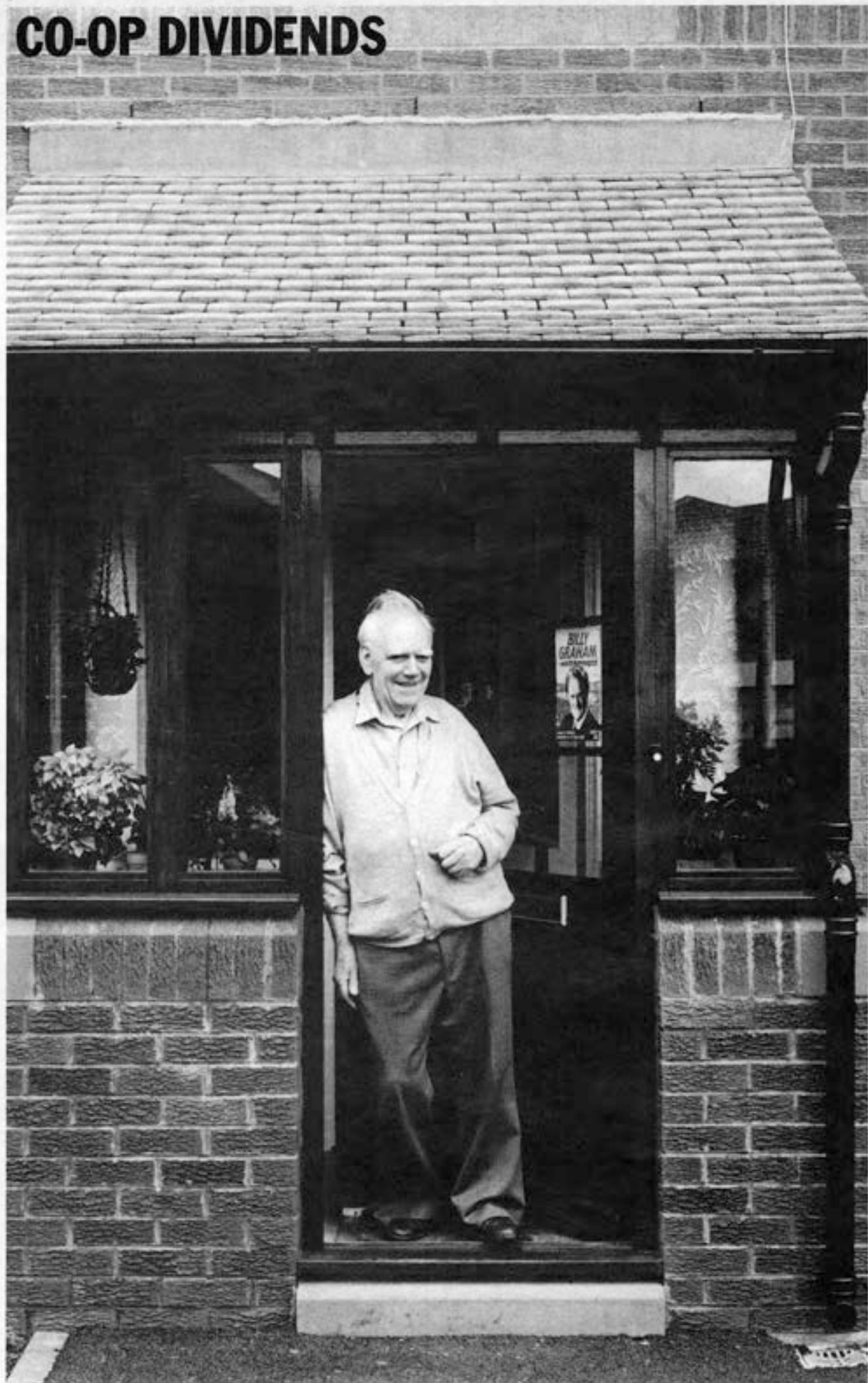




The Architects' Journal **Power to the people: co-op housing in Liverpool** 18 July 1984/80p

CO-OP DIVIDENDS

BUILDING STUDY



Hesketh Street

Innes Wilkin,
Ainsley,
Gommon

With royal personages at Hampton Court openly advocating the benefits of community architecture, and with so much published in the AJ on the Liverpool co-operative housing movement's hopes and struggles to build themselves new houses, the completion and occupation of the Hesketh Street Co-operative offers us an opportunity to see just whether these benefits and hopes have been realised. The housing agency, co-op members and the architects all tell their story and recount what lessons they have learned. To this group has been added an independently commissioned appraiser, Hugh Anderson, who asks whether in fact the end justifies the means. Photographs by Dougie Firth.

1 (previous page) The adventure of housing co-operatives is not just, as some assume, for the young and middle class. Stan Williams, at 72, is the oldest design committee member of the Hesketh Street Co-op.

2 The motivation for many Liverpoolians taking the collective self-help route of co-operative housing is to release themselves from housing conditions and management such as this. From this set of tenements has come the Dingle Co-op, the second co-operative housing venture undertaken with architects Innes Wilkin, Ainsley, Gommon.

3 The co-operative movement has survived only through struggle. In June 1983 the Liverpool co-ops marched to the city council to protest at the local authorities' withdrawal of funds.





3



How it all began

Sophy
Krajewska

Hesketh Street, Liverpool's second housing co-op came into being in February 1979, towards the end of the second phase of the city's mass drive to clear the worst of its heritage of Victorian slums. Indeed the co-op was born as a consequence of the slum clearance programme.

A group of Liverpool 8 tenants whose terrace houses had been condemned for demolition joined together with families who had once lived in Hesketh Street before the bulldozer claimed their homes, and whom the council had rehoused at random throughout the city. The two groups were made up of families with young children and pensioner couples who were friends and neighbours. The Liverpool 8 people wanted rehousing in new accommodation, with gardens, rather than in the relet flats and maisonettes the council offered. The other group longed to return to the Lark Lane area and community. Their aims converged on the now clear Hesketh Street site. Coincidentally the site had been earmarked by the council for housing association development and offered to the Co-operative Development Services (CDS), a local association and co-operative housing agency.

Complete reversal

From the first days when CDS introduced the two groups to each other and to the idea of co-operative housing, CDS's role has been that of a professional adviser, employed by the co-op under contract to provide educational and administrative services. It is this relationship between tenants as a client group and housing professionals as the co-op's employee and agent, which marks out co-operative housing from the mainstream of the public sector.

We are not talking here of an exercise in participation, of delegating selected crumbs of decision-making powers to tenants to use in consultations. Rather it is a complete reversal of the traditional power relationships inherent in our paternalistic system of housing provision. In a housing co-op the ownership and control of rented housing is held in the hands of its users

on a strictly collective, non-equity and democratic basis, enabling tenants to shape their environment to their own specific needs.

Educative role

The critical starting point to CDS's work with Hesketh Street was to teach the group the client's role. Co-operative education opened up the complexities of housing association finance to the co-op and developed the skills and confidence to run an efficient organisation. A continuing flow of presentations and briefings aimed to ensure that the co-op was able to make its own informed decisions and thus direct the design and management of its housing.

A practical example of the interaction between CDS as adviser/service agency and the co-op as client is found in the architect selection process adopted by Hesketh Street. CDS provided education sessions on the role of the architect, followed by detailed practice information from seven local architectural firms with public sector experience. The co-op's committee drew up a shortlist of four and instructed the CDS to organise a coach trip for the whole co-op to see examples of the architects' work. The next meeting concentrated on planning the formal interviews, and although CDS offered guidance, the actual interviews—and naturally the final decision—fell to the co-op.

Guiding light

Another essential aspect of CDS's involvement was a general briefing to the architects. New-build co-operative housing is a tenure pioneered by CDS and it was vital to ensure that any consultants employed by the co-op clearly understood not only the administrative requirement of the Housing Corporation but also the extent to which they themselves were required to educate and inform the co-op in the design process.

Throughout the design and construction stages CDS maintained an unobtrusive presence, directing any intervention merely at

Sophy Krajewska is an area manager of Co-operative Development Services, the local association and co-op housing agency who brought the Hesketh Street Co-op into being.

4 August '82. A long-awaited moment has arrived, the first of the monthly site meetings attended by members of the co-op.
5 Location plan. The International Garden Festival site is close by.



ensuring that the co-op had enough information on which to base its decisions at every stage, at making sure that target dates within the scheme programme were being met, and that the Housing Corporation's procedures and requirements were being adhered to. CDS also negotiated the purchase of the site on behalf of the co-op and dealt with applications for loans, scheme approval, rent registrations, and so on.

Preparing for future management and maintenance occupied the co-op's time during the construction stage. Members learned about the responsibilities of being a landlord—albeit a collective landlord—and drew up a tenancy agreement, lettings policy and other requisites, and set up the administrative and accounting services they would need for estate management. A new service agreement was also negotiated, covering the accounting and maintenance services the co-op wanted CDS to provide once the scheme was complete.

Co-op comparisons

Like other Liverpool co-ops, Hesketh Street's members are working-class families, some unemployed, some pensioners, whose initial motivation for taking the collective self-help route had its origins in housing need and a strong sense of community. It differs from other co-ops only in details of time and circumstances. For example, Hesketh Street did not spring up spontaneously from one single community—as did most of the second generation of co-ops which came from the council's tenement demolition programme—but is a synthesis of two main groups and a later influx of new members.

As a consequence of the Housing Corporation's expenditure moratorium in the autumn of 1980, Hesketh Street's design stage took 12 months longer than the average 15 months achieved by co-ops whose schemes were not interrupted by cuts or freezes. The uncertainty of that year was deeply demoralising. Design work stopped for a while. Some members resigned from the co-op and

took up rehousing offers elsewhere. While the membership of other co-ops has remained more or less unchanged from the founding days, one-third of Hesketh Street's present members were recruited then. They were local people, families and pensioners, living in dilapidated, privately rented flats in the neighbourhood.

Hesketh Street is also different in terms of its location, sheltered in an attractive part of the city which suffers less from the endemic vandalism, car thefts and break-ins that punctuate life in many of the central areas where the other new-build co-ops are based.

By any yardstick, its end product is undeniably satisfactory and attractive. The co-op not only exercised user control over the shape of the physical fabric, but went beyond this to community and social aspects. Particular priorities were to provide independent but integrated housing for elderly members—with those members playing an equal part in the decisions—and devising physical and social means of combating the inevitable problems of crime and vandalism.

The public purse pays

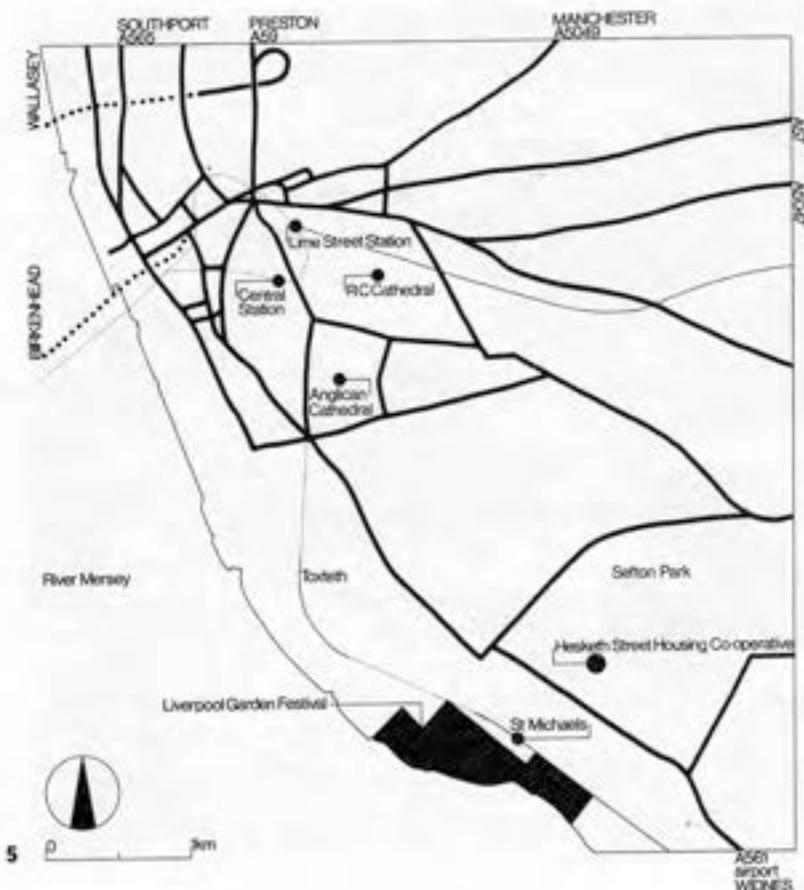
Hesketh Street is public rented housing, socially owned and paid for by the public purse. It is, of course, only right that the public should be satisfied that money is and will continue to be spent well. This entails three points. First, there is the question of housing need. Now that the estate is built and the members housed, the co-op's continuing concern with housing need is reflected in its published lettings policy. For the future, any vacancies will be filled, in equal proportions, by families nominated by the council and by others accepted onto the co-op's own waiting list on the basis of a tightly defined criteria of need.

Second, there is financial and general public accountability. As a registered housing association the work and finances of the co-op are subject to outside scrutiny. Each year audited accounts must be lodged with the Housing Corporation, which also carries out a regular cycle of 'monitoring' every key aspect of the co-op's work.

Unconventional demands

Third, there are the costs to CDS. The work involved in co-operative housing is not so much greater as different. The client-agent relationship generates evening meetings and other work outside office hours, and requires regular reporting and education work which are absent from conventional schemes. But CDS and its client co-ops work within the same financial framework as all other housing associations. Apart from co-operative education (for which CDS receives a small annual grant equivalent to some £800 per co-op), all the costs to CDS and the co-op during the development period must be met from the normal administration allowance of 2.2 per cent of the total construction and land purchase costs. (What are expensive and damaging are delays, cuts and abortive work, but in this respect CDS is no different to any other professional body.) Co-operative housing is not expensive. The key is staff with a strong commitment to the principles of tenant control and careful work organisation and planning.

For CDS, co-ops like Hesketh Street represent a better way of providing rented housing. We would not argue that it is the only way for the future, but is a viable and efficient alternative, one that tenants should have access to and one with much to contribute to housing.



Architects' account

David Innes
Wilkin

The Hesketh Street Co-op chose us after a 1 hr interview. They had already visited examples of our work. The interviews were held at a general meeting of all co-op members, and most of the time was devoted to questions. Who will run the job in the practice (you or someone else)? What do you think of municipal housing? How will you educate us to help us to make decisions? What is your ambition? Why do you want this job? How soon can we start on site? Can you afford to wait a long time for fees (a year if necessary) and, most difficult of all, what's the worst mistake you've ever made as an architect?

Developing a common language

Decisions could not be made until people were well informed about the choices available to them. The kind of housing which we wanted to discuss as a model had not been seen by everybody. Our methods of communication included:

- coach trips to and guided tours of about 10 other housing schemes, mainly in Warrington and Runcorn
- slide shows both of these trips and of new housing nationwide which the practice had visited
- books and magazines showing housing layouts and details: *GLC preferred dwellings plans* (Architectural Press); *Space in the home* (HMSO, 1968); *Metric house shells* (NBA 1969); and colour prints from *The Architectural Review* on housing schemes
- overhead projection of proposed plans, usually coloured, with the addition of extra items noted on them during discussion at general meetings
- a large number of A4 plans were printed for circulation at meetings as well as kits of small drawings and notes; the site plan was distributed on A2 size sheets to members
- video film of the site, and of us explaining things in our own office
- visits to our office, a brick library in the Building Centre and the University Botanical Gardens in Cheshire

- rough site models in polystyrene
- participation house-planning models loaned by Professor Tony Gibson of Nottingham University that formed rooms at 1:20 scale with card walls which could be moved about, and included furniture, doors and windows
- sketching on a pad while talking proved to be the best way of designing with a small group.

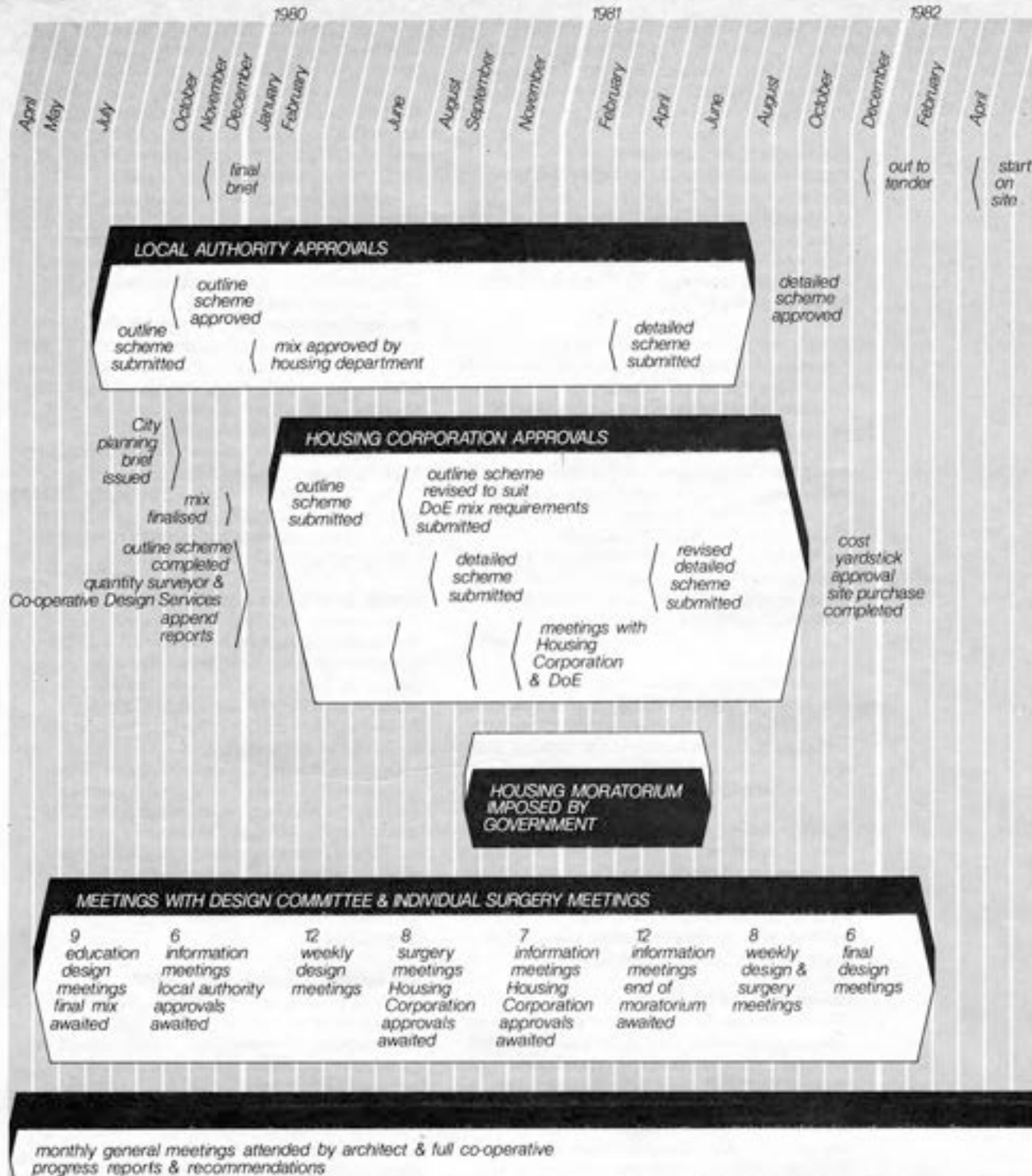
Primary decisions

The brief could only develop after decisions which included the following.

- What space standards were available? Co-op members visited the DOE in Manchester and the Housing Corporation in Liverpool to discuss storage standards and provision for disabled relatives. They found that Parker Morris standards still applied and decided to accept them with reluctance to avoid risking delays by the DOE.
- What are the cost limits? Meetings were held with the quantity surveyor, who advised on a density target and the effect of the cost yardstick tables. The scheme was built to normal cost yardsticks for public housing.
- How did the site planning have to respond to the neighbourhood? Liverpool City Council planners wrote a brief and attended co-op meetings. Local residents and businesses also put their points of view at co-op meetings.
- Could individual families vary their homes? Special designs were done for a disabled relative, for a seven-person family and for flats for the elderly. It was decided that the remainder of families could design 'variations on a theme' within a standardised shell for their house size, 8.
- Should access roads and drains be adopted? The co-op decided to comply with the local road engineer's requirements and have them adopted.
- What car parking provision was necessary? A planning agreement was made to relax the normal requirements for 100 per cent car

6 The scheme is largely complete. Co-op members and architects discuss the final details on external works.
7 The decision-making chart for Hesketh Street. Is the co-operative design process really financially feasible on the average fee scales used by housing architects? If there are no delays by the central government housing bureaucracy, the answer seems to be yes.
8 Variations on a theme. Three different ground floor alternatives for a four-person, three-bedroom house within the same 4-8 m width shell. In each of these three there were options for co-op members, such as whether to enclose the staircase.
9 Will a future generation learn from the Hesketh Street process? For the moment they must remain merely passive onlookers.





7



8



9

parking provision since few co-op members had cars. We showed how garden space could be converted into extra car parking if required by future occupants. (In practice there are rarely more than 10 cars parked in the scheme.)

How meetings were structured

It proved difficult to design with a full meeting of over 40 people. The process of inform-discuss-decide was therefore broken down into separate parts. Those who could spend more time with us helped to recommend decisions to large general meetings. We worked with the following groups.

Weekly design committee meetings

Ten members volunteered, and extra members came when they could. This group recommended decisions to monthly general meetings. They also explained plans and made suggestions to individual families at surgery meetings. The group met in the chairman's flat, and sometimes in the Lark Lane Community Association rooms. Two partners, David Innes Wilkin and Peter Gomon, attended most of the meetings, as did a representative from CDS. Meetings lasted from 19.30 to 21.30, so there was time to go to the pub afterwards, where discussion continued.

Surgery meetings

Architects, helped by the design committee, saw every family individually to check the plans for their homes. These surgery meetings were held once at the beginning of the detailed design stage and once at the end. About six families could be seen by each architect in one evening.

Monthly general meetings

Minutes and recommendations from the design and surgery meetings were read out. Members were then asked to approve the decisions which were often modified by discussion. An example was the need for deeper kitchen units, or the space allowed for tall fridge-freezers.

How we designed the houses

When we knew the exact mix of age groups and handicapped people we started making sketch proposals. At first these were density exercises to check yardstick costs with the quantity surveyor and to check the mix of household sizes with the City of Liverpool Housing Department. After these had been discussed a detailed survey on members' preferences was carried out. Members of the design committee helped families to fill in questionnaires. We used our sketch proposals to help people to make more detailed choices. Typical design meeting topics included:

- internal and external storage (the co-op decided against any exterior stores and to have the same area internally)
- kitchen at front or rear (they decided to have kitchens at the rear except in one case)
- dining area in kitchen, living room or separate (varied widely but the upper floors were nearly all the same)
- open or enclosed stairs (most people wanted the living room to appear larger by omitting the hall partition)
- window size, method of opening, finish and security (drawings showing different options were presented and the outcome was for high performance, timber side-hung casements)
- special dwellings for the disabled, elderly or large families (the design committee developed these for people who could not attend many of the meetings)

- garden size (few members had ever had gardens before and they varied in their desire for one, but the layout and site boundaries determined variations in garden size, and when the time came for members to choose their house they took garden size into account)
- choice of bricks, roof tiles, doors, kitchen units (these were undertaken in our office because many of the samples were already there)

- trees and landscape (many families were opposed to trees initially, disliking insects and falling leaves, but some changed their views after discussions and visits)
- communal open space (generally disliked due to vandalism and maintenance problems. There is very little communally maintained space; the landscaping is designed to appear so, but in fact nearly all of it is the responsibility of the dwelling on to which it fronts.)

Talks, slide-shows and visits were arranged to help the co-op to make decisions on all these items. By the time we went out to tender there had been more than 100 meetings, all minuted (three-quarters design and surgery meetings, one-quarter general, see figure 7).

How the houses were allocated

When the site and house plans were finalised the location of each type was agreed with the design committee. Each house size was positioned by us to try and take the best advantage of the site, such as putting large houses which needed a gable bathroom window at the end of terraces.

The co-op's management committee then suggested that all the families of the same size could agree with each other which house they wanted on the site plan. There were no major conflicts. Later co-ops used bingo balls as a random method of allocating homes to households of the same size. They could then swap around by mutual agreement if they wished.

Who built it?

At the beginning of the design period we asked volume builders to offer package deals, or two-stage tenders. The co-op might have valued the speed of construction which could then be achieved despite the inevitable loss of some control over design decisions.

The co-op's decision went against these contracting methods, first, because the contractors did not offer to cope with variations wanted by the members and, second, because the environmental and finished quality of schemes built by these methods was much lower than the co-op desired. Traditional tenders were therefore invited from eight out of a shortlist of more than 20 contractors, after the co-op hired a coach and visited their work.

The lowest tender exceeded the yardstick and a number of omissions and amendments had to be made. A general meeting of the co-op voted on a list of things to be eliminated. (The meeting was surprisingly good-humoured.) They voted to uphold the quality of the basic elements, such as bricks, in preference to items they could improve later. We were not met with the usual response of 'hack off the architecture and let's get the scheme built'. They even voted to retain some items because they knew we particularly liked them.

Co-op members visited the site regularly during construction. The general contractor and his staff involved the co-op in site meetings, but all instructions had to be made through the architects. ▶ 45

Appraisal

Hugh Anderson



10 Newlands Court, Hesketh Street. The co-op's design is made special and distinct from spec or council estates by the quality of hard landscaping (little of it communally owned), the attention to coping details, and the generous garden wall provision and the terrace layout.

At the end of the day, after all the participation, the talking and the theorising at Hesketh Street in Liverpool, the housing co-operative of that name has a product. While it is of the utmost importance how this housing scheme came into being, and while this is what is special about it, producing houses for people to live in isn't all in the mind. It is the product that has to perform, it is the product that (primarily) costs money and has to endure over time. It is also the product that is seen by others, makes up part of our urban heritage and probably speaks most powerfully to those who still need convincing that the participative/co-op route is a sensible way of providing housing.

Having said all this, it would be nice to point to something in the Hesketh Street scheme which is really outstanding. There are certainly differences from current private and public sector housing design, and these can be teased out and are important, but a simple answer is that Hesketh Street is not particularly outstanding. It incorporates many of the vernacular themes popular at the end of the '70s and is not dissimilar to the housing in nearby Warrington New Town, which is a powerful counter-attraction to metropolitan Liverpool.

I would go further and say that, like other 'landscaped' schemes of this sort, it blends

awkwardly with its urban surroundings and its design is somewhat inappropriate to an urban infill site. Having said this, the planning is good at both site and detailed level, the workmanship is excellent and the choice of materials suggests genuine quality. Once inside the scheme it has an air of naturalness and straightforwardness, suggesting that the 'vernacular' is more than just image and may indeed grow to fit with its surroundings.

Responsible design

If, in its sameness with several other schemes, it cannot be considered outstanding, similarly it cannot be considered odd. It is essentially a very responsible design producing, in spite of, or perhaps because of its strong user involvement, very much the kind of thing that any district council or the DOE architect would like to see (to be revolutionary doesn't mean that you have to lose sight of common sense).

Newland Court (or the Hesketh Street Co-op as it is more normally known) is of modest size consisting of 40 households (four two-bedroom, 12 three-bedroom, nine four-bedroom, nine five-bedroom, five six-bedroom and one seven-bedroom). The breakdown reflects the mix of people and the size of the site, but the deliberate inclusion of the granny flats and the seven-

Hugh Anderson is an architect in private practice with DEGW. He has had experience in housing design working for Basildon and Warrington New Town Development Corporations, and worked with community groups advising architects on housing.

11 The central court area at Hesketh Street. One of those amorphous shaped vehicle turning spaces familiar to users of the 'Cheshire Design Guide'. What makes Hesketh Street different is the low car parking provision agreed between planners and co-op members. 12 These hardstandings for cars were specifically asked for but because only six out of 40 co-op members had cars the one to one provision normally demanded by planners has not been adhered to. 13 The familiar Parker Morris trick of storage outdoors in the form of cheap sheds was fortunately quashed by co-op members. As a result, the front of terrace looks better.



11

bedroom house ensured that the scheme would not merely be one for a group of people looking totally after 'their own'. On the site originally stood working-class cottages which backed onto the grand houses of Livingstone Drive. It is on the fringe of Sefton Park, which was declared a Conservation Area in 1976. Because of pedestrian access off Lark Lane, with its newly converted restaurants and wine bars, the social pressures familiar to so many other parts of Liverpool are missing in this more settled area. This is not to say that residents do not have their share of problems, but that here design has at least been given a chance.

Community court

The houses are organised round a court—one of those amorphous-shaped vehicle turning spaces familiar to users of the *Cheshire Design Guide*. The hard and soft landscape, the extent of brick and roofscape also have that ring of what has been considered officially desirable. But this is where one's prejudice needs to stop. The elements that make up the scheme are all familiar enough but, as one starts to dig deeper, each one is revealed as being very appropriate. I discovered that each element is understood and appreciated by the co-op members who use it. Above all, they feel that it is theirs—

they would have responded to it differently if it had been imposed upon them.

Take the general arrangement, for instance. This was selected by the tenants from a range of options presented by architects Innes Wilkin, Ainsley, Gommon. It rapidly became dubbed the 'community' scheme and incorporated for them all the qualities of identity, cohesiveness yet openness, community and privacy that they had been looking for. Unlike a similar arrangement in Warrington, which co-op members visited, at Hesketh Street 'community' exists in more than just name. Compared with other schemes, the difference in built form might be non-existent but in use it is total. When walking round I was accompanied by the architect, but nevertheless it was refreshing to be greeted by everyone we met, for people to know each other and (with some reservations) for the comments to be positive.

Quality and choice

If the theme is one of well mannered medium/high density low-rise, with a generous use of landscape and natural materials, it is visually unique in two respects. The first is in the use of polychrome brickwork and polychrome concrete roof tiling. The effect is certainly lively. Although this use of colour has



12



13

its origins in some of the buildings nearby, it nevertheless highlights the scheme's newness and hardly helps it to blend. I was interested by this fact. Image was apparently important to the co-op members. They were quite clear in their brief that the development did not want to look municipal or 'corpy', as the locals have it. This it certainly does not in the traditional form of access-balcony-common refuse chute but it is still clearly an estate. It was the architects who suggested polychrome but the residents who chose the brick and tiles and decided on the extent of it. It is neither private sector nor 'corpy' in feel, but the major difference from those two forms of housing provision is clearly in how the choice had been made, and as such the colour was more than acceptable.

Integral extras

The second major difference is quality. Too often the add-on porch or the odd brick garden wall end up as little more than trappings to disguise thinly the standard yardstick box. The extras often appear patronising. At Newland Court I was genuinely surprised at what had been achieved within the statutory Housing Corporation budget. Here the extras are integral to the whole design, garden walls are generous, detailing is carefully followed

through from the gates to the porches and the hardstandings. Reconstructed stone copings are used as a proper way of ending off the brickwork, not just as some thinly spread decoration.

Good husbandry all round

Credit must go to the architects for the way in which the layout and use of standard elements proved to be genuinely economical; credit, also, to the co-op for controlling their ideas so that resources were not spread too thinly, too far. In this we have an answer to one criticism levelled at participation in design—that tenants cannot be expected to balance out the many demands on the budget. What the architects found instead was that, because the tenants knew that they would be responsible for the scheme's management and maintenance, far from bargaining for more each time, they were acutely aware of the implications of taking on more than they could handle. Thus the architectural trick, familiar during the reign of Parker Morris, of putting a certain amount of storage outdoors in the form of cheap sheds, was quickly quashed by the co-op. This was partly because they recognised the problem of security but also partly because they knew that sheds just don't last.



Innes Wilkin, Ainsley, Gommon admit that they were substantially left to their own devices in designing the buildings' exteriors. The general feel of the scheme is similar to some of their housing at New Brighton and to a scheme just being completed for the Dingle Residents' Co-op up the road. This is not to say that this important aspect of design was not important to the users. On the contrary: the selection process, which involved several visits to completed schemes, drew strong comments on these 'architectural' points. But, as architect Peter Gommon put it, the tenants chose to express their preferences by taking great care in seeing what their architects were likely to produce, and then leaving them to it.

When consulted, tenants were clear about their preferences. But other issues refused to slip through quite so easily and produced a lively

debate. Landscaping was one of them. Co-op members were against 'perimeter planting' because this was recognised as one of those 'corpy' features which would isolate the estate from its surroundings. People wanted their neighbourhood to be open and welcoming, and there was the more basic reckoning that plants would be vandalised (which Innes Wilkin, Ainsley, Gommon—being landscape architects, too—admit they found a little hard to take).

A proper fit

The greatest benefit of the consultations was that a proper fit could be achieved between the tenants and the site characteristics. Those who like gardening eventually got big gardens, those who had children or who were quite glad of some noise were housed near the play area. Next time round, when a second generation



15



17



16

14 (facing page), 15-17
Variety is the spice
of Hesketh Street,
sometimes a little
overworked, particularly in
the design and
juxtaposition of different
porches. Such contrived
organicness can smack of
architectural paternalism,
but knowing each family
was a party to the
conspiracy does make the
variety more believable.

starts to take up occupation, it won't be possible to tailor the overall configuration of houses in quite this way, but the choice will of course be no worse than with any other houses on the market.

Having specific occupants as clients meant that certain standard housing requirements should be challenged in a way that would have been impossible otherwise. One triumph for both the co-op and the designers was in the successful debate they had with the planners about parking. They ended up with far less parking than the planners originally demanded, because they were able to demonstrate that this was not required and that additional parking spaces could be provided in future.

Fitting interiors

If at first much of Hesketh Street seems unexceptional externally, this belies what is going on internally. Not surprisingly, co-op members were interested most in the design of their individual houses, and it is here that the architects and members have made their greatest contribution. A clear recognition of the principles of 'fixed shell and changeable scenery' means that they have provided first-time occupants with the chance of organising the insides of their houses and have preserved this option for generations to come. Basically a common width frontage, the avoidance of internal loadbearing walls and the judicious positioning of wet services have left an interior which can be subdivided in many different ways.

Subtle differences

A detailed examination of floor plans (each, incidentally, labelled with the name of the family and produced as the result of numerous one-to-one sessions), reveals a series of subtle differences. Many of them arise in the arrangement of storage space, often adding to the effective size of a living room, but always complying strictly with Parker Morris and meeting with the approval of the DOE architect. Other differences are evident in the staircase arrangements and the provision of

utility rooms. Kitchens in particular have been personalised in both arrangement and colour choice. The inclusion of a flue and gas point has allowed people to put in their own fires. A most effective device is the use of the 'thrust porch'—something the architects had used on their New Brighton housing and which caught the imagination of the co-op members, although other architects might have been reluctant to impose it upon unknown users because it contradicts the conventional idea of what people like. It removes the lobby from the living room area, enlarging this space and allowing more types of furniture arrangement. Stairs can still be enclosed if this is preferred later and statutory access into the garden is provided by a path at the rear.

Belief in details

Some of the personalisation we see (mostly on the outside) was induced by the architects, for example the different door types and the triangular dormer windows in the end of terrace houses of block D. In the architects' words, they like to give their buildings a graininess, or a feel for detail. This slightly contrived organicness, as I see it, can smack of architectural paternalism, but knowing that each family was party to the conspiracy did make this variety more believable. Once again this shows the major differences between the quality of the housing produced for a co-op and that built by a local authority or spec developer.

The significance is not so much in the details themselves, which can be learned and applied, as the extent they are believed in by the users and can subtly change according to the circumstances. Similarly the regulations safeguarding space standards and building quality are inane without the user's creative involvement.

I wouldn't cross the country to visit this scheme but then it was meant for living in rather than architects gawking at it. What is worth crossing the country for is to listen to what the residents think of their scheme.



18 Communal drying areas to the flats. The combination of intelligent positioning on the site and the co-op's inevitable desire to manage and care for all the spaces on the estate means that this communally shared facility is unlikely to be subject to vandalism or theft.

Alan Hoyte—the co-op's first chairman

'The most important thing about it is the power to the people bit. In general, in Liverpool people are told what they are getting, not asked what they want. But once we had established our viability by being accepted by the Government for funding, we determined everything; the way we lived, and who we employed to run our affairs. We did not succumb to bureaucracy.'

'We got the architects and builders and everybody else on our terms. We told them what we wanted and consulted right the way through, from day one, at every stage. Through the design committee we decided on every single aspect of the scheme right down to the sort of trees we planted.'

'We've proved to the council and Government and anybody else listening that if people are given the reins, get the right help and are committed they can come up with a really excellent

viable housing scheme that people want to live in.

'Of course, there were restrictions. We were still working within certain guidelines—for instance Parker Morris standards—and we were stuck with that because we were in receipt of Government money. So unfortunately we couldn't say to people, "Design your own house or flat". If we had, say, 10 three-bedroom flats then they more or less had to be standardised. Also we couldn't persuade everyone to get involved in every aspect of the design. You have to remember that for 40 years people had just been given what was available. We had a job in the early days convincing people that we were serious. Then they'd say, "Oh, I'll have anything," and we had to say, "Wait a minute, slow down, think about it for a while." Those with families were most involved. Older people tended to say, "Whatever you do will be all right". But they came to the meetings, in fact one committee member is 72. Having said all

that, almost every person on the estate is extremely happy with the results.

'Working together with the architects in tandem with each individual future tenant was the important thing. We had a tremendous relationship—they did everything we asked and a lot more besides. There were times when we said, "We don't like that. Go away and when you come back next week we'll expect something better." We put them through a very hard couple of years. It's lucky there weren't any divorces.'



Joan Fisher—the co-op's first secretary

'When the architects first drew up the plans it was very like corporation housing and we didn't like it at all. It was just like Victorian, back-to-back terrace housing and we said, "Oh no. We don't want anything like that". The architects said we couldn't build over existing drains, but we said, "We want something better than that. Come back with more plans". We threw out quite a few designs for

the layout. What we've got now is the very best we could have got out of the site.'

'I'm very pleased with the house we've got, it's absolutely marvellous. We didn't get everything we wanted but we got three-quarters. I feel the house is mine. Although it's a co-op house, the gut feeling is there—it gives you that little bit of strength.'

'Obviously we've got a few complaints. My husband told the architects that we didn't want a dark stairwell, but it is dark. From the drawings we told Peter

(one of the architects) it was going to be dark but he said, "Oh no, I don't think so because you'll have a glass door at the front and a glass door for the kitchen". But really it is dark.'

'The landing is also rather dark because we've got those little triangular windows. They reckoned we couldn't have bigger ones and I wondered why.'

'Also the water heater makes clicking noises at night when it cools down. But that was our fault because my husband is a plumber and said he didn't mind having it next to the bedroom.'





**Elaine Dutton—
member of the
design committee**

'The outside looks really nice and feels really nice—especially in the sun. It's like another world. I did think there were going to be too many colours—like a multi-coloured swop shop, but it's turned out to be a nice blend.

'The lollipop layout looks really nice, but if anything it's too exciting for the kids. It's like a race track. There are more than 40 kids on the estate (I've got three) and they come from all the other streets too with their bikes. But we chose it. It's what we wanted. I think I'd change my mind now and maybe have two streets opposite each other.

'One problem is the open-plan front gardens. They look nice, but the kids run over the edges with their bikes and the dogs foul them. We're going to get fences now. Also the walls are too low so that kids play on them all the time.

'But there aren't many mistakes and the mistakes that there are—open-plan gardens and low walls—will be fixed because we are a co-op. If this was a corporation estate we'd probably never get fences. You'd ring up and say, "Do you realise the kids are destroying the plants?", but it wouldn't matter to them. It would lead to destruction, in time, of all the front gardens, and walls being jumped on for ever, driving everyone mad. Whereas now we will get fences and higher walls and the gardens will look better so the estate will look nice. And in 10 years it will still look nice. It's because the people who hold the purse-strings are also the people who live here. You've always got someone who will say, "Look, this isn't right, let's get it done".

'I think when you live here you know what the money needs to be spent on. Money gets wasted by the corporation. They say, "Let's put in a children's playground on every single estate whether the people want one or not," so thousands of pounds get wasted. For instance, we know it would be the wrong thing for here.

'That's the main difference. Corporation estates start off looking nice but in 10 years they look awful because people see plants being destroyed and bricks being taken out of walls and say, "It's nothing to do with us". But because we're a co-op it will be different here. If you see

someone drawing on the wall you feel you've got the right to go and say, "Don't draw on that wall. Do you realise how much these houses cost to build?" Because the people who live here are the people who will do the upkeep it will always look all right.

"You never feel lonely here because you can always go to the door and talk to someone. In our old flat, if you wanted to visit someone you'd have to get dressed up and take everything with you—nappies and things. Here you can go out in your slippers and see your friends for half an hour. You don't have to make an appointment, it's so informal. And you feel safe, even at night. In the old flat, once you were in you were in for the night. You never felt safe going out at night. I don't even bother to lock the door now. Anyone who sees a stranger walking round the estate would ask them who they are looking for.

"It's to do with caring. People got to know each other during the design stage and we agreed things together. I feel I've known everybody now all my life. So nobody's left on their own if they don't want to be. I could always get someone to look after the kids if I want to go out somewhere.

"There were only a few men on the committees. Mostly it was women. In our case we couldn't both go to the meetings because of the kids and I was more interested than my husband. I don't think it bothers a man so much where he lives.

"I think architects have changed. They're getting more human. I like the personal approach. They know our families. They knew our kids and we knew theirs. They used to come to dances that we held. I don't think all architects would do it. To have to work with that many people wanting that many different things they'd have to be special. It's people changing their minds that must have been the hardest thing. Sometimes I think we had a little bit too much choice and people argued over the smallest things. Like we had an argument about exposed central heating pipes in the living room. We were worried about them, but we don't notice them now. To a point I think, over small things, the architects should just get on and do it.

"Even the builders were our friends as we had regular site visits. Because they cared about us I think they might have got to enjoy their work more."



Mary Waring— member of the design committee

"Moving in was like going on holiday to a nice place. I kept waiting for the bubble to burst but it hasn't. It looks very expensive, just like a private estate—totally different from a "corpy" estate. Other people are amazed when they come round. They ask where the show house is. They're amazed because they've never heard of what a co-op is, so we explain it to them.

"There's a real community spirit and the thing I like best is the way the old folks join in. When we have dances they really have a ball—you can count on them turning up more than the young ones.

"We all make a conscious effort to make sure the kids don't throw litter outside. You don't even have to say it to our kids now because they're aware that they can't just drop things. It's made a great improvement to our children's lives.

"We've all got to know David and Peter (the architects) like friends. We've never felt they talked down to us, it's never been "them and us". You've never been frightened to speak to them and ask, "What is a yardstick?" or whatever. I've known them go over a thing two or three times before they've got it across to us. Even now, 12 months later, you can still pick up the phone if there's any sort of problem and you know you're not putting them out. We couldn't have got a better pair. They were smashing.

"They taught us to read plans. At the beginning we couldn't make head nor tail of them. And they explained how to get

through the red tape, who to get in touch with and things like that. It was great. We just learnt as we went along.

"I was on the design committee and we had a lot of fun at times. It was first-hand information all the time, it was like being let in on a little secret, it was so interesting and informal.

"We had a lot of influence over the design. They gave us the parameters, but all the houses are different inside in one way or another. I'm the only one on the estate who's got a utility room, for instance. I combined my downstairs toilet and storage space and I've got a lovely big back kitchen. It would have been a bit smaller otherwise. It was just a personal preference. The utility room appealed to me.

"I suppose they might have imposed things on us without us realising it. They'd say, "Wouldn't you prefer it this way?" or, "Why don't you do it that way?" I remember thinking I'd like brown kitchen units because I'm brown mad. And I said, "What do you think, Peter? Will it be too dard?" And he said, "Well, I wouldn't have brown cupboards, but if you want brown, Mary, it will be light enough. But why not have brown with beige drawers?" They were honest in that they wouldn't just say anything to please.

"I'd never done anything like this before. I wouldn't have dreamt of going on a committee. I thought I'd give it a whirl, but I never thought I'd stick it out. They say ignorance is bliss, but when you know what they're talking about it's interesting and you take more pride. I'd go through the time and effort again. It was worth every minute."

Summing up

Why is it that so little housing design is carried out on the co-operative basis as at Hesketh Street? Are there hidden costs? How does it really compare with other forms of housing provision? Hugh Anderson, author of the appraisal (see pp45-50) sets out his conclusions.

The case for increased involvement by users has already been made from the point of view of offering satisfaction and a sense of responsibility. For the outside professional, two big questions need to be answered before this manner of working can gain any real credence. First, what about the quality of the product? Second, what about the cost of working in such a way?

Space standards

With regard to quality, Hesketh Street would seem to allay all fears of co-ops undermining space standards. Submitted for funding in 1980, the scheme had to comply with full Parker Morris standards and fall within yardstick funding. To that extent it was no different from any other council or housing association scheme. In addition, the design has been responsive to the particular needs of its users and the co-op has been highly responsible in its pursuit of quality. Minimum standards for public housing are enshrined in existing legislation and the protections are far greater than for private housing (which can get away with totally inadequate space standards). A housing scheme, making use of public money and being put up today, would have to comply with TICS (total indicative cost system). This attempts to uphold space standards at least as good as Parker Morris, but allows an intelligent interpretation of the rules as circumstances demand. It is a major step towards avoiding 'checklist architecture' and something which can only favour the involvement of the user.

Consistency

Hesketh Street can in no way be described as a camel produced by a committee. It exhibits a thorough consistency of approach and the contributions of the co-op can be said to have refined and on occasions enlivened the architects' ideas. There can be no guarantee that such a mature relationship will be struck between all architects and client groups, but nor can quality of design and adherence to budget and programme be guaranteed in traditional speculative housing with no user involvement.

Development costs

Building costs at Hesketh Street were similarly contained by existing legislation, and the experiment showed itself to be highly responsible, calling for minor revisions only for the lowest tender to fall within budget. These revisions produced no reduction in quality. (TICS would have similar, but even more enlightened control on the use of public finance for a scheme being built today.)

Public building, and in particular housing, has not scored as well as the private sector in recognising the need to deal with the total development costs of a project, and in particular the balances to be made between site development and superstructure costs and the advantages to be had from reducing this programme. But the Hesketh Street model, is no worse than other public sector practice.

Programme

An extended design stage incorporating full participation will produce an inevitable cost

increase, even with inflation as low as it is; but the exact financial consequence of this, as with all public works, is blurred. It must not be forgotten that the major problem facing the country is still one of volume building—how to get enough houses built. There is nothing to suggest that a total process incorporating participation cannot flow as fast as any other.

The time taken in participation can strain the patience of all concerned. It can be argued that not everyone will stay the distance, but this does not have to be the only system employed, and if people drop out they are no worse off than at present.

Equality

Hesketh Street hopefully puts paid to the notion that the allocation of housing in this way is inequitable. The cross-section of people in Hesketh Street is no different from what might be expected from any other council development. Should there be a tendency for the articulate or the pushy to jump the queue, then controls can once again be introduced to protect the interests of more deserving cases.

Hidden costs

The real problems with a scheme such as Hesketh Street come in a couple of hidden costs which participants do not appear to have faced up to.

Costs to the architect

The 100 or so evening meetings carried out at Hesketh Street could not have come cheap (see pp41, 57), even though they were reckoned to be out of hours. Not every housing architect is going to have the dedication displayed by Innes Wilkin, Ainslie, Gomon, and one fears that even their community-spiritedness will wear thin in time. The architects claim that next time hopefully they will not be confronted by government delays and they will improve upon the efficiency of their consultative procedure. They have recently completed their next scheme for the Dingle Residents' Co-op and feel their performance there has been better. But there is still an expensive learning curve and the constant danger that the architect might start to subjugate his responsiveness to the problem to the workings of the system.

Costs to other parties

To make a fair comparison on value for money should we include the cost of the co-op members' time? An essential participant in the Hesketh Street scheme (and, one imagines, in almost every other co-op scheme) was the local housing association, Co-operative Development Services (see pp38-39). The considerable number of hours which they contribute do not appear in the development costs, but certainly rate as a cost to the government system.

Why not more co-ops?

Why is it that so little housing design is done on the Hesketh Street basis? I fear that the major reason is inertia. Users, designers and bureaucrats have not stopped to solve the problem. There are fears about its uncontrollability and its costs. These have been shown to be either unfounded, or in the interests of the quality of the product that can be produced, set against the countless other social costs that poor design and housing provision currently result in. In asking whether we can afford such a method of working, we should ask whether we can afford not to have it—especially in a time of limited funds.

Was it really worth all the effort? What did it actually cost the architects, and would they ever consider doing it again? As a conclusion, Danielle Pacaud of Innes Wilkin, Ainsley, Gomon offers these reflections on their last three years' work at Hesketh Street.

Any 10-year-old Liverpoolian can point out a 'corpy' house. No first-time buyer visiting a Barratt estate would confuse it with adjacent housing association dwellings. And local people can tell that the Hesketh Street housing is different.

Hesketh Street is exceptional because we, as architects, had as a client a collective organisation of people in severe housing need, half of whom were unemployed. This significantly affected the design, just as the concerns and nature of other clients can be read in their architects' products.

Unusual features

The layout would have been rejected by spec builders on the grounds that terraces wouldn't sell, and by managers of rented housing because of the lack of privacy (indeed Liverpool City Council's latest policy does not allow courtyards, closes or flats). Housing managers would also have wanted any embellishments evenly applied, to avoid some lettings being more privileged than others, whereas the co-op agreed to spend more money on some houses because they enhanced the scheme as a whole, as with a pair of triangular dormers, for instance. The external works would have been unacceptable to a spec builder because of capital costs; to a local authority because of vulnerability to vandalism; and to any housing manager dealing with tenants who wouldn't know each other because of lack of defensibility and privacy.

Aesthetic dialogue

The co-op's collective decision-making was impressively democratic, responsible and flexible. They cared intensely, but not self-indulgently, about the design product. The fact that they, as users, chose their architect, and the manner in which they did so, provided a

basis for mutual respect and trust that is absent with normal institutional clients. From the moment of selection we were all in it together and we all sank or swam. We enjoyed what they evoked from us, the dialogue that led to the expression of 'community' that is the Hesketh Street layout, and the direction in which our and their aesthetic taste developed.

Such a process was inevitably unnerving at times and there were bound to be conflicts. What do architects weaned on the *Essex Design Guide* do when faced with a co-op that likes Georgian bow windows? They argue a lot and think hard about their preconceptions. Such discussions demand humility and imagination.

The Hesketh Street co-op led us to change our views on housing design. For instance, we increased the size of windows and used more contrasting brick colours. Our policy of not putting kitchens at the front was reinforced when the co-op referred to them as 'back-to-front houses'. At the same time we led the co-op to change their views on gardens, planting, heating and the arrangement of living space.

The process was a dialogue rather than a series of lectures. We discussed materials and details and what they mean: 'modern', 'kitsch', 'homely', 'vernacular', 'honest', 'noddy houses', 'corpy-ish', 'like the slums we're trying to get away from'. It was a question of getting in tune so that user-clients and designers knew each other's views, expectations and personalities.

Not very profitable

Presenting and discussing design decisions in this way costs time and money, as does any good, exploratory, creative design process. Of course it's cheaper to reprint standard plans than to work up a design that is responsive to a vivid, demanding and caring client. For the architect, working for housing co-operatives at current fee scales is less profitable than working to a standard brief. Our estimate is that the extra costs to the office are about 15 per cent. Other jobs have subsidised our co-op work. The process has demanded considerable dedication from members of the practice. One large Liverpool practice has declined to be interviewed for further co-op work at one time, and others have expressed their misgivings. But more problematic for us have been the severe delays in funding: we had been working for more than a year and had attended 70 meetings before any fees were paid.

A vivid experience

Architecture is about making the cold stones live. The empty formalism and simple pattern-making of much contemporary architecture which photographs so well, and disappoints in reality, very often ignores or subverts people's way of life. Hesketh Street is not a single-minded formalistic design, but the achievement of a vivid collective experience, full of life and history. It belongs to the people who live there, they had it made and they can change it.

Hesketh Street was our first co-op scheme; another has just been completed and three more are in the pipeline. Looking at the product, listening to our clients' reactions, and considering what it took out of us and what we gained from it, Hesketh Street convinces us that working with a co-op in this way has allowed us to produce the best housing design possible. We believe the costs in human and financial terms are far outweighed by the benefits. We look forward to when the principle of direct user/designer involvement is extended to other building types.

'Because the people who live here are the people who will do the upkeep it will always look all right.' Roy Rich, the chairman of the co-op, at work on his maintenance round.



Cost comment

Roger Barbrook

The Hesketh Street redevelopment is among the first of the new-build co-operative ventures, and as such is a pilot scheme from which lessons can be learnt and some criticisms answered. The number of co-operative members grew as the scheme developed, and many new families who were eligible for rehousing were drawn from the housing department's waiting list. The architects advised the co-op on the number of dwellings and finally 40 families joined, requiring 117 bedspaces.

An important requirement was the need to satisfy the Housing Corporation—which was funding the scheme—that the project was viable in terms of both time and cost. Consequently Parker Morris standards and the cost yardstick applicable at the time were closely adhered to. The yardstick discouraged the provision of semi-detached houses, and the architects' preference was for simple, rectangular, narrow-fronted terrace blocks which are both good value for money and save energy. However, Liverpool City Council does not favour this type of development, nor, it would seem, did the co-op. As a result, units are staggered and on block B, for example, there is a 12 per cent increase in the external perimeter.

Nevertheless the economies of simple shells made it possible to enhance the elevational treatment including the provision of costly external porches and canopies.

Because the internal layout was not determined solely by the architects, Innes Wilkin, Ainsley, Gomon, it was not possible to reap the benefit of repetition or to make other cost savings, for example by grouping services.

The scheme provides 16 flats and 24 houses, catering for up to seven people per dwelling, although most are three-, four- and six-person units.

No significant variations

The tender was selected in January 1982 in a competitive climate. Work on site began three months later, but the 18 month contract period was overrun by 11 weeks because of the discovery of a number of public drains on the site, which required the council's involvement. Costs shown are based on tender, which was on a fluctuating cost basis; there were no significant variations which affected cost and increased costs amounted to less than 7 per cent. Preliminary costs are modest.

The site had been cleared but foundation costs were inflated by the need to use a concrete raft where the existing foundations had not been excavated.

All roofs were well insulated but it was not possible to insulate cavity walls or provide any double glazing.

Services account for 26 per cent of the building costs, which is well above the norm. Houses and flats are equipped with full central heating, and prefabricated plumbing units, boilers and hot water units were specified.

The main reason for this above average cost is the high cost of drainage.

Overall the building cost of £203·00/m² is reasonable for a city centre scheme containing 40 per cent flats. The building cost per bedspace is £5592, or £7050 including external works.

Emphasis on external works

The importance the co-op members and the architects attached to the external environment is shown in their allocation of 26 per cent of the building cost to external works. It is hoped that, by jointly creating external spaces that clearly belong to the community, their vulnerability to vandalism will be reduced.

Critics of co-operative schemes have contended that they demand a more intensive and time-consuming contribution from the professional advisers and lead to higher building costs. The latter objection does not appear to hold good: the architects for this scheme maintain that such work can be, and indeed was, profitable. The main drawback appears to be that fee income is more at risk; if no site can be bought or if the scheme is shelved or cancelled because of events beyond the co-op's control, no fees are likely to be forthcoming.

Summary of element costs

	Cost per m ² (£)	Per cent of total
Preliminaries and insurances	7·67	3·77
Work below lowest floor finish	23·49	11·59

Structural elements

Upper floors	8·64	4·25
Roof	19·99	9·86
Staircases	3·99	1·96
External walls	20·12	9·93
Windows and external doors	12·33	6·05
Internal walls	6·60	3·25
Partitions	6·16	3·03
Internal doors	6·66	3·28
Ironmongery	2·18	1·07
Total of structural elements	86·62	42·69

Finishes and fittings

Wall finishes	9·05	4·45
Floor finishes	6·65	3·27
Ceiling finishes	3·40	1·67
Decoration	8·51	4·19
Fittings	4·85	2·38
Total of finishes and fittings	32·46	15·96

Services

Sanitary appliances waste, soil and overflow pipes, cold and hot water services, heating, ventilation and gas services	27·57	13·60
Electrical services	5·71	2·81
Drainage	19·42	9·58
Total of services	52·70	25·99
Total	202·94	100·00

Building cost £654 268.

External works £170 668.

architects Innes Wilkin, Ainsley, Gomon
partners in charge Peter Gomon, David Innes Wilkin
job architects Peter Gomon, Ben Downie
development agency CDS (Liverpool)
design team David Ainsley, Jim Fitzpatrick, Andrew Mair, Jane Prescott, Danielle Pacaud, Hesketh Street Housing Co-operative
quantity surveyors Perrin Taylor & Associates
services/electrical and mechanical Innes Wilkin, Ainsley, Gomon

structural engineers John Bratherton & Partners
landscape design Peter Gomon, Jane Prescott
main contractor P. J. Allison (Wirral)
subcontractors: electrical installation J. F. Foord Ltd, prefabricated plumbing units Armist Ltd, mechanical engineering services Coppell & Ford Ltd, precast concrete floors Bison Concrete Ltd, soft landscaping T. & B. Landscape Associates, roofing H. Pac & Sons, leadwork R. Alexander, plastering Wilestead Plastering, painting W. J. Coventry.

suppliers: trussed rafters Parker Timber Northern Ltd, ochre bricks Claughton Manor Brick Co, thermal blockwork TAC Building & Insulation Division, coloured mortars RMC Mortars, red rustic bricks Steelley Brick Co, roof tiles Redland Roof Tile Co Ltd, high performance windows, front doors Bowater Ripper Ltd, ironmongery W. Tecwyn Thomas, kitchen units BDC Cabinets Ltd, garden gates British Gates & Timber Ltd, central heating core units Harton Engineering, cast aluminium signs R. C. Hayne.

Hesketh Street Summary

Cost analysis

Ground floor area: 1649 m².
Total floor area: 3224 m².
Type of contract: 1963 JCT (revised 1977) private edition with quantities.
Tender date: 28 January 1982.
Work began: 26 April 1982.
Work finished: 25 November 1983 (original contract completion date 12 September 1983; contract completion extended by 11 weeks under clause 23 of the RIBA contract. Date of practical completion: 25 November 1983.)
Price of foundation, superstructure, installation and finishes including drainage to collecting manhole: £654 268.
Price of external works and ancillary buildings including drainage beyond collecting manhole: £170 668.
Total: £824 936.

All costs per m² based on tender.
Preliminaries and insurances £7·67
This element is 3·93 per cent of the remainder of the contract.

Work below lowest floor finishes £23·49
Reinforced concrete raft foundations to 25 units (16 flats and nine houses in three blocks). Plain concrete trench fill foundations average 1·65 m deep to 15 houses in two blocks with plain concrete floor slabs on 150 mm blinded hardcore bed. Visqueen damp-proof membrane with expanded polystyrene slab insulation to perimeter of concrete slabs in trench fill work.

Structural elements

Upper floors £8·44
Prestressed precast concrete units 150 mm deep to upper floors of flats (8 units). Dovetailed treated timber inserts cast in slabs to receive batten and plasterboard ceiling, 494 m². £17·97/m². Tongued and grooved softwood boarding on pressure impregnated softwood joists and trimmers to upper floors of houses (24 units), 1081 m². £17·56/m².
Total upper floor area: 1575 m².

Roof £19·99
Softwood trussed rafters to main roof with concrete interlocking tiles, lead flashings, 150 mm glass fibre insulation and UPVC rainwater goods, 1856 m². £28·85/m².
Canopies and porches to front entrances (32 number), softwood rafters, concrete plain or interlocking tiles, lead cladding to three circular canopies. Lead flashings, 150 mm glass fibre insulation and UPVC rainwater goods to porches, 113 m². £96·48/m².
Total roof area: 1969 m².

Staircases £3·99
7 number concrete staircases, granolithic pavings to treads and risers with thermoplastic tile finish and aluminium stair nosing, total rise: 18·2 m, width overall tread: 0·90 m.
25 number softwood staircases with colonial spindle raking and horizontal balustrades (no finish to treads or risers), total rise: 65 m, width overall tread: 0·90 m.

External walls £20·12
275 mm cavity walls, facing brickwork (£105 per 1000) externally and thermal blockwork to internal skin. Brick detailing comprising single cant facing bricks to window sill course and brick on end flush band course to perimeter of blocks at first floor level, 2139 m². £30·33/m².
Standard galvanised steel lintels with cavity damp-proof course.

Windows and external doors £12·28
Softwood single glazed side- and top-hung casement windows, satin chrome sash fasteners and stays. Neoprene weatherstrip and adjustable ventilation to window heads, blockboard window board with hardwood edging, 835 m². £47·43/m².
Standard softwood panelled doors (seven different specifications), softwood frames and architraves internally, hardwood thresholds and single glazing in georgian-wired polished plate or clear float glass.
Number of single doors: 88 (including 19 inner porch doors).
Total external door area: 142 m².

Internal structural walls £6·60
Cavity party walls comprising two skins 100 mm thick loadbearing solid blockwork, 1308 m². £15·33/m².
Composite party walls comprising two skins 100 mm thick loadbearing solid blockwork tied together with mesh reinforcement, 81 m². £15·07/m².
Total internal wall area: 1389 m².

Partitions £6·16
100 mm blockwork partitions, 97 m². £7·34/m².
57 mm plasterboard single-leaf partition inclusive of all timber inserts, 2224 m². £8·39/m².
Softwood glazed partitions with georgian wired polished glass, 7 m². £67·32/m².
Total partition area: 2328 m².

Internal doors £6·66
Prefinished hardboard-faced flush doors, softwood frames and architraves, hardwood thresholds, fanlights glazed with clear float glass, 386 m². £29·73/m².
Prefinished hardboard-faced ½ hr fire-check flush doors, softwood frames and architraves, hardwood thresholds, fanlights glazed with georgian wired cast glass, 142 m². £42·38/m².
Standard softwood panelled doors, softwood frames and architraves, hardwood thresholds, glazed with georgian wired cast glass, 98 m². £40·72/m².
Number of single doors: 335.
Number of double doors: 7 pairs.
Total internal door area: 626 m².

Ironmongery £2·18
Typical ironmongery: steel hinges, mortice latches and locks with SAA furniture, door springs to fire doors and letter plates, hat and coat rails and toilet-roll holders to each unit.

Finishes and fittings

Wall finishes £9·05
Two coats plaster to blockwork including metal angle beads, 4016 m². £4·15/m².
One coat plaster to plasterboard partitions including metal angle beads, 4608 m². £2·21/m².
White glazed ceramic wall tiling in splashbacks, 121 m². £19·11/m².
Total wall finish area: 8745 m².

Floor finishes £6·65
Thermoplastic tiles on cement and sand trowelled bed, aluminium matwell frame with coir mat to each unit, softwood skirtings, 1485 m². £10·18/m².
Acoustic vinyl sheet on reinforced cement and sand trowelled bed and softwood skirtings, 430 m². £12·39/m².
Self-sealed cork tiles on hardboard underlay and softwood skirtings, 49 m². £18·07/m².
Total floor finish area: 1964 m².

Ceiling finishes £3·40
Plasterboard with taped joints for Artex finish, 3152 m². £2·77/m².
Softwood ceiling grounds to underside

of concrete prestressed units to receive plasterboard ceiling, 494 m². £4·49/m².
Total ceiling finish area: 3152 m².

Decoration £8·51
General internal and external decorations, emulsion paint to walls, Artex to ceilings, decorative stain to windows, external doors and eaves timber, gloss paint to woodwork generally (total £27 421·00).

Fittings £4·85
Cylinder cupboard shelving and supports, 32 m². £899·00.
39 number gas and electric meter cupboards, £2301; 40 number kitchen units, £10 382; 40 number rotary clothes-driers and supports, £1680; 40 number refuse bins, £472.

Services

Sanitary fittings, soil, waste and overflow pipes, cold and hot water services, heating and ventilation and gas services £27·57
Standard white vitreous china sanitary fittings to each dwelling, prefabricated plumbing units with UPVC soil, waste and overflow pipework and fittings and copper hot and cold water distribution. Prefabricated heating and hot water boiler and cylinder unit with steel panel radiators.
Gas distribution to boiler, cooker position in kitchen and gas fire position in lounge. Proprietary gas flue blocks and roof outlets (gas fires installed by tenants).

Breakdown of gas and water services	Cost (£)
Gas system	2037
Cold water services	4064
Hot water services	3088
Prefabricated boiler and hot water unit	27 110
Radiator system	15 168
Boiler flues	1581
Ventilation	725
Sanitary installations	11 768
Prefabricated plumbing units	12 606
Builders' work	10 748
Total	£88 895

Electrical services £5·71
General domestic lighting and power installation including cooker circuit, immersion heater circuit, door bell installation and heating electrics.

Breakdown of electrical services	£/m ²
Meter and switchgear	0·43
Lighting installation	1·87
Power installation	1·62
Provision for telephones	0·10
Heating electrics	0·43
TV aerial (co-axial)	0·35
Earthing and testing	0·10
Builders' work	0·81
Total	5·71

Total number of lighting outlets: 374
Total number of power outlets: 683

Drainage £19·42
Vitrified clay drainpipe system with engineering brick and precast concrete inspection chambers.

Total per m² of floor area £202·94
£654 268 (net cost excluding external works)
3224 m² (measured inside external walls)

External works

Adopted road and pavings, car parking spaces, general paths and paved areas, division fencing and walls, general planting and landscaped areas and drainage from last collecting manholes to main sewer, mains service charges and builders' work: £170 668.