But when an asymmetrical situation occurs, the centring process will generally try to construct the asymmetrical thing, or centre, as a product of simpler centres which are themselves locally symmetrical. It does not permit random asymmetrical arrangements'.<sup>22</sup> Figures 5.11 to 5.15 illustrate the result of Alexander's organic urban design process. For this experiment he used groups of students to design an incremental series of individual projects. Without a master plan and armed only with the principles for the healing or centring process, the design groups prepared ground plans for a new city district which would exhibit some of the qualities associated with a Medieval town in Europe and therefore would fulfil the aim of the process.

### CASE STUDIES

This section of the chapter illustrates, with case studies, the use of analogy in the generation of ideas for urban design in the pursuit of sustainable development. The first case study is from Surrey. It explores the theme of permaculture. It is a project which develops from ecological analogy. The second case study is from Derby and outlines the rehabilitation of railway cottages, developing the idea of the urban village. The third case study takes further this idea of the small urban community and shows how such a community can become involved in design. In the process of generating ideas about design, a group of strangers came together to form friendships and a support group, the bedrock of community. The resulting physical structure exhibited the organic qualities associated with the unplanned settlement.



**Figure 5.15** Alexander: organic design process, final stage of the process.

The fourth case study is the Norwegian Ecological City. The ideas taken from nature have been developed in Norway and applied to the city as a whole. A number of features of the Ecological City are examined using 'Gamle Oslo' and Bergen as the main examples.

DESIGN FOR ECOLOGICAL SUSTAINABILITY ON  
AN EIGHT-ACRE SITE IN SURREY, UK  
This private residence which is linked to  
Construction Resources, Ecological Building Centre,