

BUILDING FOR LIFE

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I shall provide a case study project by Feilden Clegg Bradley for Countryside Properties in central Cambridge. It is the largest central Cambridge allocated housing site and it located just to the south of then famous Botanic Gardens .

Before that I just want to say a couple of things about housing generally, which we in this country traditionally, going back centuries, have done actually very well.

This little image on the corner is a house by Smith Fen [1]. I like this image because it puts the personal, the occupier, the resident in the centre of what we do. It is so difficult when working on larger housing projects to bring that thinking right down to the individual, because that is the where it starts, that is the purpose, to provide safe, secure and inspiring environments for people, so that they have good contact with the external environment, they have the privacy and security of their internal environment to allow them to make their own life and they are very much part of a community. We have not done very well in recent years in providing good housing stock that does all those things.

I have put this up because our main office is in Bath which is a great city [2]. It is a great model because not only is it built at the sort of very high densities compared with most developments these days but it works as an organic urban environment, integrating with the landscape of the surrounding



[1]



[2]

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parts of Bath. It has set pieces like, as you will know, the crescents, but it also has some very ordinary pieces among the things in between. Although we often aspire towards this great notion of mixed use in creating environments for mixed use, most of Bath is housing, housing forming public frontages: streets, squares, gardens, spaces. And the great thing about Bath is that it was a commercial development. It was with John Nash as the developer and John Wood and his son basically as primary architects, with other architects coming in and filling in between with set pieces. So I think it is a great model in the number of aspects and it reflects a life-style at the time which has lasted through to this period and has adjusted over time. That is a great thing that housing has to do. We must remind ourselves of that continuity that is required within housing design.

So here we are in Cambridge [3]. Cambridge, a very particular place. This is an aerial view looking from the south. As you can see in the distance here, this is Cambridge spreading out along the river, with the colleges and the backs here on the left and the rest of the town, the residential town, really further back in from the



[3]

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riverside, integrated obviously with the college buildings as well, organised round greens and pieces and larger areas of landscape, but very low key. Nothing very dramatic about it, it is all very low key. A lot of housing stock again is very ordinary: Georgian Victorian and Edwardian streets as we see in most of the country.

This is our scheme [4]. It is a scheme that sits on a 9.5 ha site, but one-third of that site is dedicated to public landscape. The only other use that we have on the site apart from housing is a shop and a community room which sits in the centre, in here. The rest is all housing.



[4]

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As a bit of background, we were brought into the scheme after Countryside had obtained an outline planning permission. We were brought in from a background of other work. But that work was principally urban schemes in the provinces, in Bristol [5] and Cheltenham [6, 7] and other places at very high densities, densities of 120 dwellings to the hectare, something like that, 1.2 plot ratios. So high densities, predominantly apartments, central urban schemes. The Cambridge project is lower density and predominantly houses.



[7]



[6]



[5]

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Our first comments to Countryside were that it is nearly 400 homes on this 9.5 hectare site. Thank you very much, very nice to design 400 homes, but what we would really like to do to create the richness and vitality is bringing in other architects to work with us. So one of those architects is Maccreeor Lavington, who have extensive experience of building in Holland [this page]. They have yet to build a significant housing development in this country, so this is their first. They are doing about 20% of the development.



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Alison Brooks Architects [this page] is known for her one-off houses and we brought her in to provide a couple of highlights within the Master Plan. She is doing about 10% of overall development.



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But at first Countryside said: "We don't want to employ three architects. One architect is bad enough.". So it was agreed we would take them on directly, and so we have employed those two architects to work with us through from the beginning of the Master Plan through into the detailed stages.

A few reference points about the site. Here it is located in the centre of Cambridge [8]. The site was until recently covered with government offices, predominantly single-storey government offices, post-war [9].



[8]



[9]

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The whole site was part of a PFI deal that was organised by Kajima and new government offices were built on one quarter of the site [10], the rest of the land then being freed up for residential development.

Here are the historical plans [11]. It is a site that was originally part of a large garden to a country house which is now owned by English Heritage as its regional headquarters [12].



[10]



[11]



[12]



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The diagram here shows the site [13]. Here are those offices [bottom left], freeing the rest of these other three-quarters of the site. This quarter of the site had restrictive covenants on it and so not only were the whole issues of the planning guidance and all those sorts of things in here, there are also legal issues that encouraged us to do certain things.

The outline permission was on a quite traditional theme. Countryside, and they would not mind me saying this, hoped they would get an outline permission with few reserved matters. As it turned out, they only got permission for the numbers of dwellings and a single access, which I think was slightly unfortunate off the principal street, which is Brooklands Avenue. Here is the botanic gardens. It was the city council that encouraged Countryside to be a little more ambitious with their design and to come back with something that was not a traditional estate housing scheme in the centre of Cambridge.



[13]

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Here [14] there are various facts and figures to do with density that were set really by the outline permission. The overall site density, and it depends how you interpret all these things, but it is about 40 dwellings per hectare overall. If you look at it within the development zones, it is much higher at 63 dwellings per hectare. It is an interesting model to look at these almost peripheral sites (rather than those in the centre at very, very high density sites): these are medium density, around the same densities that one would find in traditional areas of Cambridge.

The main diagram shows the idea of dense urban blocks sitting within a landscape trying, to create as much public landscape space as possible, trying to create as much open space for the dwellings to look out [15].

The Brief

- Total Site Area - 9.5 Hectares
- Area Available for Development - 6.0 Hectares
- Outline Planning Application Brief - 382 Dwellings
- Overall Site Density - 40 Dwellings / Hectare
- Density within Development Zones - 63 Dwellings / Hectare

PPG 3 Guidance

- Current housing in England and Wales developed at 25 dwellings / hectare
- More than half of all housing developed at less than 20 dwellings / hectare
- LPA's should approve new housing at densities no less than 30 dwellings / hectare
- LPA's should encourage the efficient use of land at densities between 30 and 50 dwellings / hectare
- Higher densities should be encouraged at sites with good public transport accessibility

[14]

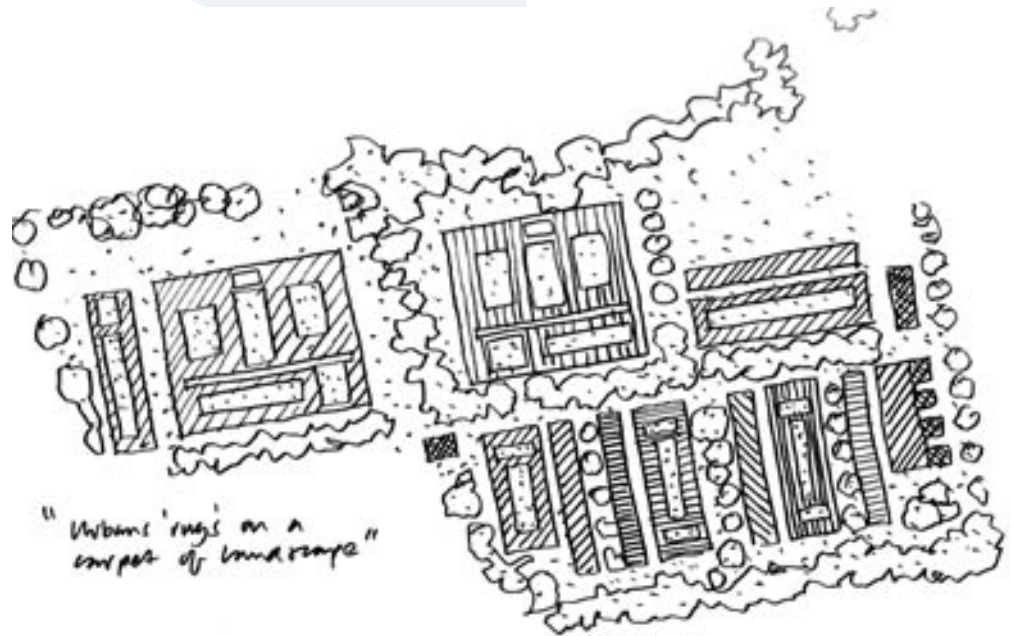
Brooklands Avenue, Cambridge



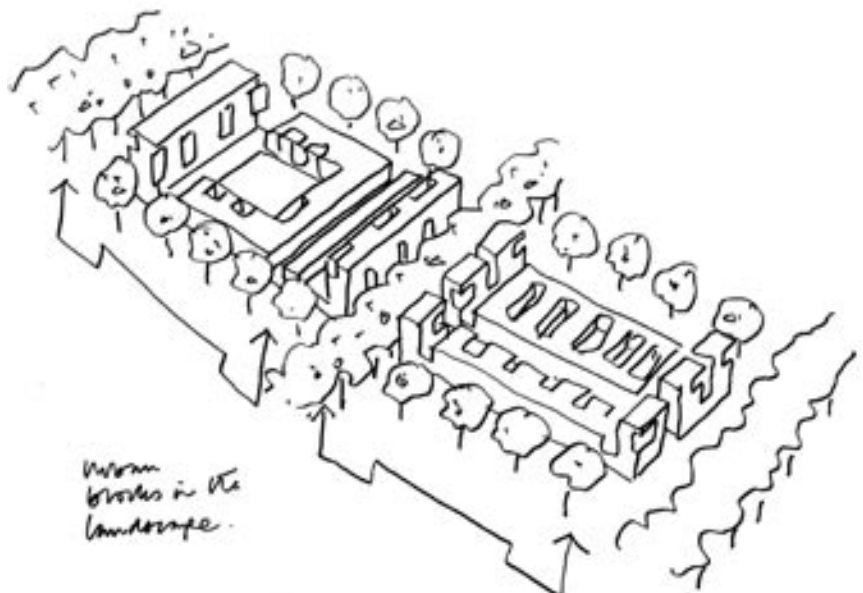
[15]

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Here a series of parks and gardens that are interweaved between those urban blocks, these formal terraces again very much in the sort of Cambridge tradition [16]. Then within that three-dimensional part of it builds up edges to form the high buildings which then face out on to bigger landscaped spaces and the principal streets and avenues, and then to actually creates mats of lower courtyard housing in between with more intimate garden spaces and courtyards [17].



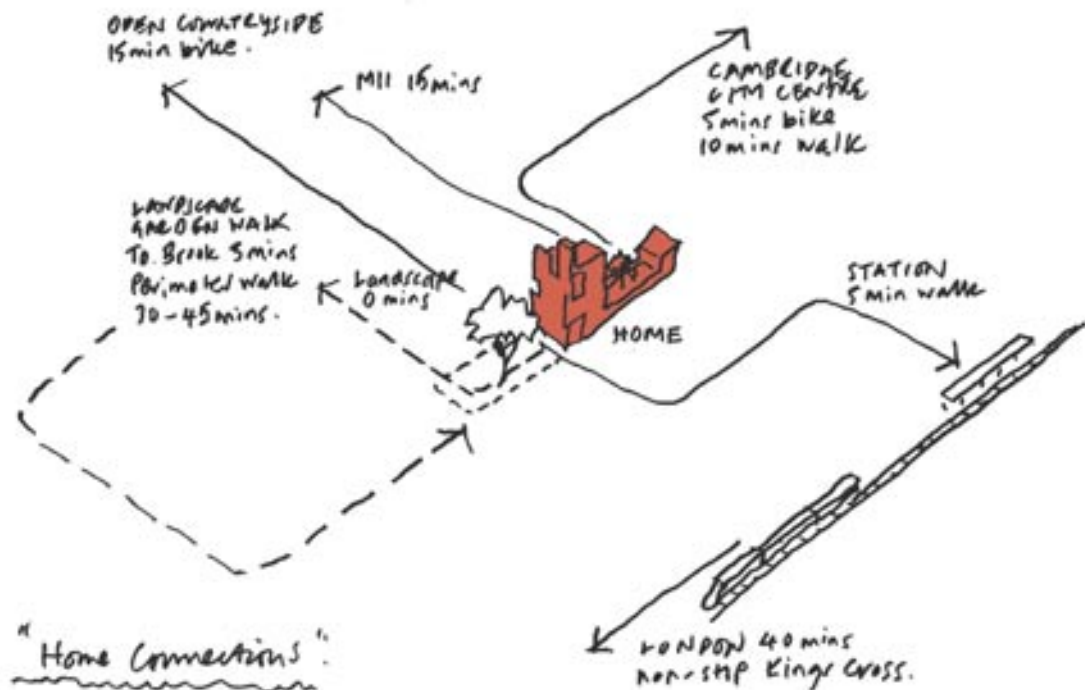
[16]



[17]

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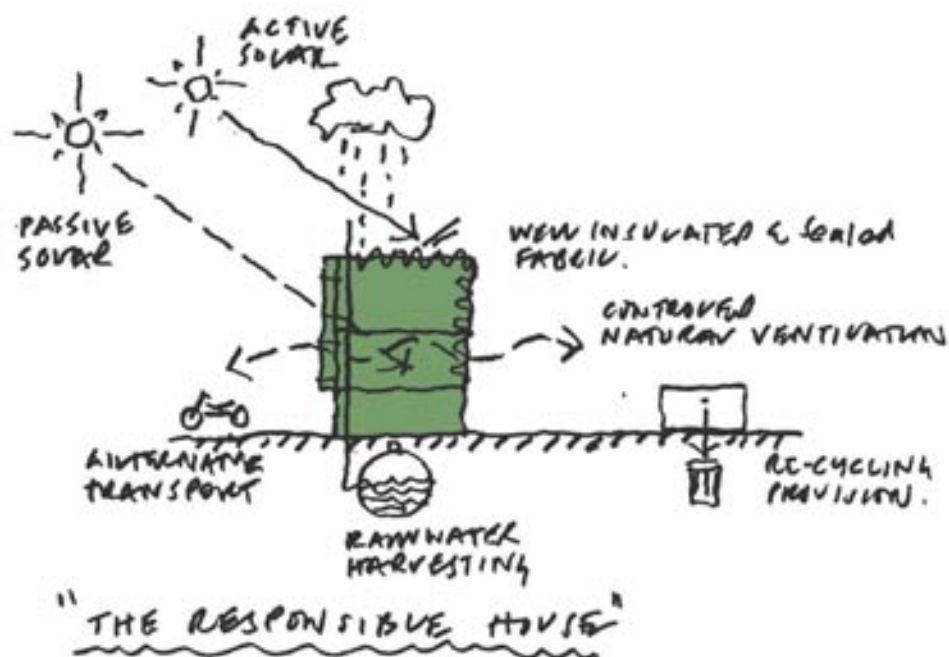
The site is very well connected [18]. It is only a few minutes away from the railway station in the centre of Cambridge. Cycling is obviously a big thing in Cambridge and the whole provision for bicycling was very important. We ended up with a car ratio of 120 per cent, which is not untypical. One would have hoped it could be a lot lower, but it was set again at the outline stage. But the whole design of the scheme is in such a way as to encourage people to use bicycles, to use their feet rather than actually getting the car out. I will go into that in a bit as we go through some of the detail.



[18]

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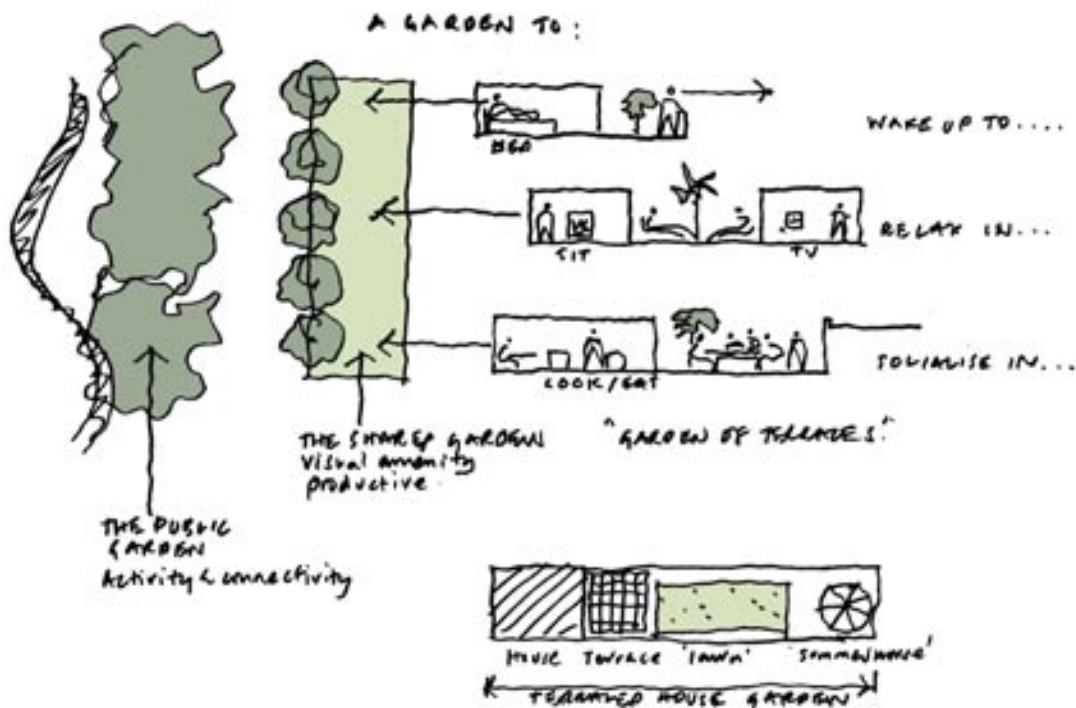
Environmental aspects of housing [19]. Although Cambridge have a very good and strong environmental agenda, and also Countryside actually have a good reputation in building environmental schemes like the Greenwich Millennium Project, for instance, it is always very difficult to convince developers that environmental issues are important and that they actually add value, particularly to private housing. Hopefully Bed Zed has done some of those things. But basically on this scheme we worked in two stages: one is to say we want to have a responsible house that deals with all the basic issues like good insulation, good basic principles of energy saving; then a second stage would be to actually add bolt-ons which could be provided at some later date. The way we are now trying to work with the Countryside is that we as a practice are going to invest in providing those bolt-ons, providing the package, and then they are going to be sold, hopefully, in future phases to purchasers. Then we would get some sort of cut of those sales to be agreed. So that is the only way that we found we could actually get in some of the more adventurous environmental aspects into the scheme which are not rocket science now. Things like pre-heating of hot water, rain water harvesting tanks, that sort of thing.



[19]

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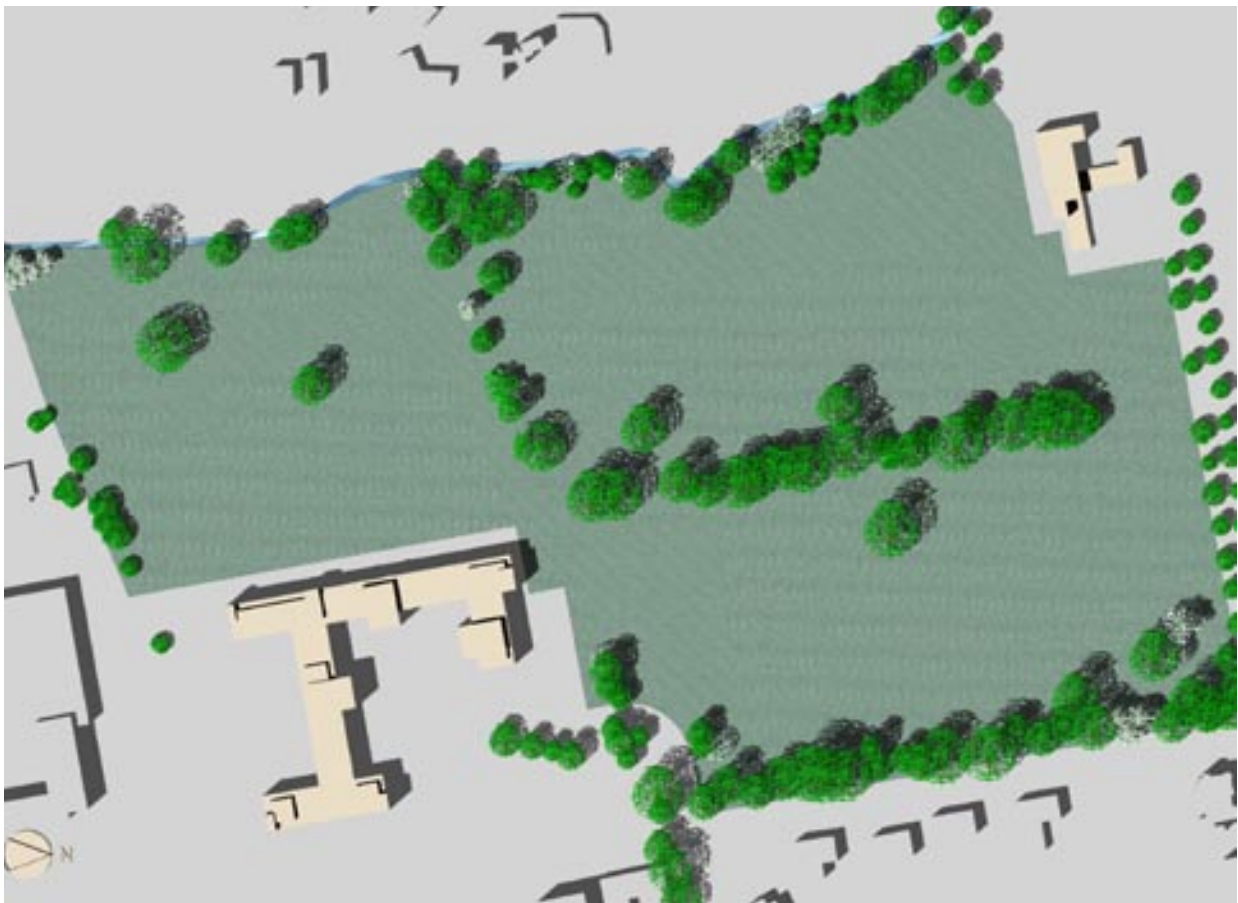
The whole principle of the individual houses is not on a straightforward terraced house, like this little diagram shows at the bottom here, with a terraced house with its garden within fences and with back-to-backs [20]. The houses are all very three-dimensional and so they have a series of external spaces on the number of different levels, relating directly to different types of living spaces inside the house. These are all quite small and intimate and, as I say, happen through the three-dimensional qualities of the house. We can do that because outside each of the houses and the apartments has shared gardens, open to the public and shared by the residents. They are run by a management committee. Then beyond those there are also the larger areas of public garden space. So a whole gradation of different spaces from the public to the private.



[20]

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Now I am just going to go through a build-up of the Master Plan [21]. This is the principal framework of the existing landscape on the site. This was its garden in the past. You can see the new offices in the bottom left and this is the structure of the trees around Hobson's Brook [top] and the central avenue and avenues of trees against Shaftesbury Road to the east. Then the first move is to work with this single access that we had



[21]

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and to create a street which moves through and to use the central tree belt as, in effect, a central space or boulevard through the middle of the scheme. Then overlaid on that we then have a series of secondary mews streets and courts [22], which are for vehicular accesses predominantly, but also they are sheer surfaces. There are no turning heads or radii or roundabouts on here. The whole idea is it is a 20 mile an hour or less zone and there are tables and everything is controlled so it is very pedestrian and cycle friendly. Overlaid on that are the pedestrian only path and courtyards which sometimes coincide and sometimes are separate. Then, beyond that, we fill in with the garden spaces [23], these shared garden spaces that I mentioned earlier. That whole idea of the garden spaces is that they all have different characters and they are part productive, they are part of ecological, they are part just for landscape for leisure for enjoyment.



[22]



[23]

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The whole idea is that these houses then can face out on to these spaces, so here is a focus in on the Master Plan of the houses around these shared gardens, with their courtyard gardens beyond [24]. You can see the mews streets in behind providing on-plot car parking which is very, very tight. This is only 7 metres in here, so quite tightly parked. Again the idea that it is not easy to get your car out, it is much easier to get our bicycle out or to walk out on foot.



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Then some of these smaller spaces in the integrational landscapes shown here of how you can create the sort of very intimate sort of landscape spaces in between parts of the dwellings [this page].



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Some sections here, through the shared gardens and the courtyard houses [25].



[25]

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We then worked with Andrew Grant, landscape architect, to build up this series of storeys on the landscape which is based on his interpretation of English gardens through from the country garden tradition, places like Sissinghurst that will have a series of garden spaces and themes [this page]. So as a resident here you can actually take a walk through all these



Tree belts and gardens



Private gardens



Garden highlights



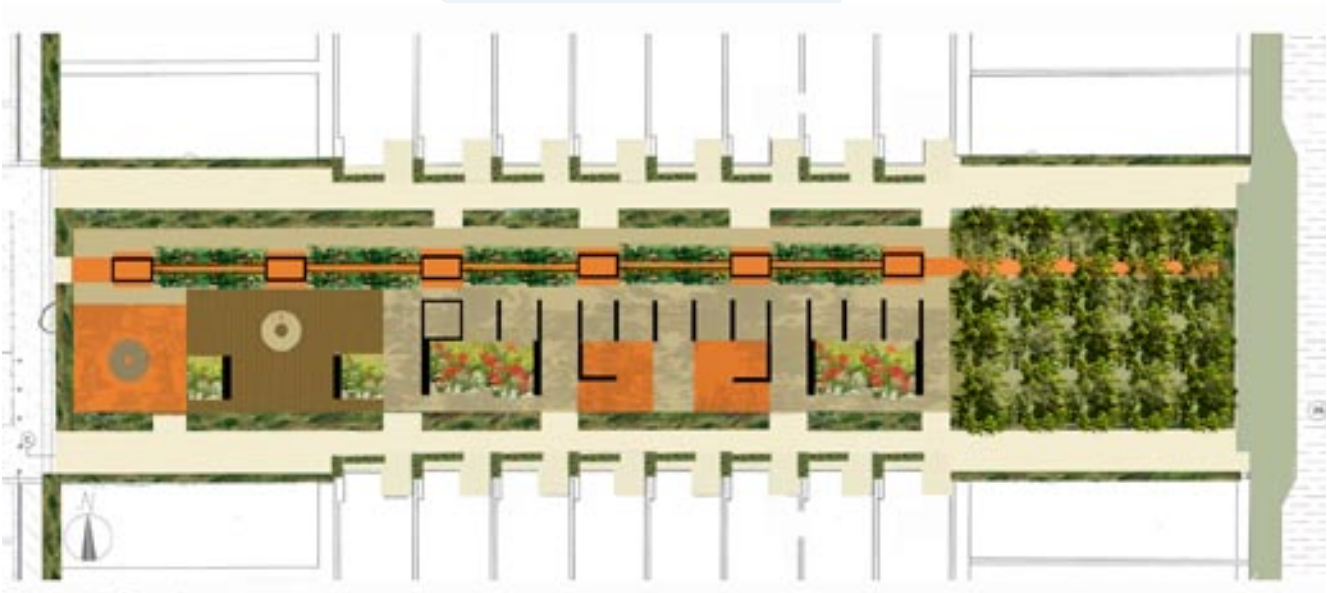
Garden walks



Framework of gardens

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different gardens. It may turn out to be productive garden like this [26] with orchards and herbs and plants that were used for production or ecological areas along the brookside with the water gardens or amongst an arboretum of trees [27]. So this whole place becomes like living in a great garden, so although you have one house or one apartment, you actually live in this big almost country house sized garden space.



[26]



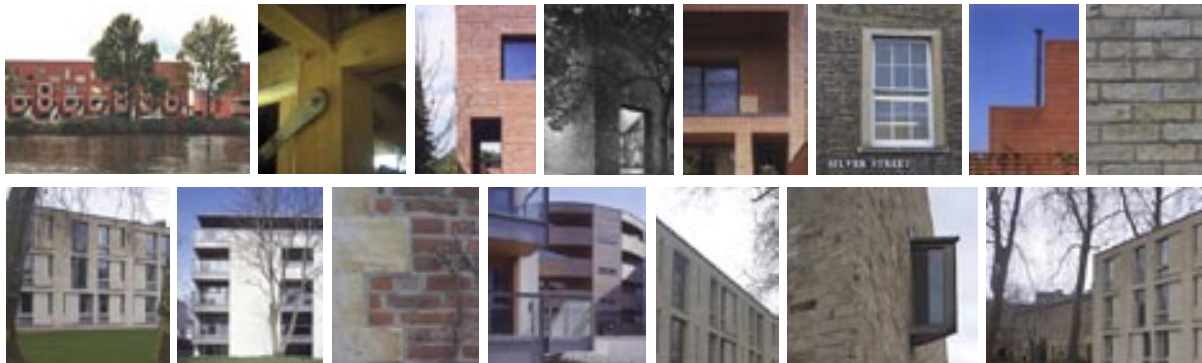
[27]

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Moving on to the dwellings and some images here of dwellings in relation to landscapes, some ours, some other people's [28]. Then the principle of the hierarchy of the drawings is to put the larger apartment buildings associated with the bigger landscape spaces, so those are marked in the orange here [29].



Public and Private Landscape



[28]



[29]

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Those apartment buildings are a mixture of five-storey, with these garden towers which are very small footprint towers, only the footprint of a house, in effect, with two apartments per floor, which provides almost folly-like markers in the middle of the scheme -- one here and one over here. So these are our apartment buildings [30].



Total Number of FCBA Apartments 8



[30]

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Then there are a couple of apartment buildings by Alison Brooks in the ground in the centre of the scheme made of copper [31]. Those last schemes predominantly made of oak timber framing and structural framing.

Maccreeonor Lavington are also doing an apartment tower over here and a terrace which runs through the middle of the scheme here shown in the bottom right-hand corner [32]. A very traditional sort of Cambridge town house terrace.



10 Flat Apartment Building



[31]



Hobson's Brook 14 Flat Apartment Building



[32]



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Moving on, here are the four-storey terraces and semi-detached houses which sit onto the boundaries which were part of the restrictive covenant working through the centre of the scheme [33, 34]. These are working on this courtyard principle of external spaces on different levels, but actually form public frontages, living spaces, front doors onto the street edges.



[33]



3.5 / 4 Storey 5 Bed Houses

Total number 32



[34]



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Then between those we then have the smaller courtyard houses [35, 36]. Some of those are private, some of them are affordable. We have 30 per cent affordable integrated into these courtyard spaces. Some quite interesting three-dimensional dwellings with courtyards and different level spiralling up the house. Or this house here, [bottom right 36], which is a long house, which is 27 metres long from one side to the other and takes the same plot as a typical terraced house but actually organises it differently, splits it apart and actually brings courtyards and living spaces into the middle. So very particular housing types which then come to form this Master Plan. With two entrances, they have an entrance on their mews side and they have an entrance on their garden side, so they are Janus-type two-way facing houses which you often see in and around Cambridge.



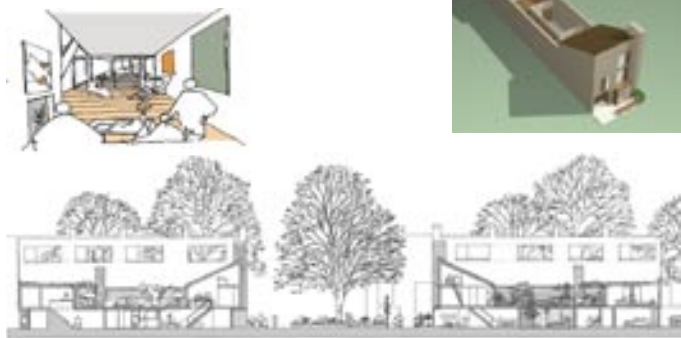
[35]



Total Number of Long and Courtyard Houses 63



[36]



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Three-dimensional views of the Master Plan from different directions [37].



[37]



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Looking back on that aerial view here are photographs of the model with some sketched views in the centre [38]. These are the existing trees through the central avenue here [39]. You can see one of the shared gardens. These are short terraced houses which are all broken on the right hand side, on the east side of the site, with these linear gardens going through, whereas this side over on the left side where the Maccreanor Lavington terrace exists forms a harder edge back from the central landscape space.



[38]



[39]

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Then a view from outside the site looking back in from Shaftesbury Road, looking back in through that same linear garden back to the central space in the middle [40].

Here is the central green and here is the oak tower with the shop under [41]. This is Alison Brooks apartments, our apartments over on the Hobson's Brook side, forming a green space around these existing trees which are all very special, as I say, part of arboretum that existed from when the country house had this garden.



[40]



[41]

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From the Hobson's Brook side looking back into the same space. [42].



[42]

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Then a picture of the overall Master Plan, [43], with the whole concept really of living in this garden space close to the centre of Cambridge with this richness of landscape, a very low-lying scheme made of houses of very particular types. The first phase is now on site, this phase going through in here, and the phases are just following on and those will be completed in February of this year.

The whole process we started in May of last year. We had four months to do our Master Plan and detailed planning application. Then we had I think it is 7-8 months in the planning processes. Once having lodged that, but within that four months we did all the stakeholder meetings and consultations with local resident groups and other amenity and interest groups. But the lesson from that is you have to do all those things and it is really good to do all those things -- it is amazing what actually comes out. But you still have to allow the time, at the moment anyway within the traditional planning process. The democratic process means that people can come forward even though they have been consulted, and object. This scheme had huge objections to it in terms of numbers, not I think in terms of design, but damage limitation from local residents trying to get numbers down, obviously not at all endorsing the general agenda of raising densities on these sorts of sites. And I think at one stage we were even threatened with a judicial review. So although in some ways it was very supportive process in terms of the City Council and certainly the other members on the Council were very, very good and very supportive and very fair also to their local residents, there are also those little battles that go on. It is a very difficult process still and I think there is a lot to be done in terms of refining that.



[43]