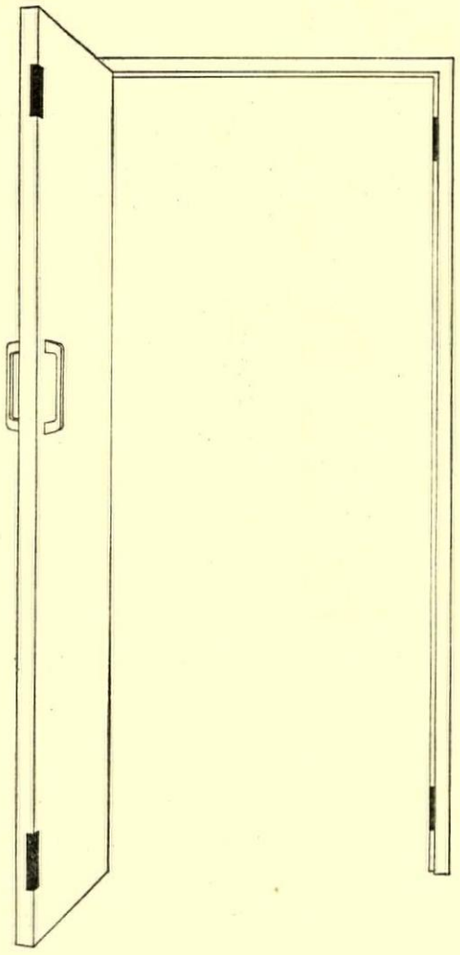
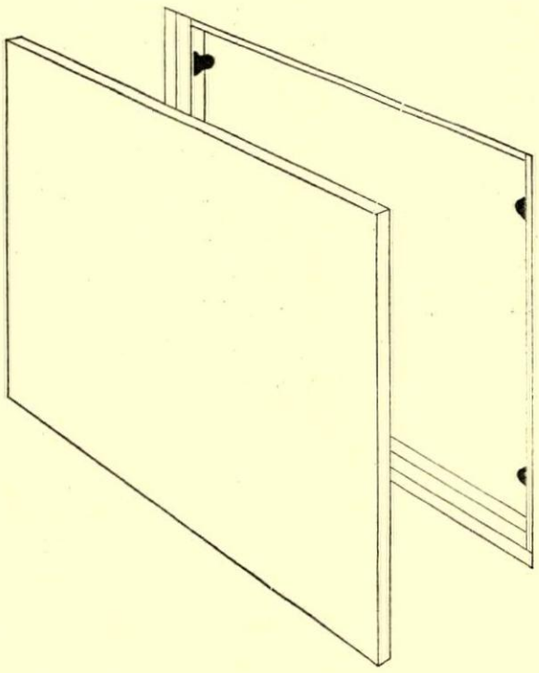
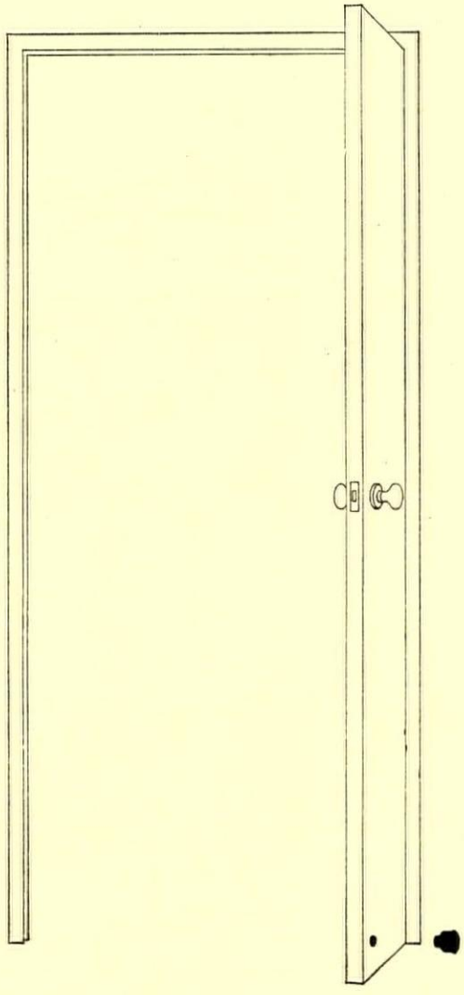
PREVIEW 67

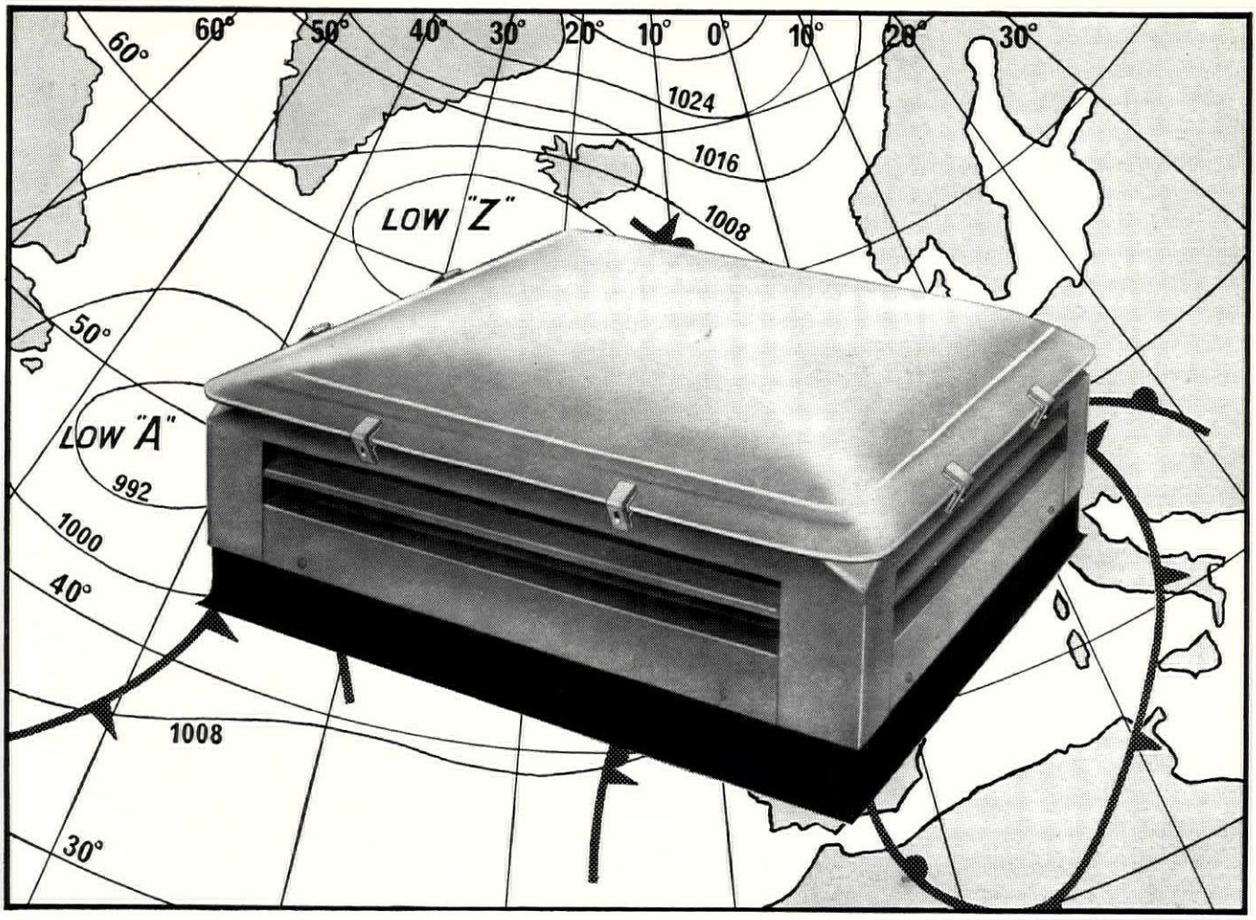




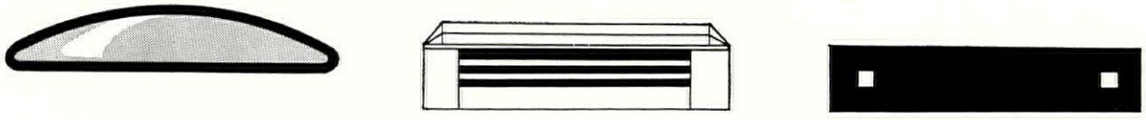


Arelec magnetic catches provide a simple, convenient and reliable method of holding doors and panels in place, either open or closed. They are simple to fix and provide full adjustment to take up unevenness, misalignment and warping. Panels held this way require no visible fixings but are easily and quickly removed for access to services, ducting or walls which they can conceal. Doors held with magnets require a simple push or pull to move them, especially convenient when your hands are full. For full details of this French range of Arelec magnetic catches, write or telephone Magnet Applications Limited, 323 City Road, London EC1, telephone Terminus 6222.

ARELEC
magnets



GREENWOOD AIRVAC **MAXADOME**—VARIABLE AS WEATHER ITSELF



ten ventilators . . . twelve domes . . . seven curbs . . . perm any 3 from 840!

FACTS. You can virtually design your own rooflight ventilator from the hundreds of different sizes, shapes and types in the 'Maxadome' range.

Domes...Glass, acrylic, wire laminated PVC, glass fibre, double or single.

Ventilators...Controllable, permanent, unventilated. With or without bird guards.

Curbs...Builder's curbs, integral G.A. curbs, roof to ceiling liners.

All these variations are available in square, rectangular or circular units; in aluminium or steel g.a.m.; for single or continuous installation on flat, or barrel vaulted roofs; flat, pitched or double glazing.

It's a fact! Whatever size, shape, or type of rooflight ventilation your next project requires, you'll get it from Greenwood Airvac.

'Maxadome' is a Registered Trade Mark

See Barbour Index SfB(37)

Write for full technical literature to:-

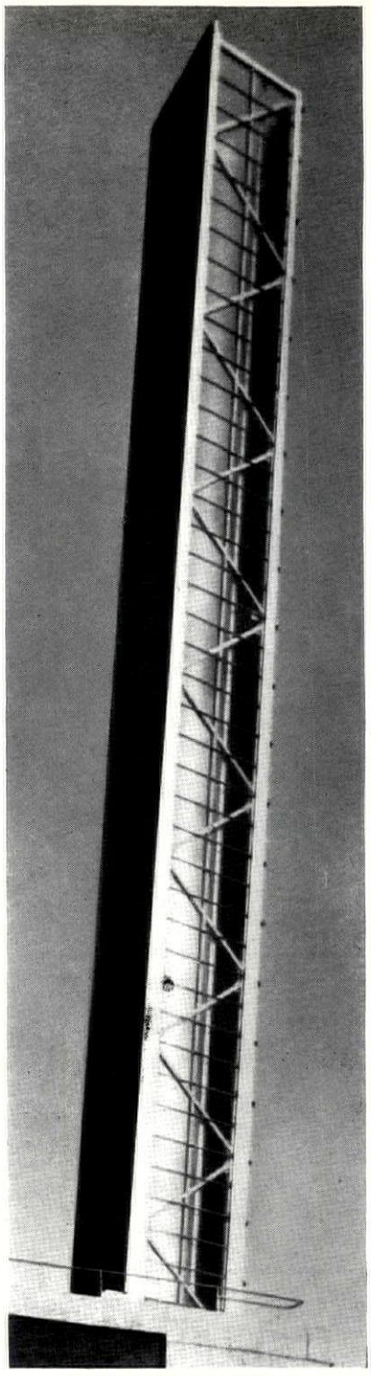
GREENWOOD AIRVAC
VENTILATION LIMITED

Regal House, London Road,
Twickenham, Middlesex.

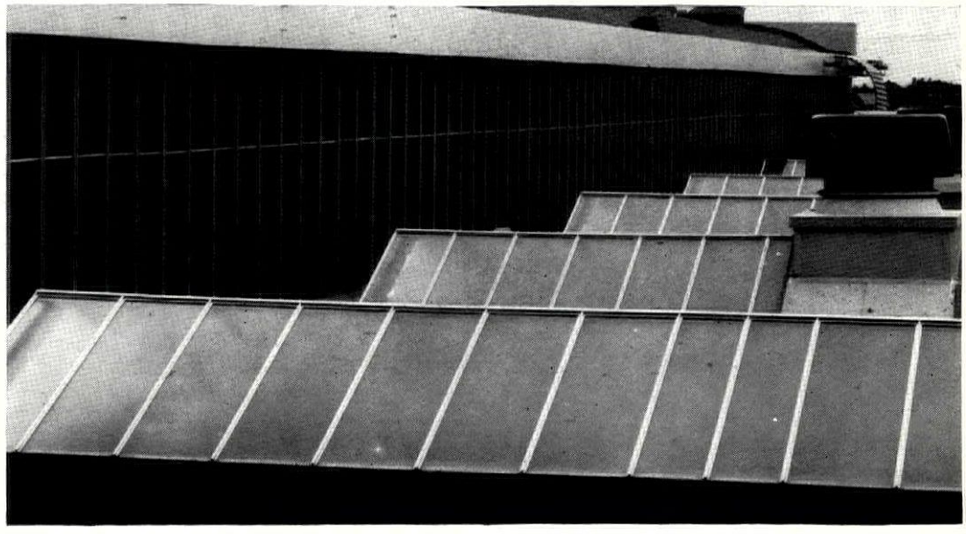
Telephone: POPesgrove 7836
Telegrams: 'Airvac' Twickenham

GREENWOOD AIRVAC VENTILATION

TAS/GA.40



Who leads in low cost cladding ?



Williams & Williams

Leading the way in low cost cladding with their Aluminex system of patent glazing. Delivery is rapid. Installation quick and easy. Replacement of glass a simple clip-in job. Other maintenance required — nil. Aluminex components are extruded from aluminium alloy that never corrodes or rots. Use Aluminex for single or double glazing, on walls and roofs. Everywhere. After all, the more you use, the more you save.

Aluminex Patent Glazing.
Wallspan Curtain Walling.
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Building Units by
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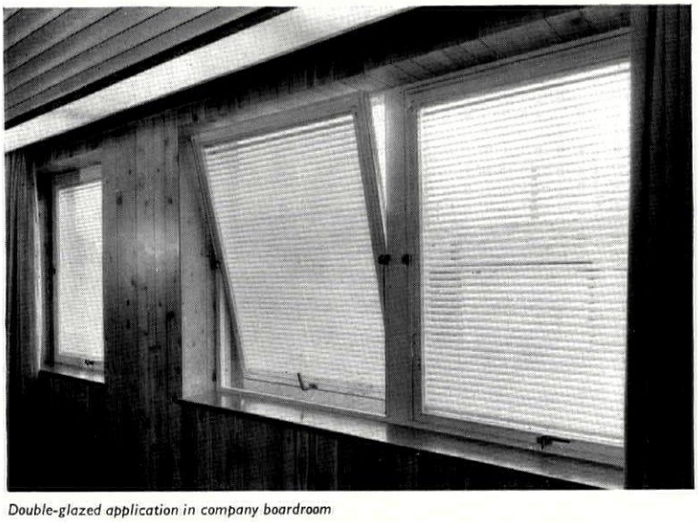
Telephone 24624 Telex 61154

perma

THE MOST EXTENSIVE VENETIAN BLIND MANUFACTURING SET-UP IN THE COUNTRY!

When the job is urgent Perma have hands galore! Over thirty manufacturing centres spread throughout the Country bring swift service in venetians. This extensive set-up is near to your hand via your nearest Perma centre, which is armed with up-to-date information on all types of blinds installation. Perma venetians are modern, Swedish-designed with slick slim-line 50 or 35 mm. aluminium slat, incorporate the most advanced features, fool-proof and permanent. Put Perma in your specifications—its short and sweet, matches our service.



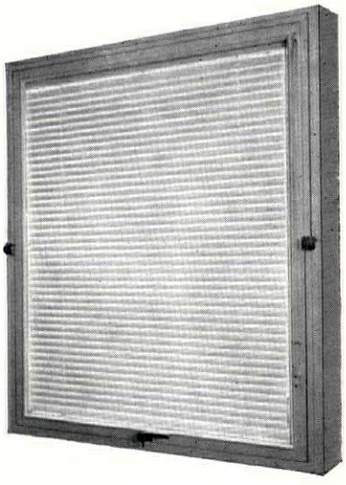
Double-glazed application in company boardroom

STANDARD APPLICATIONS

Venetian blinds
Black-out
Pleated and Audio-visual blinds

DOUBLE-GLAZED APPLICATIONS

Remote control
Mono-operation
Roller-blinds &
100% Black-out



Monolux double-glazed venetian blind

PERMA VENETIAN BLINDS LTD. · PROSPECT ROW · DUDLEY · WORCS. **Tel: Dudley 54828**

YOUR PERMA MANUFACTURER

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BIRMINGHAM
Venetian Blind Mfg. (B'ham) Ltd., 59-61 *Waterloo Rd., Smethwick*
Holdens Blinds, *Rear 28 Craddock Road, Smethwick*

BLACKPOOL
Premier Venetian Blind Co., *Rear 55 Palatine Road.*

BRADFORD
Continental Sunblinds Co., 63 *Drewton Street*

BRISTOL
Bristol Blind Co., 57 *Stokes Croft, 1.*

BURNLEY
C. M. I. Trimmings Ltd., *Folds Street.*

CAMBRIDGESHIRE
H. J. Gray Ltd., *Playfair Works, Cambridge.*

CARDIFF
Filta-Lite Blinds Ltd., 61 *Severn Grove.*

CHESTER
"D" Windoware Ltd., Venetian Blind Centre, 102 *Brook Street,*

GLASGOW
Aquila Blinds, 117 *Duke St. C4.*
Colorflex Venetian Blinds, 1903-1905 *Maryhill Rd. NW.*

LEICESTER
Bainbridges (Leicester) Ltd., *Britannia Street.*

LINCOLNSHIRE
Grimsby Venetian Blind Centre, *Humber House, Cleethorpes Rd. Grimsby.*

LONDON & E. ANGLIA
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MANCHESTER
Leyland & Sons Ltd., *Talbot Rd., Stretford.*

NORTH EAST ENGLAND
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T. & R. Longridge, *Gem Works, Coxhoe, Ferryhill, Co. Durham.*

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Portsmouth Venetian Blind Centre, 31 *Frensham Rd., Southsea*

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Edward Kierby & Co., *Vine Works, Vine Road.*

SHEFFIELD
Kilsun Blind Manufacturers, *Princess Wks., Margaret St.*

STOCKPORT
Peak Blinds, *Wharf Road, Whaley Bridge.*

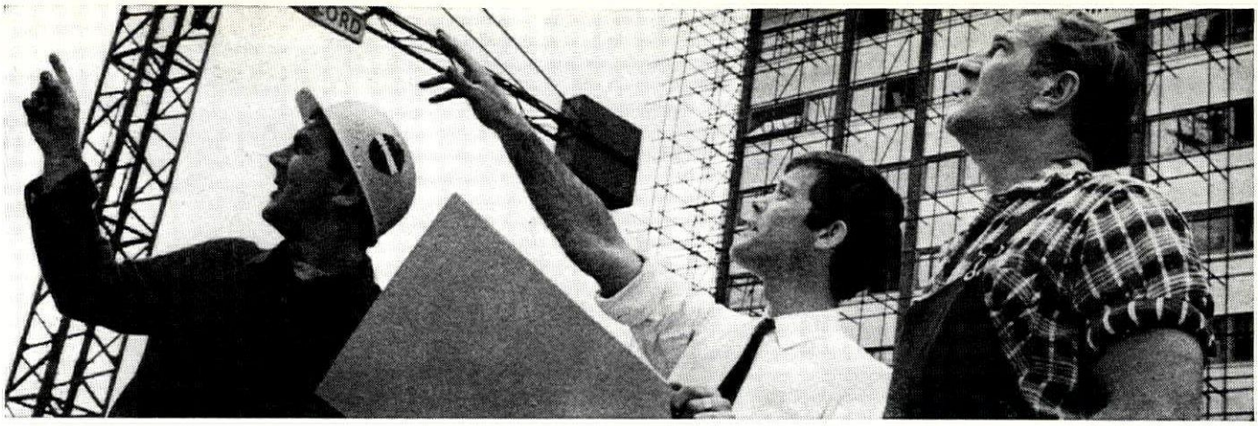
STOKE-ON-TRENT
Barnes Bros., 23 *Liverpool Rd., Kidsgrove.*

STOURBRIDGE
R. W. Gerrish Ltd., *Bradley Rd.*

SUSSEX
Southdown Sunblinds, 13 *Albion Street, Brighton, 7.*

WINCHESTER
Faberlux Ltd., *Greyfriars Wks., Lower Brook Street.*

WOLVERHAMPTON
Venetian Blind Centre, 8*a*, *Bilston Street.*



Who's finding the answer... before you even put the problem?

Most new sealing problems can take a team months to solve. We don't wait for them, says Chief Chemist Dr. Jackson. Keeping an Evomastics sized step ahead means much fieldwork but Keynote is anticipation — underlined twice.

Ted Hirst (he's now one of our VIP customers for sealing systems) 'phoned us last week. Usually, we 'phone him! What was all the excitement about ? He'd been getting his sealant actuals against estimates on recent building jobs and the figures made joyful reading.

For years, as a Senior Buyer for a major contractor, he'd been buying sealants from us and other mastics manufacturers, with budget very much in mind. This, in effect, put him in the hot seat as a sealants expert—which he says he's not.

A few months ago we told Ted Hirst that we could now solve most of his sealant problems, eliminate his budget headaches in this area, improve his sealant buying and cut his costs—all in one painless operation. He listened politely —(and didn't believe it). But he fixed things by giving us the chance to prove him wrong.

So we took over his next couple of projects on a System basis, planned his complete sealant requirements down to the last foot-run. We checked, and double checked, every single structural joint on the job and produced the best possible sealant specification. Some of the larger joints took more than one type of mastic, for economy's sake.

We showed him how, by evaluating the project as a whole, we could put up a complete scheme—a Sealing System—tailored to the job and to the budget. There was no question of embarrassing 'extras' through bad planning.

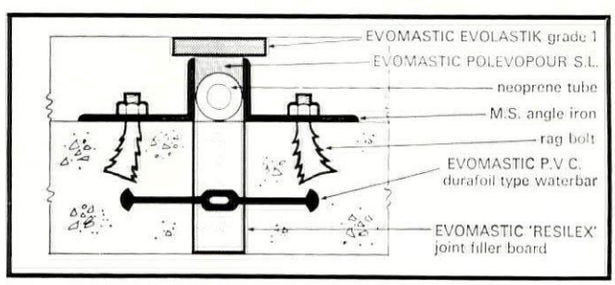
Ted Hirst began to take real notice after the first project had gone through. He discovered good ideas and dedicated personnel; with a breadth of experience and the intelligence to take a professional brief and come back with a rationalised scheme. By calling them in early he realised that these men could contribute their own know-how at the design stage and chop sealing costs before they developed.

By selling him a unified Sealing System instead of individual mastics, Evomastics were able to deliver in step with his critical path planning and give him the extra margins as a result. And we didn't just dump the stuff on site and hope there was someone who knew how to apply it. We sent our demonstration team in on each job to watch our interests— and the client's.

Designing and selling practical Evomastics Sealing Systems for a small or a large project didn't just happen with the wave of a wand. A lot of creative brainpower was brought together: building research chemists, architects, designers, draughtsmen, cost accountants and technical men— we have them all; here at Stafford. The idea is that you should use them as though they were your own.

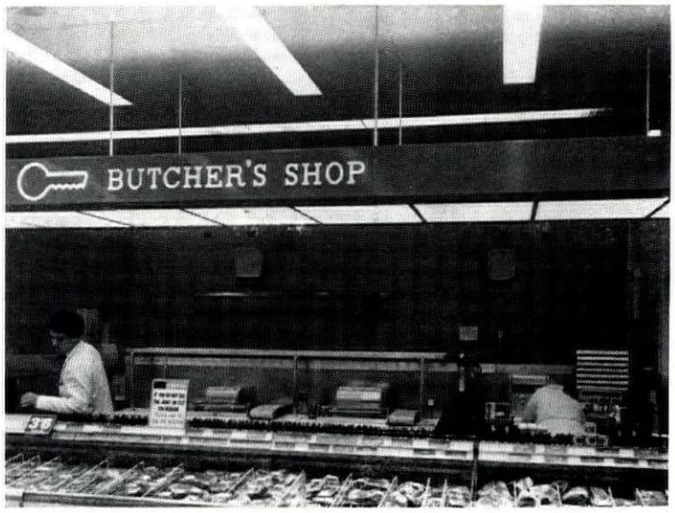
EVOMASTICS

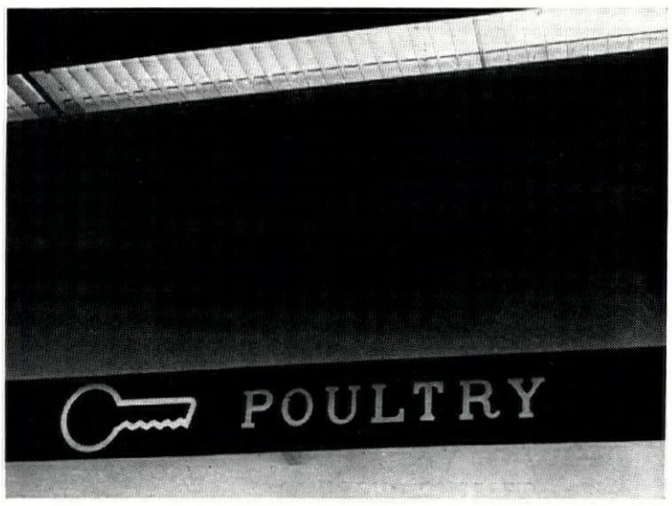
SEALING SYSTEMS



Evomastics Ltd., Stafford, Tel: Stafford 2241. London Office 450/452 Edgware Rd., W.2. Tel: Ambassador 2425

IN THE LIGHT OF MODERN MARKETING





Aimed at giving the maximum lighting on shelves, but at the same time minimising glare, the lighting system used in Key Market's St. Leonards-on-Sea food store was devised in close co-operation with the architects, Thomas Mitchell & Partners. Although designed to harmonise with their surroundings, it is intended that the lighting fittings themselves should be as inconspicuous as possible leaving the goods as the visual focus. Continuous rows of troughing with deep baffles sit easily in the ceiling. The lines of troughing are at 4′ centres, using continuous single tube 8′ fittings. The louvre baffles are at 2″ centres. Pelmet lighting and suspended trays over food counters are unobtrusive and efficient. De luxe natural fluorescent tubes emphasise the colours on display shelves, whilst over the Butchery and Delicatessen counters pink circlgrid louvres assist in colour correction. A specially designed illuminated key motif is used throughout the store with great effect.

This interesting installation gives an average illumination of 65 lumens a square foot—75 lumens a square foot when supported by special lighting—which makes it just as easy to read the labels on goods displayed in lower bins as those on top. The S.L.R. Technical staff is always available to advise on lighting problems and to design special fittings to meet special needs.

The full range of S.L.R. fluorescent and tungsten fittings is illustrated in List 55 which will be sent on request.

Special lighting fittings by

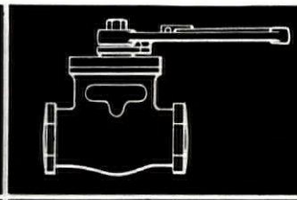
S L R

S.L.R. ELECTRIC LTD CRANBORNE INDUSTRIAL ESTATE, POTTERS BAR, HERTS.
Telephone: Potters Bar 58121/7

WHICH briton TO CHOOSE

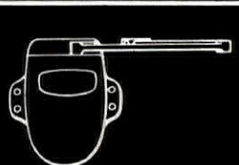
FOR MAXIMUM ECONOMY AND EFFICIENCY

briton



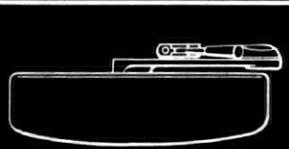
The orthodox surface fixing closer that is made in various sizes and types to suit every door whether internal or external. Suitable for both left and right hand doors without alteration.

briton 200



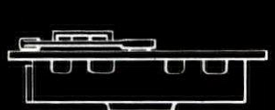
A stylized version of the Standard Briton, for internal or external doors up to 112 lbs. Suitable for both left and right hand doors without alteration.

briton 502



A new closer styled to blend with today's architecture. With the projection from the door being only $1\frac{3}{4}$" the Briton 502 is ideally suited for situations where the space behind the door is limited. For internal doors weighing up to 112 lbs.

briton 500



A concealed closer for situations where surface fixing is undesirable. (Latch action back check is incorporated as standard.) For doors weighing up to 112 lbs.

See our exhibits at the Building Centres, London, Birmingham, Manchester and Glasgow. All details can be found in the Barbour Index, File No. 53 and the Gorco Bureau, File No. 44/3.

WILLIAM NEWMAN & SONS LTD. HOSPITAL STREET, BIRMINGHAM, 19

NEWMANS

ADAMSEZ 'Lotus' drinking fountain has a press action valve to ensure a constant jet despite changes in supply pressures
In strong vitreous glazed fireclay, shaped to protect the jet, the fountain projects 11" from screw-to-wall fixings
Details from ADAMSEZ Ltd. 75 Victoria Street London SW1 (Abbey 5846) or Fireclay Works Scotswood-on-Tyne

DMA

Pammastic gives you an overall advantage

Pammastic Emulsion is based on a unique Acrylic Ter-polymer medium for increased adhesion, flexibility, opacity and weathering. It can be applied by brush, spray or roller to any wall or ceiling surface without primer or undercoat. Inside and outside, Pammastic dries in an hour to a perfect matt finish. Pammastic has been proved durable under severe atmospheric and climatic conditions, and can be washed or scrubbed—time and time again. Pammastic is available in a complete range of exciting contemporary colours—including the BS 2660 range plus white. So look out for our new sign. And pick Pammastic, every time.

Pammastic is based on a special grade of DUNLOP POLIMUL
One of the world-famous polyvinyl acetate co-polymer emulsions developed and manufactured by the Dunlop Chemical Products Division.

THE SIGN OF GOOD PAINT

PAMMASTIC

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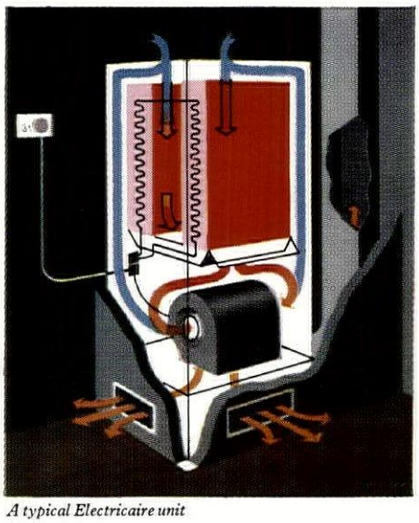
ATTRACTIVE MAISONETTES ERECTED BY
KEYNSHAM U.D.C., AT KEYNSHAM, SOMERSET
Architects: Architects Department, Keynsham U.D.C.
Builders: J.A.Venn Ltd, Civil Engineers
and Building Contractors, Bristol

ELECTRICAIRE

the warm-air central heating that runs on half-price electricity

Electricaire is not only the most economical of all central heating systems to run, it's the easiest to install and it can fit your existing plans. These are just a few of the reasons why it is today setting a new trend everywhere in central heating



A typical Electricaire unit

How does Electricaire work?

Simple! A central thermal storage unit is fitted in each dwelling. This unit heats up on half-price electricity and incorporates a fan which discharges warm air as and when required. The fan can be manually or thermostatically controlled and a boost provides for a rapid warm-up. Units vary in size according to the output required but a normal unit will fit into a space a little over 2 feet square.

A thermostat in one of the main rooms controls the air temperature at the level desired by the occupier. Warm air is directed into individual rooms through outlet registers. These are unobtrusively sited near the skirting or in the floor.

Whether you're building houses, bungalows or blocks of flats, Electricaire gives you the most efficient and economical central heating in existence today.

7 reasons for choosing Electricaire

1. Electricaire gives you complete freedom to plan homes the way you want to. The central unit can be sited almost anywhere and there are no flues to construct.

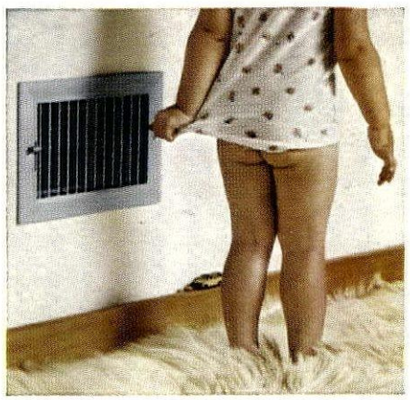
2. 100% efficiency. Electricaire, designed to Parker Morris standards, will give full value for every unit of current used.

3. Electricaire runs on half-price, off-peak electricity. It's the most economical of all central heating systems to run.

4. It's the cleanest, healthiest heating, too. No fumes, dust, ashes and the re-circulated air is filtered.

5. No stoking, no fuel storage. In flats, no boiler attendant is needed and storage space is saved. Each tenant controls the heating in his flat.

6. Electricaire minimises condensation.



The unobtrusive outlet register near the floor

The constant background warmth from the central unit, coupled with the absence of combustion minimises the risk of condensation.

7. Electricaire is silent. The fan runs quietly and there is no sound of burners lighting and shutting off.

ELECTRICAIRE

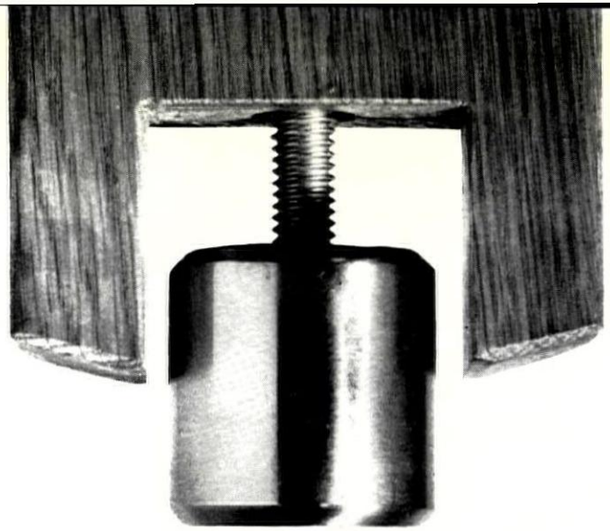
warm-air central heating on half-price electricity

Like to know more? For advice and technical information about Electricaire, just ring your Electricity Board; or write direct to: The Electricity Council, EDA Division, Trafalgar Buildings, 1 Charing Cross, London, SW1.

Issued by the Electricity Council, England & Wales.

Keynsham Council fit Electricaire in modern maisonettes

'*It's trouble-free heating*', *say delighted tenants.* At Keynsham, near Bristol the local Council decided to build 44 really modern maisonettes. The exterior design was carefully chosen, the interiors were planned on the most modern lines and extra special care was exercised in choosing the heating. After weighing up all the factors connected with different types of central heating, Electricaire was chosen by the Council. Electricaire units each with a loading of 10 kW and an active storage capacity of 40 kWh were installed at a cost of £170 per maisonette. (Similar installations today would cost about £145.) Each unit supplies warm air by stub ducts to the living/dining room, hall and kitchen, while a rising duct delivers warm air to keep the three bedrooms cosy. Tenants praise not only the economy of Electricaire but its cleanness and trouble-free running. It is estimated that a full year's running costs should work out at £40 to £45 per maisonette.



Remember this? The adjustable foot fitted to Nexus desks and tables. Everybody likes it but not everybody can afford to indulge their foot-fiddling fetishes. If you want desks or tables for contract work – 12 or 24 or more – and the budget is tight, control yourself! Specify

nexus 24U

Aston Cabinet Co Ltd

Central London showrooms:
50-54 Charlotte St London W1
Phone Museum 7318

Head office and showroom:
Astrola Works, Roebuck Lane
West Bromwich, Staffs
Phone West Bromwich 2551

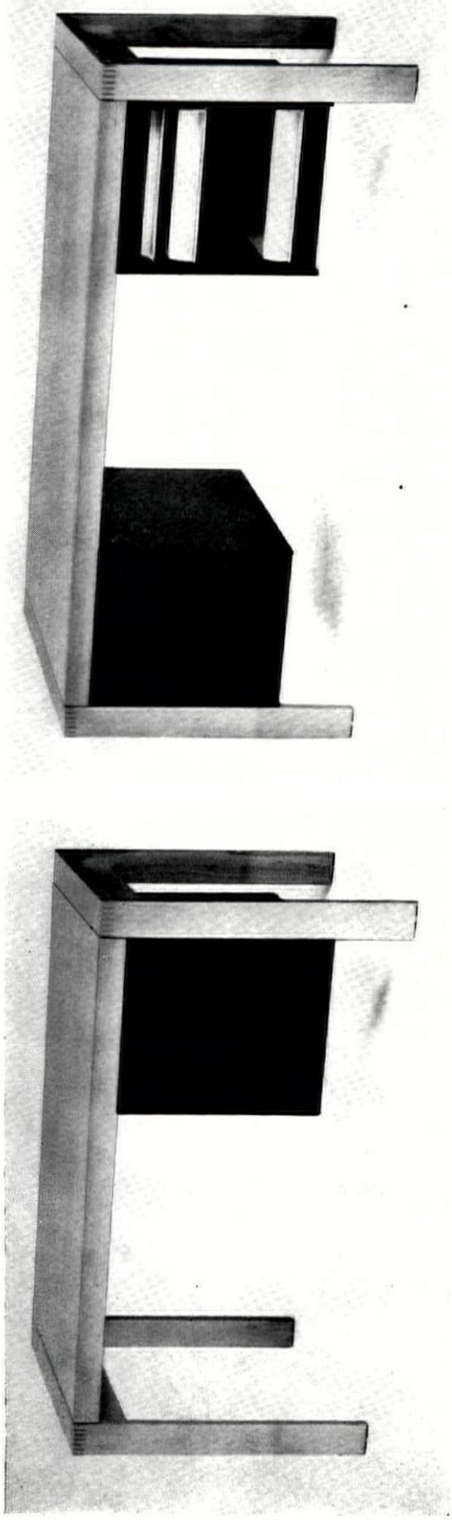
Ken Garland and Associates

Shown here are two of the 1,226 desks which are available in the **Nexus 24U** range

Designed by Martin Grierson MSIA FRSA

Left: single pedestal desk 24U/203 in beech
4′8″ x 2′8″ x 2′4″ high
Price £27 12s 9d

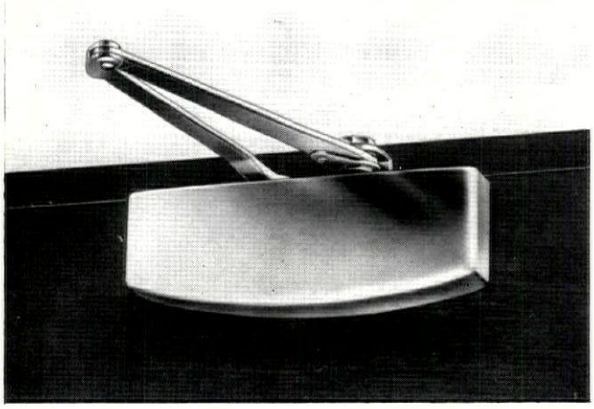
Right: double pedestal desk 24U/311B in beech
5′4″ x 2′8″ x 2′4″ high
Price £37 12s 3d



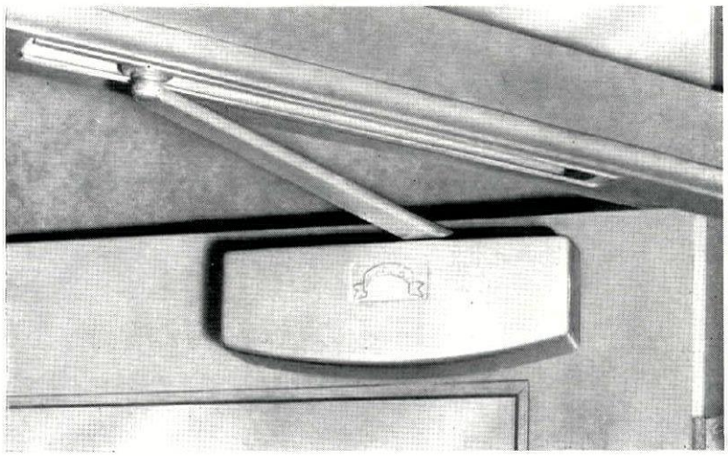
FOR ALL FUTURE PROJECTS

Choose LANCER

–the ultimate in door closers for concealed or surface fixing



The Model 6C for surface fixing. Can be used where a door is not thick enough to take a concealed type.



The Model 67C, a surface fixing type with single arm for doors opening outwards. That shown above has a flush mounting channel, but there is also a version with surface mounted channel.

Other LANCERS

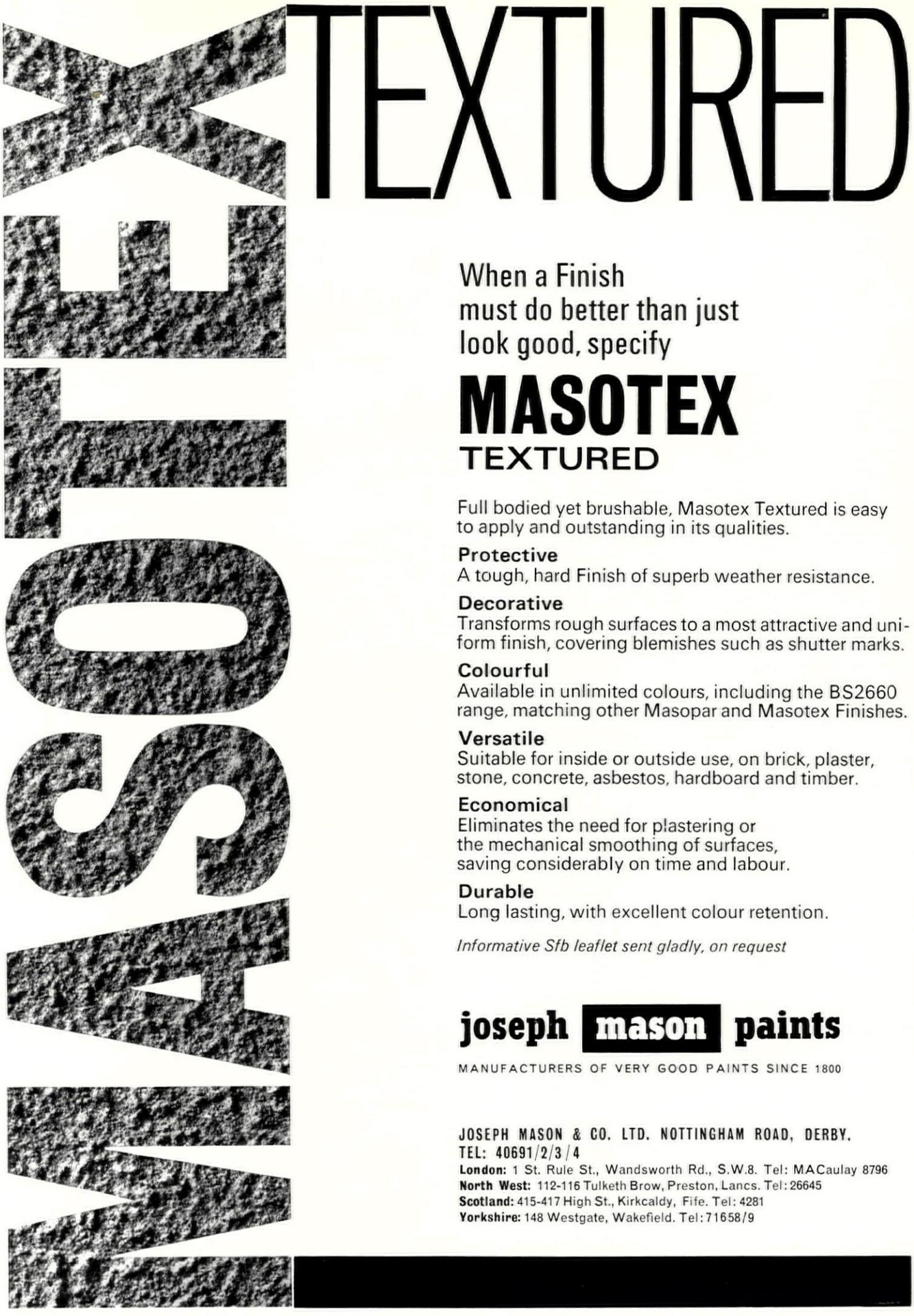
4C Concealed type with arms visible.
5C As 4C but with an external fixing arm.
7C Completely concealed single arm model.

Lancers are not recommended for use on external doors.

100% BRITISH PRODUCTS OF

FORSON

DESIGN AND ENGINEERING COMPANY LIMITED
Commerce Way · Lancing · Sussex LANCING 2835/6



When a Finish
must do better than just
look good, specify

MASOTEX
TEXTURED

Full bodied yet brushable, Masotex Textured is easy to apply and outstanding in its qualities.

Protective
A tough, hard Finish of superb weather resistance.

Decorative
Transforms rough surfaces to a most attractive and uniform finish, covering blemishes such as shutter marks.

Colourful
Available in unlimited colours, including the BS2660 range, matching other Masopar and Masotex Finishes.

Versatile
Suitable for inside or outside use, on brick, plaster, stone, concrete, asbestos, hardboard and timber.

Economical
Eliminates the need for plastering or the mechanical smoothing of surfaces, saving considerably on time and labour.

Durable
Long lasting, with excellent colour retention.

Informative Sfb leaflet sent gladly, on request

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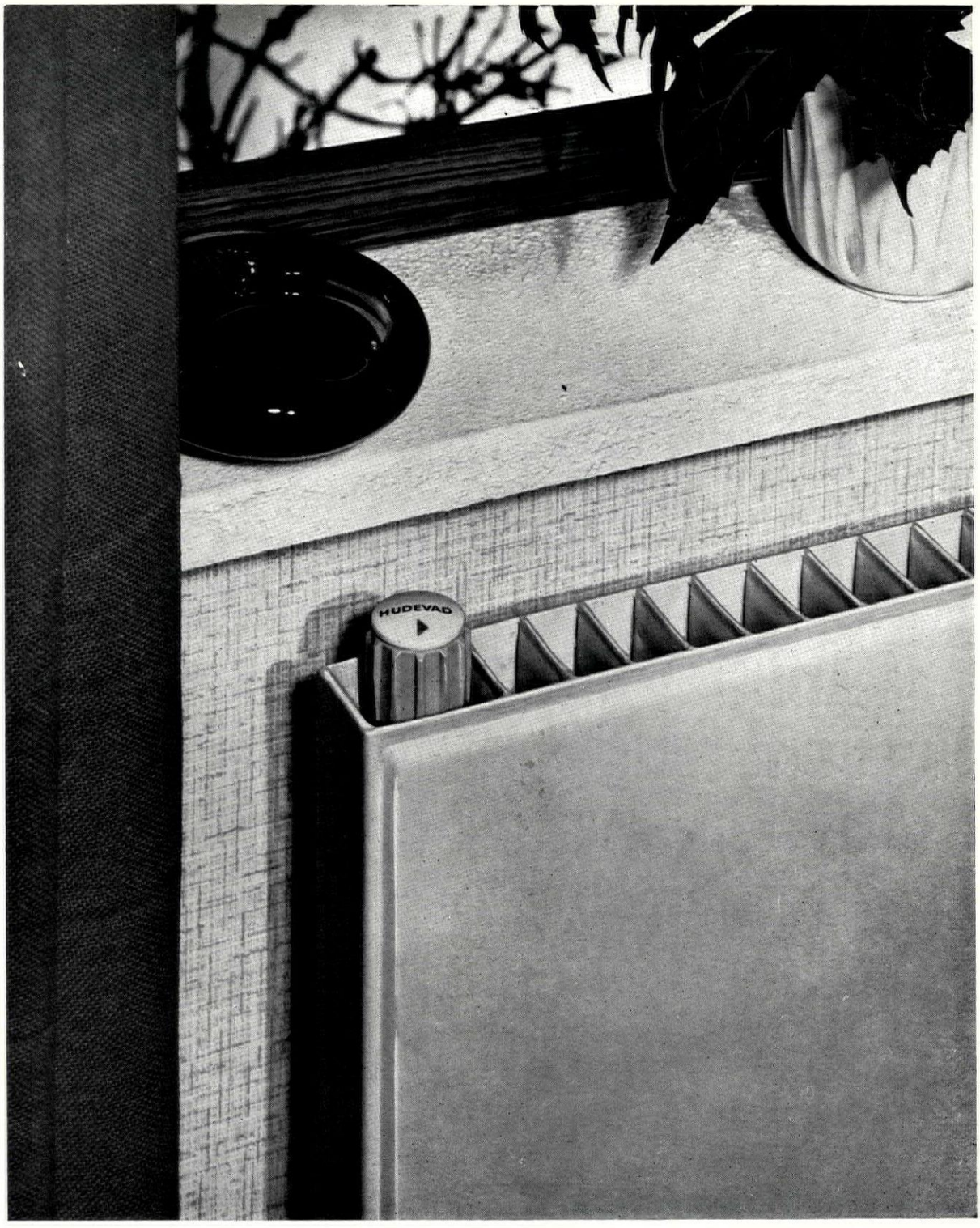

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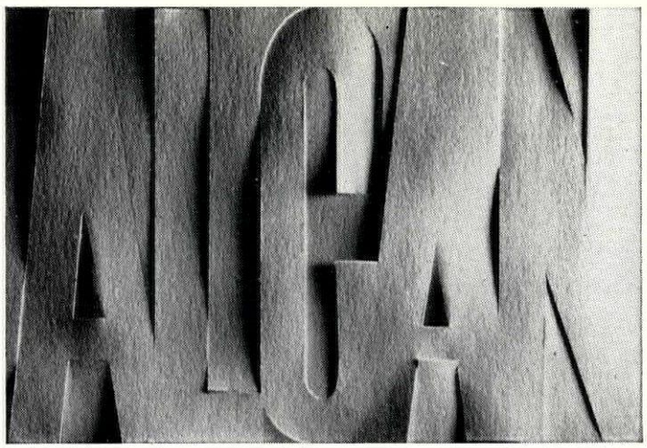


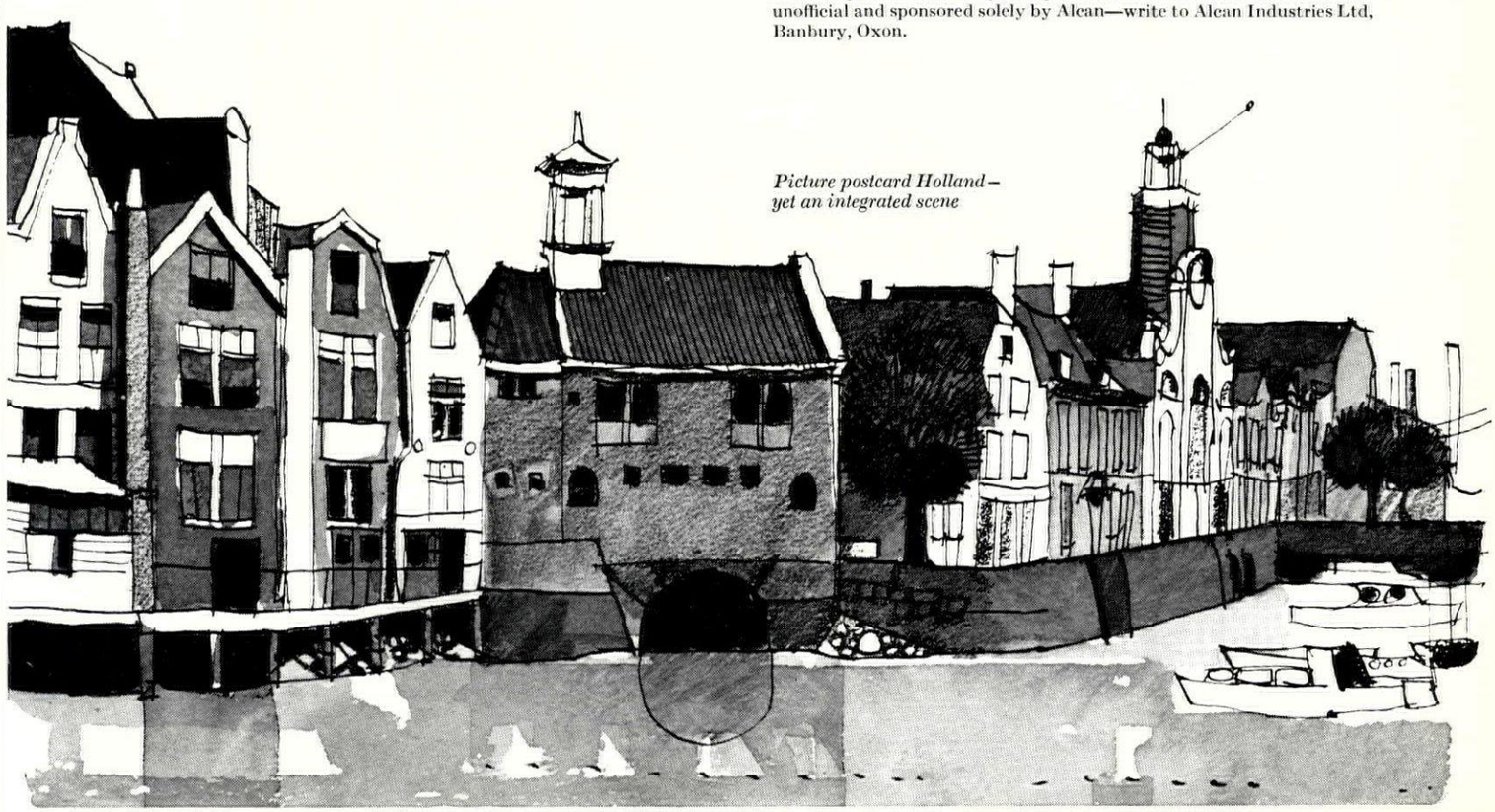
A study of

ROTTERDAM

Our previous broadsheet was concerned with the Rhondda, a region suffering from neglect. Now Gordon Cullen examines the problems arising from high-pressure reconstruction of a city, Rotterdam, which had been severely damaged by war and flood.* Our business at Alcan is not, of course, town planning but making and selling aluminium. Nevertheless, the traffic in *ideas* between industry, planners, architects, sociologists and builders is a very real part of this business.

Architectural Consultants: Alun Jones, Ward and Partners

*For a reprint of this study, and previous 'A Town Called Alcan' studies—unofficial and sponsored solely by Alcan—write to Alcan Industries Ltd, Banbury, Oxon.



Picture postcard Holland—yet an integrated scene

ALCAN

ROTTERDAM REBUILT

THE PROBLEMS OF HIGH POPULATION DENSITY

The Rotterdam Lijnbaan and its neighbouring housing development is now some years old, and probably the designers would now rebuild in a more sophisticated way. In this study some criticisms are made; but it must be clearly understood that the vitality, quality and speed of the whole operation were of a very high order.

Before studying the problems of Rotterdam in particular, we deal below with the general situation in Holland. Density and rapid growth of population, with consequent land shortage, are very quickly becoming world problems. The environment we find in Holland today may very well be ours in the South East of England by 1980.

★

Demographic survey Whereas in many other Western European countries the rate at which the population is increasing has shown a drop, in the Netherlands, with a density of 912 inhabitants per square mile (it is the most densely populated country in the world), the population is increasing very rapidly. This is partly a result of the birth rate, 20.8 per 1,000, which is high by European standards; but is particularly due to a fall in the death rate, which is among the lowest in the world at 7.9 per 1,000. Every newborn Dutch baby has an average chance of living to the age of 73.1. Almost half of the twelve million inhabitants of the country live in the low-lying (below sea level) Western part and this, seen in the context of the ever present threat to the protective sea wall, gives tenure a national and serious connotation.

Problems of density Now turn to consider the problems of high population density. The first is simply a lack of space. It has been said that 'Holland is a fine country, the only trouble is that there are too many Dutchmen in it.' (*The Times*.) This is the country where the self-employed person is likely to take his week-end at mid-week. Crowding results (as they say themselves) in an ever more closely meshing bureaucratic machine; and with this increasing organization come the human reactions of kicking over the traces, impatience and resentment of authority. The resentment stored up, as the Dutch pedestrian scrupulously observes the street crossing lights, is real.

Rebellion This attitude is exemplified by the eruption of the Provos, who can, perhaps, be described as idealistic Mods with a few mean ones thrown in. In fact there exists a mild form of explosion in which the victims are the social structure, wage restraint, puritanism, thrift and similar traditional values.

THE PARTICULAR FIELD OF HOUSING

Land hunger Turning now to the particular, housing and planning, the first observation must be that cities such as Amsterdam, The Hague and Rotterdam have now almost completely used up their land suitable for house building. And where the town finishes, the serious work of the country begins—dairy farming, market gardening and crops. There is little of wild nature left, no opting out.

Housing pressure People are getting married younger, there is a relative increase in the total number of married people, the low death rate and infirmity rate strengthen the claim of the older citizens to independent accommodation. Further, there is a growing tendency among young single persons to want a 'key of their own.' These conditions, taken together, add up to an enforced change in the traditional community pattern. Looser family ties and smaller families increase the housing need.

Averaging out These housing pressures have made considerable demands on the planners, which they have only been able to meet by averaging out the social needs.

Community size The determining factor in arriving at community size is the need to provide in any new area three churches, each with its school, owing to the religious structure of this society. This means that the viable size of the community must be in the region of 20,000.

Density Traditionally accommodation was compact and of modest dimensions (the legacy of the merchant class rather than the worldly and 'spiritual' classes). Also, of course, land, inside dykes and fortifications, was at a premium. It still is; and not only is building density high but the accommodation standard is only about half that advocated in Parker Morris.

Layout The layout of housing developments is normally a rectangular network of streets. The reason is undoubtedly the flat, featureless land. There are no slopes and not many woods that could be exploited to produce a more romantic pattern. Where, however, the town pattern is dictated by the meandering line of a river, a totally different and picturesque layout is produced, as at Utrecht. There is now a tendency to bend streets in new layouts to obtain a somewhat less rigid pattern.

A typical extension unit of 22,000 people within an area of 350 acres.

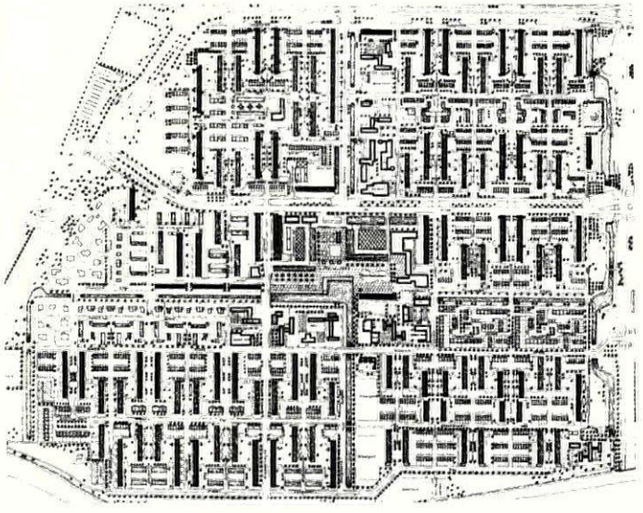
Industrialized building Industrialized building techniques are often used. It has been shown that the use of these techniques does not result in any financial saving;

but they are quicker than traditional methods of building.

Monotony In new residential districts great attention is given to public gardens and attempts are made, where possible, to provide children's playgrounds. Even so, the general aspect of postwar housing is one of uniform monotony.

Appraisal There is now a general recognition that the provision of new housing, of itself, is not enough. It is becoming more realized and on this a study group is working 'that dwelling is more than just a matter of housing: that the entire layout and the appreciation of dwelling environment including the street, gardens, playing facilities, shops, schools, etc. have a marked effect on the value which the occupants attach to their environment and on their feeling of well-being.'

Repetitive blocks pushing out over the flat land.



A recent layout for a new community in South Rotterdam. Variety is aimed at by employing four different architects, one for each quarter.

Conclusions Not, you might think, a very exciting account. There is admittedly monotony; and the dominance of the average and these physical limitations reflect the general conditions which produced, *inter alia*, the Provocative Ones.

Undoubtedly, if the optic nerve is resorted to as a palliative, the provision of landscaping, irregularity, concealment and drama could assist. But there comes a point where these devices cannot cope with the pressure (and this is where our study of the Lijnbaan fits in). They simply look frivolous. The bluff is called.

THE LIJNBAAN

The Lijnbaan (the name derives from a 17th Century rope-walk on the site) is a shopping centre which was opened in 1953 in the centre of Rotterdam, the centre that was destroyed by enemy action in 1940.

There is something like 3,000 feet of shopping frontage and it is intended to extend this soon by another 600 feet. At the moment there are about 70 shops and restaurants.

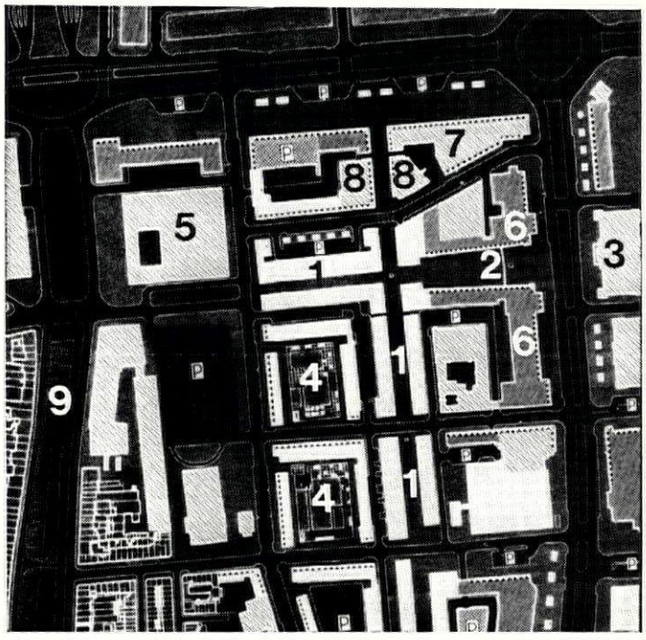
The development, which is mainly in the luxury or specialized shopping range, is part of the general reconstruction of the area of the city which includes hotels, offices, apartment blocks, cinema, dance hall, bars and restaurants, concert hall and car-parking.

Several imposing buildings survived destruction and the main shopping axis is directed towards the old Town Hall which lies on the far side of Coolsingel, a major traffic artery of the city. The comparatively narrow shopping streets open out in front of (but separated from) the Town Hall to form a spacious square.

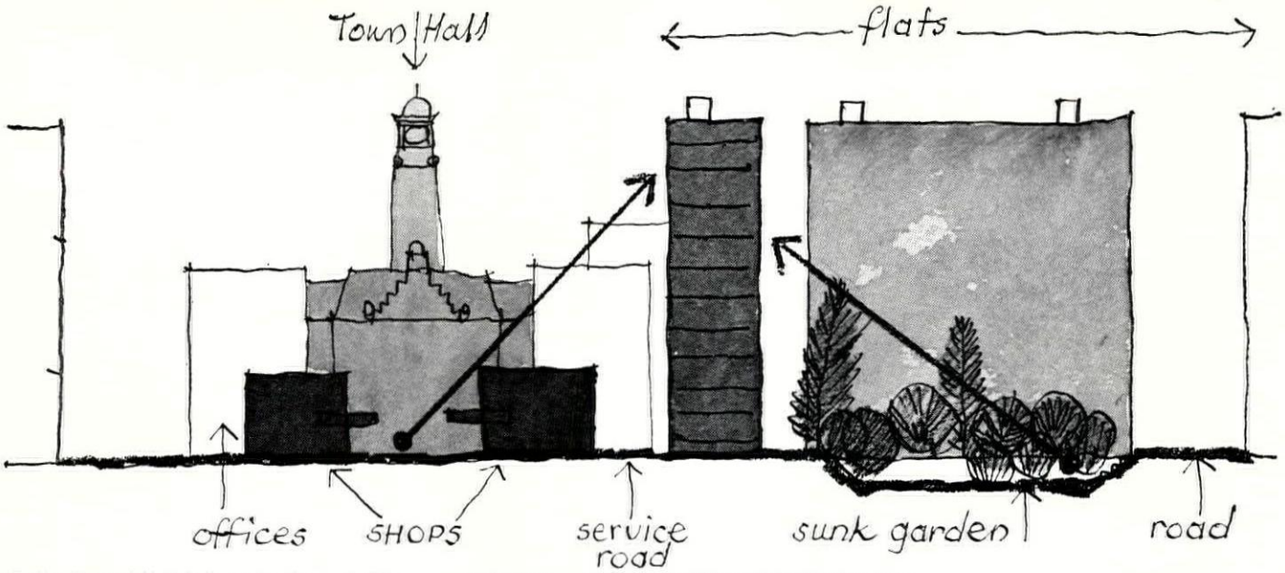
The shopping routes are traffic free, the shops having back access, and there are covered ways with cross links for convenience in inclement weather. The whole of the public space is laid out with flower beds, sculpture, cages for songbirds, kiosks and, from time to time, exhibitions of sculpture and posters. This is the responsibility of the Lijnbaan Shopping Promenade Association.

The shops themselves are free-standing and rise only to a height of about 25 feet whilst the offices are between six and eight floors and the flats rise to about 14 floors.

From the plan it will be seen that the development falls into rectangles of approximately 350 feet and that the heart of the scheme is the pedestrian system, first the shopping walks and second the gardens enclosed by the flats. In fact, the traffic routes are regarded as being purely utilitarian and receive very little attention.



1. *Shopping Precinct.* **2.** *Main Square.* **3.** *Town Hall.* **4.** *Flats.* **5.** *Concert Hall.* **6.** *Offices.* **7.** *Hotels.* **8.** *Cinema/Dance Hall.* **9.** *Canal.*



Section through the Lijnbaan development. The arrows indicate the cut-off observed from the pedestrian areas.

Appreciation Now all this is splendid. Here is a real town centre wealth of material put together with considerable skill. We say 'skill' because that is how it appears to us; certain effects have been consciously contrived.

Section The first point arises from a consideration of the section. Here it will be seen that the intimate and almost private pedestrian areas are confirmed in their character by the cut-off which succeeds (to a greater or lesser degree) in withholding the mass and bulk of the flats from these zones, i.e. they are not over-awed.

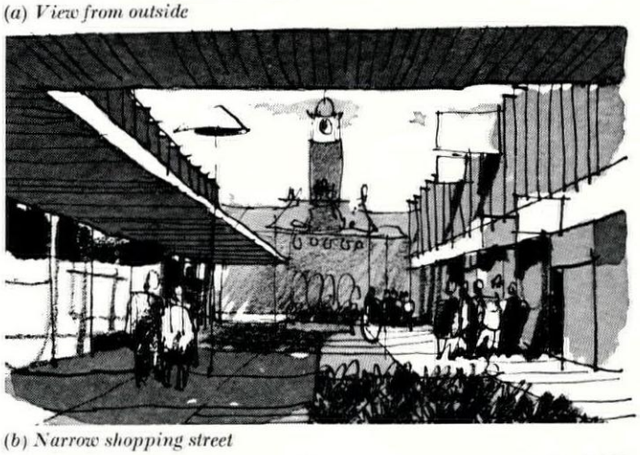
Sequence This should then be read in conjunction with the progression along the axial shopping street from west to east, to the Town Hall. We start with the narrowest section of the shopping promenade, with its clear definition of ENTRANCE. Once inside, the tall flats are largely cut off from view and the eye is allowed to rest on the Town Hall, a big building in a significant position.

The length of the narrow section is not too great to become worrying. It opens out to the main square in front of the Town Hall and here again the height of the enclosing buildings, about six floors, is correct in the context. In fact, this is a perfectly coherent, classical progression.

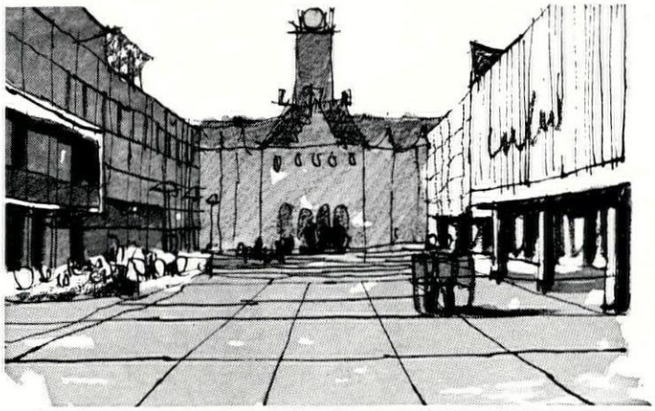
Sculpture The progression is given point and flavour by the sympathetic use of sculpture. Sculpture is used to point the ambience of each part of the progression. If we can say that the monumental lettering at the entrance constitutes sculpture, then the next link in the chain is the romp of bears which is situated at the intersection of two narrow shopping promenades. This is right in scale and self-preoccupation in the crowded context. The next group is a monument to the dead of 1940 and stands in the main square, obviously a serious, if homely, group. All these are seen in the context of the fourth monument, the tower of the Town Hall.

In passing, one should mention the dimension of sound which varies from the myriad twittering of songbirds in cages to the carillon of bells whose tunes fall out of the sky at regular intervals.

(a) View from outside

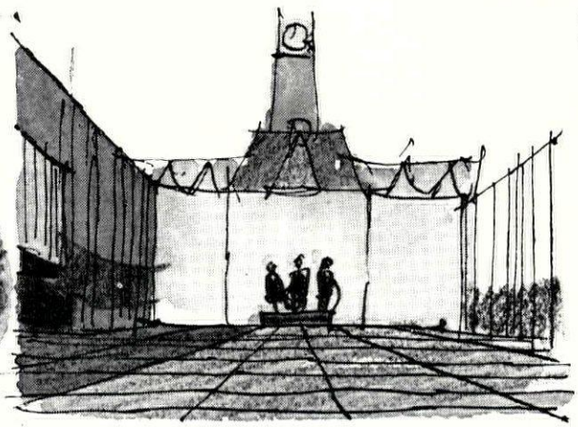


(b) Narrow shopping street

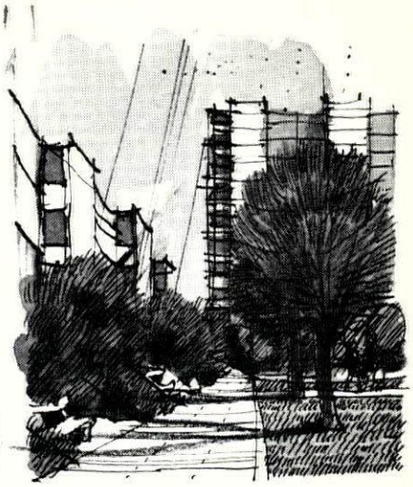


(c) Opening out to square enclosed by offices and old Town Hall

Carved bears . . .



. . . and citizens. Appropriate for their settings, and both in the shadow of the sculptured tower of the Town Hall.



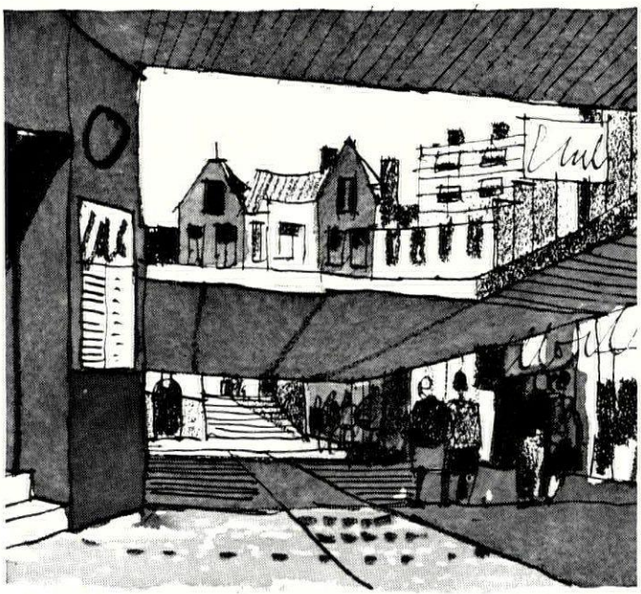
A typical sunken garden in the flat development.

DOUBTS

Having reached this point, the mind is beset by two types of doubt. First, does the plan succeed within its own terms of reference, and second, is the attempt realistic, is a satisfying solution possible at all?

Dealing with the first, it is clear that if we apply the Scanner we will see that this scheme consists of several interlocking chains. For the purpose of this exercise we can quote *space*, *sculpture* and *integration*.

Space We have already seen the progression from west to east which leads from modesty to civic presence. If we turn and go the other way there is no corresponding devolution,



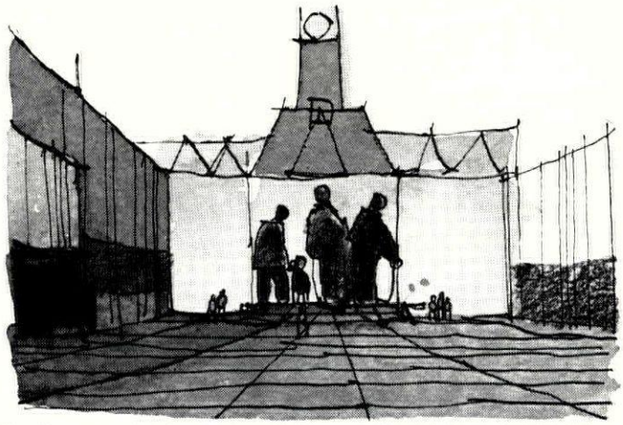
The intimate atmosphere of the shopping lanes should, ideally, devolve into the surrounding city.

the sequence simply fixes on a distant sign for Nescafé instead of just getting lost in Rotterdam.

Another aspect of space is the absence of a direct visual link between the two pedestrian areas, promenade and gardens. This would reveal and bind the development

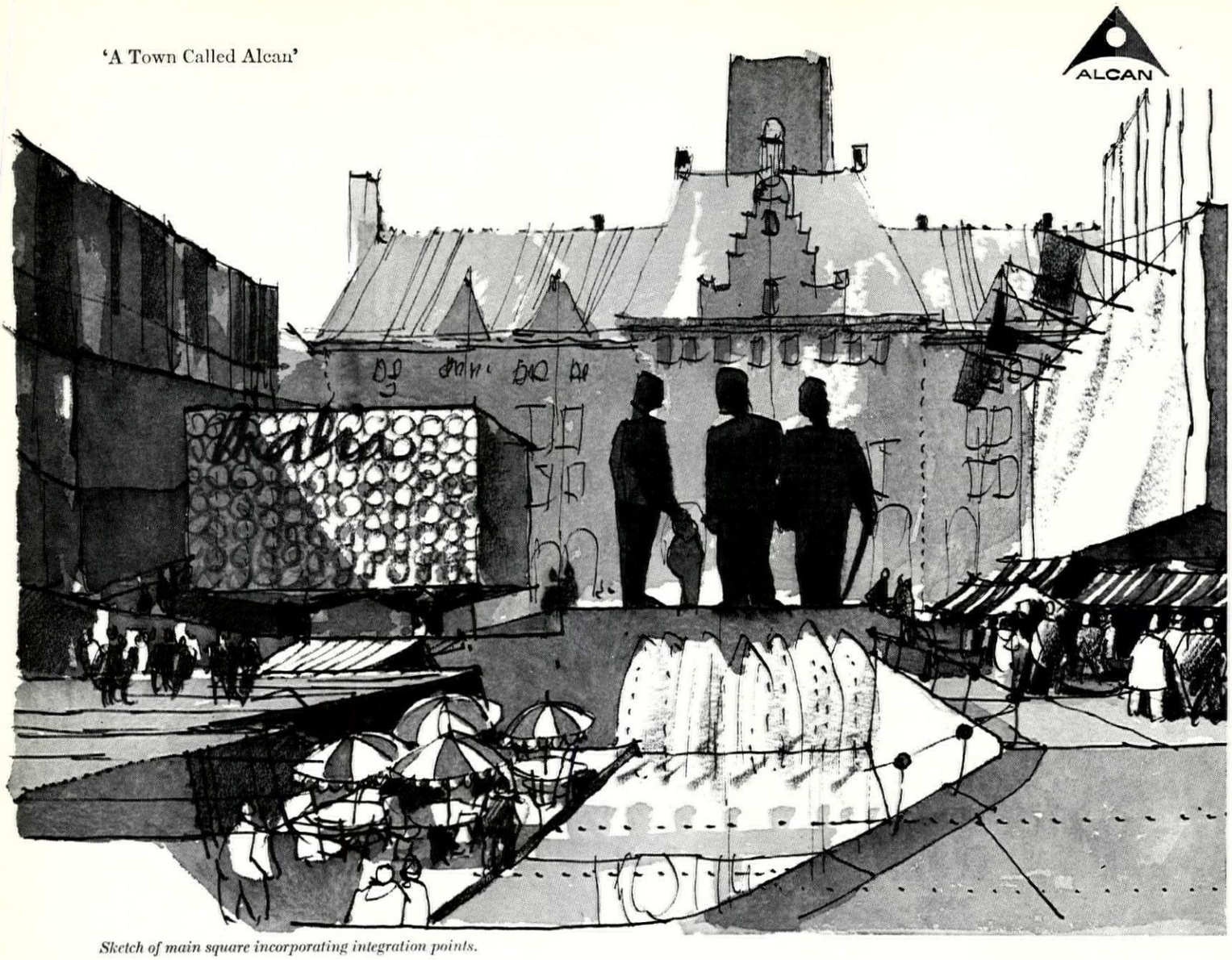
The two pedestrian areas should join forces to create a private network.

together. Lastly, there should be direct visual contact between the square and the Town Hall. A slight change of level would cut out the sight of the intervening main road.



Sculpture enlarged to scale of setting. (Compare with top centre picture.)

Sculpture The memorial group is too small to play its part in the sculpture chain and should be about three times its present size. Quite apart from visual considerations, this would be justified by its 'civic' importance as a serious monument.



Sketch of main square incorporating integration points.

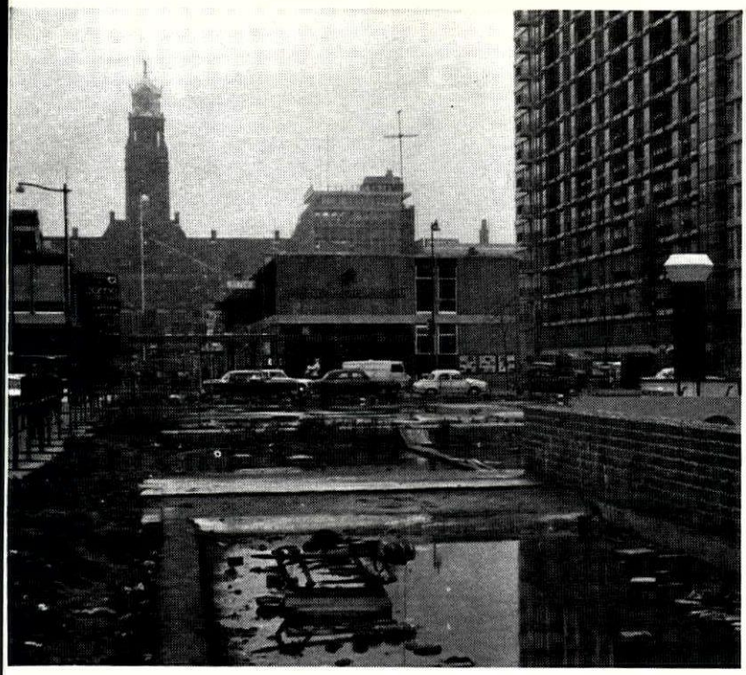
Integration We may be hopelessly wrong but there seems to be a lack of integration in that the pedestrian heart of the development, the main square, appears dead and many of the city centre functions which could well have shared in the centre—hotels, cinema, dance hall and concert hall—are separated from it by traffic routes and we are left with office buildings which could quite easily have been placed elsewhere.

Realistic? We now come to the second consideration: is the attempt realistic? This may require a little explanation. If someone builds a factory in the countryside it is sometimes screened by planting trees. This is a device, an artifice. When, on the other hand, the approach to St. Paul's is partially screened by office buildings but then revealed . . . massive and near . . . at close range, this also is a device, an artifice, but it is not hiding anything, it is a self-justifying joy.

What we can see happening here is that the big scale, pressure and speed of modern development are not being matched by the sophistication of the corresponding civic and social arts. This means that instead of, say, Townscape being integral with the development (see frontispiece) it is either being used to try to justify the unpalatable or it simply cannot cope—like a boy's waistcoat on a fat man.

All the values are suffering similarly, human, integrational and optical, and the only way to get them back is by new design techniques. We have to regain control of the environment.

CRUNCH. The result of high density. What price the sunken garden? . . .



. . . or the devices of Townscape? Rotterdam . . . or Manchester, Tokyo, Detroit.

LOOKING AHEAD

Regaining control of the environment

Starting from the original concept of a schematic city ('A Town Called Alcan') our studies progressed to the consideration of the detailed structure of the city. This resulted in an attempt to make the total field of reference a normal piece of planning currency and for this reason we gave it a name, the Scanner.

A basic purpose of the Scanner is to attempt to fit the ebullient, the irrational and the accidental into the scheme of things. The framework allows for Zests and for the Maze factor. ("That pleasant degree of complexity and choice which, although it is contained within a coherent framework, allows the individual to find his personal path. We feel that this degree of personal initiative, both socially and visually, helps to identify a person with his environment.")

Certain conclusions ensued.

1 That a check-list is not an arbitrary compilation of random facts but that items tend to fall into a series of CHAINS. (*The Urban Village*)

2 That the random items that are pinpointed when we expose a given environment to the Scanner create a web typical of that place; and redevelopment consists in the fulfilment of that WEB. (*Rhondda*)

3 The present system of hand-made environment cannot cope with the pressures of population and *urgency.* (*Rotterdam*)

Our next exercise will be, in fact, to suggest the route that can be taken from the present 'hand-knitted' stage to the point where (with the aid of technology) human imagination can, on the one hand, comprehend the problems and, on the other, control the solutions with sufficient speed to *once more gain control of the environment.*

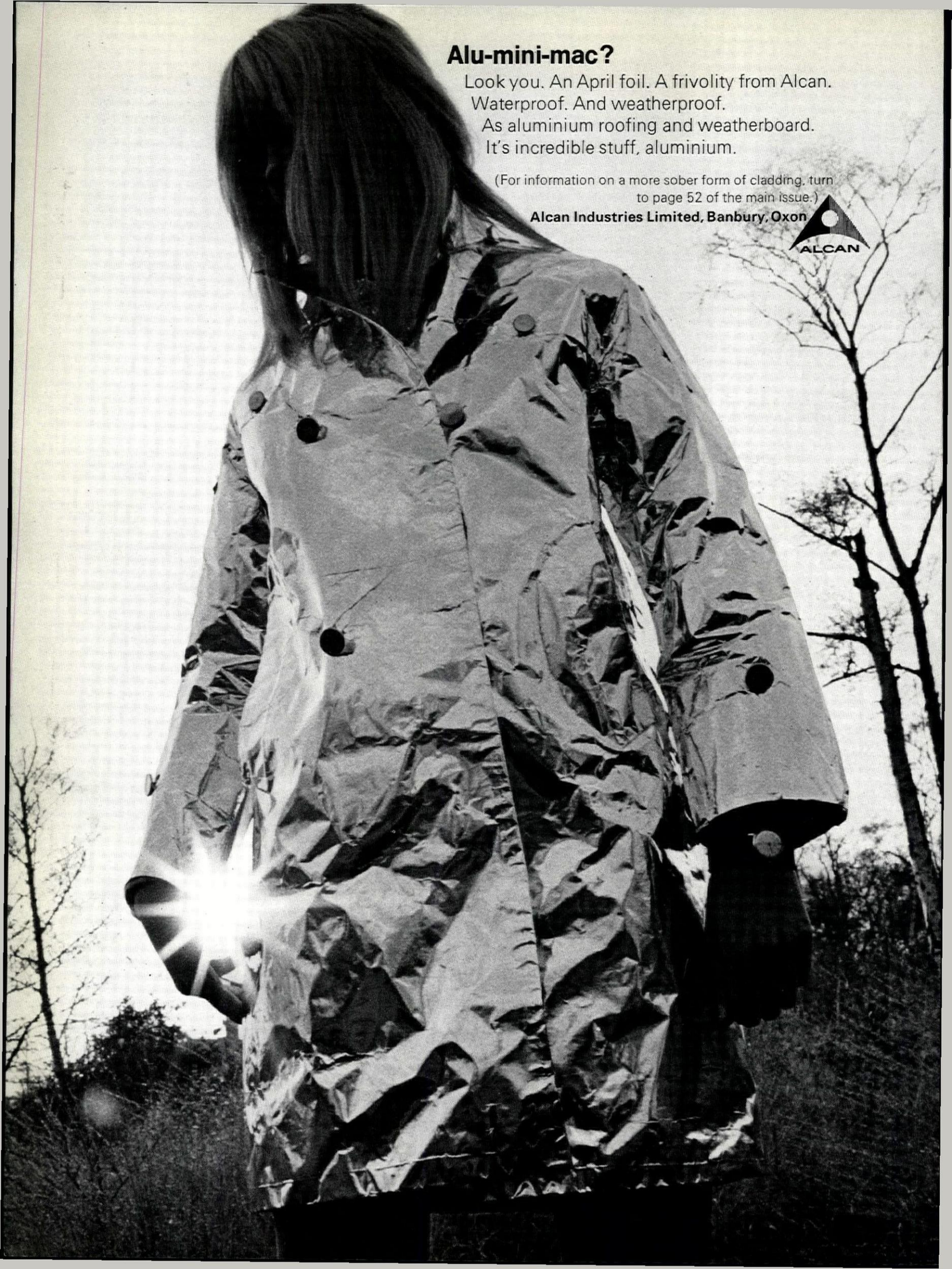
We do not propose merely an extension course on electronic machines, although naturally these will come into the picture (for the processing of statistics, for example). Mainly we shall be concerned with the complete environment and how to create it.

To be more precise, we propose to start with the consideration of notation: by this is meant the wider use of existing design ability whereby the planner comprehends and solves a problem but is not bogged down in the execution of it. Instead he transfers his conception to the local operator by means of a notation (visual and social shorthand), much as a musician might write his score and leave it to the local orchestra to play.

This would help, but the shortage of architects and planners is such that only 10% of building work is in their control and we must look to some other method of increasing productivity. The simplest tool, the electronic light pencil, is reckoned to increase available design time from 15% to 85% of the working day. By these techniques, plans and elevations can be turned into perspectives, we can explore spaces visually, project layouts on to contours and really come to terms with the visual organization of planning. It should be pointed out that these machines cannot themselves *design;* but they release the design ability of people and, whilst enhancing their powers, they minimize their weaknesses.

From notation we would aim to move on to the study of the processing of quantifiable data, making the maximum use of statistics, and from there to the study of qualities—those qualities mentioned in the Scanner; such as, for instance, worth or vitality, which we know should be woven into the scheme of things but which, for the moment, are intangible.

No study of this nature would be complete without an examination of the most complex of all computers—the human mind. What are the credentials of those who, by accident or design, find themselves in charge of our future environment?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Look you. An April foil. A frivolity from Alcan.
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(For information on a more sober form of cladding, turn to page 52 of the main issue.)
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ALCAN

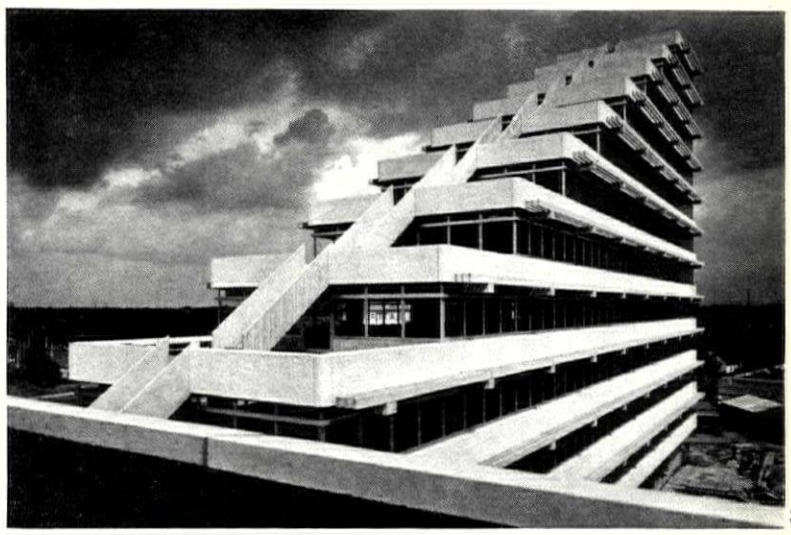
WORLD

1

WAY OUT

Rarely can the problem of the emergency exit have been structured so impressively as by Paul Schneider-Esleben at Dusseldorf, 1. Ironically the clients were an insurance company, ARAG, who are also developing the forecourt, 2, with some canopied shops. The twelve levels of the office block, 3, have their size closely related to different functions, with management offices, conference room and plant at the top. The insistent horizontality of the concrete-slatted sunbreakers helps to establish a 'traffic architecture' aesthetic suitable for a major highway intersection.

2



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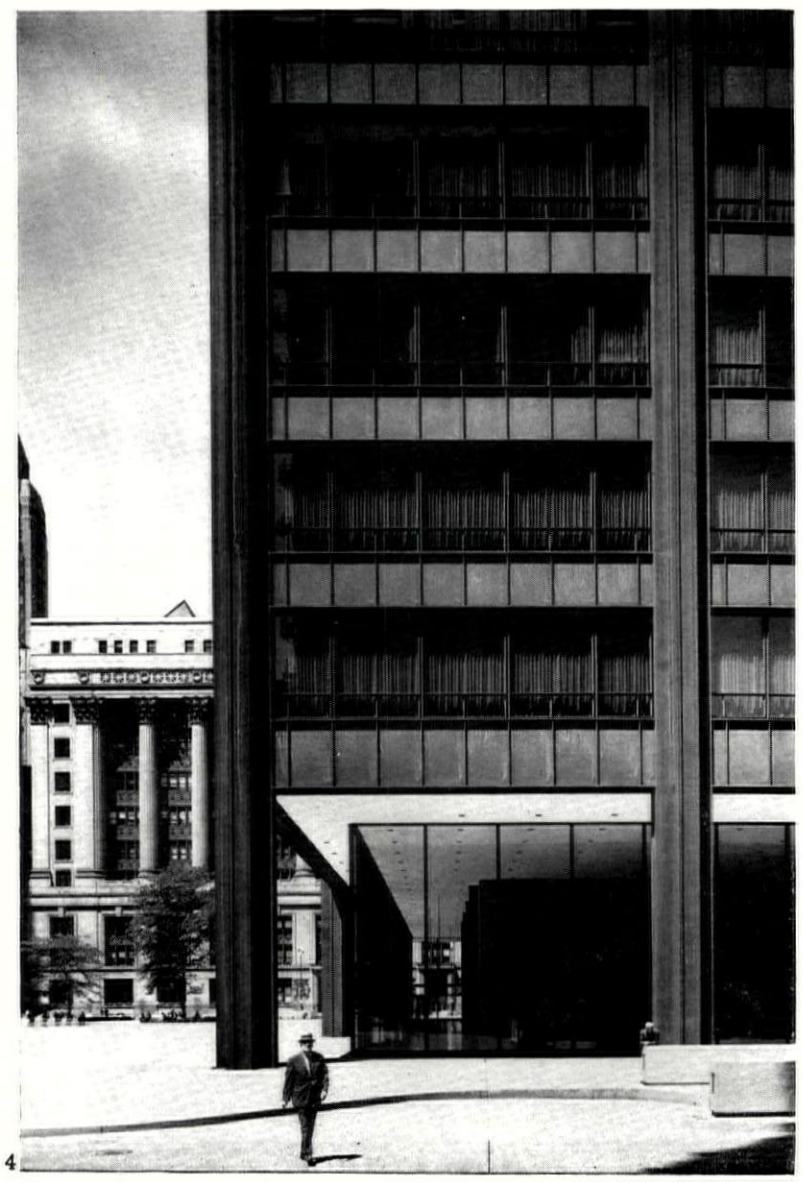
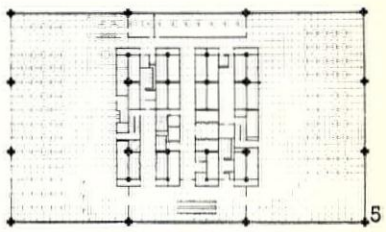


4

CIVIC FRAME

Undoubtedly the climax of recent rebuilding in Chicago's Dearborn Street (see AR World, September 1965), even allowing for the second phase of Mies's Federal Building which is still under construction, is the exquisite 648 ft. skyscraper for the Civic Center, a statement more purely classical, 4, than earlier Beaux Arts monuments nearby. The architects were C. F. Murphy Associates, in association with SOM and with Loebl, Schlossman, Bennett and Dart. This is the ultimate in Chicago School structures: three 87 ft. spans in one direction and three 48 ft. spans in the other, allowing enormous open office areas, 5. The cruciform columns, 6, which step inwards at three places (from 5 ft. thickness to 2 ft.), consist of steel, fireproofed with concrete and then given an outer skin of self-rusting Cor-Ten. Floor to floor height is 18 ft. but the trusses, accommodating all services, are so deep that floor to ceiling height is less than 12 ft.

A two and a half acre plaza has been created between the Civic Center



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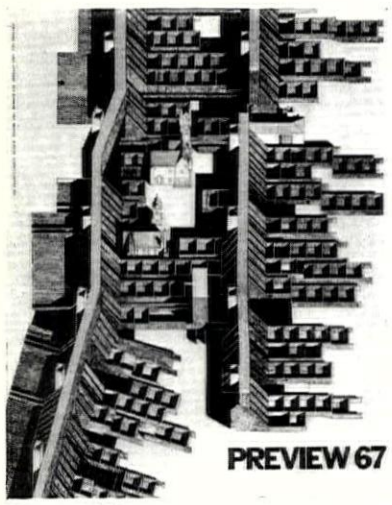
acknowledgments

WORLD, pages 1-4: 1, 3, *Bauwelt;* 2, *Bauen + Wohnen;* 4, 7, Balthazar Korab; 5, 6, 8-10, Hedrich-Blessing; 13-15, 18, 21, 23, 25-28, *Architectural Forum;* 17, 19, 20, 22, *Progressive Architecture:* 29, 30, *Casabella;* 31-34, *Bouw.* PREVIEW: TOWN CENTRES: pages 15 and 16 (top), John Mills. HOUSING: page 21, GLC; page 26 (bottom), Wrekin Photo Services; page 28, Warren Jepson & Co.; page 29 (centre), Bryan & Shear; page 31 (top), G. Forrest Wilson; (bottom), Ernest Gordon; page 32 (centre), John Dewar; page 38 (top), Christopher Bailey. EDUCATION: page 41 (centre), GLC; page 42 (top), Henk Snoek; page 47, A. L. Hunter; page 48, John A. Rose. PUBLIC: page 69 (top), Patricia Cain; (bottom), P. W. and L. Thompson; page 70 (bottom), Henk Snoek; page 76, Henk Snoek; page 78, Alfred Cracknell; page 81 (bottom), Keystone Press Agency; page 82, A. L. Hunter; page 85, Henk Snoek; page 86, Sam Lambert. STOP PRESS, pages 87-88: 3, 5, Nairn Arphot



This month's cover *Scottish baronial relics—two churches and a town hall—are enclosed like jewels or stranded high and dry (depending on one's opinion) as the centrepiece of Moira and Moira's imaginative and intelligent proposals for rebuilding the town centre of Rutherglen, near Glasgow. Described in further detail on page 13, this is one of several schemes in Preview 67 which drastically question received ideas of urban form and suggest new possibilities based on patterns of movement.*

PREVIEW

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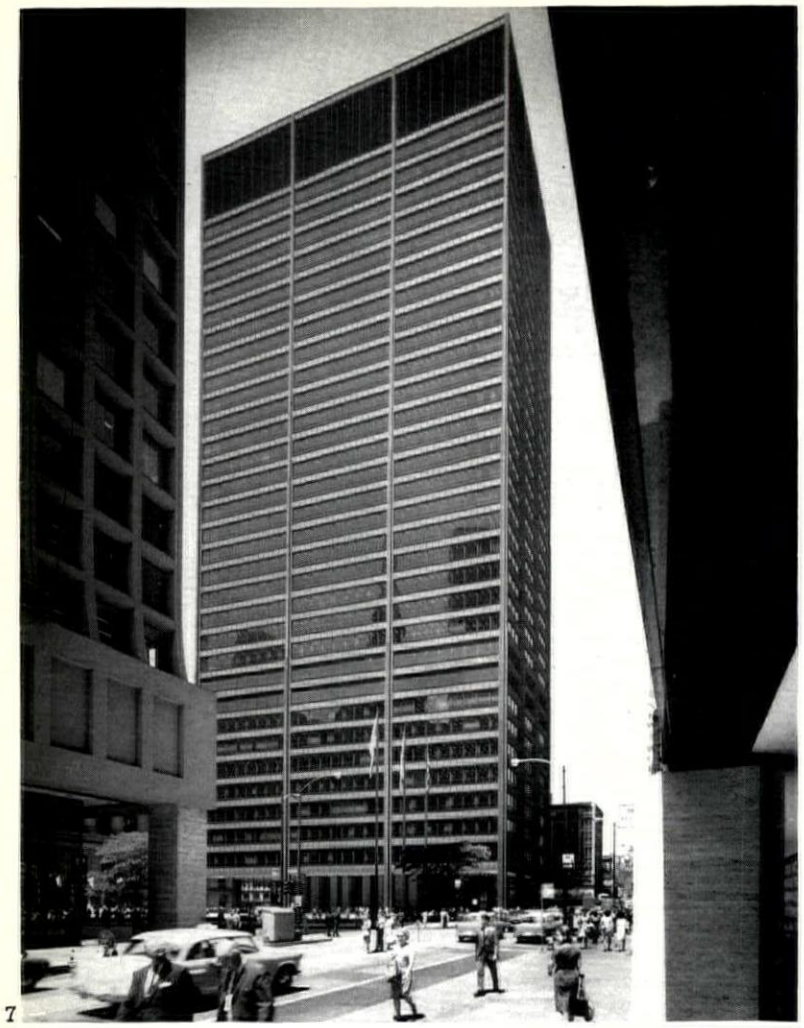

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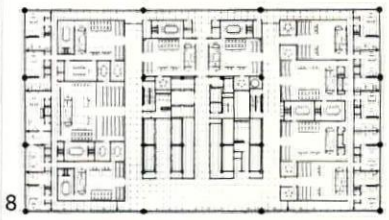
6

CIVIC FRAME

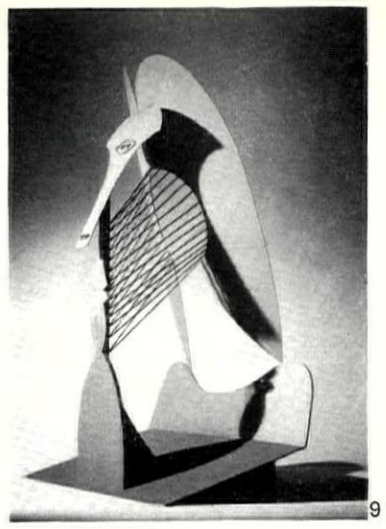
and SOM's recently completed Brunswick Building, left in 7. But there is a stronger, and more controversial, reason for packing everything into a single tower: almost half of it (floors 13–26) consists of courtrooms, and Murphy's theory is that expansion for these is easiest if they can simply take over more office space. Most of



8

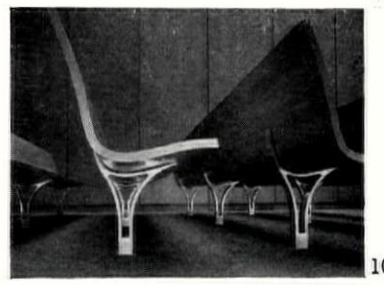
them run through two storeys, giving a 26 ft. floor to ceiling height. Certainly flexibility triumphs on these courtroom floors, 8, where separate lifts and access have had to be provided for judges and prisoners. But the central core for witnesses and spectators seems extravagantly large.

The great *coup* of the Civic Center has undoubtedly been the commissioning



9

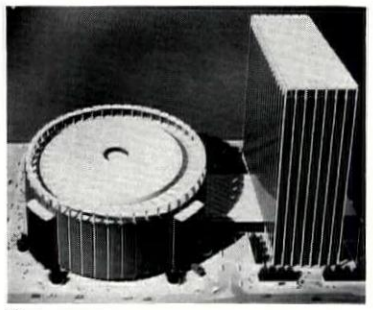
from Picasso of the only major monumental sculpture he has ever done, a winged head 50 ft. high, 9. The artist waived his fees and the structure, paid for by local businessmen, will be up next summer. Meanwhile the laminated wood and steel benches in the courtrooms are the next best thing, 10.



10

FUN PALACE

It is possible that after all the fuss over the high-born Lincoln Center has died down (see next article), vulgar low-class Madison Square Garden Center, 11, will carry off more architectural honours—for all the sadness of its replacement of McKim, Mead and White's splendid Pennsylvania Station. The new 29-floor office block is corny but in the fun palace itself, 12, the architects, Charles Luckman Associates, have at least shown ingenuity in the vertical stacking of spaces. Above the new station (below street level) are a 5,000-seat 'forum' for games or concerts, a 48-lane bowling centre and finally the new Madison Square Gar-



11

den itself, seating over 20,000 spectators beneath a 425 ft. diameter clear span roof. Exit of a full house by means of express escalators will take 22 minutes. The aesthetic impact will probably not be greater than that of the Bull Ring at Birmingham.

12

KIS-MET

The obsequies of Lincoln Center are now in their final phase. Only the outlying Julliard School of Music, by Belluschi, Catalano and Westerman, remains to be built. The recent opening of the plaza's centrepiece, the new Metropolitan Opera House designed by Wallace K. Harrison, gave the chance for an amusing parody by Chuck Moore in *Architectural Forum* which included a curtain-up view of the ensemble as superimposed on the stage of the Old Met, 13—a neat comment on classical splendours, genuine and phoney. Moore quoted a thinly disguised Philip Johnson (for his State Theatre, left in 13, see AR World, October 1964) as saying: 'The plan of the Center is so boring because the six of us couldn't think of any other way to arrange the buildings on that

13

A built-in drying area that takes a whole family wash in less than four square feet

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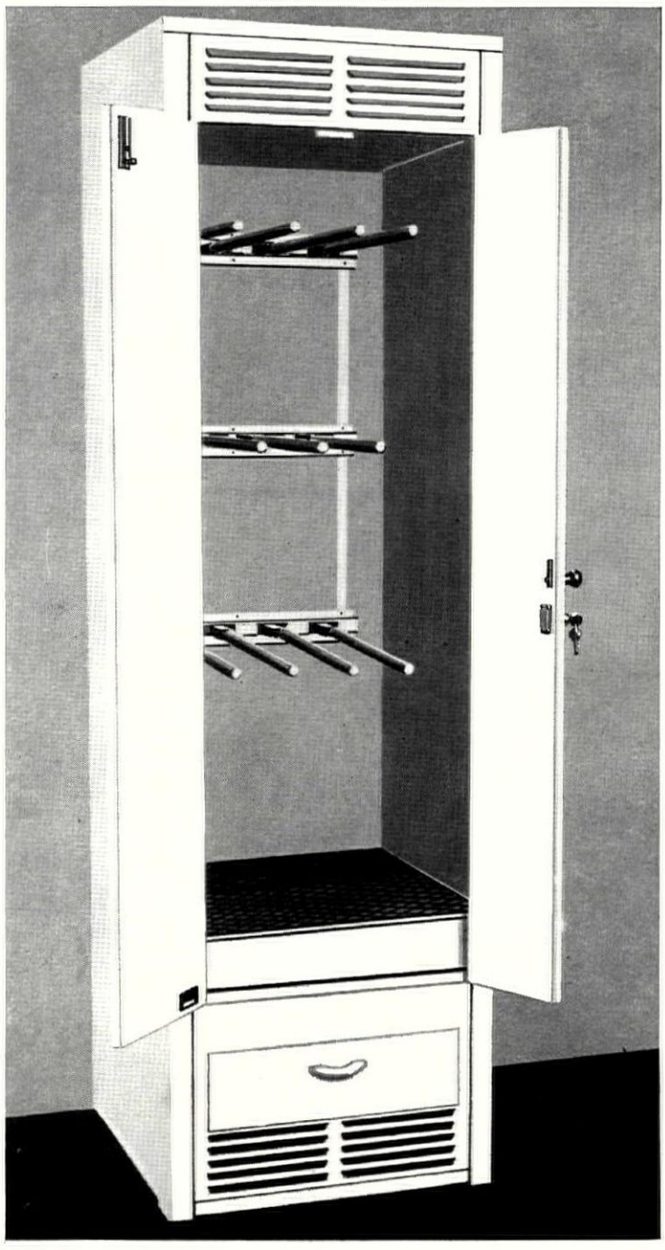

Compact—that's the Flavel Multiplex drying cabinet. In less than 4 square feet of floor space it will take a whole family wash. Standing 78″ high, 23⅝″ wide, with 24″ overall depth, the Multiplex takes 16 lbs. of damp washing—and dries it ready for ironing in less than 2½ hours, using gas, electricity or warm air.

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The model illustrated is for communal use and is fitted with a lock and key as an optional extra.

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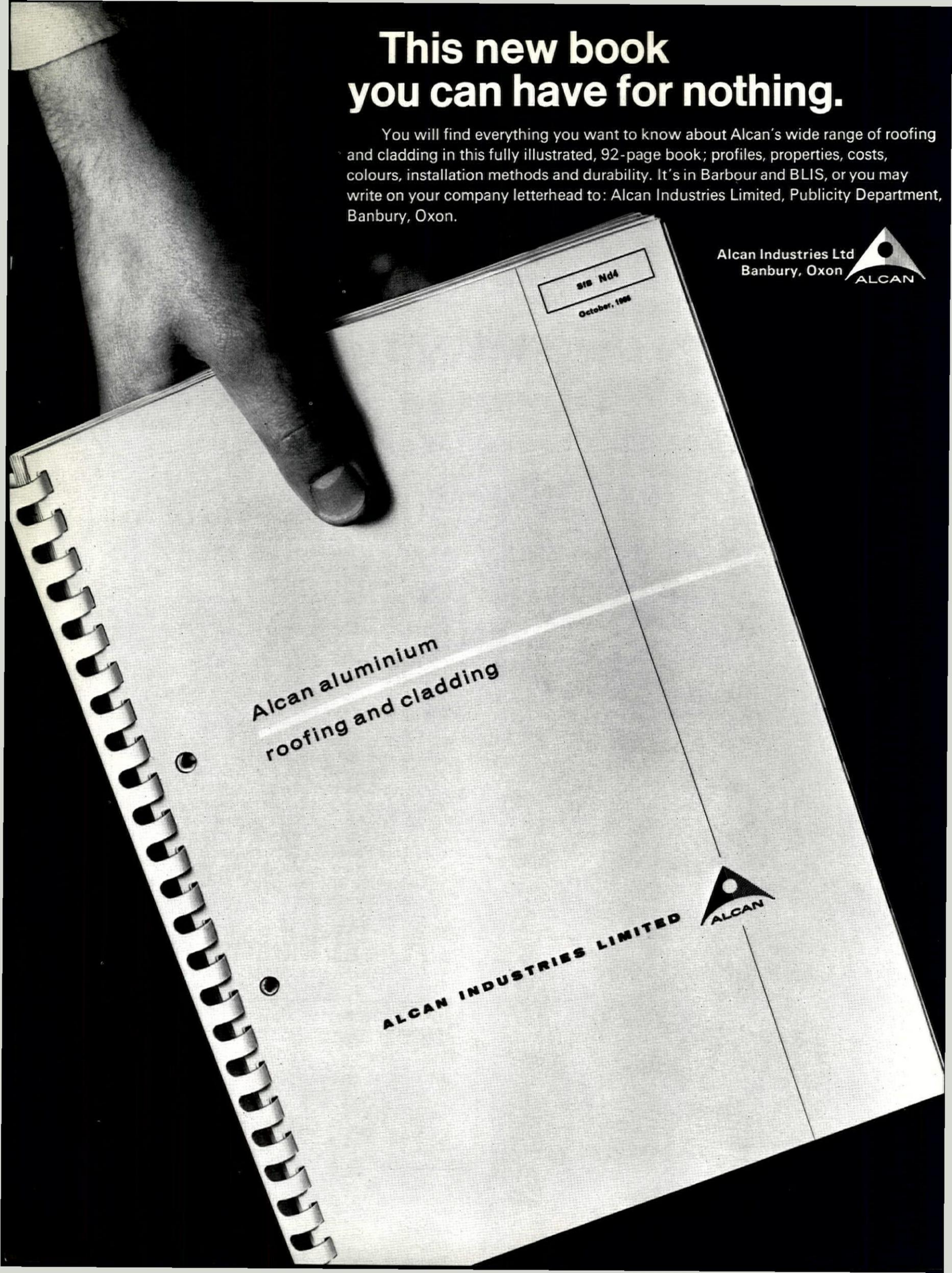
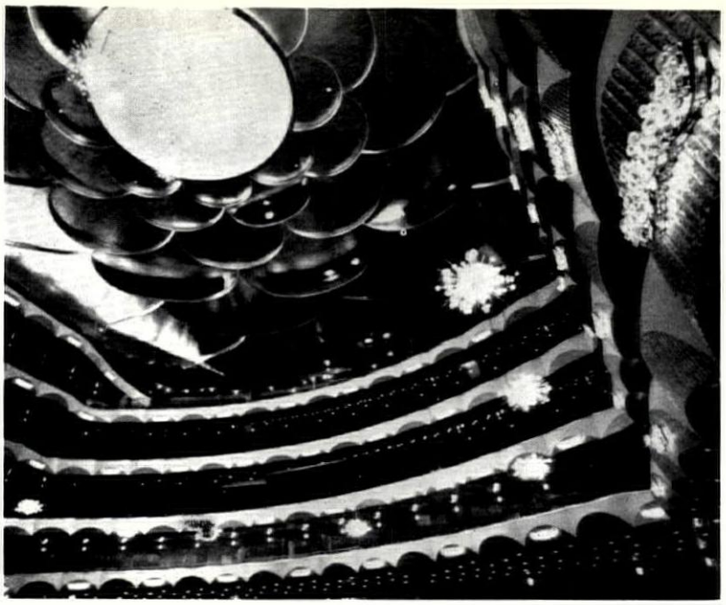




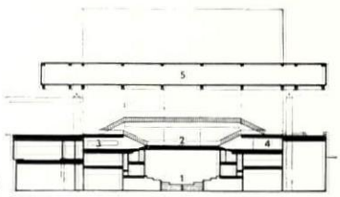
14

15

THE NEW MET

site.' As a cultural ghetto, the whole scheme is a fearful warning to London's South Bank. The interior of the Met, 14, outdoes even Johnson in applique glamour; the 'arcading' along the gallery fronts confirms that Jaoul is now just a cry of pain. Only the stairs, 15, have the real spatial flow of Gaumont Expressionism.

The one creditable component of Lincoln Center, largely overlooked on its site beside and behind the Met, is the Library-Museum of the Performing Arts and the Vivian Beaumont Theatre — two projects ingeniously rolled into one, as the section shows, 16. Raised on peristylar columns, 17, are the library and museum, designed by Gordon Bunshaft of SOM, with their own rooftop courtyard, including a Henry Moore in a pool. Inside at ground level are the two rooms of the theatre, designed by Eero Saarinen and Associates, one an austere Greek setting, the other an excellently detailed arena stage, 18.



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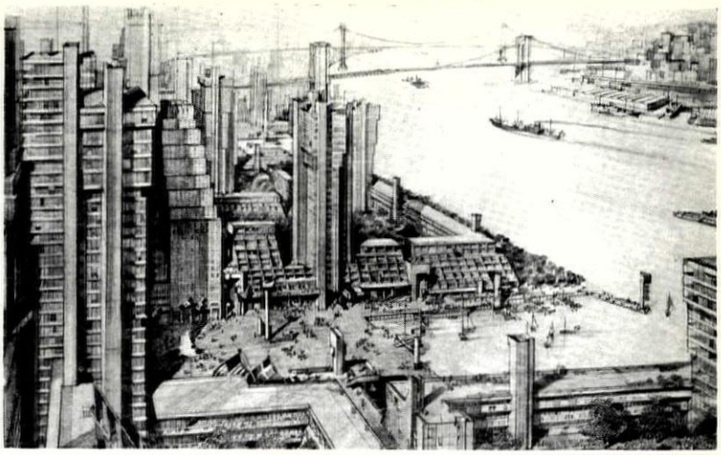


19

WATERFRONT

Impressive first fruits of Mayor Lindsay's personal interest in architecture and planning can be seen in the report on Lower Manhattan recently prepared for the New York City Planning Commission by Whittlesey, Conklin and Rossant (the planners of Reston and Germantown New Towns) —AR World, September 1965, and May 1966) with Wallace, McHarg, Roberts and Todd and Alan Voorhees and Associates. The report proposes to fill in the Hudson and East River shores between the present mainly rotting piers and to build six new neighbourhoods of 10–15,000 residents each on the infill, with stepped housing overlooking new waterfront plazas, 19. The perimeter expressways which at present cut off land from water and would otherwise cut off the new housing areas from the commercial centre, would be sunk and decked over. This forms part of a fairly thorough study in Buchanan terms of Lower Manhattan's traffic, 20, with a proposed pedestrian network connecting the waterfront plazas. Where the report is disappointing is on land use: it recommends the mixture as before, with Yamasaki's off-centre World Trade Center tacitly accepted and accommodated within a new pyramid of towers, 21.

The test of Lindsay will be how firmly he stands up to two alternative proposals of a depressingly conventional kind, that have been planned piecemeal for infill in front of the Trade Center, but without the intervening expressways sunk. One, 22, is by Ebasco and Egger and Higgins for the Marine and Aviation Department; the other, 23, is by Wallace K. Harrison (of UNO and Met fame) for Governor Rockefeller, i.e. New York State.

20

21

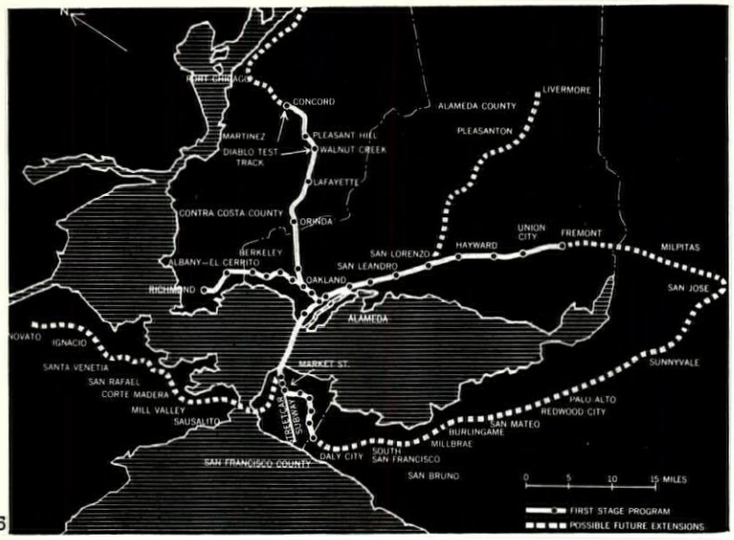
22

23

BART

Striding off into the sunset, 24, are the elevated parts of BART (Bay Area Rapid Transit), which, as *Forum* said in its fascinating article on the project last June, is 'the first totally new mass transit system to be built in the US in more than 50 years, and the first to openly challenge the dominance of the automobile.' The 75-mile route converging on San Francisco (31 elevated, 24 surface, 20 underground)

24



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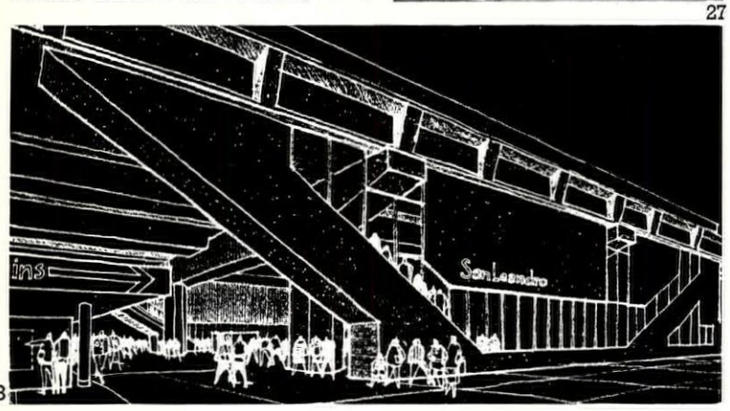
26

BART IN TROUBLE

which will open in December, 1969, is not at first sight dissimilar from the prewar Middlesex extensions of London Transport except that the average speed, including stops, will be as much as 50 m.p.h. The cost of the first phase, 25 (later phases are shown dotted), will be $1,051 million. The aim is to attract half the commuters who at present travel by car; but some experts feel that the two-mile gap between stations is either too wide or not wide enough to do this. The fundamental criticisms, however, are of aesthetics and—more important—of planning and co-ordination. The consulting architect, Donn Emmons, of Wurster, Bernardi and Emmons, resigned in September along with the landscape architect, Lawrence Halprin, in protest against a long series of decisions (or indecisions) by the engineers under Walter Douglas: the failure to appreciate the land use implications of the route; the farming out of the design of the light aluminium wide gauge trains, 26, and of all other hardware and graphics to the Detroit firm of Sundberg-Ferar; the controversy over Emmons's restrained design of the elevated structure, 27; the continual battles to hem in the design responsibilities of the individual architects for the 37 stations (14 firms, all but one nominated by Emmons). The best station design so far is that for San Leandro, 28, by Masten and Hurd and Joseph Esherick and Associates.


27



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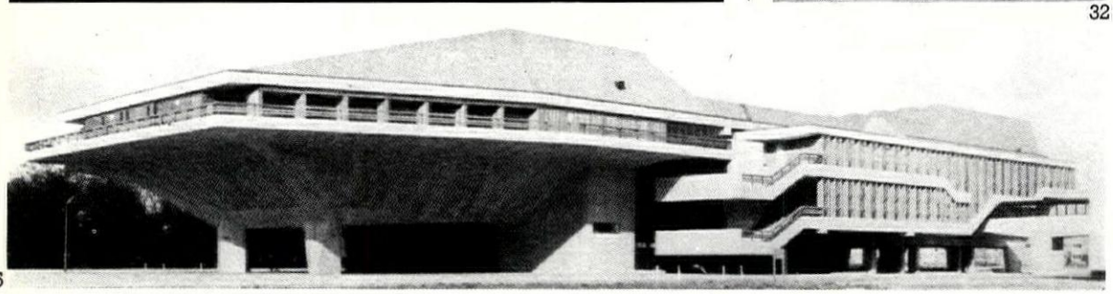
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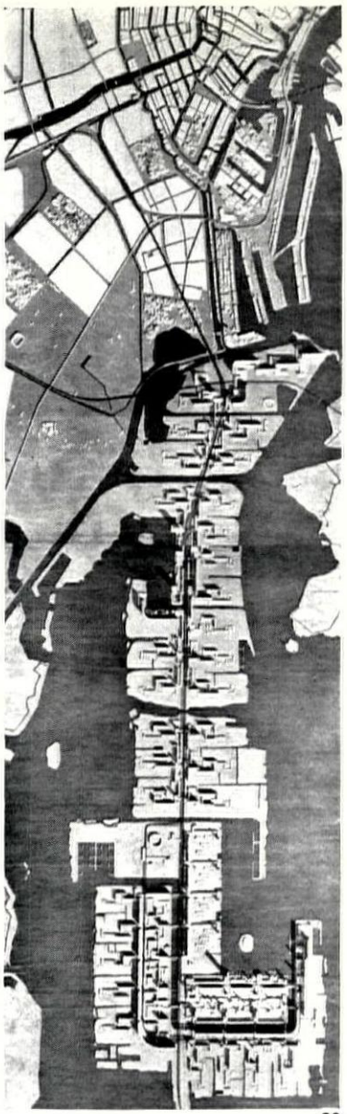
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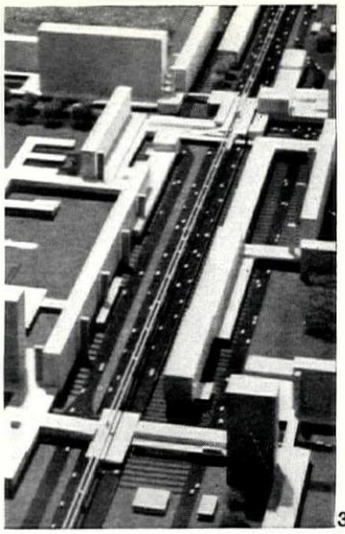
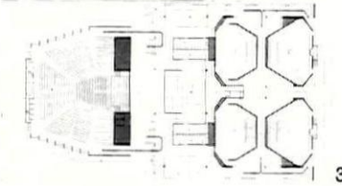

30

PAMPUS

The Pampus Plan for Amsterdam by van den Brock and Bakema, 29, is the latest of these architects' studies of future residential patterns. Others include their plans for the old town of Tilburg (*Bauwelt*, June, 1966) and for the new town of Ashdod, Israel (*Bauen+Wohen's* recent issue in praise of Mies). This time they have suggested a characteristically Dutch scheme of building on reclaimed land stretching out from the old centre of Amsterdam (top of 27) into the water of IJmeer (lake). Three small islands, each representing 30,000 people in three 'housing units,' will lead to the large island, called Pampus, enclosing 200,000 people around a new city centre. Rapid transit by public transport (this time a monorail) is used as the core of the central traffic artery, 30. If the architecture of Pampus is shown in disappointingly conventional sketches of slabs and towers, van den Broek and Bakema have certainly proved their ability in the architecture of mass-movement in the vast foyers, 31, of their recently completed lecture hall block at the Technical College of Delft. The main hall, 32, seating 1,300-1,600, has a graceful sounding canopy, 33, contrasting with the massive roof. At the other end, 34, are four small halls seating 350 each. The exterior, with its grinning mouth on stubby legs, 35, has the oddly prehistoric giantism of some of Nervi's structures.


33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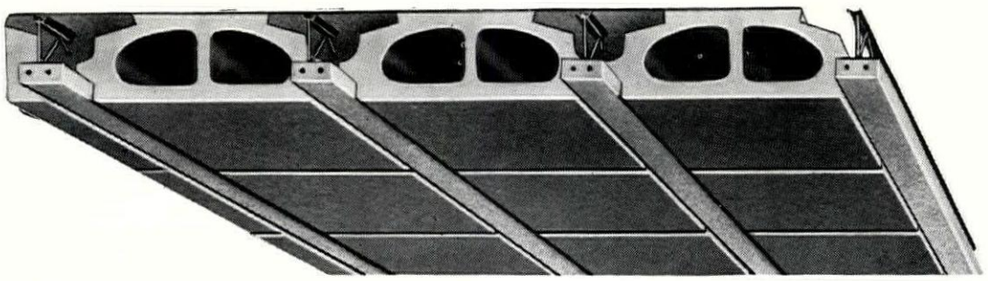

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VIEWS AND REVIEWS

marginalia

CHURCHES ON THE MOVE

Buildings and Breakthrough is the ominous title of an otherwise excellent report from the Diocese of Chichester Buildings Study Group, an interdisciplinary team led by John Wells-Thorpe and the Rev. Anthony Way (both architects). Published in association with the Institute for the Study of Worship and Religious Architecture at Birmingham (10s. 6d. plus 1s. 6d. postage), it is the first serious response by any of the Churches in Britain to the demographic facts of life, at a time when gaps of long grass are frequently all that is seen in new housing estates from the traditionally laborious process of one-off designing and fund-raising.

Chichester Diocese, comprising the county of Sussex, increased in population by fifteen per cent in 1953-63 (national increase, three per cent) and meanwhile Chichester Cathedral celebrated the centenary of the collapse of its spire in 1861 by threatening to do the same again. One million pounds is being raised, nearly a third of it for the cathedral. Such conditions are far from unique, and it is disappointing to read that neighbouring dioceses did not wish to participate in this 'short tactical survey,' let alone in the continuing programme of basic research that the Chichester group considers is needed on the subject of its brief: to advise on 'methods of location, design, construction and cost of new temporary and permanent buildings for liturgical and social purposes.' Even on the basis of normal criteria, the Chichester diocese alone will need as many as twenty-four new churches, ten church halls and eighteen extensions to existing churches by 1975.

The group's most definite and immediate recommendation is the appointment of a diocesan planning officer, who would turn such an amateurish forecast into a proper diocesan master plan by obtaining the fullest possible information from the local planning authorities and from systematic user studies of postwar church buildings. The basis of his work would be the group's realization that in our increasingly mobile society, an average 'life' of forty to sixty years is the most that can be expected in pastoral terms for a 'permanent' church; but the report fails to explain how a relatively maintenance-free structure can be devised for such churches, which will not make them so substantial that their disposal after a short time will seem 'waste.' Present technology can provide twenty-year structures and hundred-year structures, with not much between. A report-within-the-report from the National Building Agency points frankly to the limitations of existing school building systems and suggests 'rationalized traditional' building, as in Spence's Coventry churches, as an alternative. It emphasises foreknowledge of costs, not reduction of costs, as the advantage of standardization.

It is on temporary churches that the report has most to offer: it suggests the adoption of an industrialized system of 'mobile churches' which would rest at four different sites in twenty years' life (compared with the LCC mobile home's six different sites in the same time). The mobile church would consist of a series of 26 ft. by 9 ft. units, with a vestibule unit and an end unit. During its five-year stay the congregation could be built up sufficiently for it to be clear about its long-term requirements; the permanent church could then be built alongside and the temporary one moved on.

The main emphasis in the report is on the incredible lack of common knowledge in Britain about the nature of church building; Denys Hinton's Rugby brief and the Birmingham Institute's Castle Bromwich project are presented as the only valid examples of organized survey work.

HAUS TO LET

Otto Wagner's own house requires a rescuer. He needs no introduction as a major pioneer of modern architecture, as this middle-aged Viennese professor whose conversion around

1

1895 to radical ideas in the midst of a prosperous practice both of designing and of teaching was the fount of the mainstream of Central European modernism. His own summer residence at 26 Hüttelbergestrasse, Vienna XIII, built in 1886, is important as an example of his slightly earlier 'free Renaissance' manner, linking the simplified classicism of Schinkel with the deliberate break from historicism that followed.

This elegant villa, 1, still standing in relatively good condition in large grounds on the city's western outskirts, is now empty and tenantless, threatened with dilapidation and ultimate demolition unless a buyer can be found. Anyone interested in using it as a residence or as some kind of academic or public building can obtain further information from the Museum des XX Jahrhunderts, Schweizergarten, Vienna III, Austria.

PRE-CORB

The photograph numbered six in the article with the above title (AR October, 1966), about the early Brutalist structure at Erith, should have been credited to Mr. Edwin Johnston—not number seven.

obituary

IAN LINDSAY: 1906–1966

Ian Lindsay died on August 28, aged sixty. He was, as it seems at the moment, the last of the great race of scholar architects specializing in church and country house work which has dominated the Scottish architectural scene for the last century and a half. His neo-Greek office at 17 Great Stuart Street, Edinburgh, had been Lorimer's and, long before, that of W. H. Playfair whose face beamed approvingly on his from over the mantelpiece. Educated at Wellington and Cambridge, assistant to Reginald Fairlie, whose tastes and temperament were closely akin to his, Lindsay had, while still in his teens, travelled Scotland and brought out a little book on Scottish cathedrals old and new still useful to refer to.

Like Anderson and Kinross before him, he was a man of unerring taste with a sure feeling for proportion. It shows from the very first in the Nurses' Home at Princess Margaret Hospital, Fairmilehead, in which Fairlie generously gave him almost a free hand; it shows how well he had absorbed all that was best in Fairlie's austere Scots Renaissance. Before the war—'the old days' as he wistfully referred to them in later years—he followed in the country house building tradition in Allta Bhruais and Eventyr and in the restoration of Aldie, while the inventories of burgh architecture he compiled for Lord Bute extended his scholarship and laid a valuable foundation for work he was to do later.

The second World War ended the country house building era; but Ian Lindsay did indeed become the specialist in that field, removing later wings (as at Mertoun) and restoring and re-equipping for those prepared to persevere with them. His greatest achievement was, however, the restoration of the burgh architecture, to which he had given such careful study before the war, at Culross, Dunkeld, Inveraray, Cramond and New Lanark and Mylne's Court, Edinburgh, which were only being put in hand when he died.

In the field of church building the pattern was similar; no large new church came his way, but even in the very restricted sphere of post-war church building his scholarship stood him in good stead; the simple post-Reformation churches of the seventeenth and eighteenth centuries made ideal models and most happily he caught their spirit. He restored many others, but it will be by his work at Iona and at Pluscarden, the latter still unfinished, that he will be chiefly remembered. A very special quality attaches to his restorations and work in the old tradition; that of knowing what to leave out as well as knowing what to put in. He always avoided the unduly archaeologizing, the 'tweaky' as he used to say.

Ian Lindsay was a great scholar. It shows in the smallest minutiae of his restorations, which are full of evidence of intensive looking. But it extended to literary work also in the excellent series of monographs on the architecture of the Scottish burghs; and as Chief Investigator under the Planning Acts he directed and partly compiled the lists of buildings of special architectural interest. At first he had only part-time staff, shrewdly chosen from personal friends like A. G. R. Mackenzie of Australia House and Waldorf-Astoria fame, who was still travelling Aberdeenshire well into his eighties. Lindsay's 1948 guide to his staff was remarkably far-seeing. I quote: 'The curious must not be neglected—it is nearly always of architectural interest. St. Conan's Church, Loch Awe, the works of Pilkington, the amazing bungalow on the north side of the Forres Road going out of Elgin, the Arbroath Water Tower and so forth, all add variety to life. . . . Engineering works must be considered

Almost at the same time as the suspension bridge across the Severn was opened (AR, September 1966; article on Long Span Bridges by James Sutherland), Europe's longest bridge—across the Tagus at Lisbon, was also opened, 2. Like the Severn bridge it is a suspension bridge; it links Lisbon with the new industrial zones on the south bank of the river and with the holiday areas of Setubal and the Algarve.

2

carefully. . . . After about 1850 the choice of examples must be selective rather than wholesale. . . . Works of the better known architects must go in. . . . We may not like revival "baronial" but future generations may. . . . Even if they don't, it plays its part in the history of architecture'. To work for him was a rare pleasure and a privilege. He guided one's tastes and opinions on the right lines quite imperceptibly and his pleasure in new found knowledge was more than half the incentive to acquire it. To find anything of real consequence, no matter how hidden away or unknown, was however virtually impossible. He had seen it all, and even if he had not been there since the early 1930s he never forgot. His last and greatest book—on Inveraray—is still in manuscript. Squeezed between a busy practice, his official appointments and the innumable committees to which he gave perhaps too generously of his time, it was a long time on the way. His is an irreplaceable loss. We can but look back in gratitude that he taught us so much.

DAVID WALKER

correspondence

FARM BUILDINGS

To the Editors.

SIRS: Having read Mr. Voelcker's review of John Weller's book *Farm Buildings* (AR October) and his comments on the omission of a section on the appearance of farm buildings, I felt I must write to you. It is, perhaps, not surprising that the author should have made but the briefest mention of appearance because, if published information is any guide, there would seem to be surprisingly little interest at present in this aspect of architecture. This Centre has made several unsuccessful attempts to obtain funds for a research fellowship to be established for an architect to investigate the siting and aesthetic appearance of farm buildings. In view of the importance of this matter to the whole community a total expenditure of a few thousand pounds would seem to be a very small investment. However, it would seem that I am wrong.

Yours, etc.,

PETER BROAD

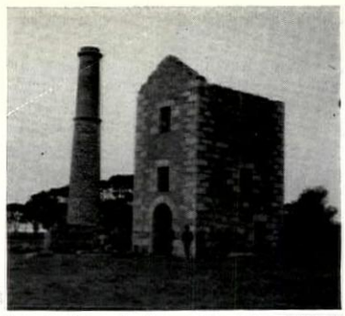
(Director Farm Buildings Centre).
Kenilworth, Warwickshire.

ENGINE HOUSES

To the Editors.

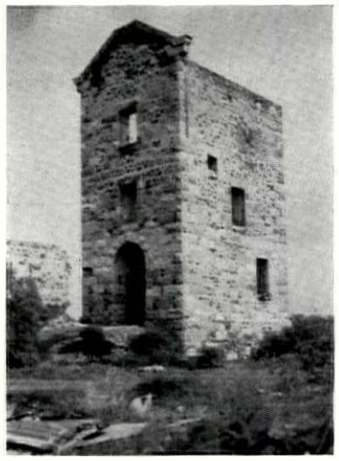
SIRS: Your article 'Exploring Eye' (AR June 1966) on the subject of the derelict engine houses and other buildings in Cornwall was of considerable interest to South Australian readers. In the early days of the settlement of this colony (which started in 1837) deposits of copper, tin, lead, silver and zinc were discovered at several places north of Adelaide, at a time (the late '40s) when the colony itself was virtually bankrupt, and the working of these deposits by a large community of Cornish tin-miners, specially imported for that purpose, was instrumental in saving the colony from almost inevitable financial ruin and disaster.

Most important of these discoveries was copper, found at Moonta, Wallaroo, Kadina, Burra and other centres. The miners established communities at all of these towns, and brought with them their whole vocabulary of building, as the accompanying photographs will show. Their cottages were very strictly on Cornish patterns —and quite unsuitable that was for the Australian climate.



3

3-5, *derelict engine houses at a copper mine at Burra, South Australia. See the letter from R. N. Ward.*



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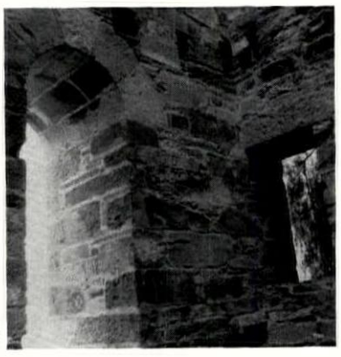

5

More striking than the cottages are the mine buildings, the square-cut stone engine-houses, furnaces and chimneys, etc. which are an interesting part of the landscape, and which several interests here, notably the Architectural Research Group and the SA National Trust, are attempting to persuade the Government to preserve as tourist parks. The open cut mine at Burra is particularly striking, the 'cut' being about a mile long by half a mile wide and some 500 ft. deep, with several chimneys and engine houses dotting the rim of the cut. Unfortunately new methods of extracting the copper from the ore, which the SA Miners Department now claims could mean the re-opening of the mine economically, threaten the life of these ruins.

Yours, etc.,

R. N. WARD

Adelaide, South Australia.

book reviews

AROUND THE CAPE

THE OLD HOUSES OF THE CAPE. *By Hans Fransen and Mary Cook. Cape Town and Amsterdam: A. A. Balkema.* 125s.

The historic architecture of South Africa is receiving a good deal of attention these days and a new book on it has to be very good indeed to be worth a notice, especially at such a high price as this one. In a broad sense however, very good it certainly is. The authors have undertaken a detailed survey of all the houses at the Cape of before the mid-nineteenth century which they consider important or interesting. They are well qualified to do this by their position as curators of historical museums, and Dr. Cook is also known for her painstaking pioneering studies in Cape architecture. The buildings are conveniently arranged according to their locality, with excellent accompanying maps and town plans, so that the book may be used as a guide. Its size and weight are no particular disadvantage, since most of the houses can be reached only by car. Over 600 country houses, farmhouses and town buildings are discussed. The history of their successive ownerships is followed by an analysis and dating of their parts and their gables —the dates are usually conjectural. An outstanding feature is the inclusion of standard scale plans and, in the case of country houses and farmhouses, overall plans showing the grouping of the buildings.

Almost every building has a photograph, and where its gables, doors or interiors are of particular interest there are often three or four of them. It has to be said that the black and white photographs are poor, but they form an extremely useful aid to the visitor. There are few places in the ex-colonial world where so much survives from the eighteenth century; so choice and elimination soon become essential. To assist judgment further the authors have included a starring system, Baedeker-style, but most readers will probably prefer to choose for themselves from the photographs. Code numbers after each item, representing source and page, provide easy cross-reference to other books. The detailed maps marking the interesting buildings in the towns are an invaluable aid in finding addresses, but should otherwise be treated with reserve, as the authors have been somewhat arbitrary in their selection of what *is* interesting from the nineteenth century.

It must be a matter of satisfaction to all scholars that Dr. Cook was prevailed upon to collaborate in this book and set down her accumulated knowledge in such detailed form. The weaknesses of her approach are, perhaps, an excessive reliance on local information, and a tendency to ignore the likelihood that development in the colonies reflects, sooner or later, something of the current practice in Europe. For these reasons there is much that one might quarrel with in her analysis of the dating and development of the gables and plans in the introduction. For instance, her account of neo-Classical architecture at the Cape does not take into consideration the extensive French and English influence in Holland in the eighteenth century.

R. B. LEWCOCK

FAMILY TOWN

THE MAKING OF STAMFORD. *Edited by Alan Rogers. Leicester University Press.* 30s.

To mark the quincentenary of Stamford's charter of incorporation in 1961, six scholarly lectures were delivered. This book contains the text of five of them (one with certain modifications), together with an essay on 'Mediaeval Stamford' by the editor. It is primarily a book for the social and economic historian. Although Stamford never became the county town of Stamfordshire as it might well have done (the reasons are discussed in Mr. H. R. Loyn's essay on 'Anglo-Saxon Stamford'), stone-quarrying, pot-making, and especially cloth-manufacture and the wool trade brought great prosperity to the town in the thirteenth century, and wool again in the fifteenth. Then followed a long period of decay, the principal subject of Dr. Joan Thirsk's essay on 'Stamford in the Sixteenth and Seventeenth Centuries.' The Georgian period witnessed a notable revival in Stamford's fortunes, largely owing to its position on a great coach road, and to the establishment of a malting industry as an outcome of the dredging of the Welland. But gradually the town fell more and more under the control of the Cecils of Burghley, whose influence on the quite abnormal development of Stamford in the nineteenth century is the main theme of the last essay, 'Modern Stamford,' by Mr. J. M. Lee. This lecture, as originally delivered, gave considerable offence, since the bad deeds of the Cecil family were highlighted, whereas the many services which the family, and particularly the present Lord Exeter, have rendered to the borough went unmentioned. In its printed form there is nothing to offend; in some ways indeed this is the most interesting essay in the book, for it shows how, in the nineteenth century, a great landowner could, for his own political purposes, completely throttle a town's natural desire for expansion. The story of the deflecting of the Great Northern railway is well-known, but more significant was the refusal of the 2nd Marquess to allow enclosure for house-building for fear that their occupants might vote against him. As a result the poor lived in crowded slums; not until 1875 did the town at last start expanding over the open fields to the north. Now most of the working population lives in this spaciously laid out but unseen part of the town, while the handsome Georgian houses within the old walls have become 'a privileged precinct for the middle class.' Visually, of course, this is excellent, however undesirable socially.

Readers of this journal will turn first to Mr. John Harris on 'The Architecture of Stamford.' This theme he was able to treat in greater detail in the *Lincolnshire* volume of *The Buildings of England*, but here we have an excellent summary, especially of Georgian building in Stamford, an architecture with several distinctive local characteristics which were nevertheless all derived from the pattern-books of Batty Langley, William Halfpenny and others. Mr. Harris has done a nice little piece of detective work in tracking down the sources of some of the motifs, and for this essay alone the book very properly includes 17 plates.

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Acids and alkalis, greases and oils- even tea and coffee- give some floorings a bad reputation

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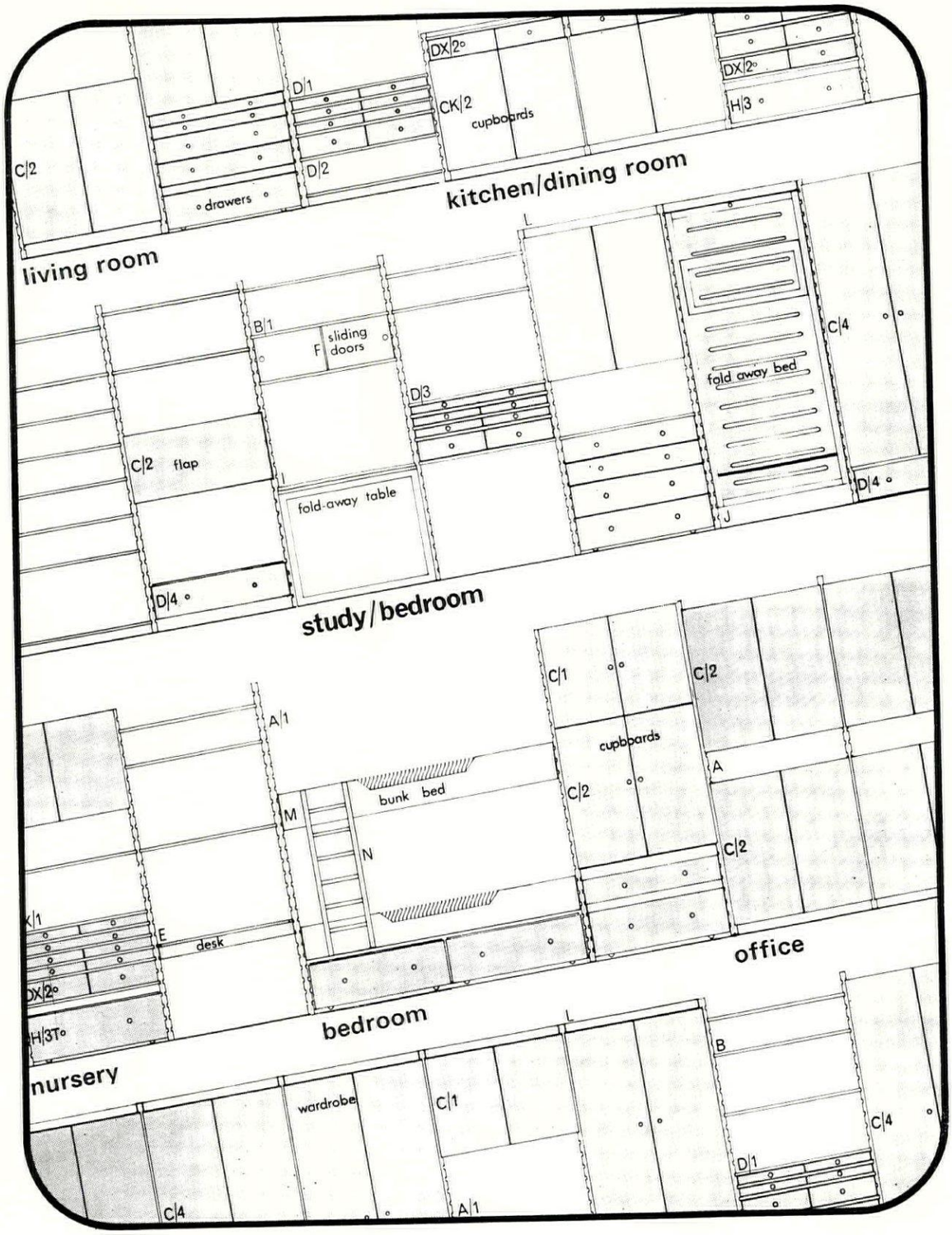

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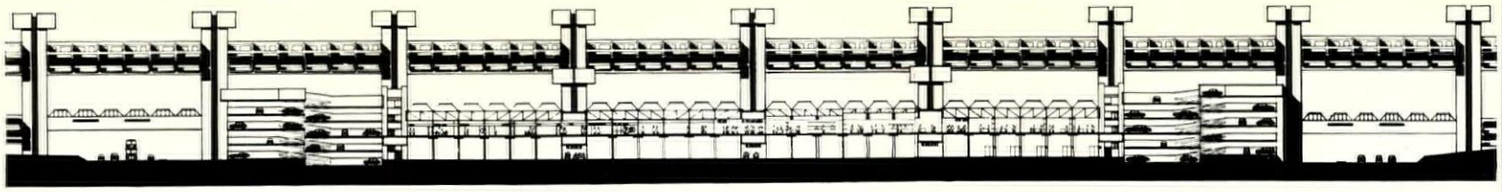
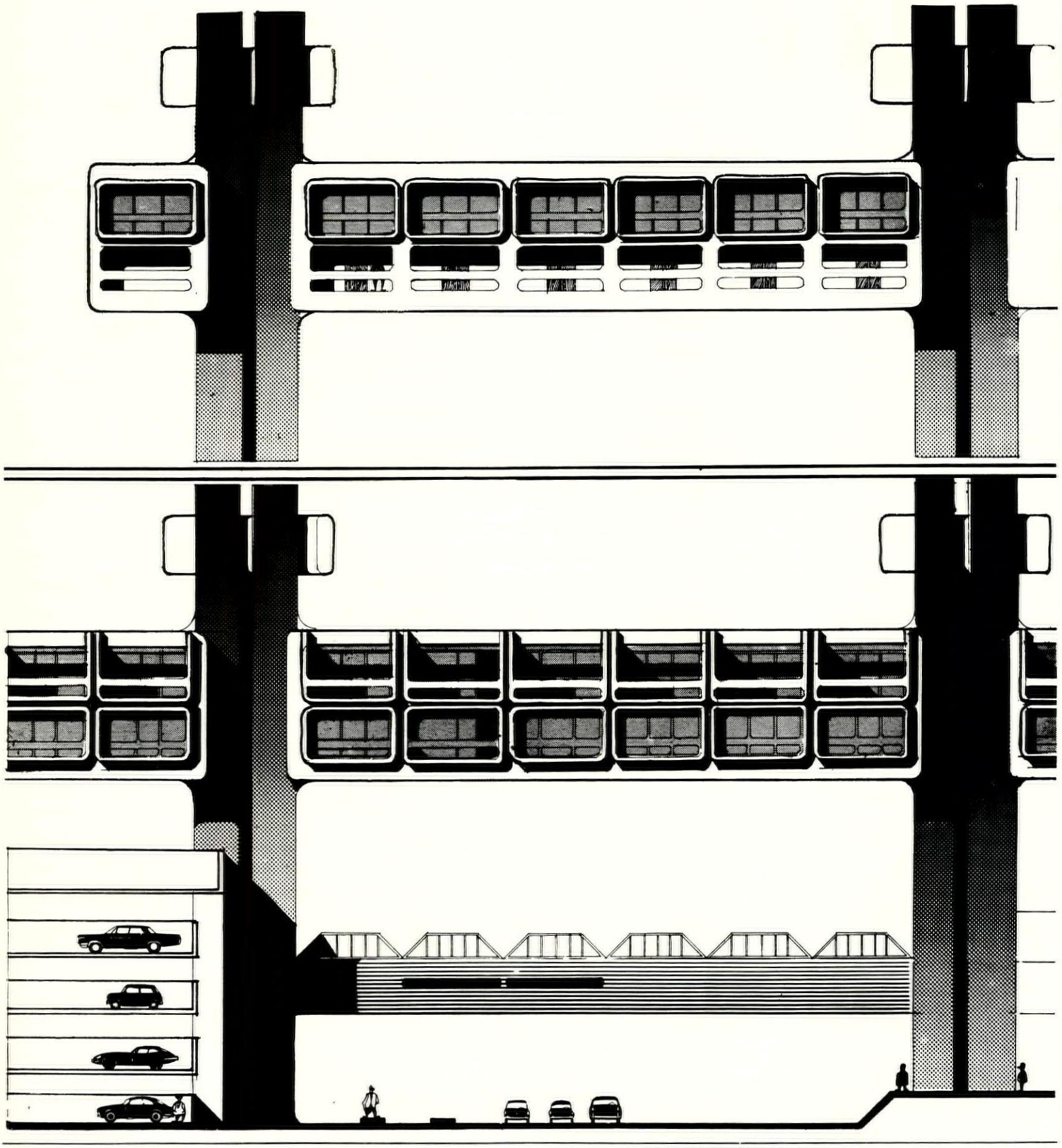
PREVIEW

compiled for the Editors by Peter Collymore



Runcorn town centre (see opposite): above, east-west section: below, elevations of over deck flats



PREVIEW 67

Opposite: Following quickly on Professor Arthur Ling's overall plan for the Merseyside new town of Runcorn (see 'Mark 3 New Town,' AR, July 1966), the chief architect, F. Lloyd Roche, has now published detailed designs for the town centre (see also pages 14-15). The exceptionally clear sectional organization, with a modular system of rooflit shopping bays flanked by car parks and service roads, is crowned by a dramatic skyline of 'overdeck' housing, shown here in elevations distant and detailed. Visually it will form a link both with the ruined castle of Halton on its rock nearby and also with the sweeping bridges of the town's rapid transit system of fast buses which converges on the shopping centre. Whether these mid-air dwellings will also be linked socially to their environment remains to be seen.

No one can say in January 1967 that the future lies clear ahead for English architects. On the credit side there are signs of an increasingly mature and versatile vocabulary of design on every scale from the grandiose town centres of Skelmersdale and Runcorn (see frontispiece opposite) to the little individual houses designed for themselves by Messrs. Winter, Pank and Evans (pages 37–38). It is not just the heroic service towers and Kikutake-like metabolic bridges of Runcorn that are thrilling, nor just the splendour of Skelmersdale's giant suspension bridges. It is that Runcorn's young chief architect, F. Lloyd Roche (Taliesin on Merseyside?) last appeared in these pages (Preview 1965) as the author of the Midland Housing Consortium's prefabricated slate-hung terrace houses at Woodway Lane, Coventry; and that Skelmersdale's Derek Lyddon is meanwhile tackling the problems of industrialized housing on the largest scale. Comparable versatility is shown by the inexhaustible GLC (formerly LCC) in a repetitive spine of housing along the inland sea of Woolwich-Erith and in an eccentric kraal of toplit huts for a school for handicapped children in Poplar.

But in spite of the high quality of the schemes shown here—and a 'Salon des Rejets' would maintain a good standard too—there is no doubt about the prevailing scepticism over the present state of architecture, both within and without the profession. There is for those who actually look around them at the casual drabness of daily life—the choked city streets, the fast-decaying villages—a feeling of Greek Tragedy about the higher reaches of architectural practice at present. There is an uneasy sensation that, while a tasteful poetry of elevational treatments and spacious pot-planted foyers is being composed for the customary audience, the real problems, the real struggles are meanwhile being fought off-stage. Every now and then a Messenger comes in to announce the latest Decision—the Office Ban, the Freeze, the National Plan, the Bank and Mortgage Rates, the Industrialized Package Deal; the Chorus from the RIBA wails briefly back in punch-drunk unison the replies it knows so well: Leader of the Team, Independent Consultant, Professional Code, Much Worse in America, etc., etc. Then everyone gets on with the play as before until the next shock comes.

In this Preview two schemes, each in itself excellently designed in detail, seem particularly symbolic of this predicament; and each by coincidence is styled in the purest reinforced concrete classicism imported from the States. Yorke, Rosenberg, Mardall's design for a massive teaching hospital to replace Florence Nightingale's St. Thomas's, opposite the Houses of Parliament, is the net result of twenty-one years' struggle; and it salvages the wreckage of two previous comprehensive rebuilding schemes with aesthetic sleights of hand worthy of a Russian Grand Master. Chapman Taylor Partners' Pei-in-the-sky redevelopment of the Cadogan Estate's Tedworth Square in Chelsea, first suggested eighteen months ago, is now locked in conflict with local residents and with GLC and borough planners—a conflict which could last for as many years. In each case it is not YRM or CTP who have been in control of events; nor has it yet been the St. Thomas's Governors or Earl Cadogan, even though they have tried to show the smack of firm government. Behind everything lies such nebulous things as the National Hospitals Plan, the Future of the London Teaching Hospitals, the Group Value of Historic Areas, the GLC's High Buildings Policy. Even further in the background are decisions on the South-East Study—on the overall changes in economic and industrial structure and on the demographic implications of the drift to the south-east—and without these background decisions, or lack of decisions, St. Thomas's will have no patients. Earl Cadogan will have no posh tenants, and none of them will know whether they can afford to build at all.

It is fundamentally a question of Land Use. Without a rational distribution of industry and commerce, the schemes shown in Preview are mere pimples on a face in need of a lift. It matters not a whit whether Marks & Spencer

has its facade in brick or stone or steel or half-timber, if the siting of it is wrong. Yet we still have an extraordinary incuriousness about what goes on behind the front, a myopia subconsciously calculated to prevent us going mad with worry. Michael Frayn in a recent 'Observer' article asked whether his refrigerator had been given a Design Centre Award merely for its three exposed sides, or whether the Duke and the jury had actually praised the 'gritty technological realism' of the piping on its back. The same myopia applies to architects who have too often interpreted only in narrowly aesthetic terms the Modern Movement's insistence on seeing buildings in three dimensions, and have ignored the fourth dimension of function in its wider implications for Land Use in the surrounding area.

Delays and doubts on these things are of course loaded on the shoulders of the politicians. Much of the present malaise certainly results from the fact that most of the wider implications of Land Use have fallen politically between the old local authorities, too tied to the parish pump, and the national ministries, too remote from popular feeling and, in the case of the Ministry of Housing and Local Government, too fearful of appearing to bully the boroughs. The setting up last spring of the Royal Commission on Local Government could prove the most important single decision on home policy for a decade; and already there are signs that the way is being prepared, practically in the Regional Economic Planning Boards set up a year earlier and ideologically for planners in the report of the Planning Advisory Group to the Minister of Housing, for a massive devolution from above and amalgamation from below of the fundamental decisions on location of industry and patterns of communications which will determine the projects in Preview 1977.

What will the architect's place be then? There are distressing signs already that he is being left on the touchline. When Mr. Fred Catherwood, the director-general of the National Economic Development Council, prophesies (at Belfast in October) that private architects will lose their position as an independent profession and will be absorbed into vast package-deal design-and-build companies specializing in industrialized building, it is time for thought—not just for parroting the old cries about Leader of the Team, etc. After all, in the scale of modern comprehensive redevelopment, should the architect always be Leader? In an urban motorway design team, is the architect rightfully 'primus inter pares'? In fact he will not be sitting round the table at all unless he can offer specialized knowledge and unless he has a positive understanding of the complex processes involved at each level of government. At present the architectural schools teach three years of general architecture and two years of more or less specialized study. They teach virtually nothing about the mechanics of decision in our more or less democratic society, so their students graduate with only a vague apprehension that 'they' are going to push them around. It is of course 'exciting' in the best possible sense to see those brave new centres for Runcorn and Skelmersdale and to see the exceptionally large number of industrialized building schemes in the Housing section of this year's Preview. But will they be built and, if so, when? What are the resources available and who will really make the decisions on their deployment? In the AR last July, an article on new housing at Harlow, which began with the aesthetic and sociological reasons for high density, low rise housing, ended inevitably with an exposition of the mere mechanics of getting just one well-designed industrialized scheme built. Design will have to be absorbed into production unless the designer really knows the process.

PREVIEW 67

'The separation of vehicles from pedestrians'—how often the cant phrase is heard, but turns out only to be a windswept mini-precinct, with some paving and some cobbles and some amenity-conscious litter baskets. Beyond the dead calm of the traffic-free area lie the windswept acres of car parking and the exposed debris of the servicing areas at the rear of the shops. All the younger post-Hook generation have, of course, rejected such 'horizontal segregation' in favour of the more tightly packed thrills of 'vertical segregation': servicing and parking underneath, a great shopping deck above, tied closely at each end to the surrounding town, and even some extra city centre housing as a top layer. But have the results of this necessarily been more satisfactory? The largest example so far, the Bull Ring at Birmingham, can be dismissed too easily for purely aesthetic reasons, as the inevitable compromise of package-dealing, the architects being on the staff of the developer-contractor; but the disillusioning truth is that the Bull Ring provides a much livelier and more human environment than the Elephant and Castle Centre in South London or than the Barbican South podium in the City—both of which were designed and/or planned by architects of deserved reputation. So this is not a matter of tasteful design—indeed the opposite, as much of the moribund atmosphere (aesthetically and commercially) of the last two schemes is the result precisely of the obliteration of popular tastes beneath a blanket of curtain walling. Much more important than the buildings are the spaces between, where the wind bloweth as it listeth, as at Barbican South, or where soporific air conditioning disorients the customer, as at the Elephant. As Shakespeare remarked of the effect of the air conditioning on the visitors to his island in 'The Tempest,' 'What a strange drowsiness possesses them! It is the quality o' th' climate.'

The major scheme for Skelmersdale New Town in this Preview is a particularly interesting attempt to resolve such problems. There will be a dramatic overall roof structure suspended on cables, but beneath it natural ventilation will give a feeling of reality to the artificial deck. An 'internal environment consultant,' Dr. B. Wilson, formerly of Liverpool University and now of Edinburgh, who is also consultant to the second phase of the Cumbernauld town centre, is advising the Skelmersdale architects as a kind of community psychologist, on everything from colour and ventilation to such subtleties as the increase of reverberation to give a feeling of bustle at crossroads. At Runcorn and Corby—the latter breaking boldly out from the confines of a Mark One new town centre of conventional type—there is an alternation of open and covered areas on the shopping deck. The quality of this is almost impossible to judge in the perspectives, as so much depends on the detailed response of the architects to the invisible atmosphere.

What can be easily appreciated already is the response of Runcorn to the more obviously aesthetic problem of fitting the brightly coloured random packages of retailing into an overall hierarchy of traffic and land use. The whole central area is threaded through with a rooflit egg-crate grid of almost Grecian severity. More doubtful, though a soft sell to the fans, is the use of high level bridges of flats spanning between lift towers in the manner of Kikutake and the Japanese Metabolism Group. A similar attempt at creating a 'megastructure' can be seen in the extraordinarily bold town centre scheme by Moira and Moira for Rutherglen, near Glasgow. They have organized elements of Japanese plasticity in linear 'walls' of building slightly reminiscent of Ralph Erskine's Arctic town designs (for Erskine's first environment in England, see page 45 of this Preview). The walls are hunched against the north wind, with balconies and terraces facing south and central shops in the valley between. It is difficult to tell what the spaces will be like, particularly around the poor wee pieces of Scots Baronial left stranded in the centre (see the cover of this issue).

TOWN CENTRES

TOWN CENTRE EXPANSION, CORBY, NORTHANTS

John Stedman, Chief Architect

CLIENT Corby Development Corporation.

SITE Phases 1, 1a and 2 on 9 acres, with 40 ft. fall north-south.

ACCOMMODATION Phase 1, 70,000 sq. ft. shopping, 65,000 sq. ft. dance hall (possibly), 34 flats, bus station, pub, parking for 700 cars. Main pedestrian deck at same level as Corporation Street (to be pedestrianized after Phase 1). Upper level access to offices and flats.

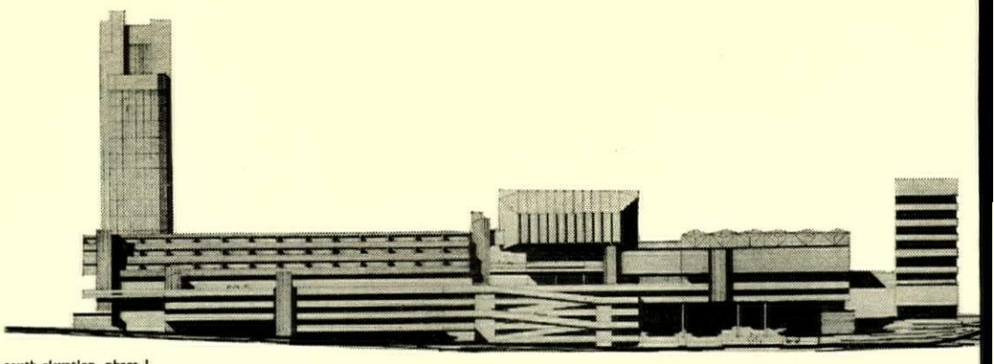
STRUCTURE R.c. frame clad with precast panels and heavily textured in situ concrete. Matching facing brick.

SERVICES Mechanical ventilation and heating from central plant. Air conditioning to offices.

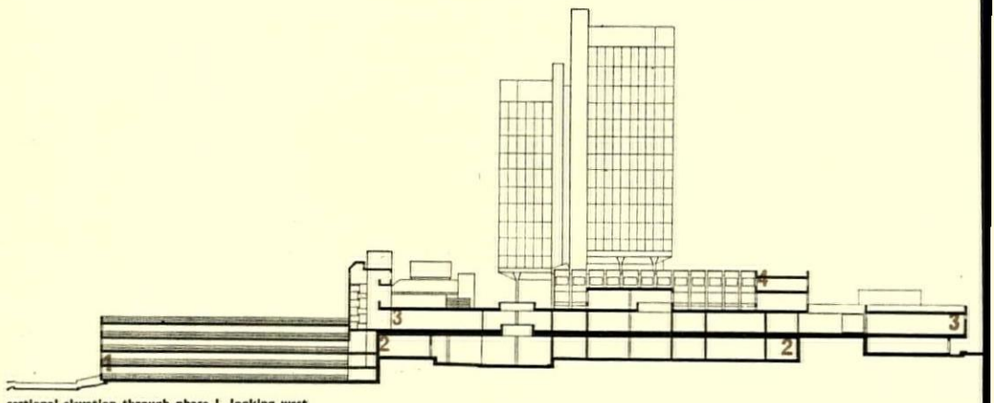
COST Phase 1, £1,500,000.

CONTRACT Early 1968–early 1970.

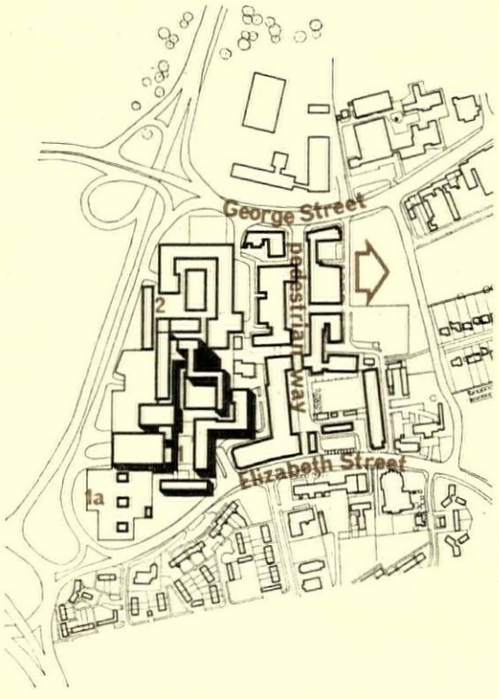
Principal assistant, D. K. Clark and R. Hewitt. Quantity surveyor, Mercer and Miller. Structural consultant, R. Travers Morgan and Partners. Services consultant, Steensen, Varming, Mulcahy and Partners.



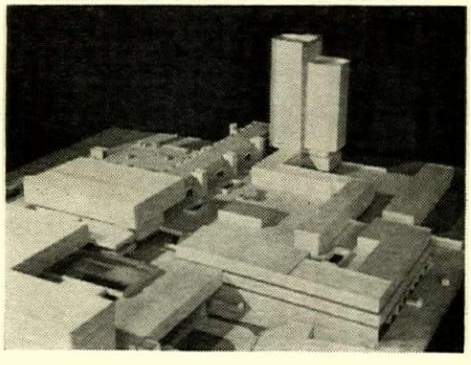
south elevation, phase 1

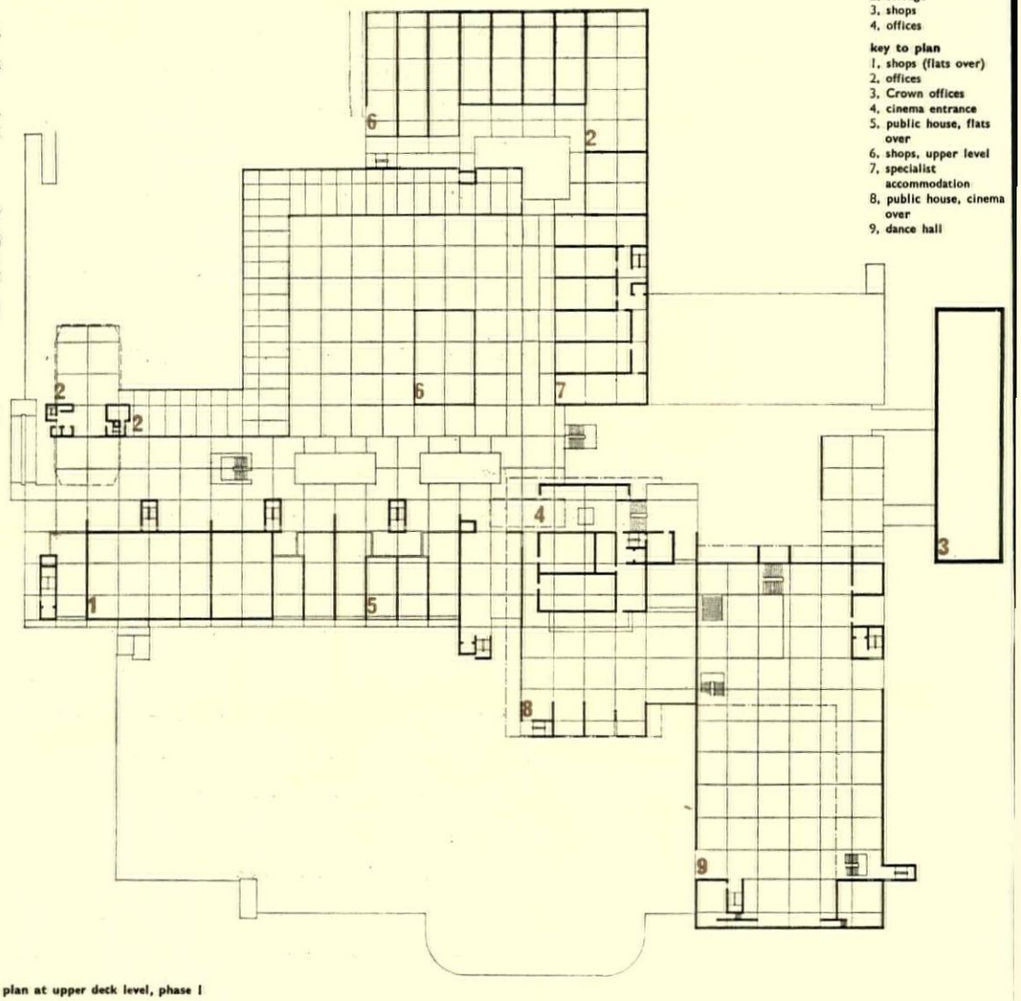


sectional elevation through phase 1, looking west



above, site plan showing development phases: below, model from east





key to section
1, car decks
2, storage
3, shops
4, offices

key to plan
1, shops (flats over)
2, offices
3, Crown offices
4, cinema entrance
5, public house, flats over
6, shops, upper level
7, specialist accommodation
8, public house, cinema over
9, dance hall

plan at upper deck level, phase 1

TOWN CENTRE, RUTHERGLEN, SCOTLAND

Moira and Moira

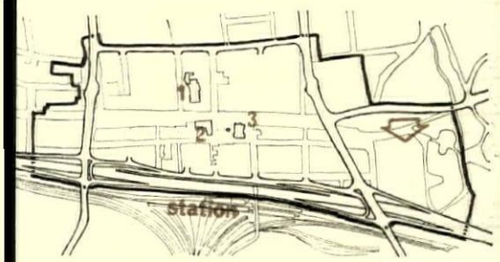
CLIENT Rutherglen Town Council.

SITE 50 acres of obsolescent development grouped round main thoroughfare.

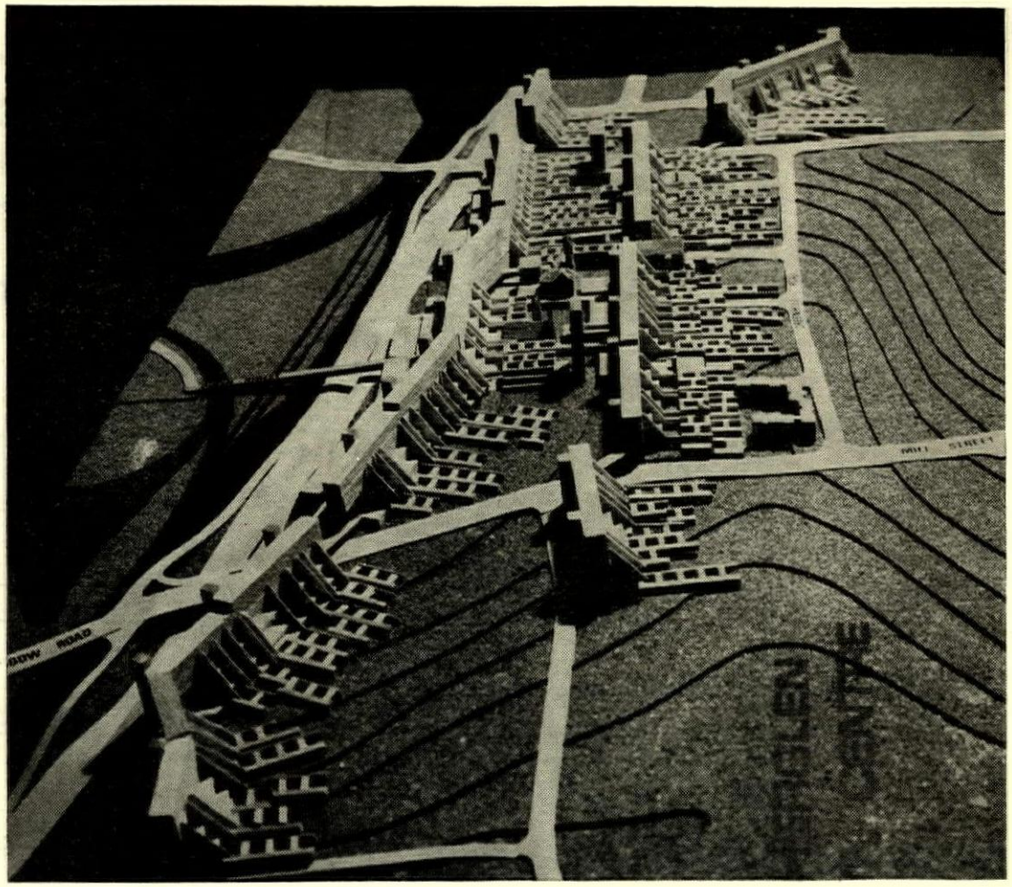
ACCOMMODATION Ground level, 200,000 sq. ft. of shops in squares and through streets. First floor, 100,000 sq. ft. of offices, convenience goods shopping for residents, entertainments and cultural facilities. Total number of dwellings, 1,400.

STRUCTURE Reinforced concrete.

Partner-in-charge, R. E. Moira. Associate-in-charge, M. W. I. Pettigrew. Assistants, D. N. Beck and J. C. Hope.

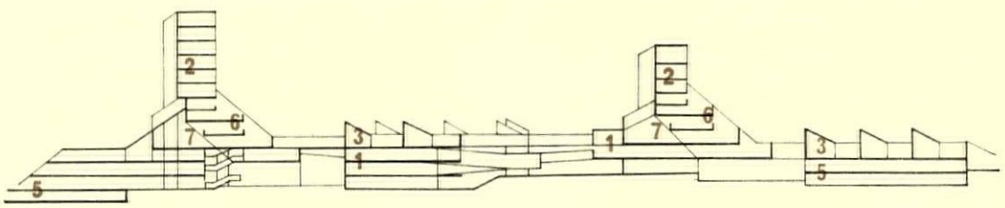


site plan showing new roads system: key
1, St. Columbkille's church
2, town hall
3, old parish church



aerial view of model from west (see also the cover of this issue)

key to plan and section
1, shopping centre
2, high rise housing
3, patio housing
4, public open space
5, multi-storey parking
6, maisonettes
7, internal street



north-south section

plan at internal street level

TOWN CENTRES

TOWN CENTRE, RUNCORN, CHESHIRE

F. Lloyd Roche, Chief Architect and Planning Officer. Arthur Ling and Associates, Consultant for Master Plan

CLIENT Runcorn Development Corporation.

SITE Link between existing town and New Town housing area for 70,000 people. Site area of 110 acres, including 69 for housing. Shallow valley, rising 40 ft. on three sides, with steep northern slope to village and castle of Halton. Motorway to north, town park to east.

ACCOMMODATION Shops, service trades, commercial offices, banks, post office, local and central government offices, courthouse, police station, telephone exchange, polyclinic, library, theatre, cinema, restaurant, 3 pubs, 2 hotels, youth centre, assembly hall, concert hall, dance hall, museum and exhibition centre, garage and car showrooms, car parking. 200 flats over deck. Surrounding housing at 80-100 p.p.a. with decks connecting directly to shopping.

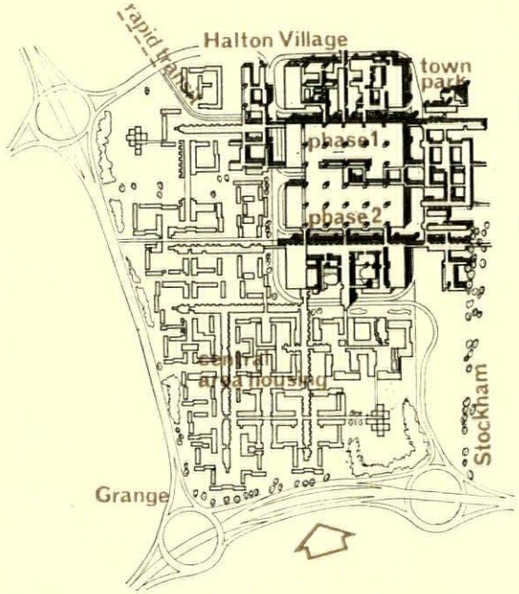
STRUCTURE Shopping deck, 18 ft. grid of precast concrete columns and beams. Shopping roof, tubular aluminium space frame on pre-stressed concrete girders spanning 108 ft. between concrete service towers. Over deck flats on welded steel vierendeel girders spanning between service towers. Cladding all in white precast concrete.

SERVICES District heating with possible air conditioning of shopping halls. Grid of 18 ft. sq. service towers and 6ft. deep horizontal ducts below deck.

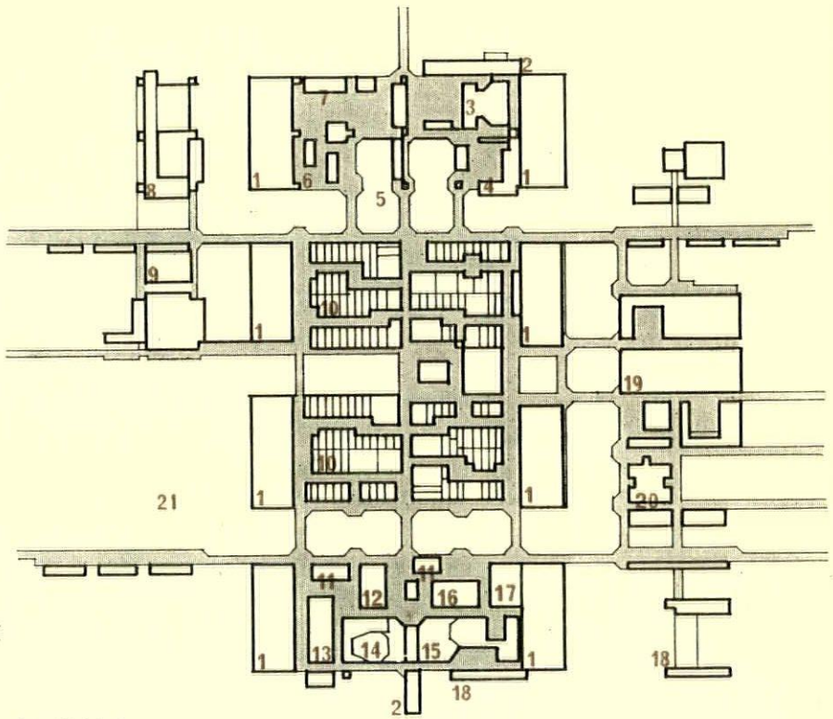
COST Phase 1, £9,000,000. Phase 2, £3,000,000. Phase 3, £5,000,000.

CONTRACT Phase 1, 1968–1972.

Deputy chief architect, David Gosling. Assistant architects, Peter Edwards, Keith Smith, Surya Pawar, John Lovibond, John Randle, Michael King, Peter Carmichael, Susan Macnab and Alan Glover. Planner, Ron Turton. Chief quantity surveyor, Frank Henshaw. Quantity surveyor, Peter Thompson. Principal structural engineer, Alan Bell. Structural engineer, Ewart James. Mechanical engineer, Jim McDowell. Electrical engineer, Bill Bainbridge. Chief engineer, Jack Mercer. Deputy chief engineer, Tom Walsh. Principal roads engineer, John Connell. Traffic engineer, Mike Ratcliffe. Chief estates officer, Jeffrey Gee. Estates officer, Hugh Gunton. Shopping consultant, Drivers, Jonas and Co.

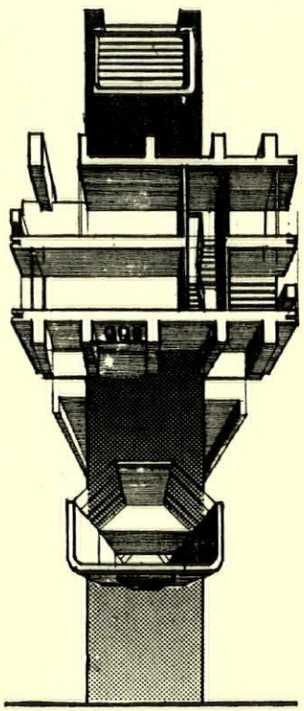


site plan

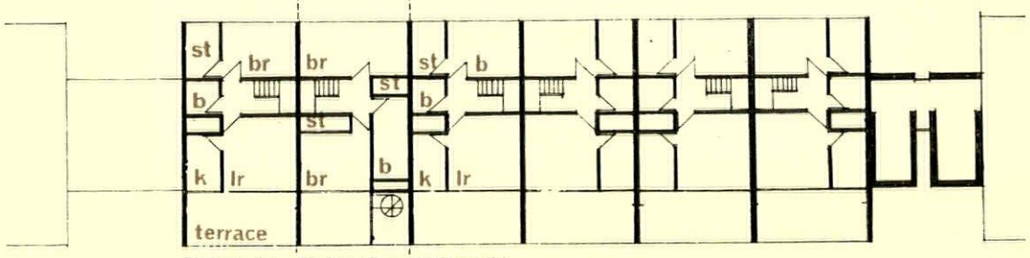


plan at deck level

key
1, parking
2, offices
3, court
4, police
5, bus station
6, banks
7, library
8, telephone exchange
9, polyclinic
10, shopping
11, pub
12, youth centre
13, sports hall
14, cinema
15, theatre
16, dance hall
17, museum
18, hotel
19, technical college
20, college extension
21, expansion area

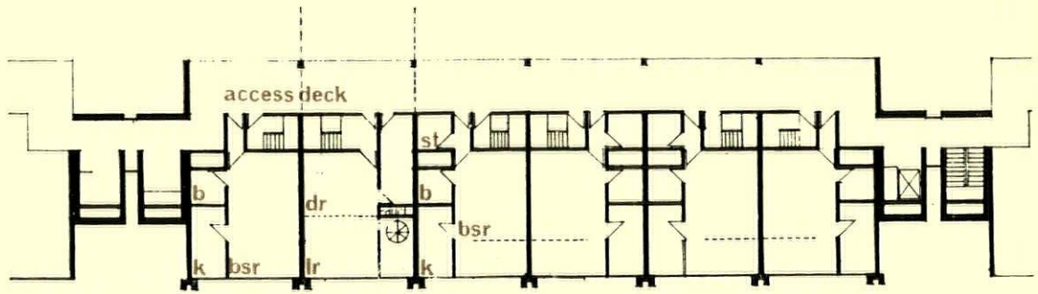


cross section through over deck flats and walkway at service tower



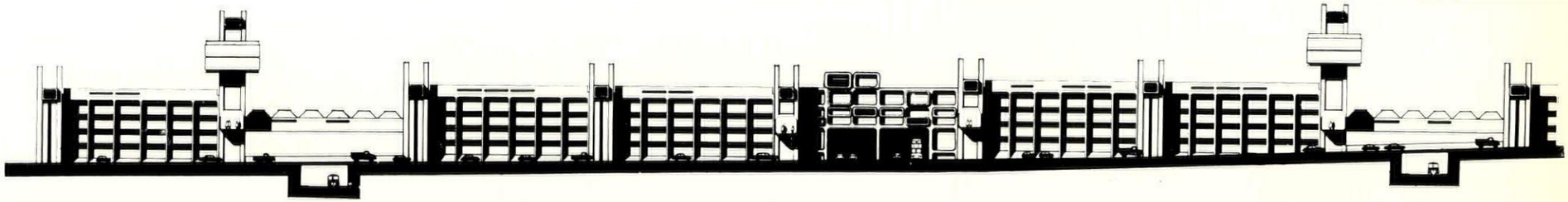
1-bedroom flat 2-bedroom flat 1-bedroom flat

over deck flats: plan at upper level

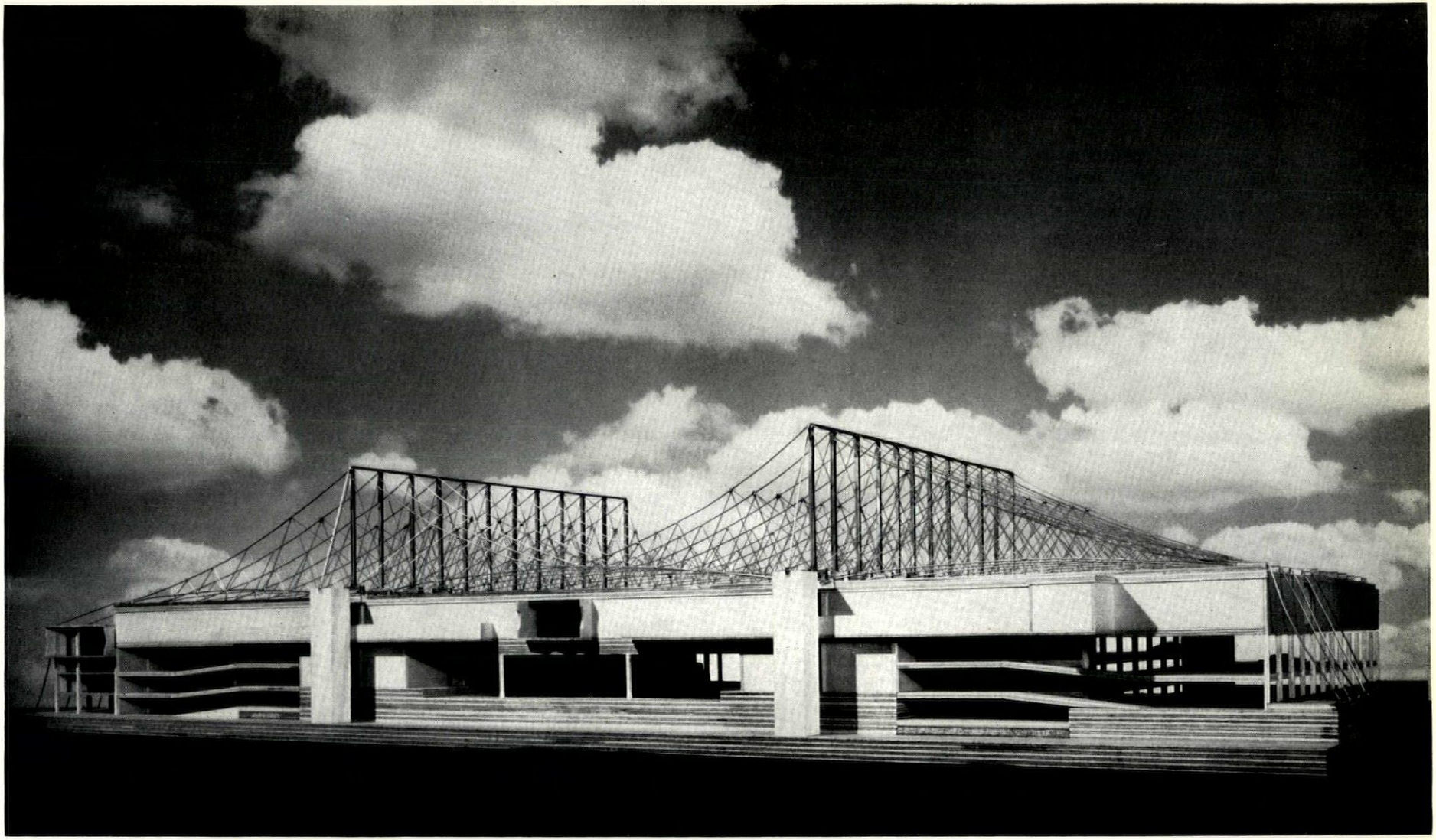


bed-sitter 2-bedroom flat bed-sitter

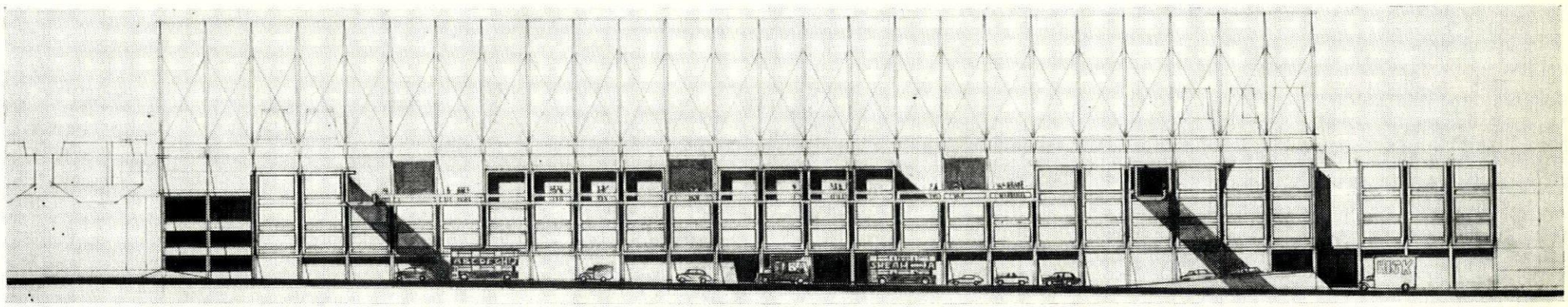
over deck flats: plan at lower level



town centre, Runcorn: above, east elevation: below, model of phase I from the north-east, with elevated rapid transit system on right



town centre, Skelmersdale: above, part model of phase I showing roof structure: below, south-west elevation



TOWN CENTRE, SKELMERSDALE, LANCS

W. D. C. Lyddon, Chief Architect and Planning Officer

CLIENT Skelmersdale Development Corporation.

SITE 32 acres, including approach roads. Undulating land with deep gullies. Shop and office complex on plateau, with linear town park in River Tawd valley to west and high density low rise housing to east and south.

ACCOMMODATION Main Phase 1 structure, 468 ft. × 450 ft. contains retail trades 178,000 sq. ft., service trades 38,000 sq. ft., offices including banks and post office 58,000 sq. ft. and covered parking for 1,450 cars. Vertical separation of pedestrians from motor and goods vehicles, with large column-free areas on shopping deck to allow maximum flexibility of layout. Similar structure for Phase 2 will be built to north on other side of civic centre. The latter, to be built gradually as funds allow, includes municipal offices, police station, magistrates' court, library, assembly rooms, church, swimming pool, making total of 152,000 sq. ft., and entertainment buildings, 121,000 sq. ft.

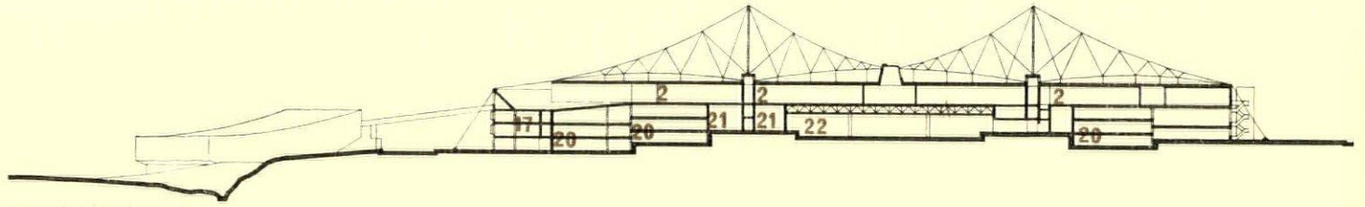
STRUCTURE Main roof to shopping suspended from steel cables, supported on two rows of steel columns spaced at 18 ft. centres, with central clear span of 198 ft. and end spans of 135 ft. This gives one column-free area of 198 ft. × 450 ft. and two column-free areas each of 135 ft. × 450 ft. Structure below shopping deck, r.c. columns and beams, with in situ r.c. floors.

SERVICES Natural ventilation to shopping malls, with individual heating to shops. Mechanical ventilation to car park.

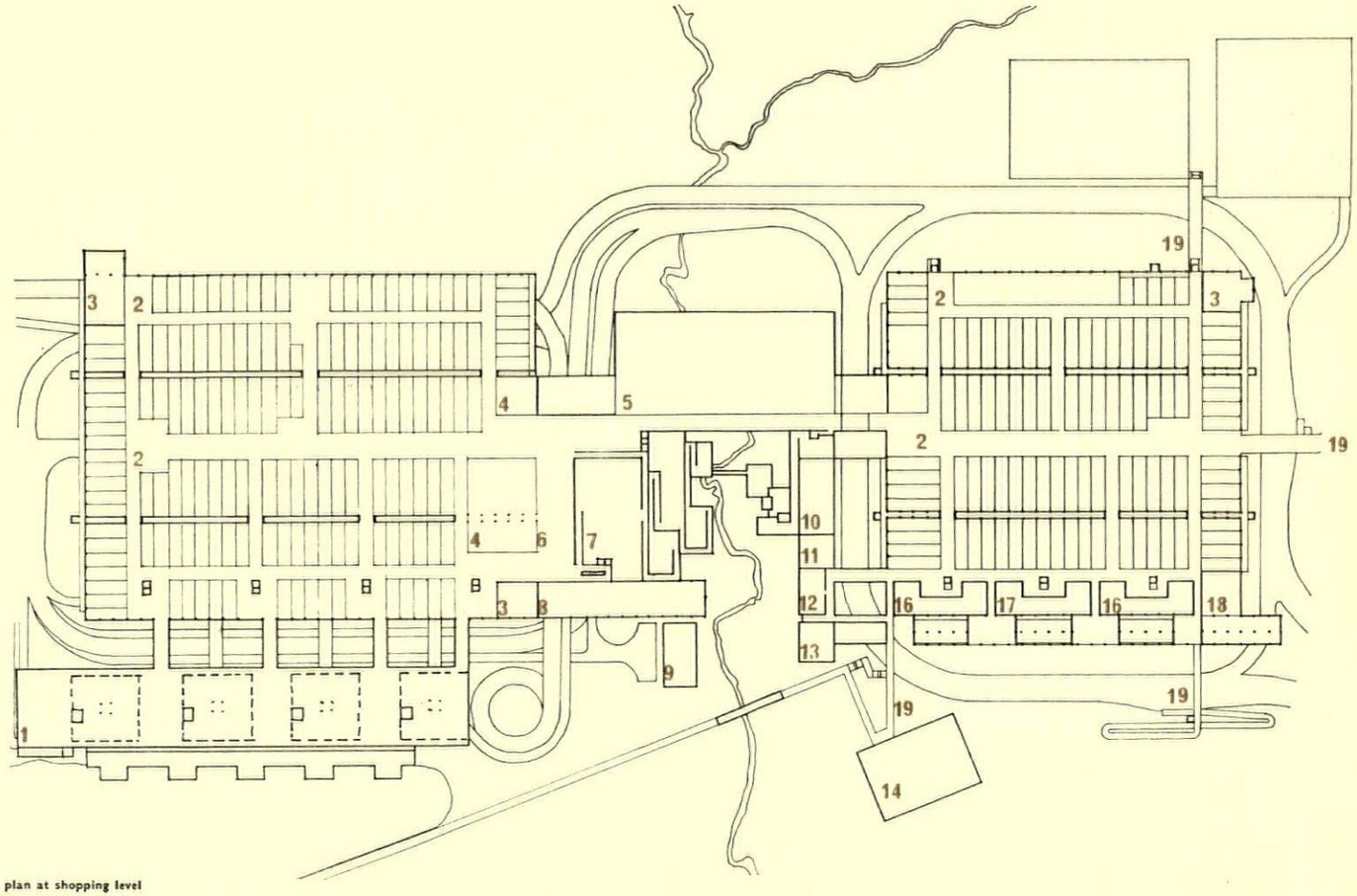
COST Phase 1, £2,500,000.

CONTRACT Phase 1, mid-July–early 1970.

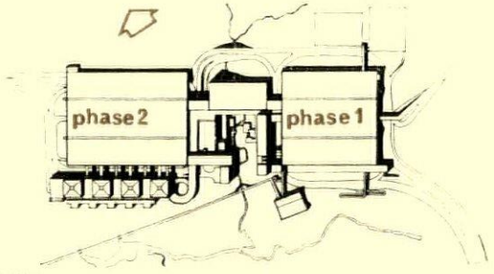
Principal architect-in-charge, J. G. Roxburgh. Group architects, J. F. Quinn and A. E. Powell. Quantity surveyor, P. J. Jackson. Chief engineer, D. H. Garside. Project engineer, P. J. Cox. Landscape consultant, A. E. Weddle. Internal environment consultant, Dr. B. Wilson.



cross section through phase 1



plan at shopping level



site plan

key

1. entertainments
2. shops
3. public house
4. department store
5. shopping bridge
6. market square
7. lower market square
8. assembly buildings
9. civic offices
10. library
11. police
12. magistrates
13. hotel
14. swimming pool
15. restaurant
16. bank
17. offices/service trades
18. post office
19. pedestrian bridge
20. parking
21. storage
22. delivery area

CENTRAL AREA, BARNSLEY, YORKS

Abbey and Hanson, Rowe and Partners

CLIENT Norwich Union Insurance Societies and Barnsley Borough Council.

SITE 5 acres including main market, Queen's Road, Kendray and May Day Green.

ACCOMMODATION 150,000 sq. ft. shopping, 300 market stalls and ancillaries, 50-bedroom hotel, 500-seat arena-type cinema, restaurant and banqueting rooms, entertainment centre, dance hall, multi-storey parking for 550 cars.

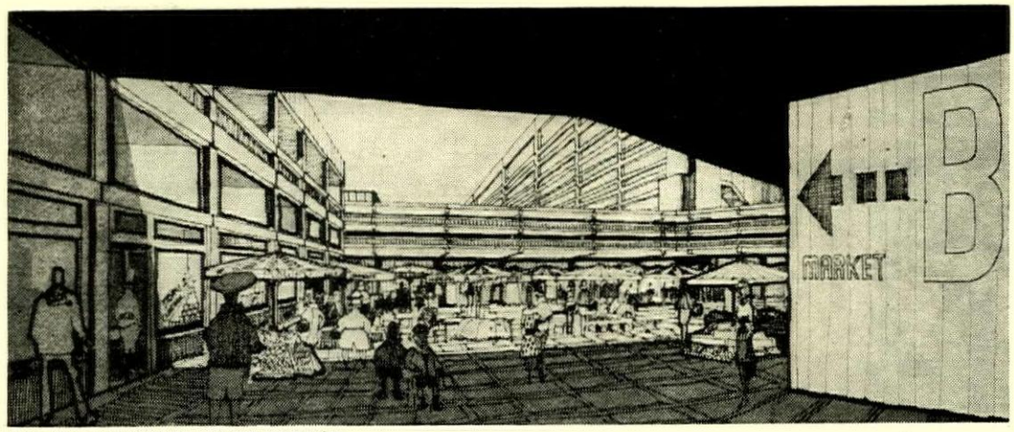
STRUCTURE In situ r.c. frame on 4 ft. module. In situ walls, precast concrete local aggregate faced panels. Anodized aluminium windows.

SERVICES Underfloor heating in markets and hotel. Extract ventilation to low-level parking and service areas.

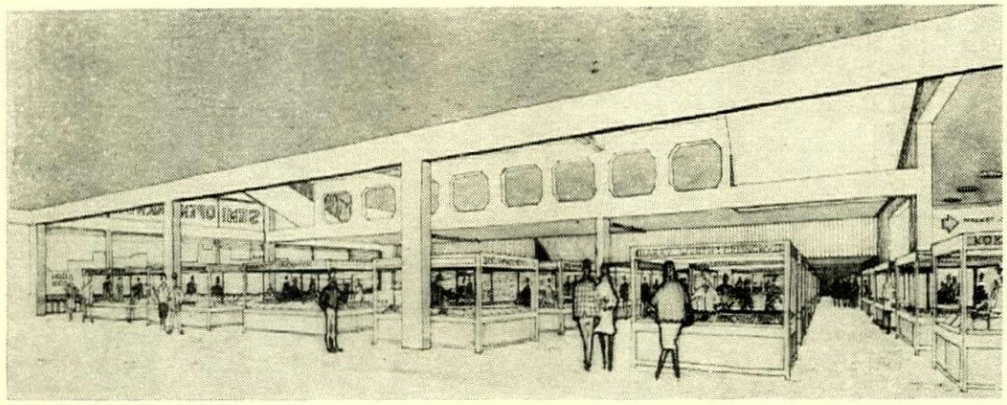
COST £2,500,000.

CONTRACT Late 1967–late 1969.

Partners-in-charge, Geoffrey Rowe and Peter Nash. Assistants, R. Clayton, I. Hirst, T. Mallalieu, A. Whitehead and R. Spurrier. Quantity surveyor, Jack Stockings and Clarke. Structural and services consultant, Husband and Partners.

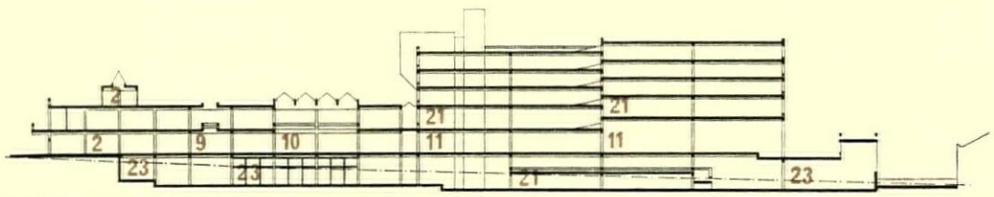


above, the open market: below, the semi-open market

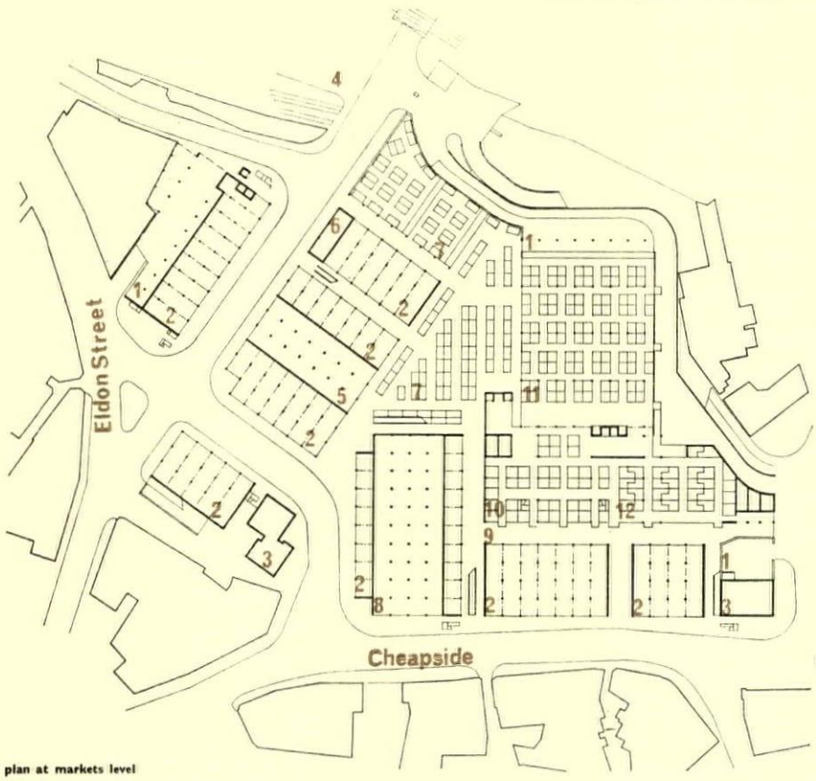


key

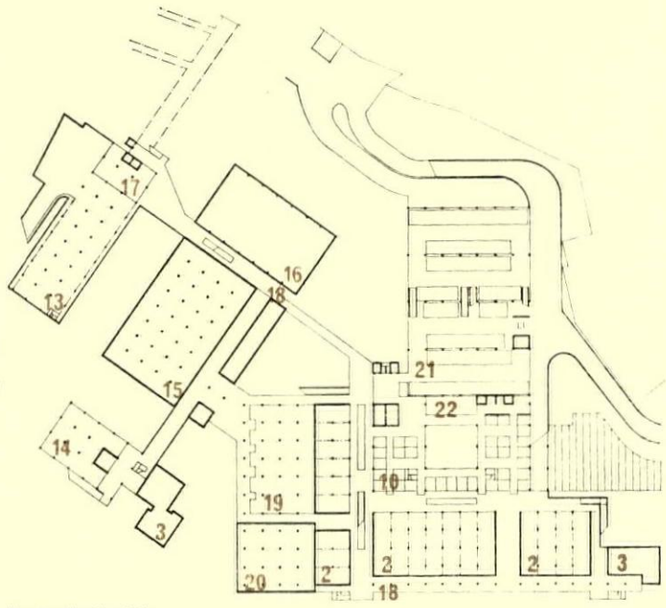
1. service yard
2. shops
3. public house
4. bus station
5. supermarket
6. cinema entrance
7. open market
8. chain store
9. arcade
10. closed market
11. semi-open market
12. fish and meat market
13. hotel car park
14. offices
15. entertainments
16. cinema
17. hotel entrance
18. pedestrian deck
19. restaurant
20. chain store staff
21. parking
22. cafes
23. storage



cross section through shops and parking



plan at markets level



plan at pedestrian deck

PREVIEW 67

Industrialized building makes a far more widespread appearance in this year's Preview. There is hard evidence at last that the temptations of package deal production are being subordinated to the kind of hierarchical discipline exerted by Associated Architects and Consultants at Harlow (AR, July 1966). Skelmersdale and Cumbernauld New Towns and the Greater London Council at Woolwich-Erith have been able to acquire sufficiently large sites and sufficiently definite promises of continuing Government subsidy for large panel concrete systems to be used in economic quantities for high density low rise neighbourhoods. Particularly interesting, in view of the rather conventional layout of towers and slabs at the GLC's previous major industrialized project at Woolwich, is the structuring of the Erith housing principally in a long 'spine' with an internal access gallery—a type deriving from Theo Crosby's Fulham Study of 1963. New Towns on this scale, however, will still be the exception rather than the rule in the increased housing programme to come. The normal problem will be to attempt the discipline and economics of industrialized building on confined central area sites. For this reason, the Yorkshire Development Group's scheme at Leek Street, Leeds, is specially important, as the economies have been made by using the Group's method simultaneously on sites at Hull, Sheffield and Nottingham. The London boroughs, with their great variety of sites and requirements, have not yet made use of the advantages of such consortium organization. Some are using industrialized schemes: the Austin-Smith design for Hillingdon, Haringey borough architect's (including a fully grown ziggurat) at Broadwater Farm. Others, however, no less imaginative, are using loadbearing brick on difficult hilly sites: Lambeth's at Norwood, Southwark's at nearby Dulwich.

For the first time Preview this year has looked through the other end of the domestic telescope—at private houses. Nowadays, in spite of affluence, the prevailing insecurity encourages spending on domestic fitments and yachts rather than on town or country houses; yet the history of the Modern Movement gives constant testimony of the outsize importance of the individual villa. It is now left to architects to use their own families as guinea pigs. In this issue we have the cool little SOM-style Winter house, beside the lodge gate of Highgate Cemetery, a tall brick gap-plugging terrace house in World's End by Kit Evans and skylit back-garden infill in Kentish Town by Philip Pank (a children's playground expert).

There are also some encouraging schemes of private housing in which the speculative developer seems at last to be taking advantage of the less prejudiced attitude to modern architecture of the building societies. Wates, for example, who ten years ago encouraged experiment by investing in the independent firm of Span, are now, with a younger generation of the family directing, plunging boldly into the future under their own name: last year in the Team 4 scheme for Coulsdon, this year in the extremely interesting scheme for nearby Croydon by the Swiss firm, Atelier 5. Like Team 4, Atelier 5 have been commissioned to design an 'aesthetes' corner' within a much larger Wates' suburb, in this case called (confusingly) Park Hill. There are many points of resemblance to these architects' estate at Berne-Halen (AR World, June 1966), though Park Hill is on a larger scale, and also to the micro-climatic research of Ralph Erskine, whose Clare Hall design for Cambridge is here published under Education. Smaller private experiments are shown in two schemes of four houses each, by Derek Walker at Leeds, and by Stout and Litchfield at Charlbury. The latter has a faceted continuity of walling with eccentric room spaces, while the former provides varied plans beneath standard roof canopies.

HOUSING

WOOLWICH–ERITH PHASE 1, LONDON

Hubert Bennett, Architect to the Council

CLIENT Greater London Council.

SITE Exposed and flat land beside Thames estuary, below high tide level. Very poor subsoil. Phase 1, Harrow Manor Way on west, railway on south, sewer embankment on north.

ACCOMMODATION 1,578 dwellings at 96 p.p.a. 3-storey houses, 13-storey point blocks, and 2- to 5-storey linear blocks. Medical centre, 2 primary schools, shops, 2 pubs, old people's home. 1:1 garages and car spaces plus visitors' hardstandings. 30-acre boating lake.

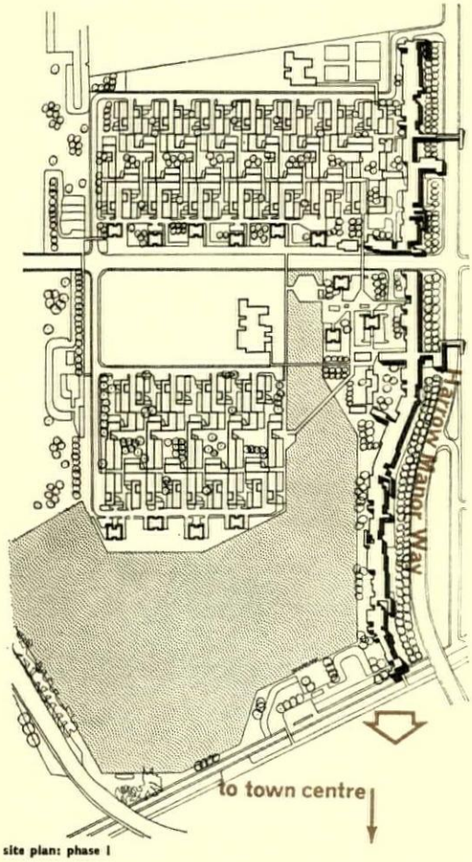
STRUCTURE Balency industrialized system of large concrete panels.

SERVICES Normal, but with pumping station for soil drainage.

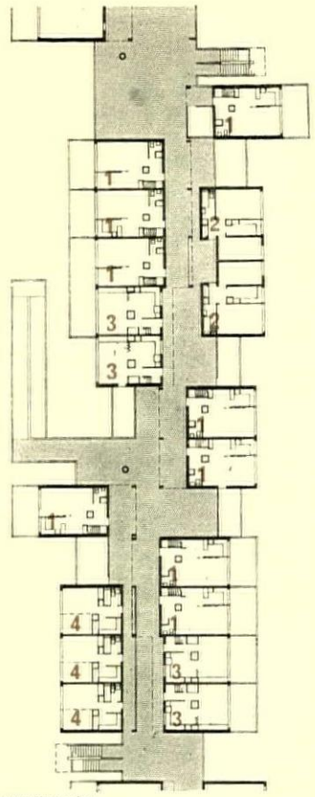
COST £12,000,000, including civil engineering, pumping, drainage, lake and landscaping.

CONTRACT Phase 1, early 1967–mid-1969.

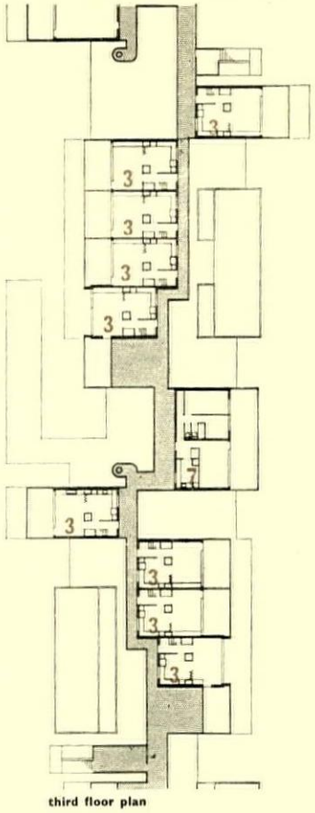
Deputy architect, Jack Whittle. Principal housing architect, Kenneth J. Campbell. Divisional architect, J. G. H. D. Cairns. Section architect, D. T. Grove. Quantity surveyor, M. F. Rice. Structural engineering, J. H. Humphreys. Director of mechanical and electrical services, C. A. Belcher. Chief officer of parks department, F. Hallowes. Director of highways and transportation, P. F. Stott. Director of planning, B. J. Collins. Director of housing, J. P. Macey. Valuer to the council, K. H. Blessley.



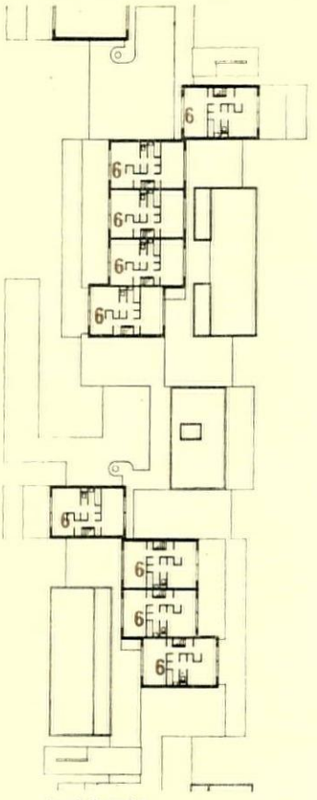
site plan: phase 1



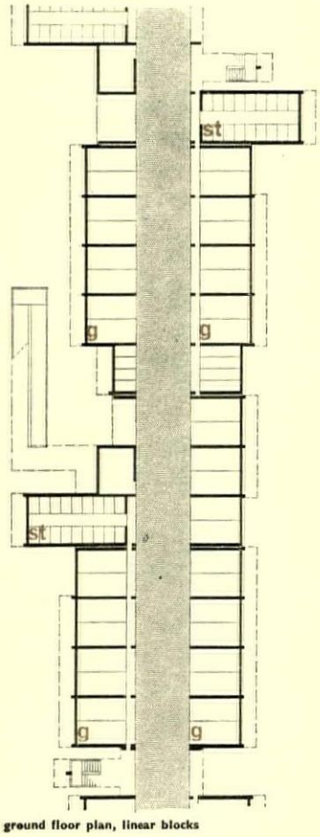
first floor plan



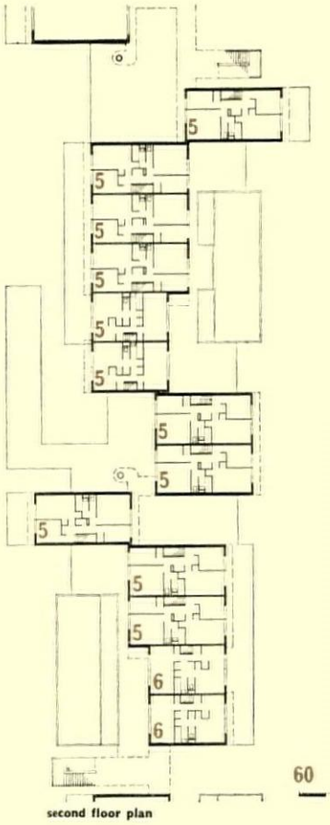
third floor plan



fourth floor plan

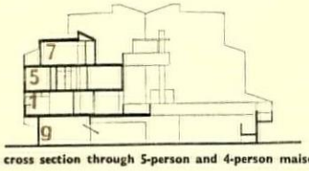


ground floor plan, linear blocks

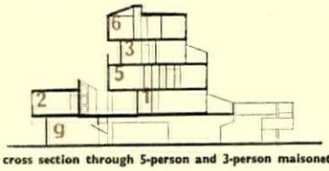


second floor plan

60 0 10

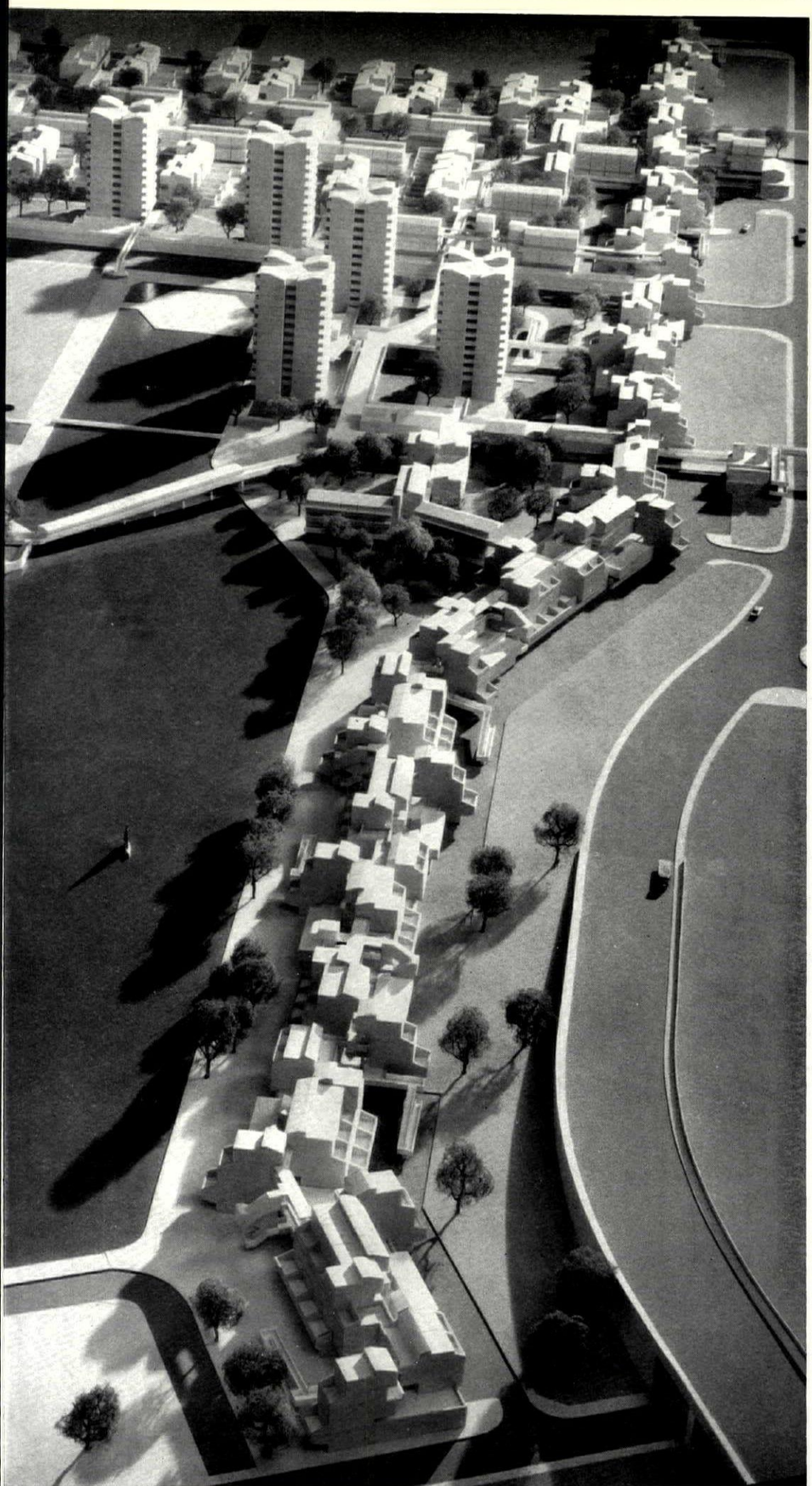


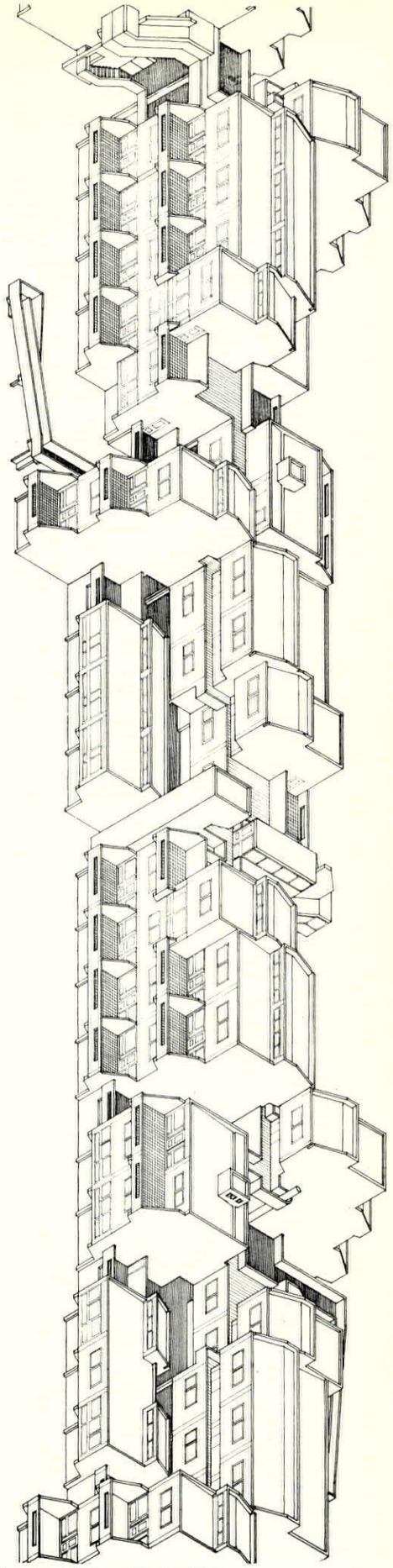
cross section through 5-person and 4-person maisonettes



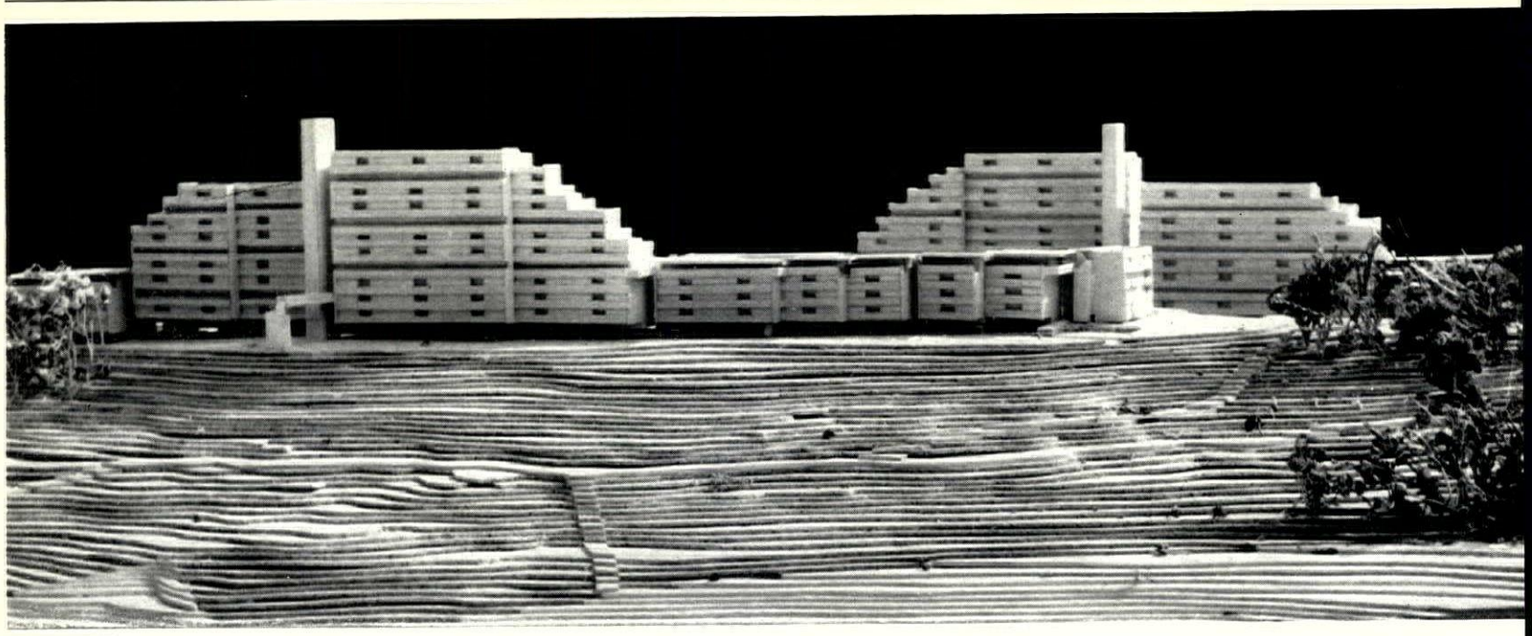
cross section through 5-person and 3-person maisonettes

key
1. 5-person maisonette, living floor
2. 2-person o.p. flat
3. 4-person maisonette, living floor
4. 1-person o.p. flat
5. 5-person maisonette, bedroom floor
6. 4-person maisonette, bedroom floor
7. 3-person maisonette

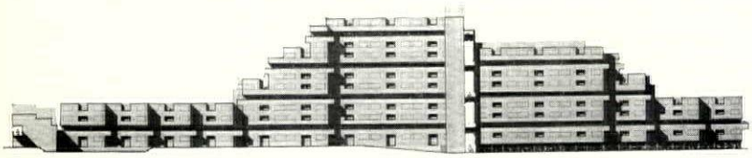




housing, Woolwich-Erith, phase 1: left, aerial view of model from north showing the 2- to 5-storey linear blocks facing the lake, and some of the 13-storey point blocks: right, axonometric of part of the linear blocks

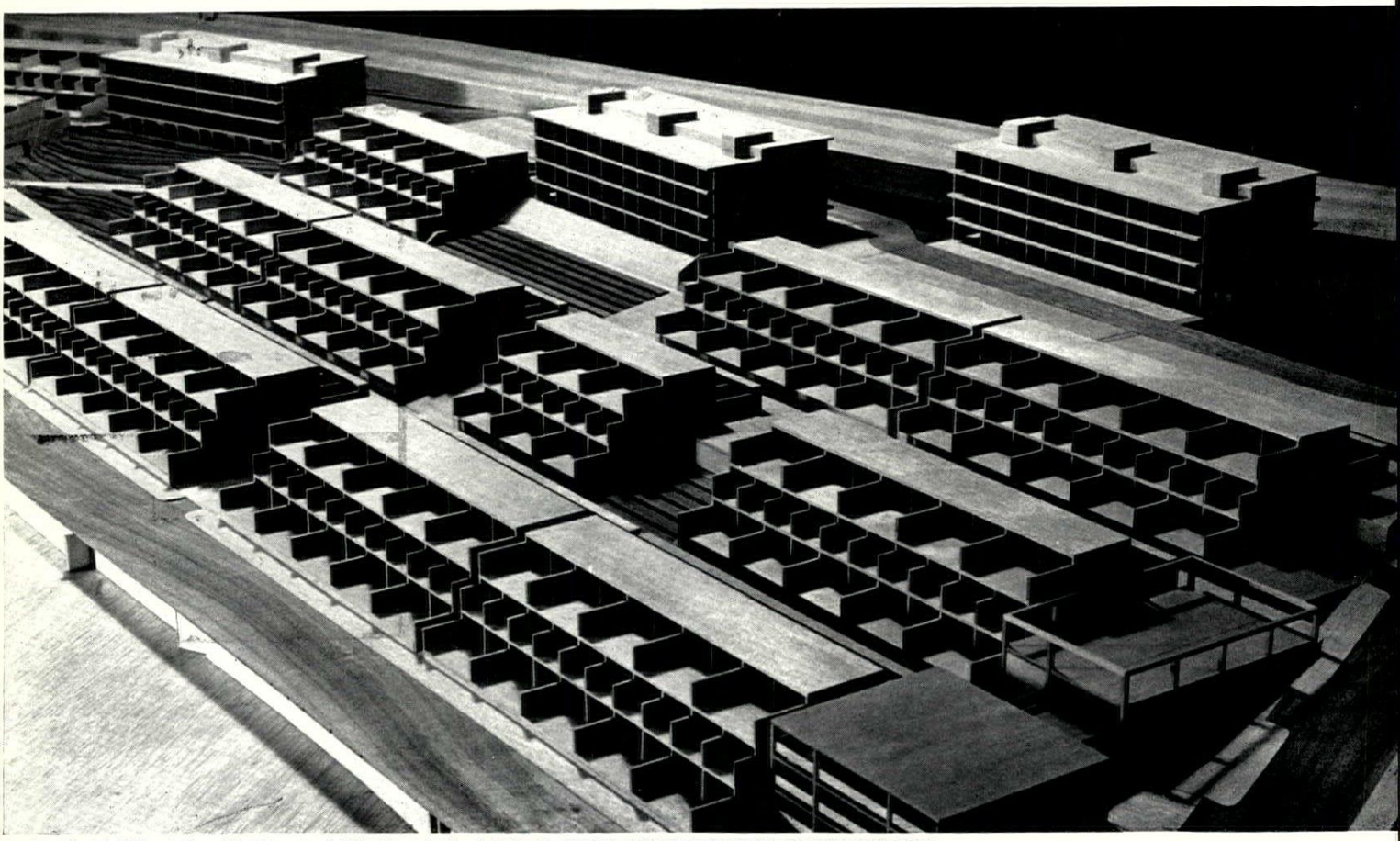


housing at Dawsons Hill, Southwark: model from the north



north elevation of blocks B1 and B2

south elevation of blocks B1 and B2



housing at Central Hill, Lambeth: model of the west end of the scheme, showing the blocks of 2-person flats behind and the terraces of 4- and 5-person houses in front

DAWSONS HILL, SOUTHWARK, LONDON

F. O. Hayes, Borough Architect

CLIENT London Borough of Southwark.

SITE 13.8 acres at Overhill Road, East Dulwich. Steep slope to north-east, falling 75 ft., with fine view over Central London. Also south-facing slope, with view over Dulwich Park to Crystal Palace.

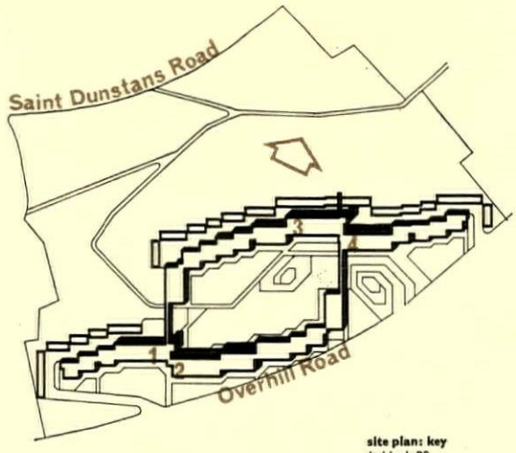
ACCOMMODATION 293 dwellings at 70 p.p.a. overall, but only one-third of site buildable. High rise scheme unacceptable in views of area. Split-level maisonettes with access gallery every third floor. 108 1-bedroom, 75 2-bedroom, 82 3-bedroom, 28 4-bedroom. First floor gallery continuous over site.

STRUCTURE In situ r.c. crosswalls on piled foundations, except for 4-storey portion in calculated brickwork. Brick cladding, aluminium sliding windows. Dry finishes internally.

SERVICES Central heating by off-peak electricity, with night storage units controlled by tenants.

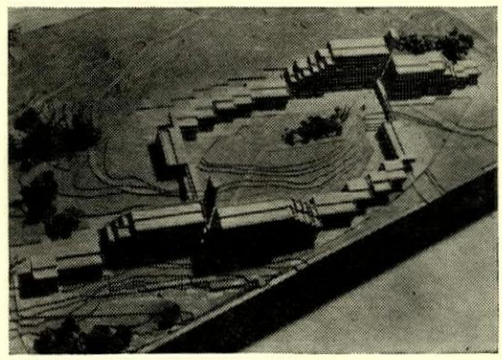
CONTRACT Starts early 1967.

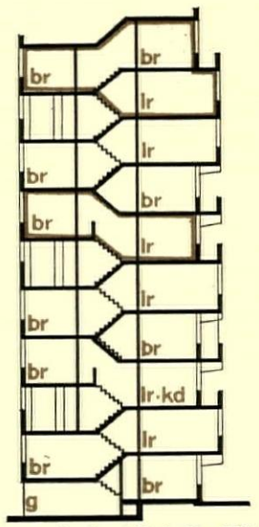
Quantity surveyor, Oswald E. Parratt and Partners. Structural consultant, W. V. Zinn and Associates. Mechanical consultant, Lovely and Orchard.



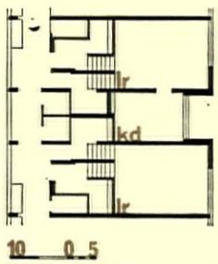
site plan: key
1, block B2
2, block B1
3, block A1
4, block A2

aerial view of model from south

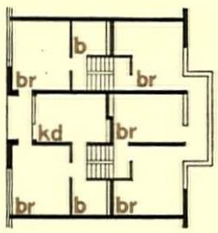




cross section through blocks A2 and B2 at maximum height (1-bedroom and 2/3-bedroom dwellings)



living room floor plan, 3-bedroom and 2-bedroom dwellings



bedroom floor plan, 3-bedroom and 2-bedroom dwellings

CENTRAL HILL, LAMBETH, LONDON

Edward Hollamby, Borough Architect

CLIENT London Borough of Lambeth.

SITE 14.87 acres west of Crystal Palace. Steep slope with panoramic view of London. No building to project above trees on skyline.

ACCOMMODATION 374 dwellings at 85.5 p.p.a. 12 1-person flats, 150 2-person houses, 10 3-person houses, 86 4-person houses, 106 5-person houses, 10 6-person houses. 1:1 car parking plus 20 per cent visitors' parking. 2 shops, launderette, tenants' workshop, maintenance store, old people's day centre, youth club, nurses' hostel, doctors' group practice.

STRUCTURE Modular brickwork to preferred dimensions, mainly crosswall construction, with concrete floors and timber roofs.

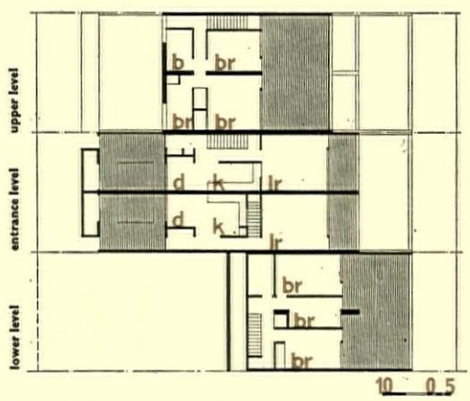
SERVICES Central oil-fired boiler house with medium pressure mains distribution. Fan-assisted warm air units to individual dwellings.

COST £2,250,000.

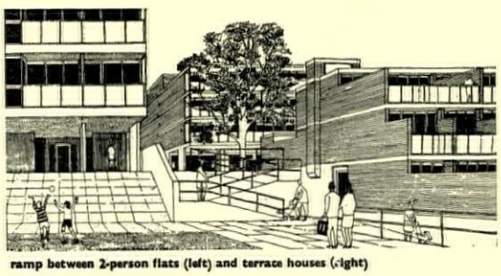
CONTRACT December 1967–December 1970.

Deputy borough architect, W. Kretchmer. Group leader, R. Stjernstedt. Assistants, A. Sansom, B. Roberts, R. Westman and N. Kuhn. Quantity surveyor, P. Davies. Services engineer: J. Burt. Electrical engineer, D. Roberts. Structural consultant, Ove Arup and Partners.

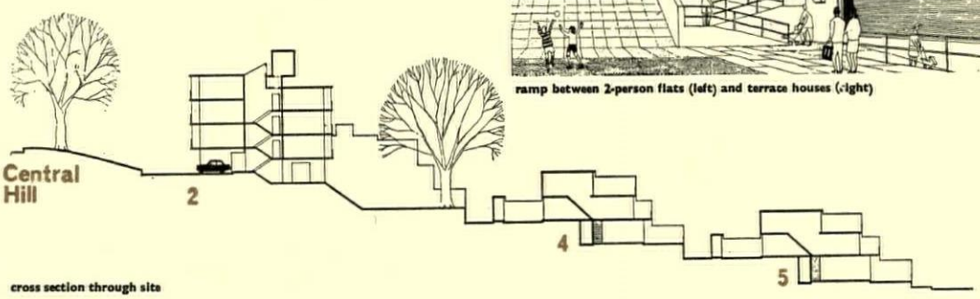
site plan: key
1, 1-person flats
2, 2-person flats
3, 3-person houses
4, 4-person houses
5, 5-person houses
6, 6-person houses
7, community, welfare, youth centres
8, sub-station



plans, 5-person house



ramp between 2-person flats (left) and terrace houses (right)



cross section through site

HOUSING

BROADWATER FARM, HARINGEY, LONDON

C. E. Jacob, Borough Architect

CLIENT London Borough of Haringey.

SITE 28.35 acres, south of Lordship Lane, 21 of them for housing and remainder for schools. Mainly allotments at present.

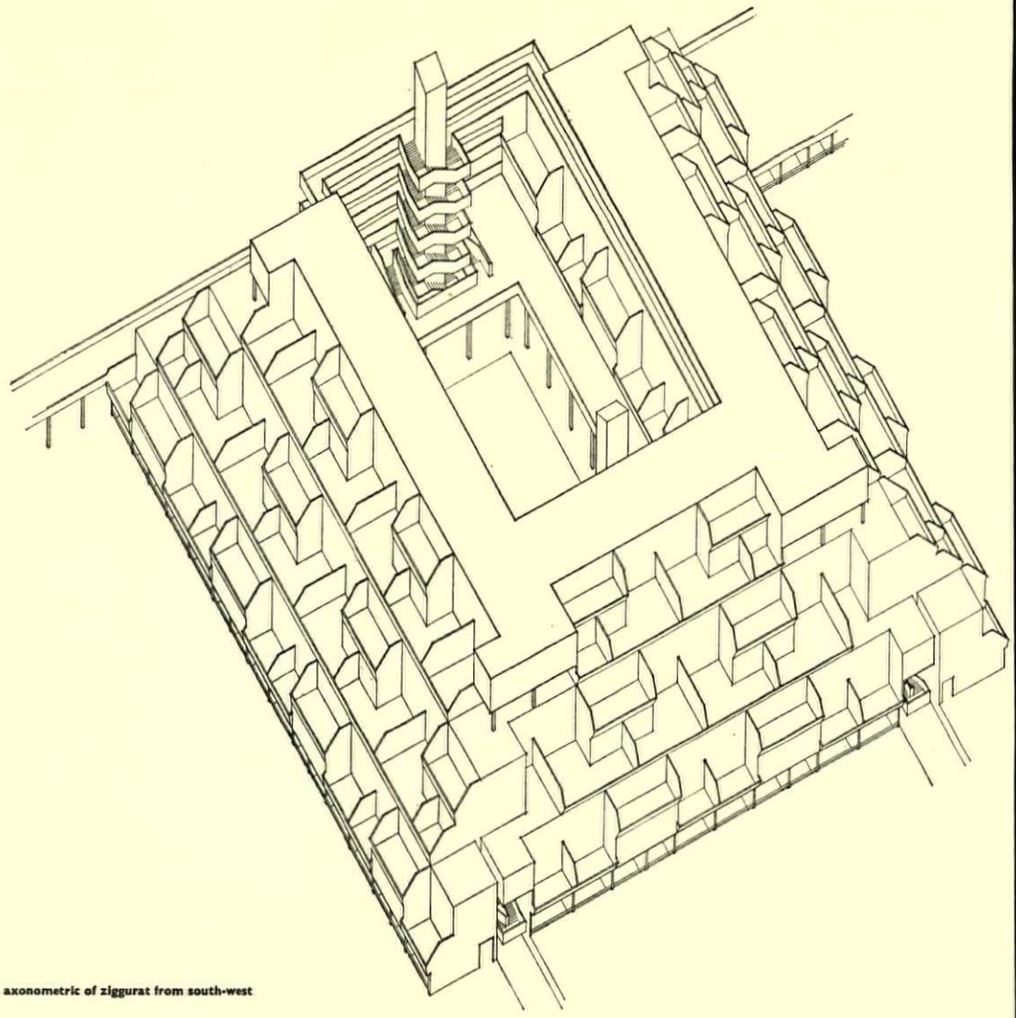
ACCOMMODATION 1,063 dwellings at 110 p.p.a. to Parker Morris standards. 39 per cent 2-bedroom, 19 per cent 3-bedroom, 42 per cent 1-bedroom. 1: 1 covered parking, 10 per cent visitors' parking. Large open spaces related to recreation ground on west, with existing trees kept.

STRUCTURE An industrialised system.

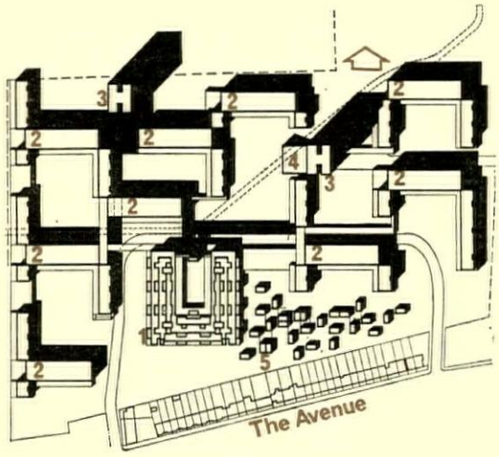
COST £5,891,761.

CONTRACT January 1967–May 1970.

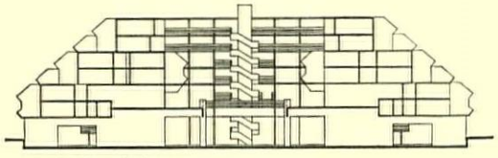
Deputy borough architect, P. Clapham. Principal architect, S. M. El Doori. Assistants, E. Vaughan, R. S. Yim, C. J. Medway, A. R. Smith and J. R. White. Quantity surveyor, Mercer and Miller. Structural consultant, Clarke, Nicholls and Marcel. Services consultant, Zisman, Bowyer and Partners.



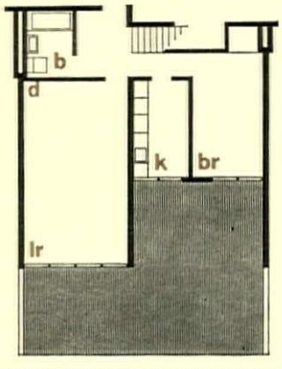
axonometric of ziggurat from south-west



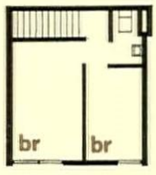
site plan: key
1, ziggurat (3-bedroom flats)
2, 6-storey maisonettes
3, 19-storey block
4, boiler house
5, 2-storey houses



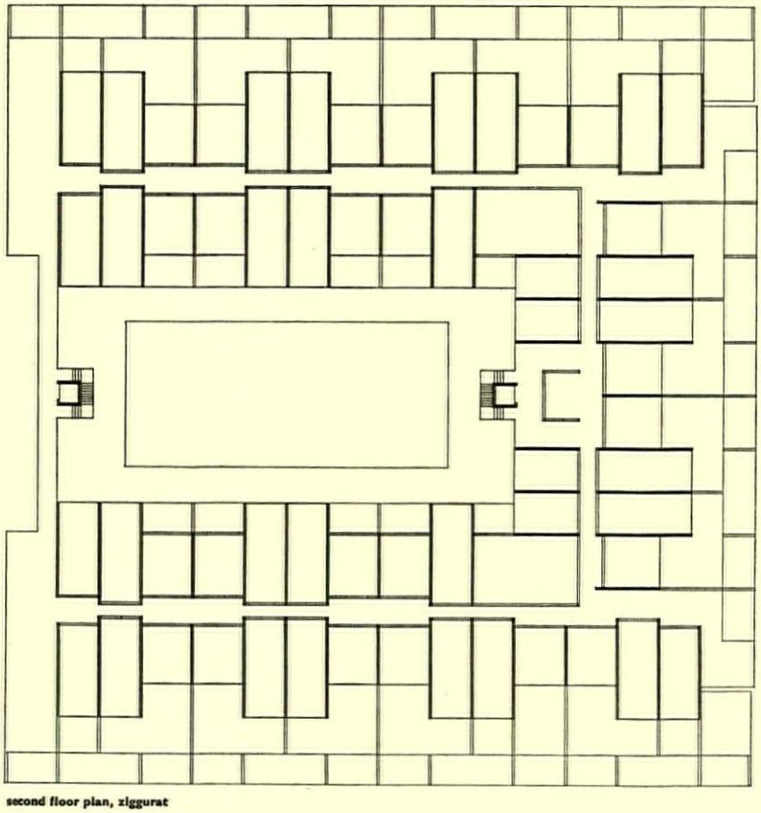
cross-section through ziggurat



lower level plan, 3-bedroom maisonette in ziggurat



upper floor plan



second floor plan, ziggurat

NORTHERN AREA, WINDSOR, BERKS

Mathews, Ryan and Simpson

CLIENT Windsor Borough Council.

SITE 7.7 acres, below 1947 flood line, contained by Alma and Arthur Roads, Clarence Crescent and new distribution road. Existing houses cleared. Phase 1 of central area redevelopment.

ACCOMMODATION 282 flats at 100 p.p.a. to Parker Morris standards. 64 3-bedroom, 106 2-bedroom, 64 1-bedroom and 48 old people's flats. Garages and parking for 535 cars. Six shops, public house.

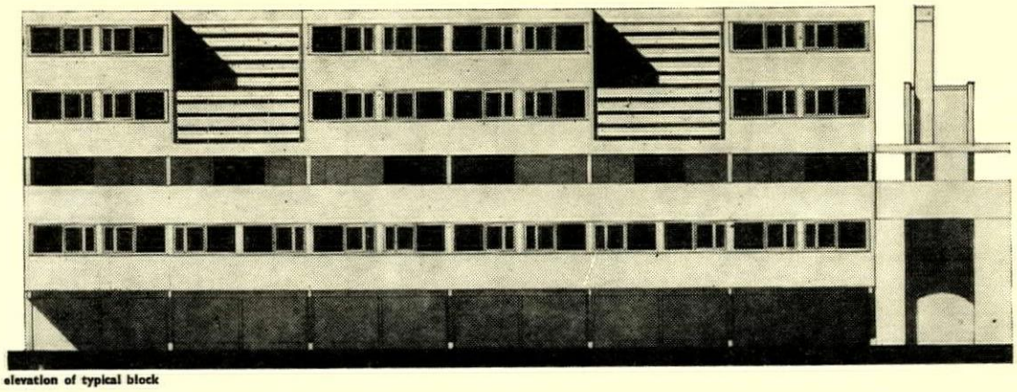
STRUCTURE Wates industrialized system of precast concrete walls, floors and cladding panels. Exposed granite aggregate finish.

SERVICES Gas-fired hot water and warm air units in each flat.

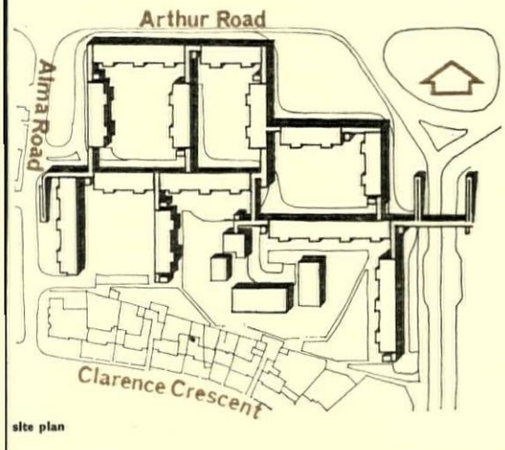
COST £1,200,000.

CONTRACT Starts May 1967.

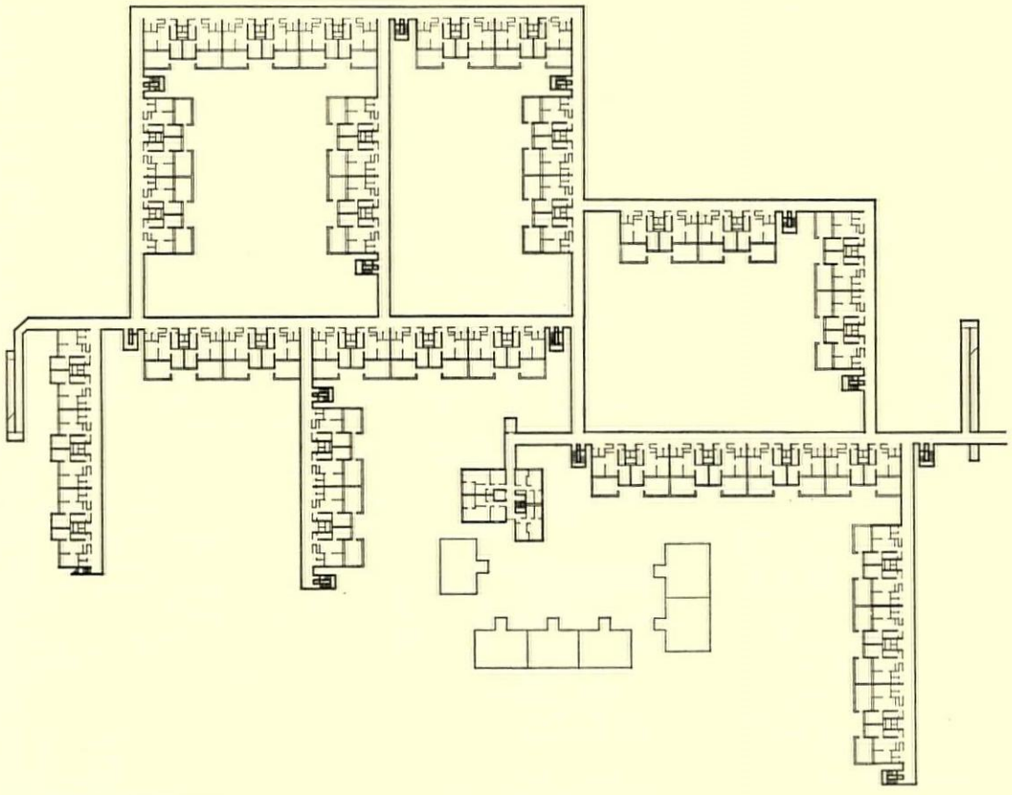
Partner-in-charge, Michael Ryan. Associate-in-charge, Roy Latham. Assistants, R. Hamilton, P. Martin, J. Lainé, Y. Handa, P. Miller and R. Foster. Quantity surveyor, Gardiner and Theobald. Structural consultant, Ove Arup and Partners. Services consultant, G. H. Buckle and Partners.



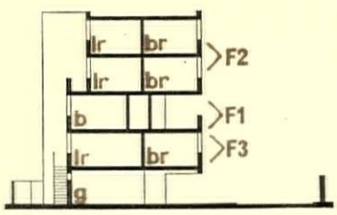
elevation of typical block



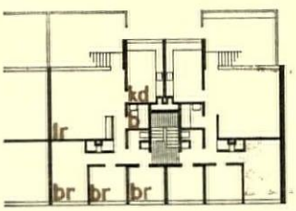
site plan



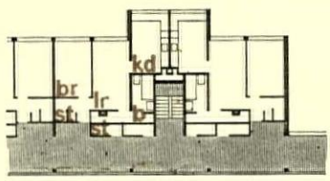
second floor plan access deck level



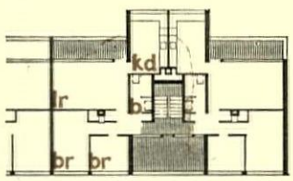
cross section



first floor plan
flat type F3



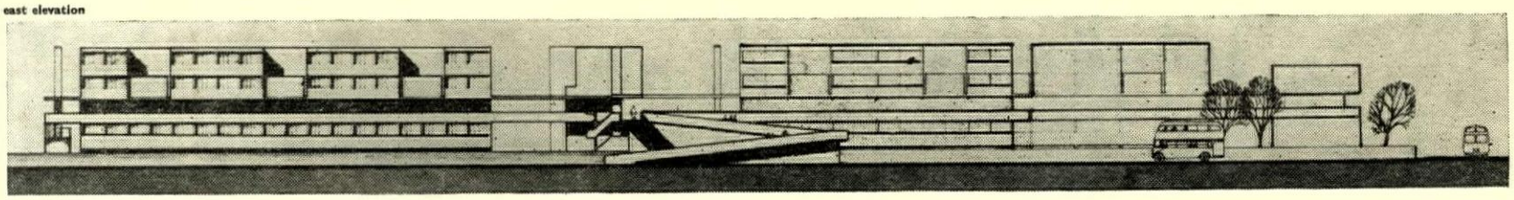
second floor plan
flat type F1



third and fourth floor plan flat type F2

20 0 10

east elevation



BURGHLEY ROAD, CAMDEN, LONDON

S. A. G. Cook, Borough Architect

CLIENT London Borough of Camden.

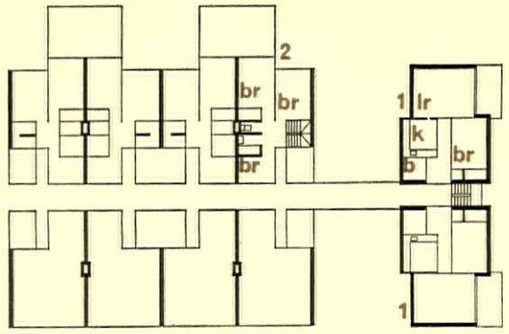
SITE 6.6 acres in Kentish Town, next main-line railway. Steep slope to east and west from central plateau, partly of deposited soil.

ACCOMMODATION 180 dwellings at p.p.a. 56 1-bedroom, 72 2-bedroom, 40 3-bedroom, 12 4-bedroom. 1 : 1 car parking.

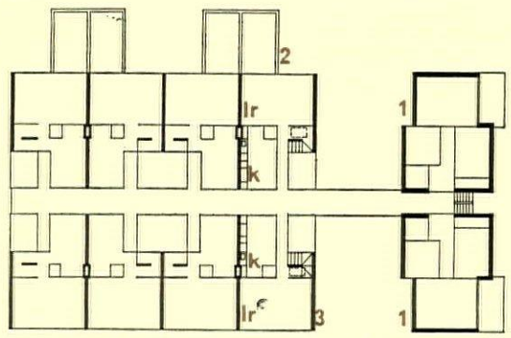
STRUCTURE R.c. frame for podium of garages, crosswalls over.

COST £800,000.

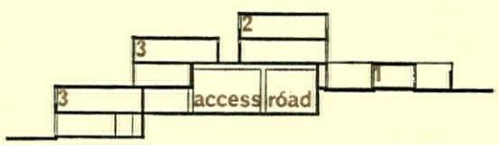
Group leader, M. Wilson. Job architect, J. Green. Assistant, M. Hendy. Quantity surveyor, Monk and Dunstone. Structural consultant, Ove Arup and Partners.



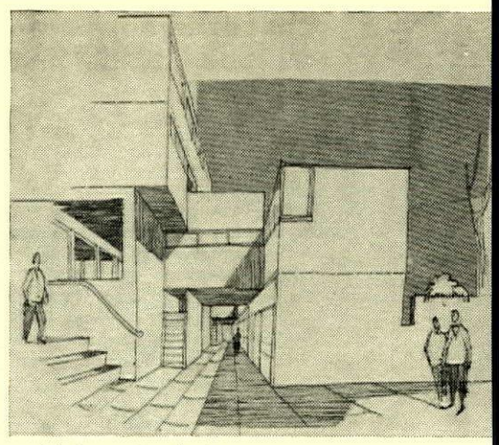
plan at level 5



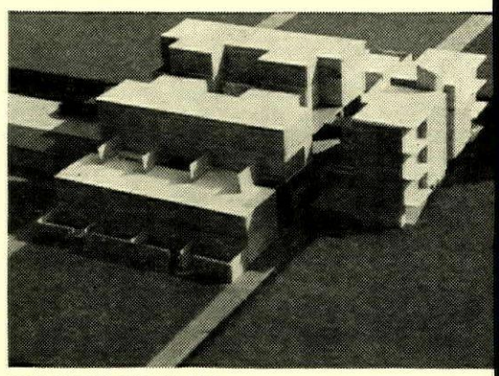
plan of maisonettes block, level 4: 1, 1-bedroom flat. 2, 3 bedroom maisonette. 3, 2-bedroom maisonette



cross section

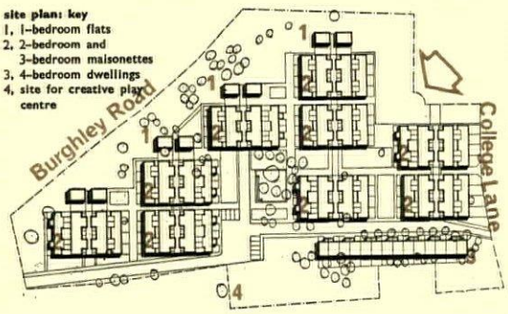


ground level entrance to maisonettes



model of typical maisonette block

site plan: key
1, 1-bedroom flats
2, 2-bedroom and 3-bedroom maisonettes
3, 4-bedroom dwellings
4, site for creative play centre



SUTTON HILL, DAWLEY, SHROPSHIRE

Ceri Griffiths, Chief Architect and Planning Officer

CLIENT Dawley Development Corporation.

SITE Phase 1a, 24 acres of agricultural land. None flat, slopes up to 1 in 20. Some good trees. 5.28 acres for 'urban way.'

ACCOMMODATION Phase 1a, 291 houses at 42.4 p.p.a., 4 basic units, 8 variations. 'Urban way,' 140 houses at 92.8 p.p.a., 6 basic units. Average density in area of 45–47 p.p.a.

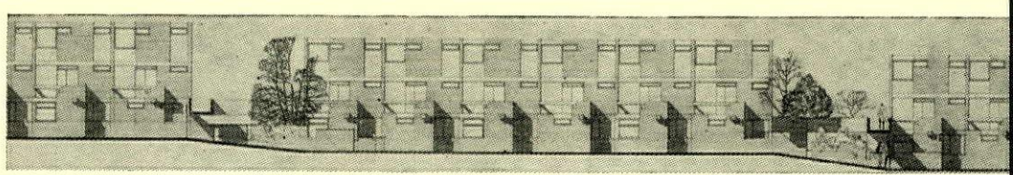
STRUCTURE Phase 1a, Mactrad construction with timber frame for internal and external structural walls. Brick party walls. Urban way, brick crosswalls at 18 ft. centres.

SERVICES Partial central heating to all dwellings. 50 per cent gas warm air, 50 per cent electrical warm air.

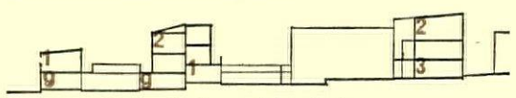
COST Phase 1a, £944,662. Urban way, £382,530.

CONTRACT Phase 1a, September 1966–August 1967. Urban way, January 1967–April 1968.

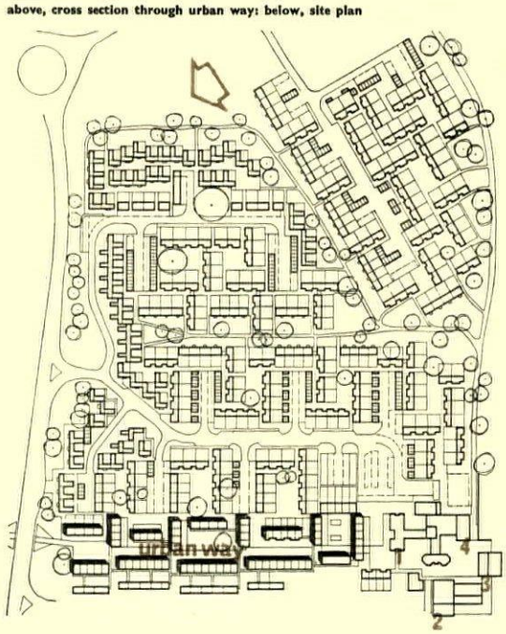
Deputy chief architect, D. G. Fenter. Group architects, R. Milton and A. D. Nicholls. Job architect, R. Brazier. Assistants, C. Bailey, D. Percival, J. Kirnig, R. Moore, D. Leyland, P. Stone and A. Senior. Chief quantity surveyor, J. F. Boyce. Chief engineer, L. Buckthorp.



part south-east elevation of urban way houses

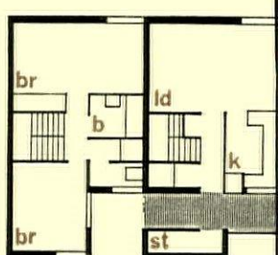


above, cross section through urban way: below, site plan



key to section
1, 2-person flat
2, 4-person maisonette
3, 1-person flat

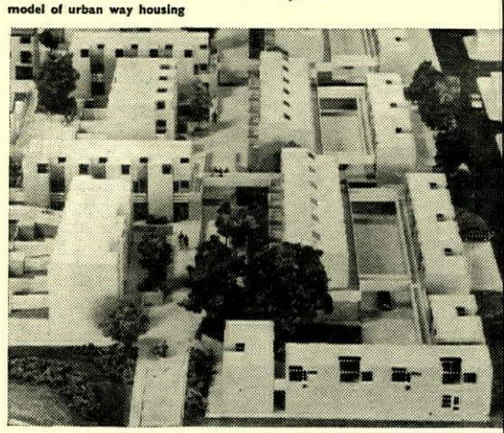
key to site plan
1, clinic
2, supermarket, shops
3, public house
4, community centre



second floor plan, urban way house

first floor plan

model of urban way housing



HOUSING

MASBRO ROAD, HAMMERSMITH, LONDON

Renton, Howard, Wood Associates

CLIENT Greater London Council.

SITE 0.9 acre of flat land, island site among 2-3 storey housing.

ACCOMMODATION 36 dwellings at 98 p.p.a. 24 2-room old people's flats, 12 4-room maisonettes.

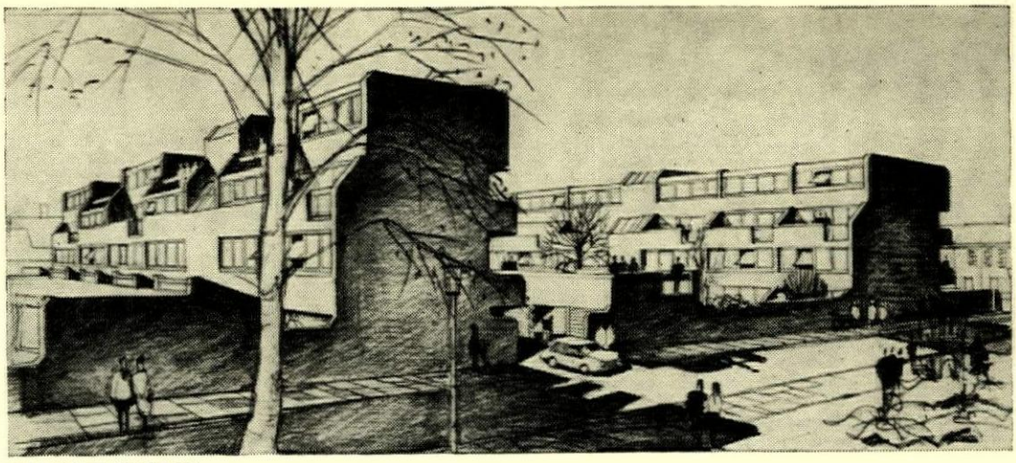
STRUCTURE Loadbearing brick with concrete floor slabs. Fairfaced brick and boarding with black solignum.

SERVICES Gas heating.

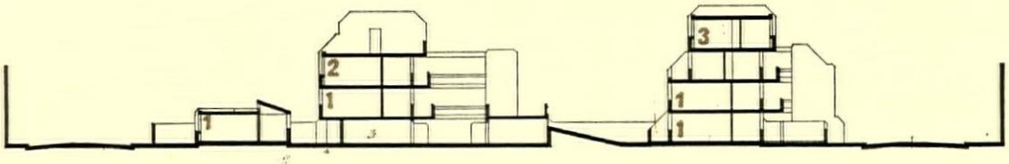
COST £148,600.

CONTRACT April 1967–June 1968.

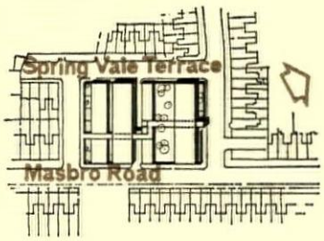
Partner-in-charge, Peter Howard. Associate-in-charge, Gerald Levin. Assistants, Derek Dredge and Alan Avery. Quantity surveyor, Gleeds.



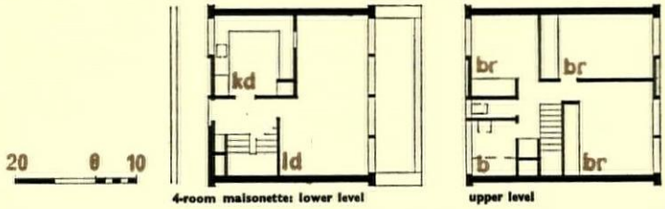
perspective from Masbro Road



south-north section:
key
1, 2-room old people's flats
2, 2-room flat
3, 4-room maisonette



site plan



4-room maisonette: lower level

upper level

WESTERN DEVELOPMENT AREA, CHELSEA, LONDON

Chapman, Taylor, Partners

CLIENT Cadogan Estate.

SITE 9.52 acres of existing residential properties in Tedworth Square area of Chelsea.

ACCOMMODATION 385 flats and 159 houses at 150 p.p.a. Flats of 1-8 rooms; houses of varying sizes. Three-storey garage for 294 cars.

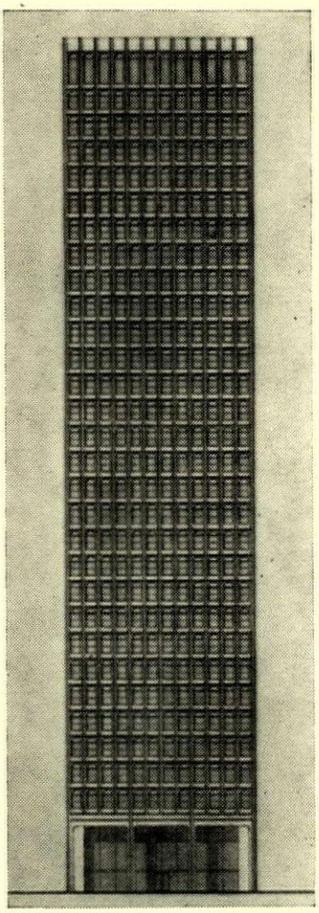
STRUCTURE R.c. frame with precast concrete cladding panels and aluminium sash windows.

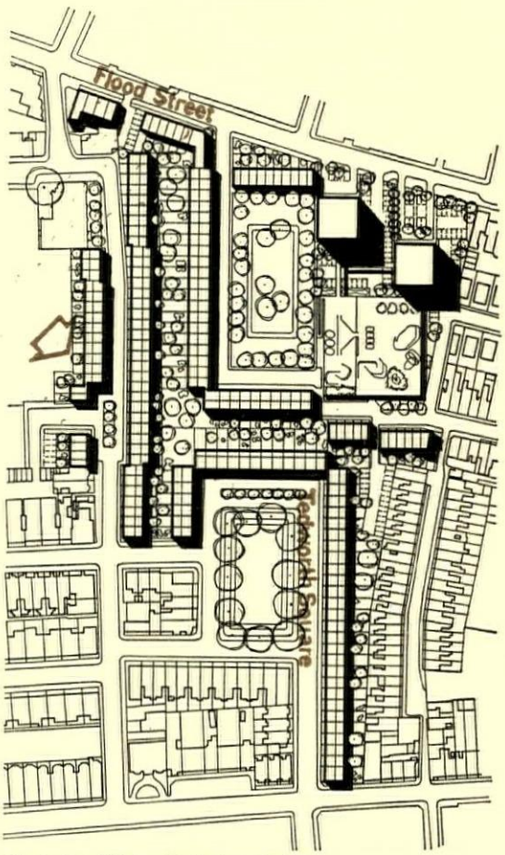
COST Phase 1, £1,250,000. Phase 2, £2,250,000.

Quantity surveyor, Gardiner and Theobald. Structural consultant, R. J. Crocker and Associates.

above, typical floor plan, 29-storey block:

key
1, 1-room flat
2, 2-room flat
3, 3-room flat
4, 4-room flat





left, elevation of 29-storey block: above, site plan

LEEK STREET, LEEDS, YORKS

Martin Richardson, Development Architect of Yorkshire Development Group in association with E. W. Stanley, City Architect

CLIENT Leeds City Council.

SITE 12.3-acre slum clearance area in Hunslet, with slight fall south-north. No trees.

ACCOMMODATION 440 dwellings at 147 p.p.a. 1-, 2- and 3-person flats and 4-, 5- and 6-person maisonettes, exact ratio on each site adjustable to demand. 1 : 1 garaging in multi-storey car parks and 50 per cent car parking next to lift towers. General store, public house.

STRUCTURE Large precast concrete panels on 3 ft. module weighing up to 8 tons, cast principally in site factories and erected with 90 ft. span gantry cranes. External panels of 8 in. sandwich construction with exposed aggregate finish. Cross walls at 18 ft. centres, papered direct. Solid 10 in. concrete party floors have foam-backed vinyl finish.

SERVICES Vertical prefabricated ducts incorporating warm air units.

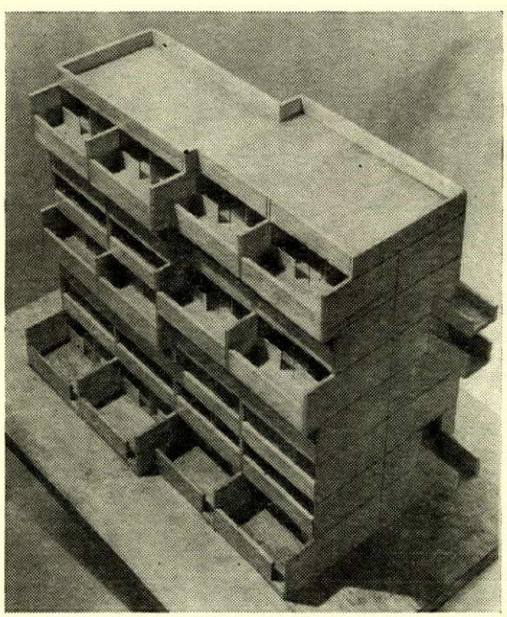
CONTRACT November 1966–March 1968. Quantity surveyor, Ernest R. Babbs and Sons. Structural consultant, Ove Arup and Partners. Services consultant, Shepherd Engineering Services Ltd.

Other YDG member cities are building schemes as part of the first programme using the YDG Mark 1 system.

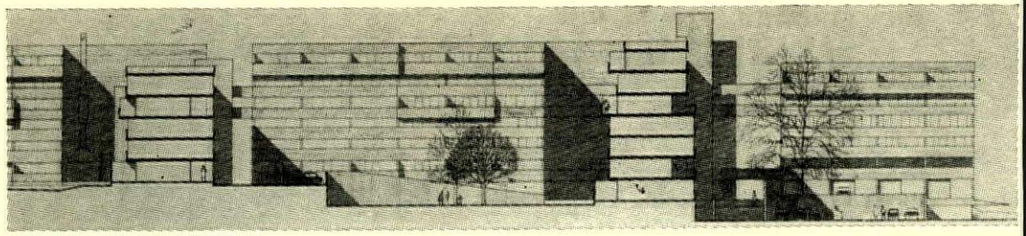
SHEFFIELD (W. L. Clunie, City Architect). 12.9 acres at Broomhall providing 650 dwellings at 157 persons per acre. starting May 1967.

NOTTINGHAM (David Jenkin, City Architect). 15 acres at Balloon Wood providing 645 dwellings at 167 p.p.a., starting December 1966.

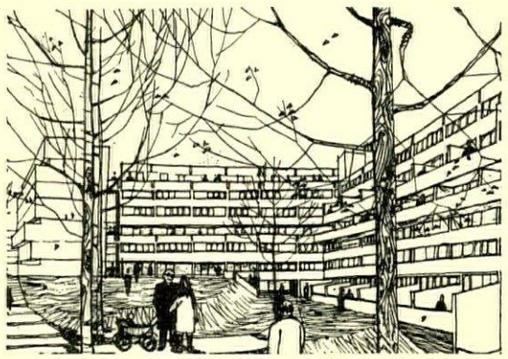
HULL (J. V. Wall, City Architect). 11.5 acres at Area 17 providing 550 dwellings at 196 p.p.a. starting February 1968.



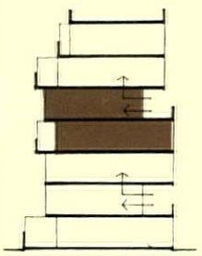
model of typical blocks



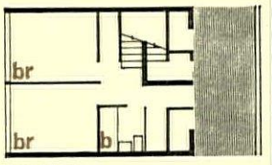
typical sectional elevation at Leek Street



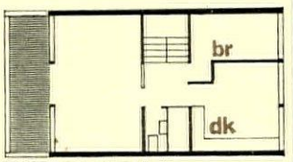
perspective of Leek Street scheme



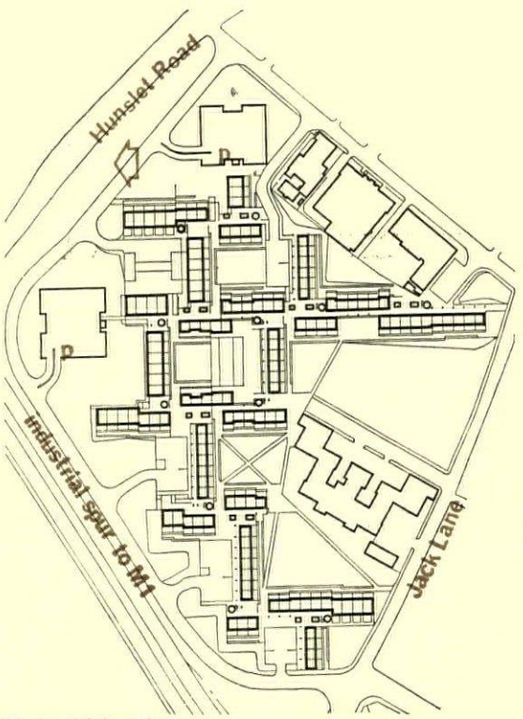
cross section through seven-storey block



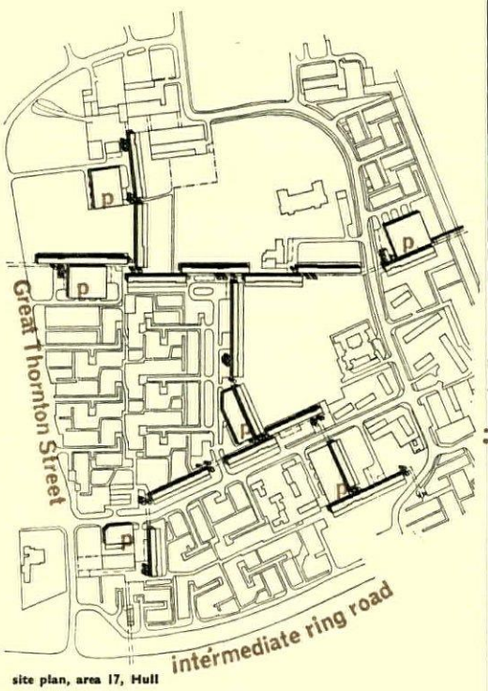
upper level



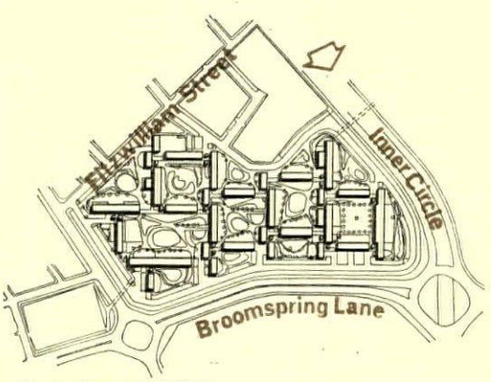
maisonette plan, lower level



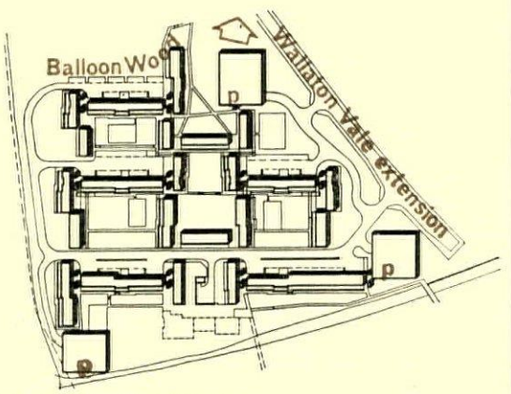
site plan, Leek Street, Leeds



site plan, area 17, Hull



site plan, Broomhall, Sheffield



site plan, Balloon Wood, Nottingham

CARBRAIN 13 AND 14, CUMBERNAULD, SCOTLAND

D. R. Leaker, Chief Architect and Planning Officer

CLIENT Cumbernauld Development Corporation.

SITE 14 acres in New Town, two areas separated by tree belt, on south-west edge of town, ten minutes walk from centre. Carbrain 13, 10 acres on two parallel east-west ridges, average slope of 1 in 12. Carbrain 14, 4 acres, partly flat, partly steep.

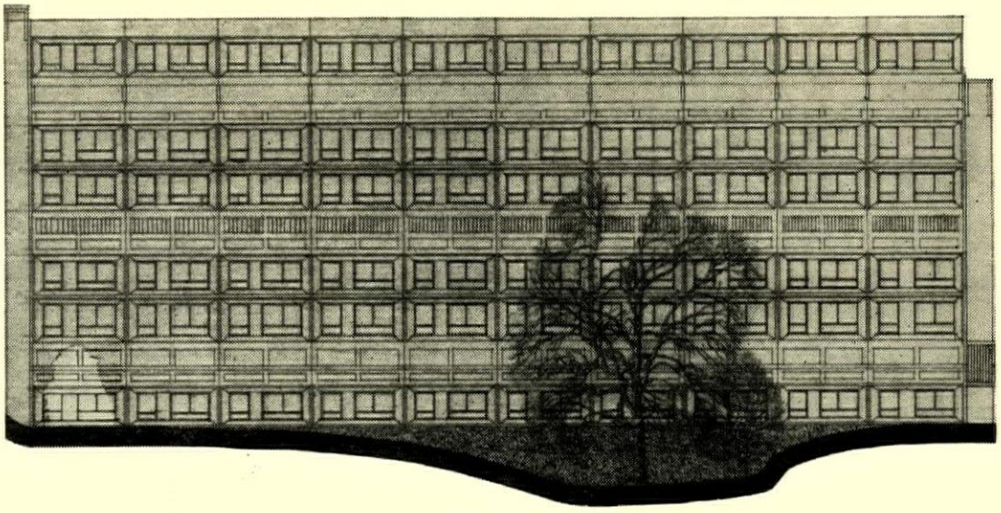
ACCOMMODATION 543 dwellings at 111.7 p.p.a. Split-level flats, 66 2-person, 245 3-person. Split-level maisonettes, 180 4-person, 52 5-person. Access decks on six levels with recessions for entrance halls and possibly for toddlers' play areas.

STRUCTURE Bison industrialized system with precast concrete structure and cladding panels.

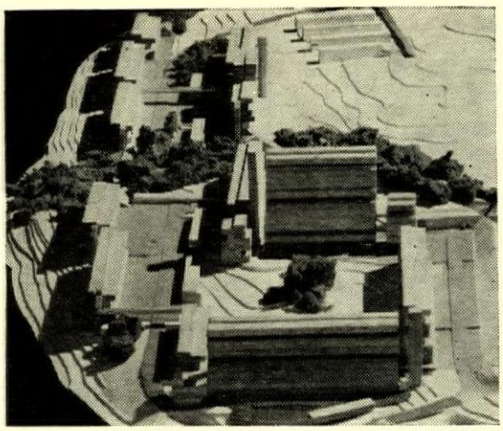
SERVICES Possible district heating scheme with part of Carbrain 12.

CONTRACT Starts early 1967.

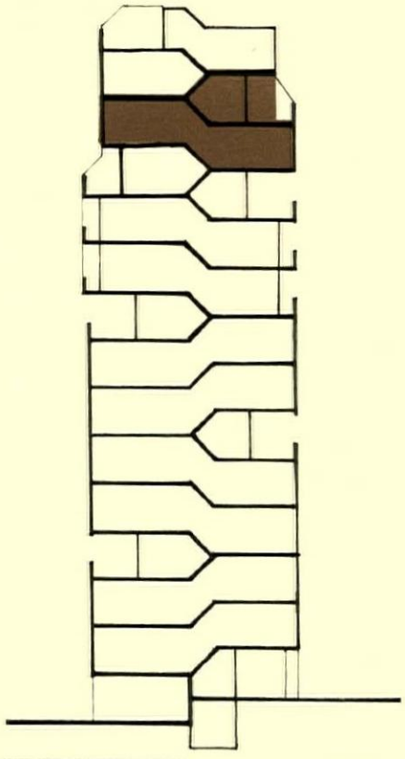
Group leader, H. Eccles. Team leader, C. Lobban. Assistants, J. Halliday, T. White, A. O'Neil and J. Oswald. Chief quantity surveyor, J. Simpson. Quantity surveyor, D. Davidson. Chief electrical engineer, T. Love.



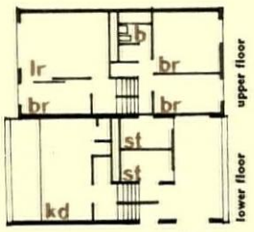
west elevation of block A



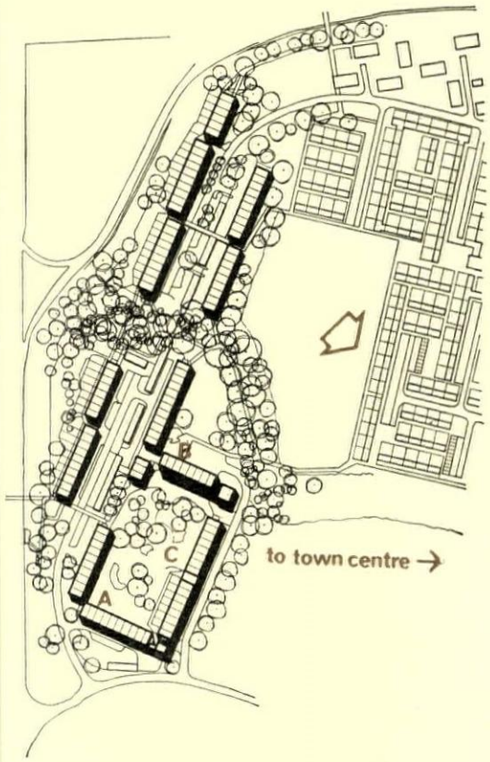
aerial view of model from south-east



cross section through block B

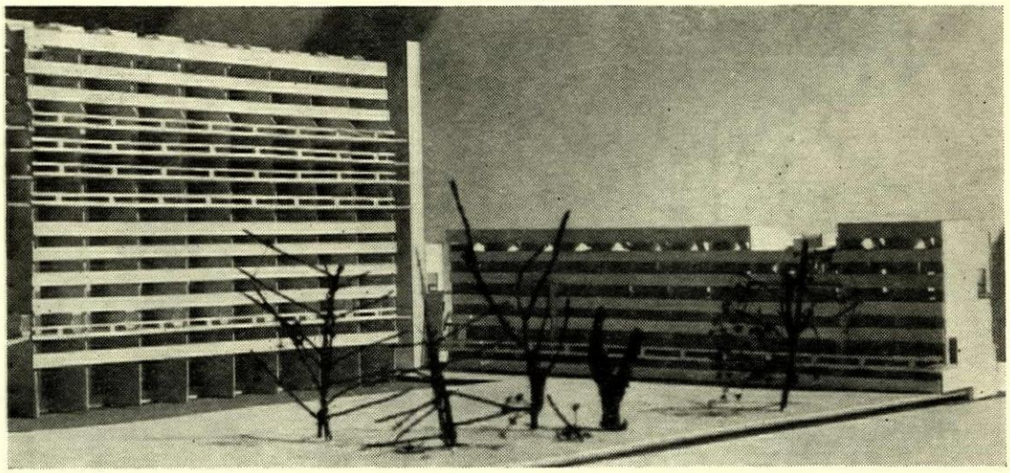


plan, 4-person maisonette, block B



site plan

model of blocks B (left) and C (right)



LITTLEHOLM, CLYDEBANK, SCOTLAND

John Vaughan, Burgh Architect

CLIENT Clydebank Town Council.

SITE 6.4 acres, flat ground in valley between Dalmuir Park and municipal golf course, rising to north and south.

ACCOMMODATION 249 dwellings at 100 p.p.a. 3 blocks of 16 storeys, each with 30 4-person flats and 53 2-person flats.

STRUCTURE R.c. frame and floors with precast cladding units, on an 8 ft. grid. All windows double glazed.

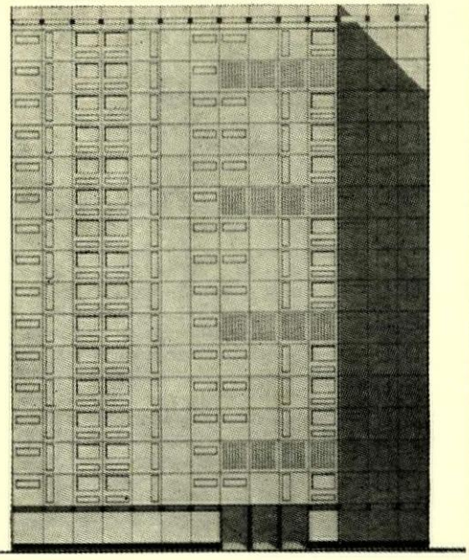
SERVICES Electric warm air heating system.

COST £1,150,000, including landscaping and garages.

CONTRACT Early 1967–mid 1968. Design team, R. J. Thomson, J. M. Wilson and C. G. Wilson.

typical floor plan

site plan



side elevation

RAVENSWORTH ROAD, DUNSTON, CO. DURHAM

The Owen Luder Partnership

CLIENT Whickham Urban District Council.

SITE 12 acres, flat, next to railway sidings.

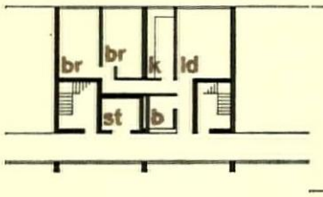
ACCOMMODATION 400 dwellings at 100 p.p.a. 119 3-bedroom, 77 2-bedroom, 4-bedroom, 63 2-bedroom, 3-person, 133 1-bedroom. Requirement for open space and poor soil conditions led to design of one high block. Parking beneath it for 100 cars.

STRUCTURE High block floated on 3-storey 14 ft. diameter caisson, enclosing spiral parking ramp. Main structural walls stand on radial beams, with buttresses distributing loads to caisson perimeter. In situ r.c. with possible precast elements. Precast lightweight panels for exterior.

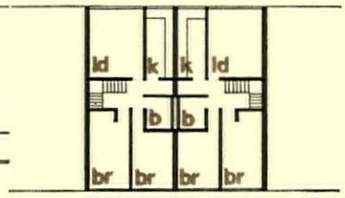
SERVICES Gas-fired warm air heating for each dwelling.

COST £1,350,000.

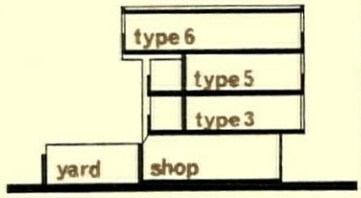
CONTRACT July 1967–July 1969. Partners, Owen Luder, R. Worthington, Rodney Gordon and Dennis Drawbridge. Associate-in-charge, Peter Abbott. Assistant, John Spohrer. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Mason, Pittendrigh and Partners.



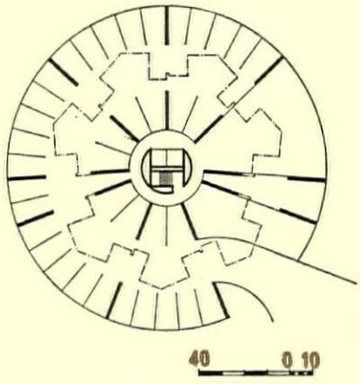
plan 2-bedroom 4-person flats (type 5)



plan 2-bedroom 4-person flats (type 6)



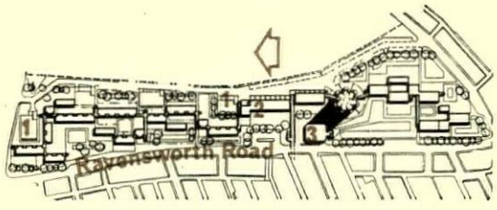
cross-section through low rise flats over shops



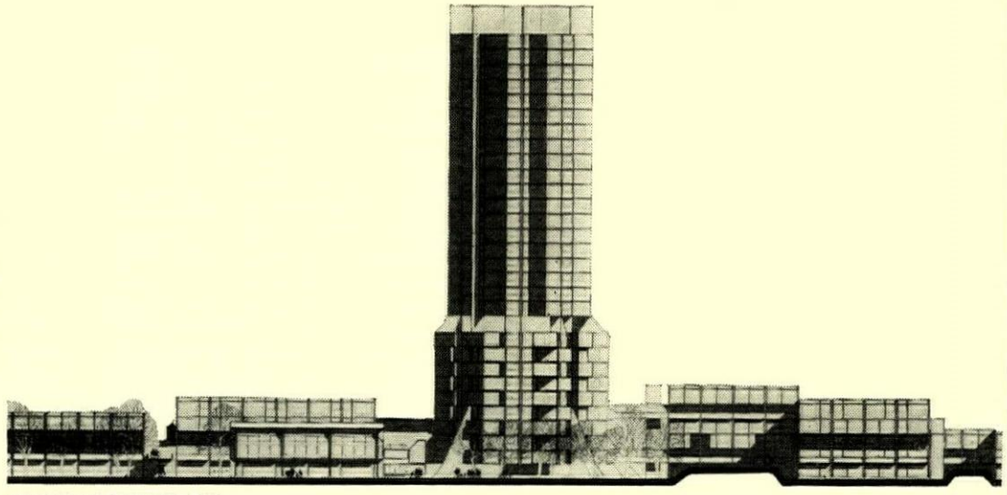
tower block: ground floor plan

plan floors 1-9: 2-bedroom 3-person flats

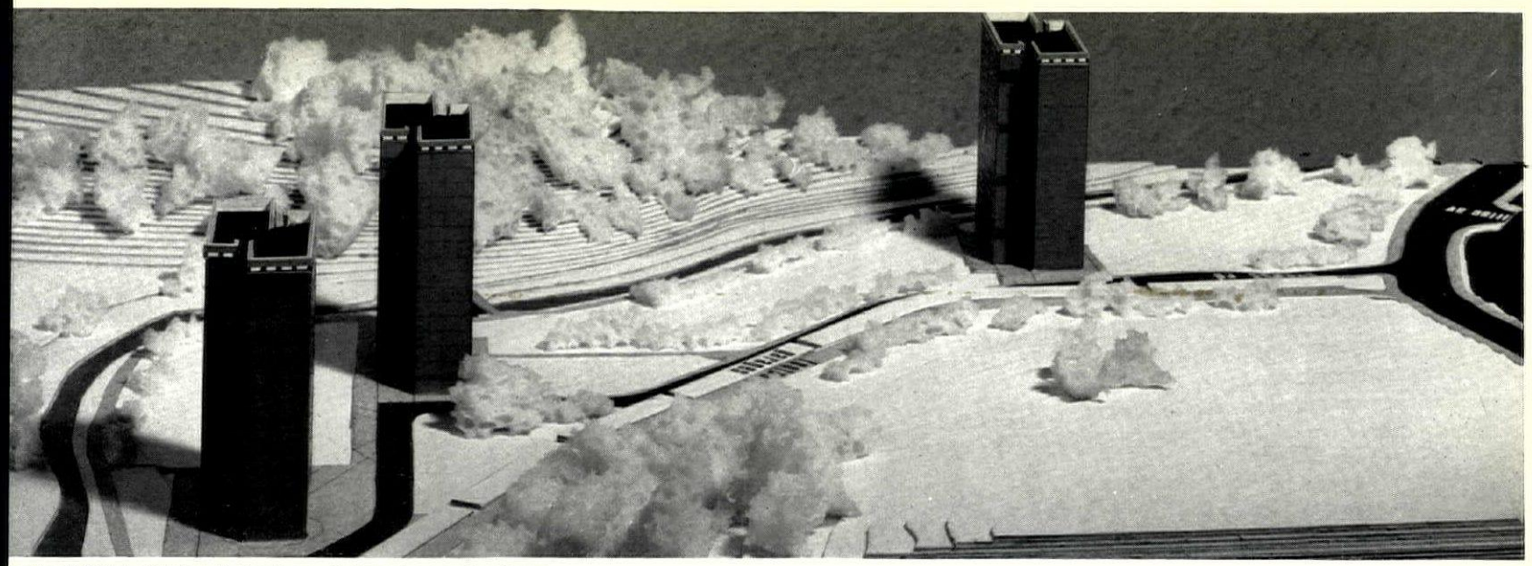
plan floors 10-28: 1-bedroom 2-person flats



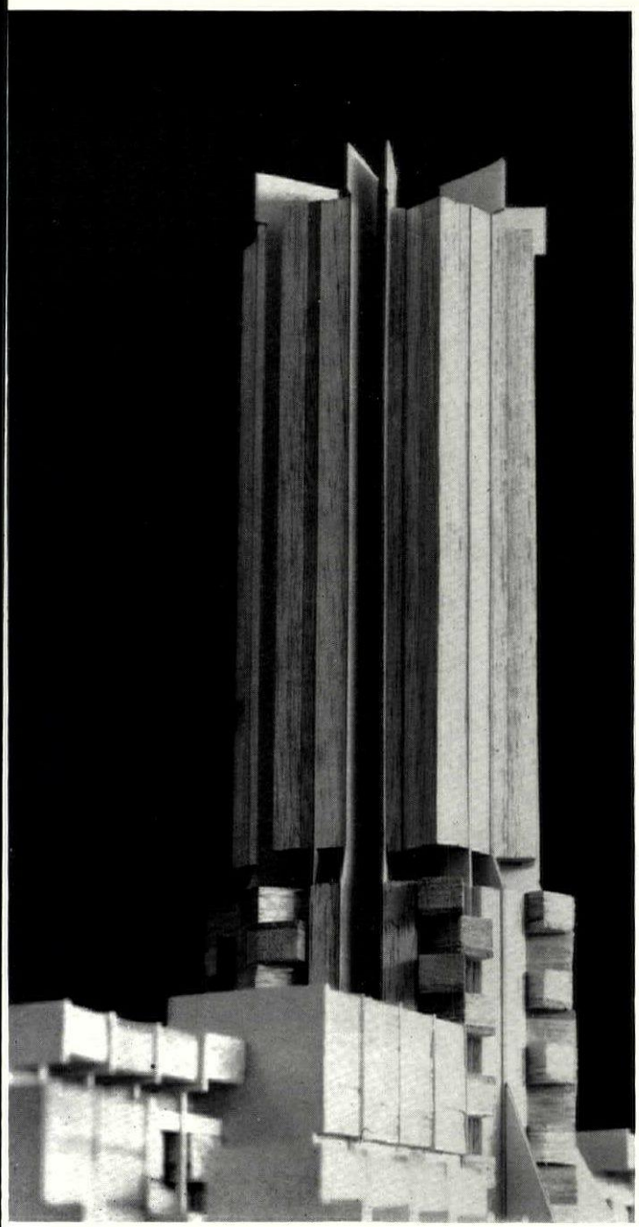
site plan: key
1, parking
2, shopping
3, social centre

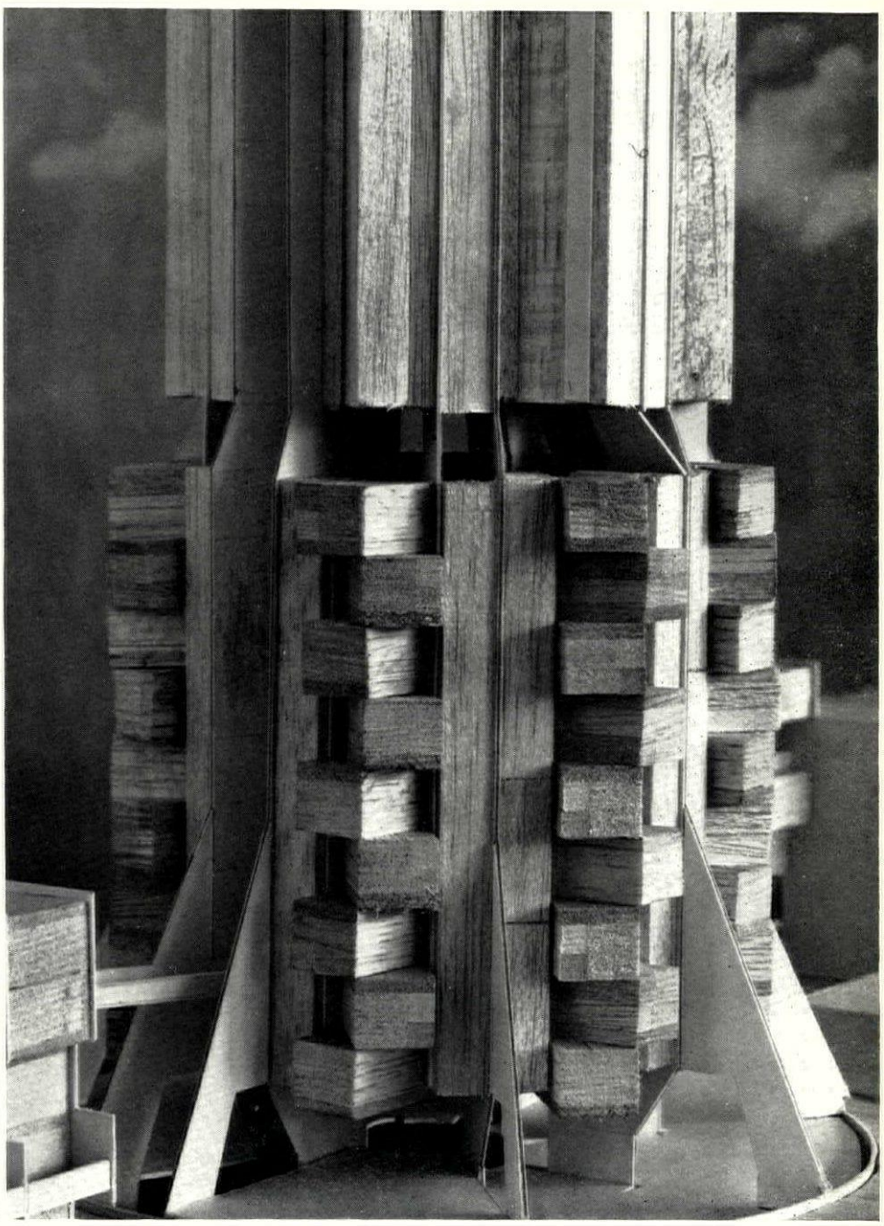


part elevation to Ravensworth Road



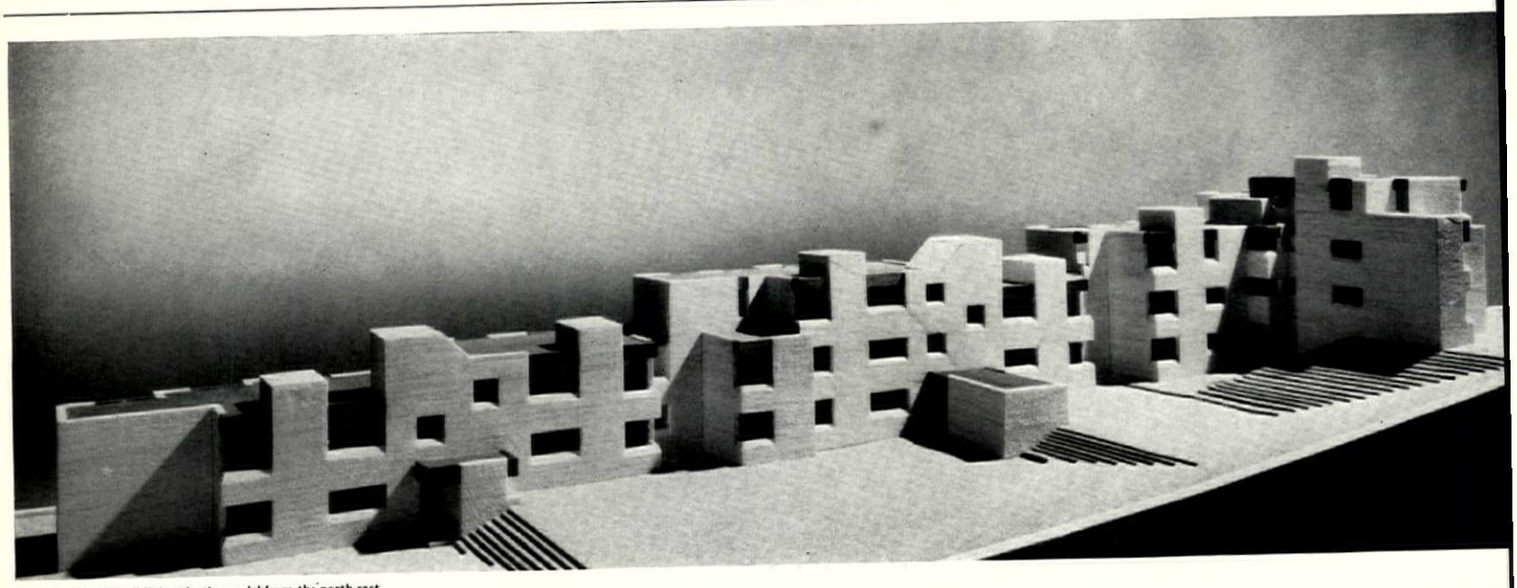
housing at Littleholm, Clydebank: the three 16-storey blocks seen from over the golf course



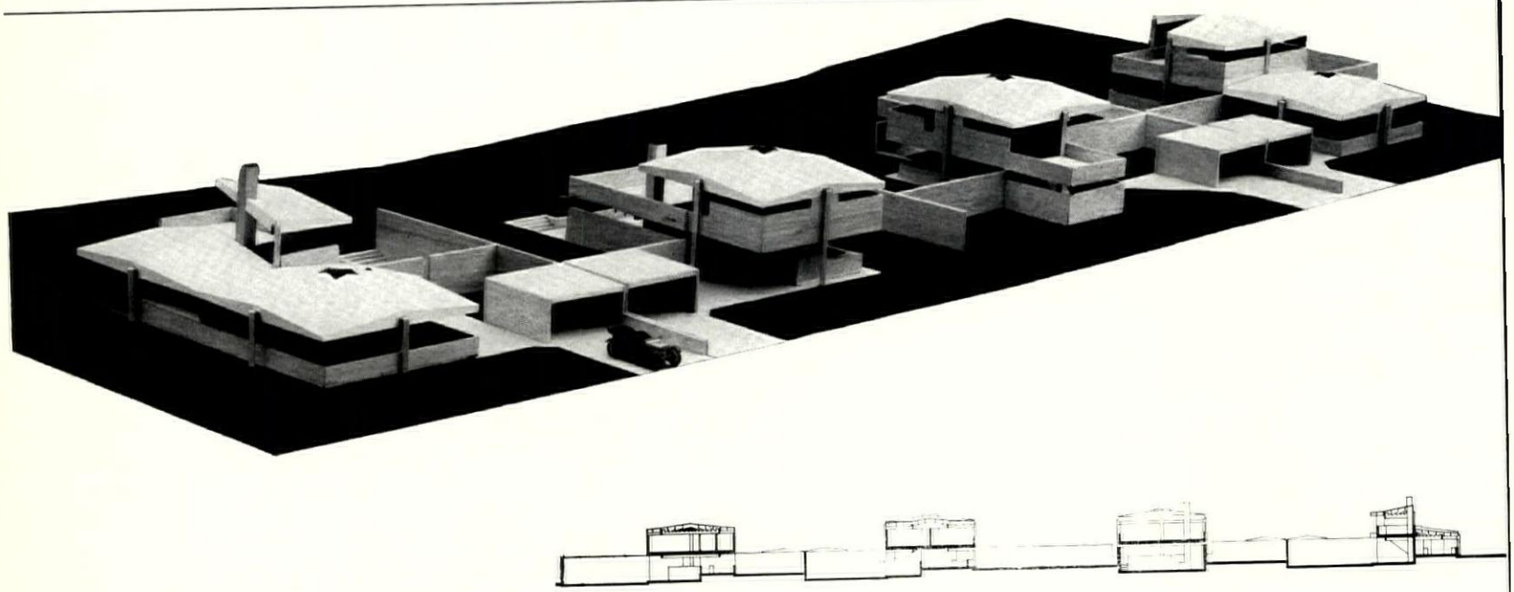


housing at Ravensworth Road, Dunston: left, model of the 29-storey point block from the south: right, the projecting 2-bedroom flats on floors 1-9 of the point block

housing at Field End Road, Hillingdon: the model seen from the south



hospital staff flats, Edinburgh: the model from the north-east



four houses at Wetherby Road, Leeds: above, the model from the north-east: below, west-east section

FIELD END ROAD, HILLINGDON, LONDON

The Austin Smith/Salmon/Lord Partnership in association with Thurston Williams, Borough Architect

CLIENT London Borough of Hillingdon.

SITE 7 acres at Eastcote, flat, with trees of five demolished houses.

ACCOMMODATION 126 dwellings at 67.5 p.p.a. 42 3-person flats and 84 4-person and 5-person maisonettes.

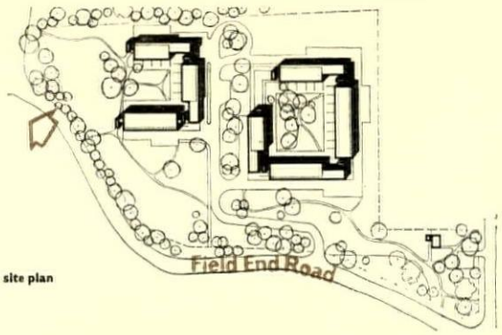
STRUCTURE Bison wall frame system, with white exposed aggregate panels. Aluminium windows and spandrels.

SERVICES Gas-fired ducted warm air heating.

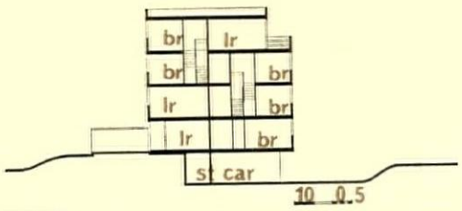
COST £570,689.

CONTRACT January 1967–February 1968.

Partner-in-charge, Peter J. Lord. Assistant-in-charge, Michael Aukett. Assistants, Peter Brown, Anne Douglas, Nigel Lane and Nicholas Tesdorf.

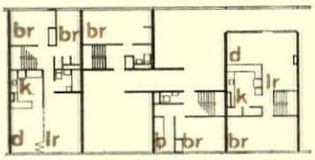


site plan



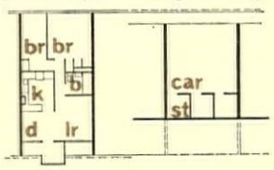
cross section

5-person maisonette
first floor plan second floor plan



second floor third floor plan
4-person maisonette

plans: 3-person flat
ground floor plan lower ground floor plan



HOSPITAL STAFF FLATS, EDINBURGH

Campbell and Arnott, in association with John Holt, Architect to the Board

CLIENT South Eastern Regional Hospital Board (Scotland).

SITE 6 acres, with average gradient of 1 in 7 and fine views of Pentland Hills.

ACCOMMODATION 14 flats, varied for different grades of staff of City Hospital.

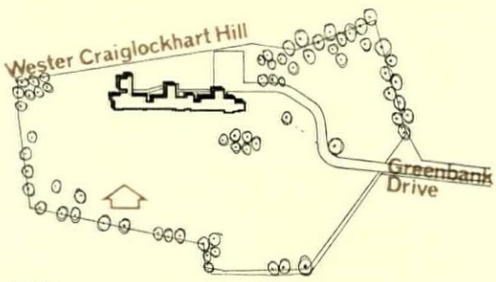
STRUCTURE Loadbearing brick external walls and crosswall, with aluminium or copper flashings.

SERVICES Underground hot water main from hospital to calorifier feeding hot water radiators in all flats.

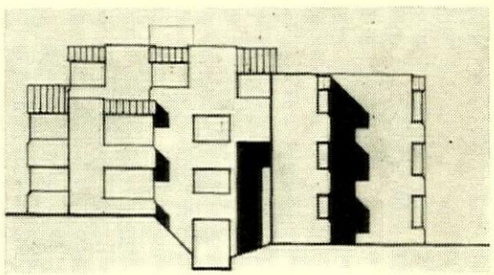
COST £64,000.

CONTRACT Summer 1967—spring 1968.

Partner-in-charge, J. E. Arnott. Quantity surveyor, R. C. Crilly. Services consultant, Hulley and Kirkwood.

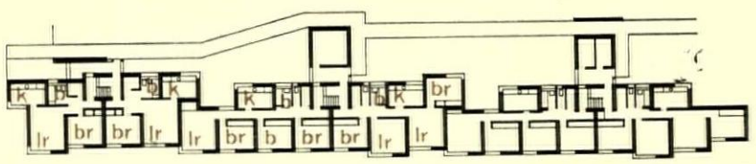


site plan



west elevation

first floor plan



ground floor plan

WETHERBY ROAD, LEEDS, YORKS

Derek Walker and Architects' Design Group

CLIENT Messrs. Peters and Bolton.

SITE 1.5 acres, wooded and flat.

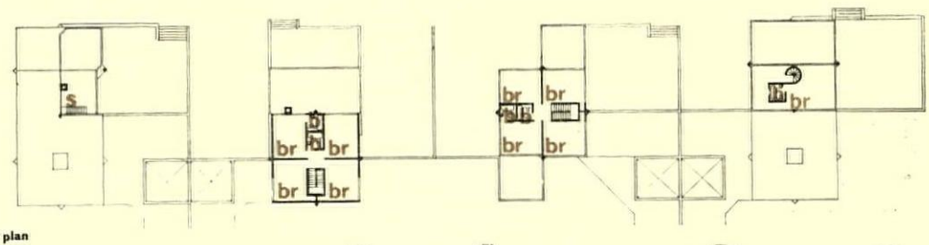
ACCOMMODATION Four houses, each containing living, dining, kitchen, laundry, hall, 4 bedrooms, 2 baths, double garage.

STRUCTURE R.c. posts and diagonal ring beam, supporting butterfly timber roof members with ply surface membrane; white neoprene roofing finish. White gault brickwork exposed internally, with white tile floor finish.

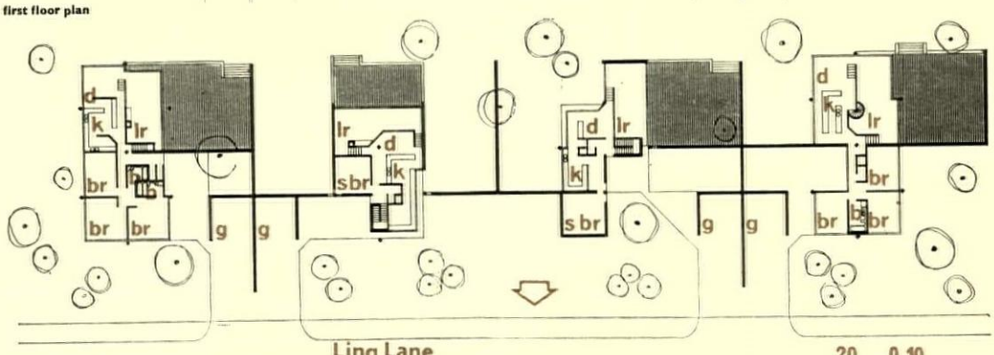
SERVICES Gas-fired blown air heating.

CONTRACT April 1967–April 1968.

Associate-in-charge, D. Benneworth. Assistants, B. Mawtus and P. Kellett. Structural consultant, Hennessey, Chadwick, O'Hcocha and Associates.



first floor plan



ground floor plan

HOUSING

FURNACE GREEN, CRAWLEY, SUSSEX

Peter Phippen and Associates

CLIENT Coastal Counties Housing Society Ltd.

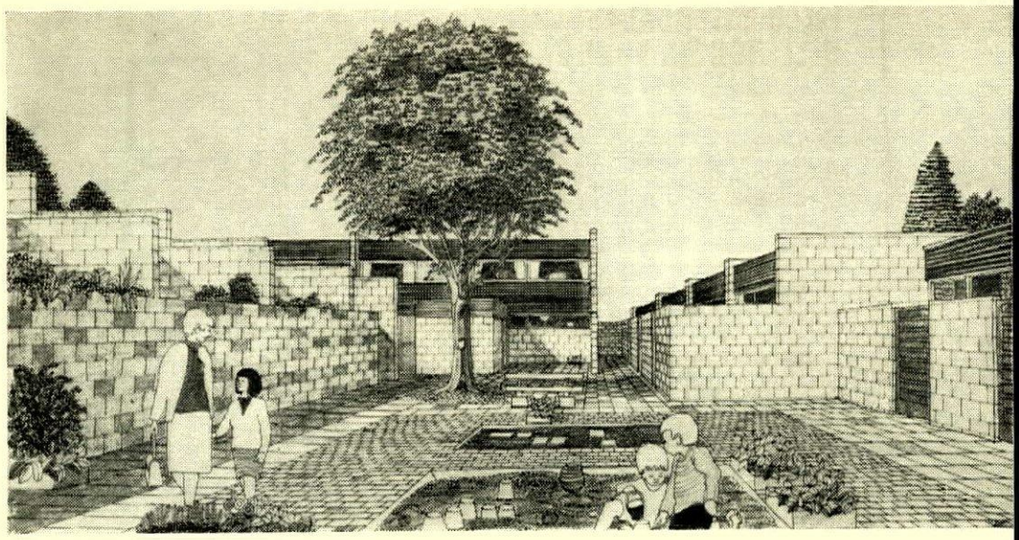
SITE Maiden Bower Drive, next to A23, on south-east boundary of New Town. Gentle slope to north, Tilgate Forest to south, rough woods on west.

ACCOMMODATION 129 houses in all. Phase 1, illustrated in AR Preview, 1965. Phase 2, 20 2-bedroom maisonettes, 4 3-bedroom maisonettes. 19 ft. frontages in three sectional arrangements.

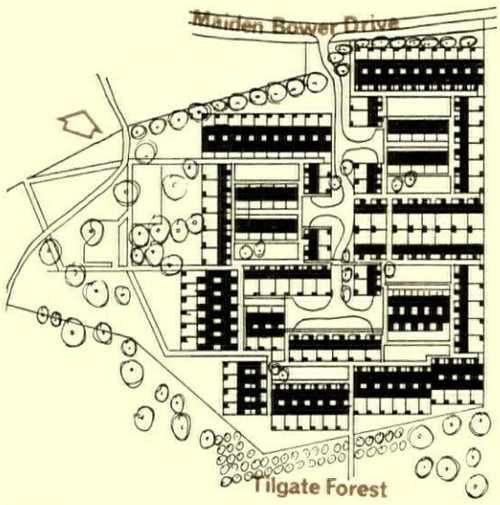
STRUCTURE Pale buff concrete blocks for party walls. Timber boarding for infill walls treated with dark solignum.

COST Total, £500,000.

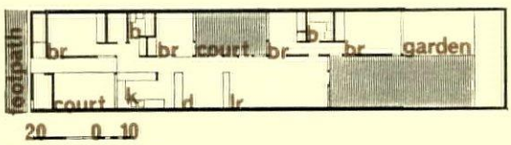
CONTRACT Summer 1967–spring 1969. Partners, Peter Phippen, Peter Randall and David Parkes. Assistants, R. T. Harris and N. Wakenham. Quantity surveyor, Degerdon and Partners.



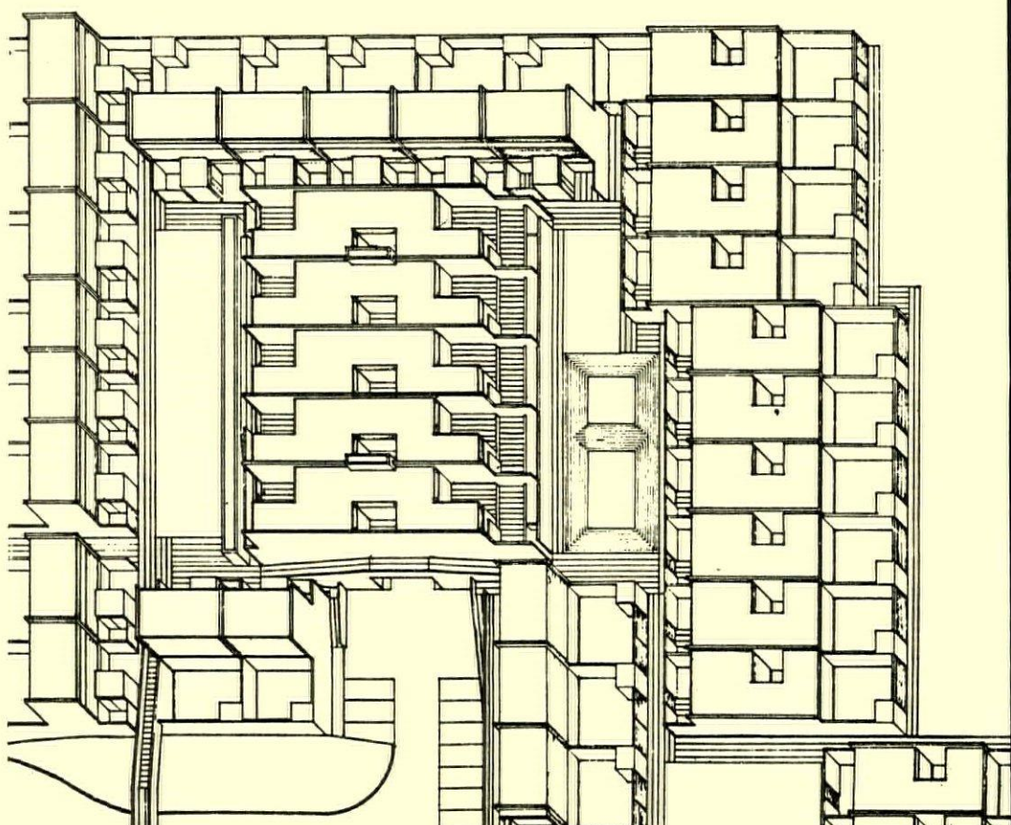
play area, with maisonettes beyond and patio houses right



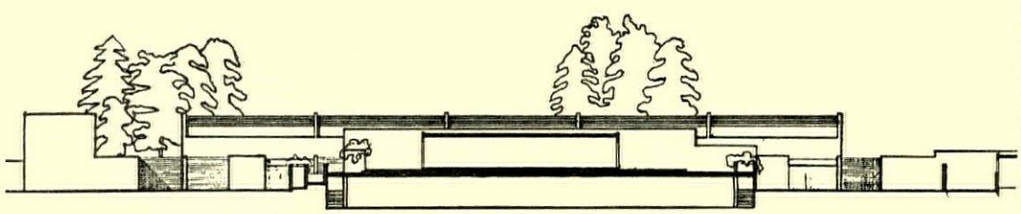
site plan



plan, 4-bedroom patio house



axonometric of typical cluster

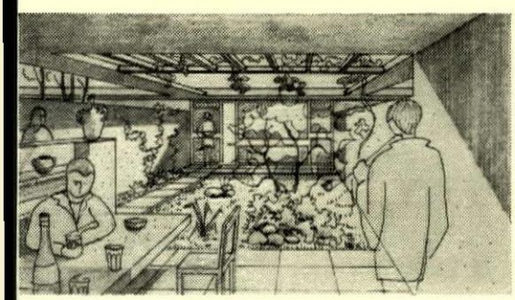


long section through typical cluster (patio houses with parking under)

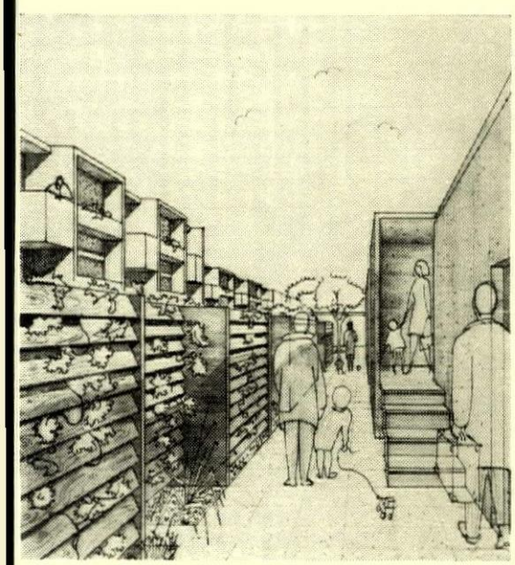
PARK HILL VILLAGE, CROYDON, LONDON

Atelier 5

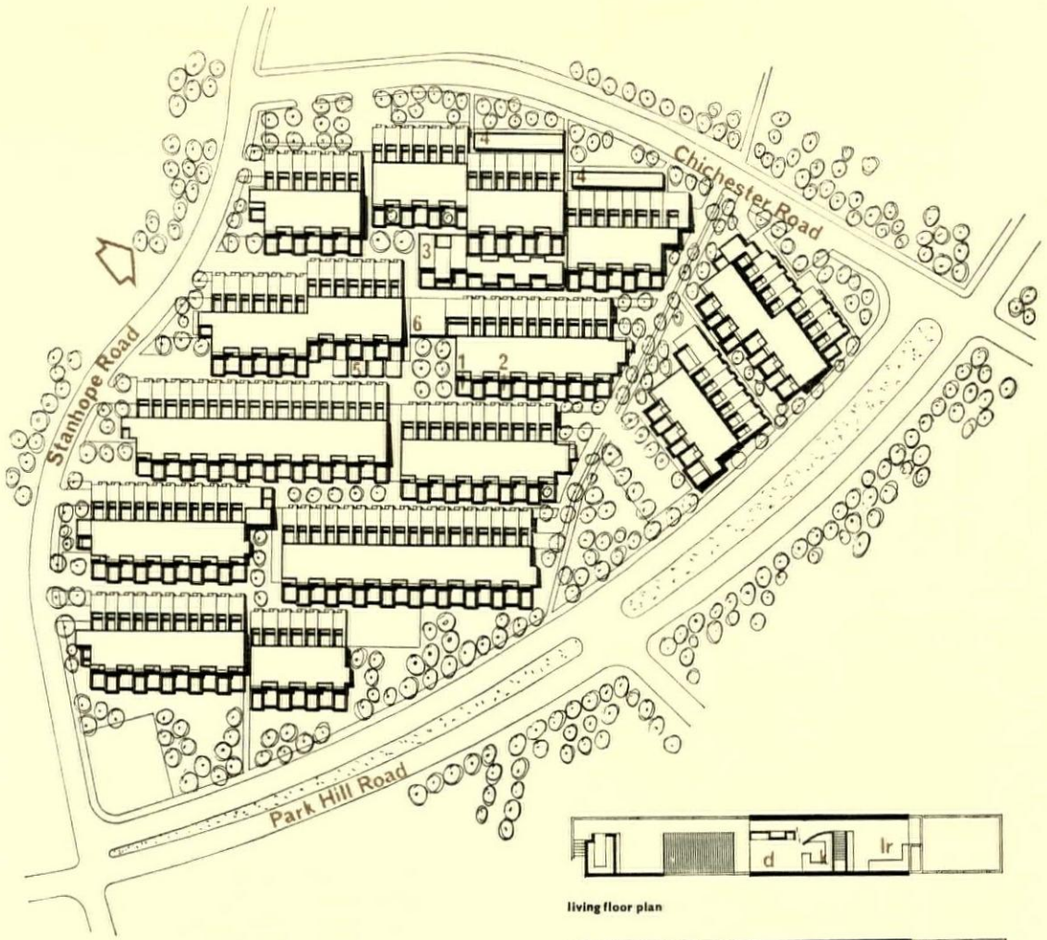
CLIENT	Wates Built Homes Ltd.
SITE	Island site of 10.5 acres in Park Hill Road, falling steeply from north-west to south-east. Part of 140-acre Wates development.
ACCOMMODATION	169 houses at 53 p.p.a. 4 different types. 1 : 1 garaging. 76 off-street parking spaces.
STRUCTURE	Brick crosswalls, normal finishes.
COST	Houses for sale, £8,000–£10,000 freehold.
CONTRACT	Early 1967–autumn 1968.



internal garden seen from the dining area

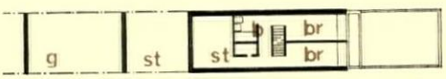


above, pedestrian way between houses: below, cluster of houses and covered play area

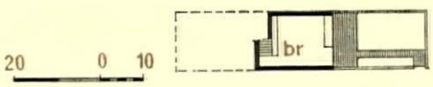


site plan: key
1, 4-bedroom house
2, 3-bedroom house
3, 1-2 room houses
4, club
5, covered play area

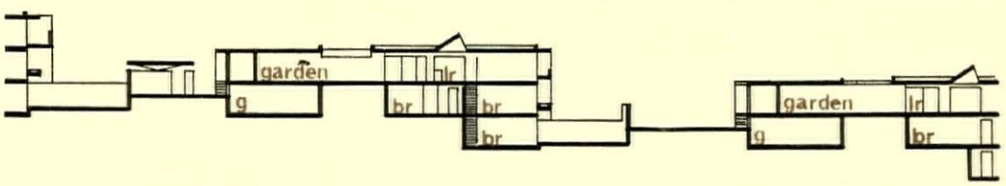
living floor plan



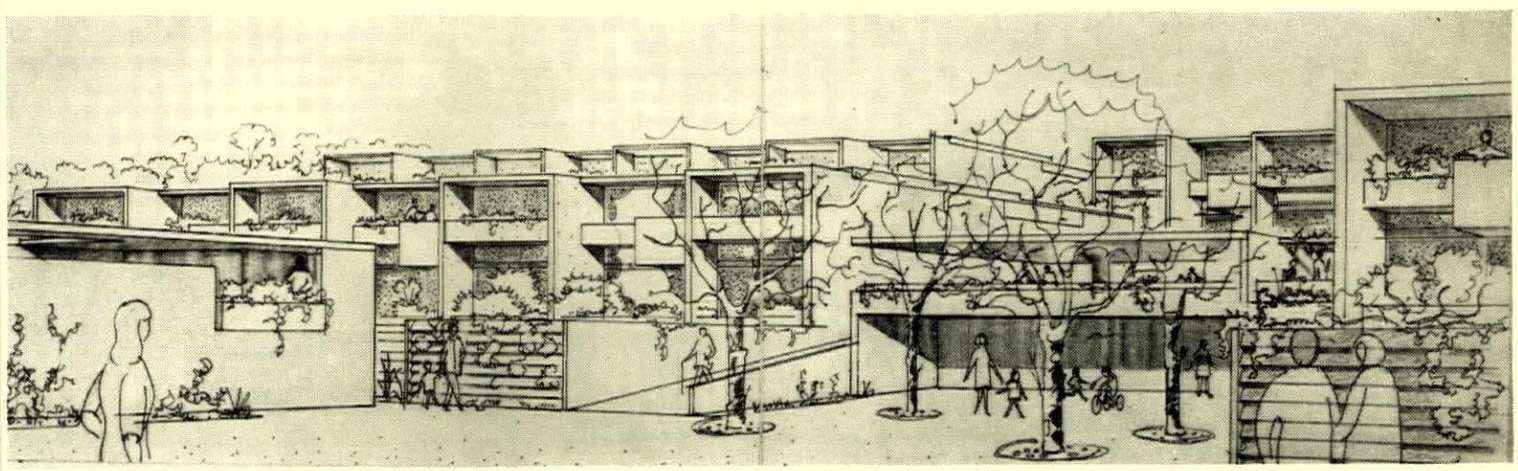
bedroom floor plan



garden floor plan, 3-bedroom house



long section



HOUSING

FOUR HOUSES, CHARLBURY, OXON

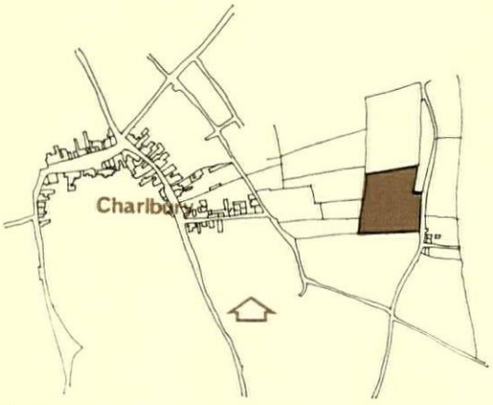
Stout and Litchfield

CLIENT Studley Properties Ltd.

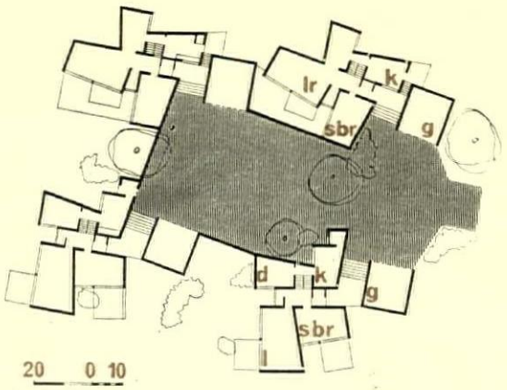
SITE South-facing slope of valley in rural area.

ACCOMMODATION 3 bedrooms, study-bedroom, living room, dining room and kitchen per house.

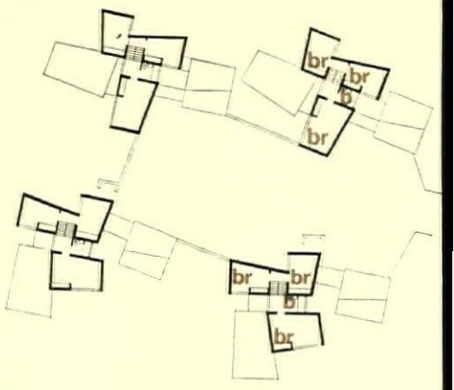
STRUCTURE Loadbearing walls with pebble dash finish and natural slate roofs.



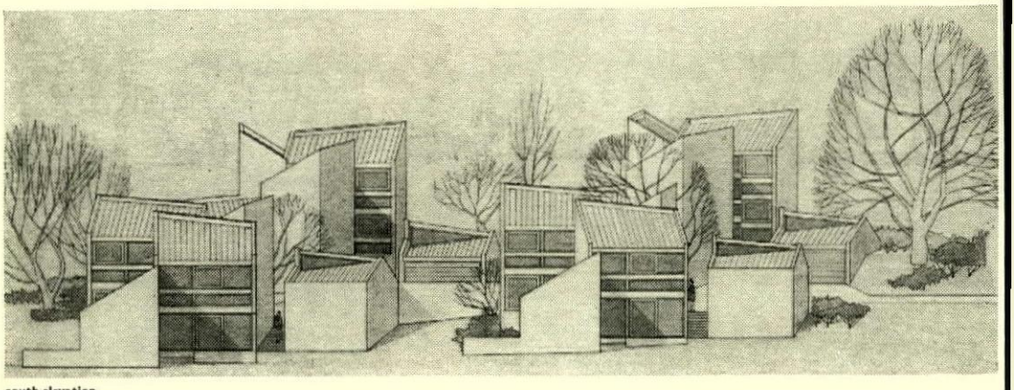
site plan



ground floor plan



first floor plan



south elevation

HOUSE, LETCHWORTH, HERTS

Peter Foggo and David Thomas

CLIENT Mr. Ash Rigby.

SITE Open land next to golf course, owned by Garden City Corporation.

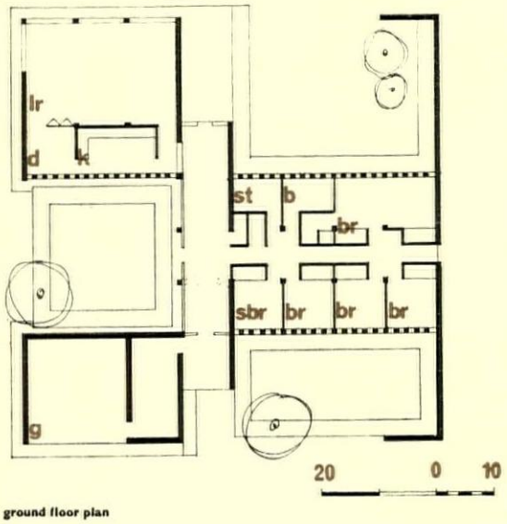
ACCOMMODATION Living, dining, kitchen, two bathrooms, five bedrooms, double garage.

STRUCTURE Timber roof beams at 9 ft. centres supported on brick piers and walls. Pine boarded ceiling throughout. Timber Partitions. Red-brown facing bricks.

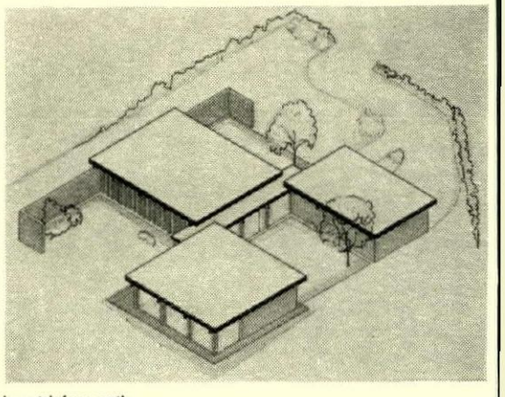
SERVICES Warm air ducted heating.

COST £10,000.

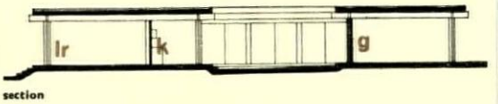
CONTRACT March–November 1967. Mechanical consultant, Max Fordham.



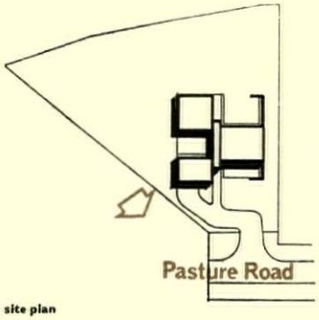
ground floor plan



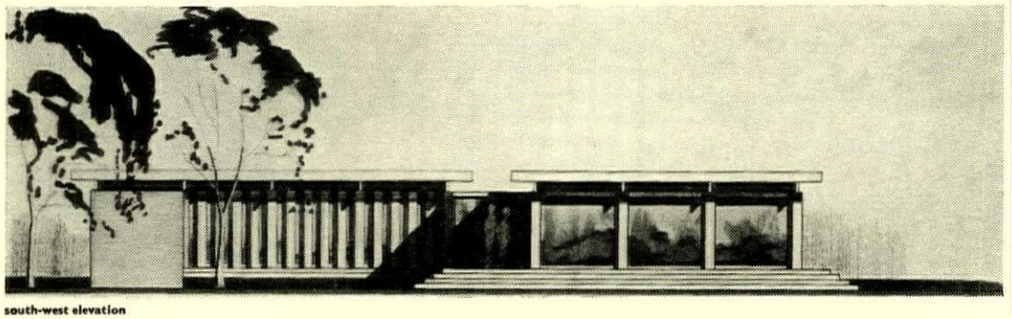
isometric from south



section



site plan



south-west elevation

HOUSING

ARCHITECT'S HOUSE, HIGHGATE, LONDON

John Winter

CLIENT The architect.

SITE Garden of Victorian house, 9 ft. above Swains Lane.

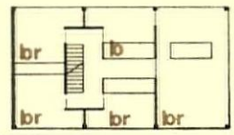
ACCOMMODATION Private house with 5 bedrooms.

STRUCTURE Steel structure, uncased externally. Storey height glazing with vertically pivoted metal opening panels.

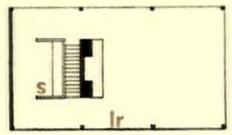
SERVICES Underfloor heating from gas-fired boiler.

CONTRACT March–September 1967.

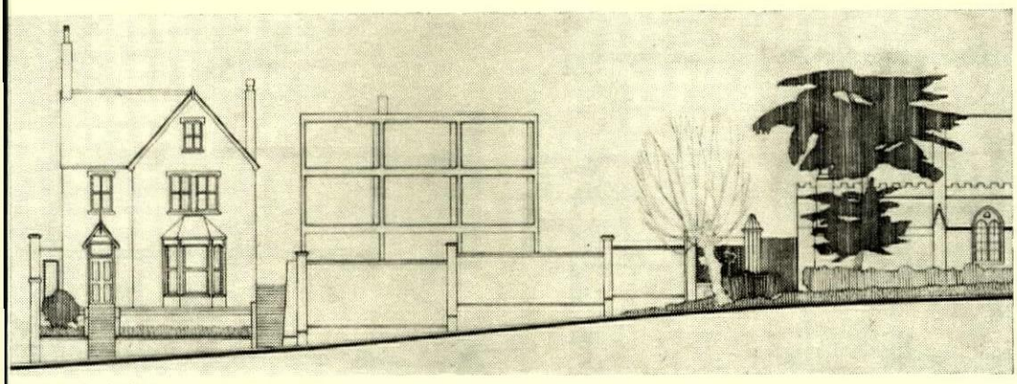
long section

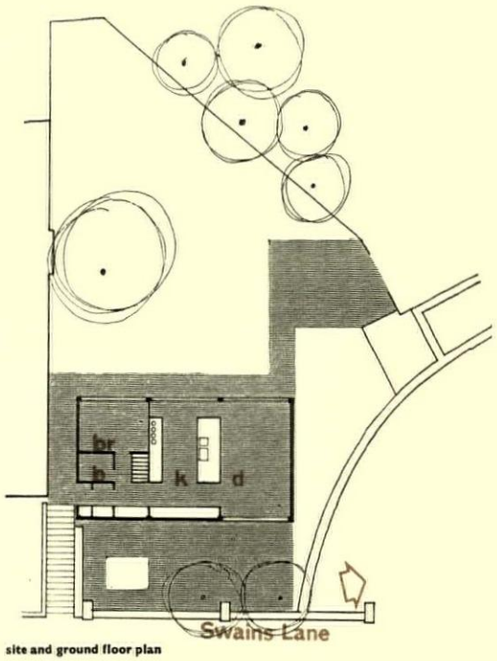


first floor plan



second floor plan


elevation to Swains Lane



site and ground floor plan

ARCHITECT'S HOUSE, CHELSEA, LONDON

Kit Evans

CLIENT The architect.

SITE Bombed gap in Victorian terrace.

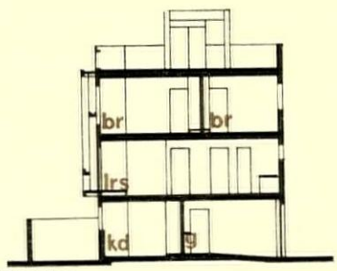
ACCOMMODATION Kitchen/dining, living/study, 2 bedrooms, bathroom, garage, washroom and store.

STRUCTURE London stock calculated brick walls, timber floors and windows. Quarry tile ground floor.

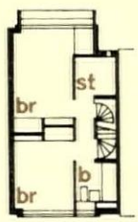
SERVICES Gas heating.

COST £7,500.

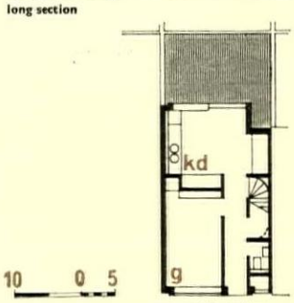
CONTRACT November 1966–August 1967. Structural consultant, Anthony Hunt and Partners.



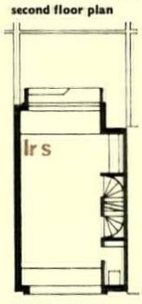
long section



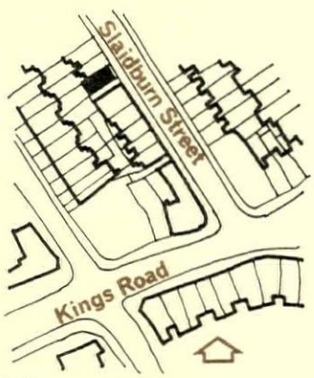
second floor plan



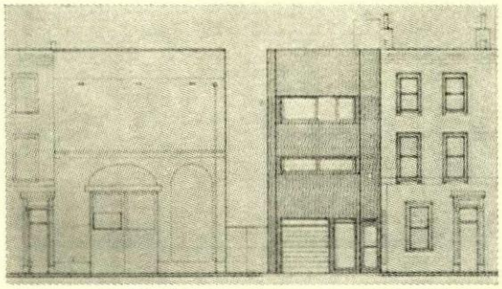
ground floor plan

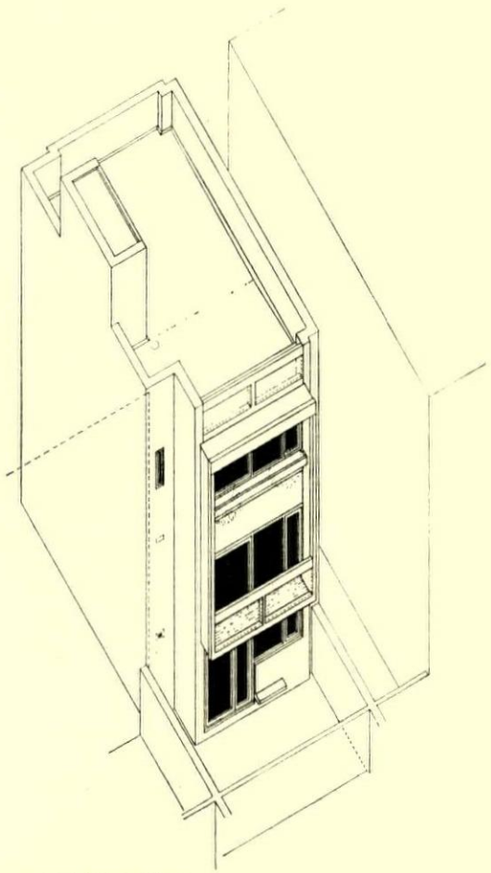


first floor plan



site plan


elevation to Slaidburn Street


axonometric of rear of house

PRIVATE HOUSE, CAMPDEN HILL, LONDON

Tom Kay

CLIENT Mr. J. C. R. Bailey.

SITE Demolished end house of early nineteenth century terrace of cottages in Kensington Place.

ACCOMMODATION 3 bedroom house, 1,750 sq. ft.

STRUCTURE Externally, fairfaced blue engineering bricks, used internally in circular staircase, living room gallery. Brick tile floors.

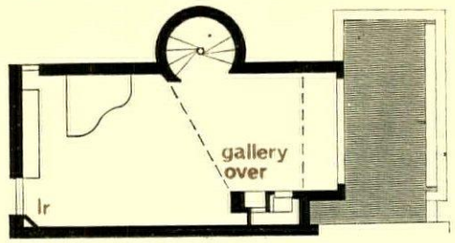
SERVICES Gas-fired boiler serving fan convector heaters.

COST £16,000.

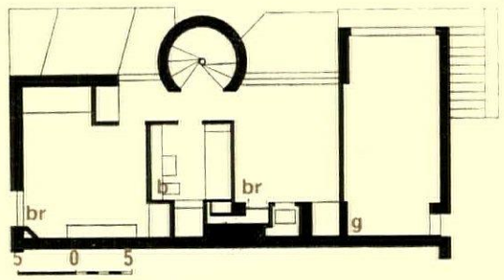
CONTRACT August 1966–March 1967.

Quantity surveyor, Nigel Rose and Partners. Structural engineer, Herbert Heller.

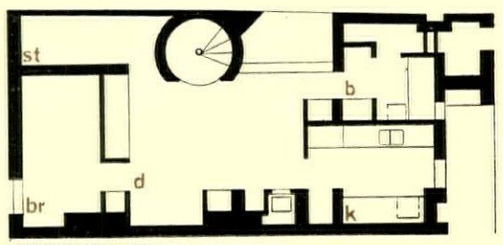
site plan



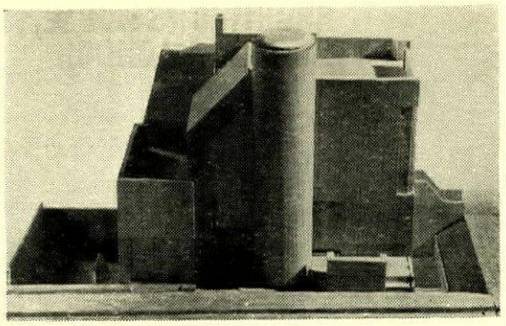
first floor plan

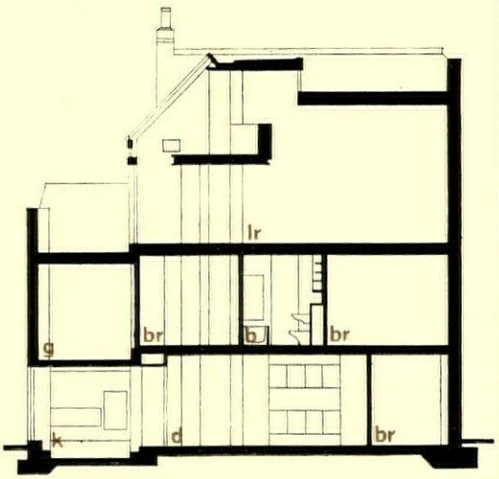


ground floor plan



lower ground floor plan


the model from Hillgate Street



section

ARCHITECT'S HOUSE, KENTISH TOWN, LONDON

Howard and Pank

CLIENT Mr. Philip Pank.

SITE Gardens of two existing nineteenth century houses in Torriano Cottages.

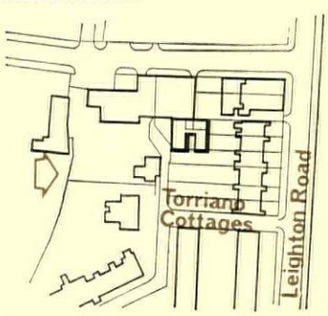
ACCOMMODATION Four-bedroom house, 1,568 sq. ft.

STRUCTURE Rigid bolted hardwood jarrah frames, supporting roof joists to outside and enclosing non-loadbearing Crowborough stock brick walls around perimeter. Open joisted ceiling of tongued and grooved boarding. All internal walls of fairfaced brickwork. Loliondo strip floor.

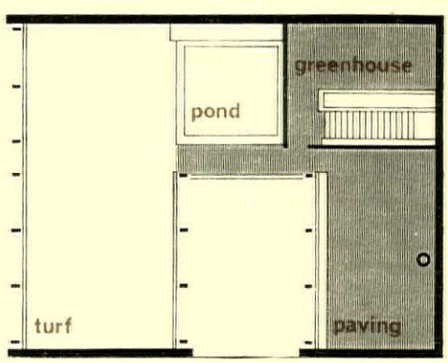
SERVICES Gas-fired boiler for warm air heating.

CONTRACT June 1966–March 1967.

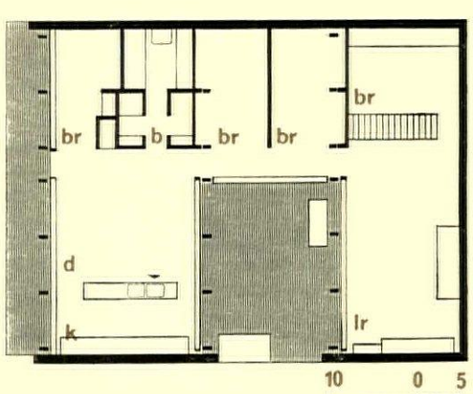
Structural consultant, Herbert Heller. Mechanical consultant, Max Fordham.



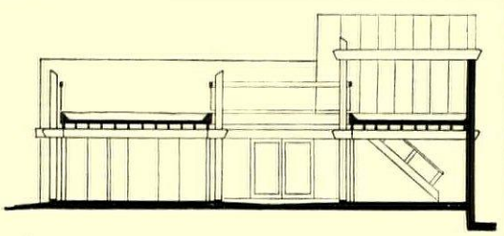
site plan

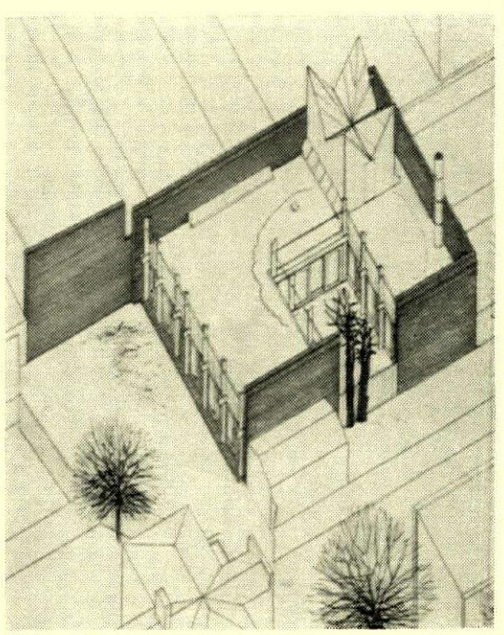


roof plan



ground floor plan


section


axonometric from south-east

HOUSING

PREVIEW 67

The new universities are now emerging from their enticing block models into the cold light of built detail. In this issue, the most recent drawings of the University of Surrey can be seen to show interesting variations on the theme which Building Design Partnership stated in their first report (AR, February 1965). Other buildings must also be seen in the context of a previous comprehensive scheme: Sheppard's massive Brunel lecture theatres, ACP's chemistry building at Imperial College, BDP's first stage laboratories at Bradford (with an interesting separation of inner structure from outer frame). There is bound to be greater concentration in the next few years on such actual environments and not simply the academic diagrams.

Ralph Erskine's graduate community of Clare Hall at Cambridge therefore comes at a particular opportune moment, as he has in Sweden been the principal pioneer of microclimatic research. On an unpromising site, stranded among the Edwardian villas on the west side of the town, Erskine has succeeded in conjuring up subtle changes of level and varieties of enclosure against the East Anglian winds. The other two Oxbridge schemes show the current expertise in infilling historic sites: a gap next to Waterhouse's hall at Balliol for rooms by the Oxford Architects' Partnership and the banks of the Bin Brook for David Roberts's final building in his fifteen-year development for Magdalene College, Cambridge. The Roberts building faces across a new punt harbour to Powell and Moya's Cripps Buildings at St. John's College (soon to be illustrated in the AR), making one of the finest ensembles in the country of remodelled historic buildings and large-scale new buildings.

This feeling for variety and intimacy and enclosure—above all, for a tangible domestic scale—is expressed with an exceptionally strong personality in the Inner London Education Authority's Bromley Hall School for the handicapped, by R. W. Giles of the GLC Architect's Department. A series of toplit pavilions creates a private world secure from the harsh and decayed surroundings at Poplar; whereas Ivor Smith's spastics' teachers' training college has the therapeutic advantage of a country house landscape. By contrast, for the healthy and prosperous children of suburban Sutton, Team 4 have designed what must be the first steel-framed blast of fresh air from Hunstanton into the conservative world of privately owned boys' preparatory schools.

Equally remarkable in the 'private sector' is the very large development in the CLASP system for the new buildings of St. Paul's School, designed by Feilden and Mawson, who made their name in this field through their temporary 'student village' for the University of East Anglia at their home town of Norwich. St. Paul's will certainly extend to the limit the potentialities of CLASP for variety; it is precisely the uniformity of the school's present Waterhouse-designed buildings at Hammersmith that is crushing—in bright red terracotta, the prefabricated material of an earlier industrialized age. Those who doubt the validity of all-over glazing or prefabricated repetition can examine instead the toplit assembly areas (the influence perhaps of Colquhoun and Miller's Forest Gate School) of Douglas Stephen and Partners' Evelyn School and of Gollins, Melvin, Ward and Partners' Leicestershire system duet at Syston. Both these schemes have an interesting sectional arrangement of galleries to the upper levels, as does the College of Art at Hull which Frederick Gibberd and Partners have designed for a site close to the Museum and Art Gallery illustrated in Preview 1965. The Gollins buildings are very different from the firm's usual sleek glasswork, one of the new partners in charge being the former Midland Region railways architect, W. R. Headley.

EDUCATION

SCHOOL FOR PHYSICALLY HANDICAPPED, POPLAR, LONDON

Hubert Bennett, Architect to GLC and ILEA

CLIENT Inner London Education Authority.

SITE 0.8 acres in East End, hemmed in.

ACCOMMODATION Classrooms, 3 junior and 3 senior, for 120 children. Craft rooms, dining and assembly halls, administrative and medical offices, house for school keeper.

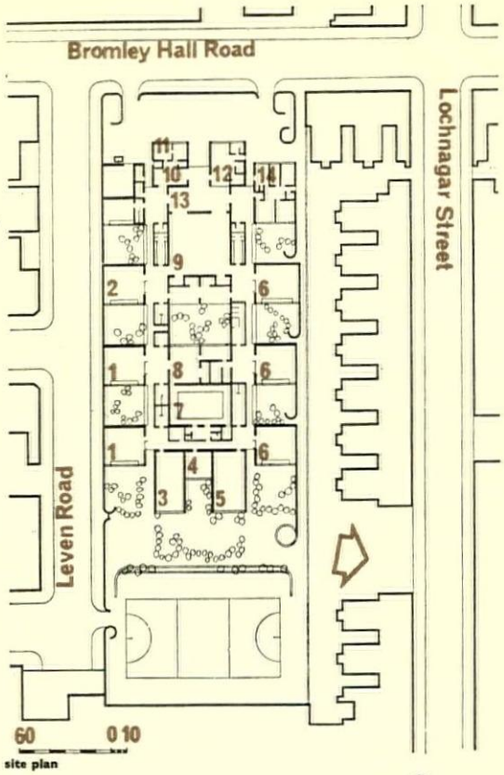
STRUCTURE Loadbearing brick walls. Pitched roofs 5 in. by 1½ in. timber between two skins of plywood; panels to be prefabricated on site or in factory, bolted together at hips and covered with asbestos roofing slates.

SERVICES Radiators with underfloor heating panels in classrooms.

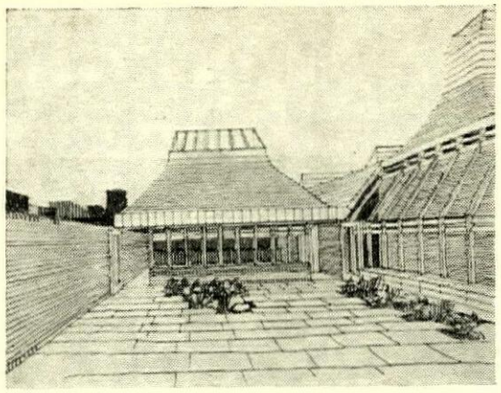
COST £148,000.

CONTRACT January 1967–June 1968.

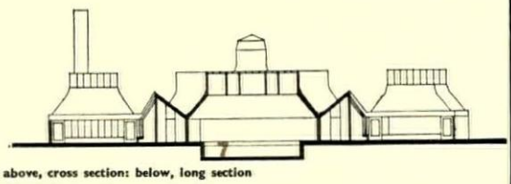
Education architect, Michael Powell. Schools architect, Cedric Hartland. Assistant schools architect, Ronald W. Robson-Smith. Architect-in-charge, R. W. Giles. Assistant, D. L. Penny. Quantity surveyor, F. Rice. Structural engineer, J. H. Humphreys. Senior architect, building regulations division, W. J. Wadey. Director of mechanical and electrical services, C. A. Belcher. Heating consultant, Troup, Bywaters and Anders.

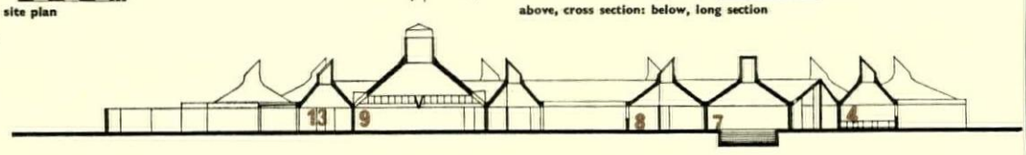


site plan


perspective of inner court

key
1, primary
2, admission
3, handicraft
4, typewriting
5, housecraft
6, secondary
7, hydrotherapy pool
8, physiotherapy
9, assembly hall
10, wheel chairs
11, headmaster
12, kitchen
13, dining hall
14, schoolkeeper's house


above, cross section: below, long section



RESIDENTIAL BUILDING, MAGDALENE COLLEGE, CAMBRIDGE

David Roberts and Geoffrey Clarke

CLIENT Magdalene College.

SITE Extension to same architects' Benson Court, on edge of Bin Brook, facing new Cripps Buildings of St. John's by Powell and Moya.

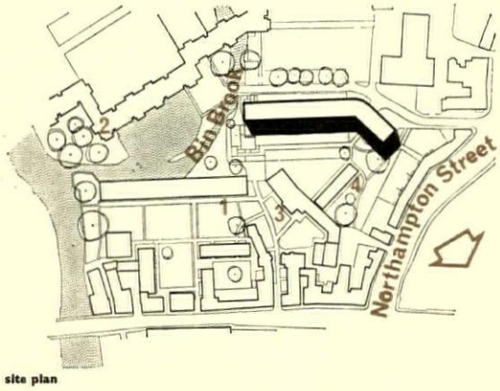
ACCOMMODATION 50 undergraduate and graduate sets, 4 Fellows' sets, parking for 40 cars in basement.

STRUCTURE Brick crosswalls with r.c. floors.

COST £200,000.

CONTRACT May 1967–December 1968.

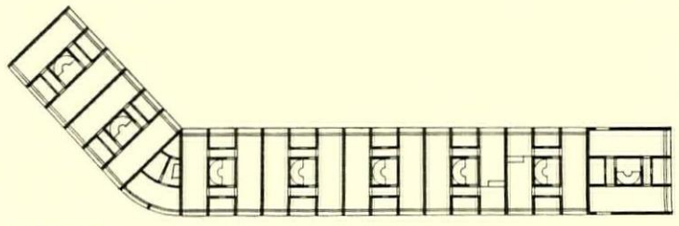
Quantity surveyor, Davis, Belfield and Everest.

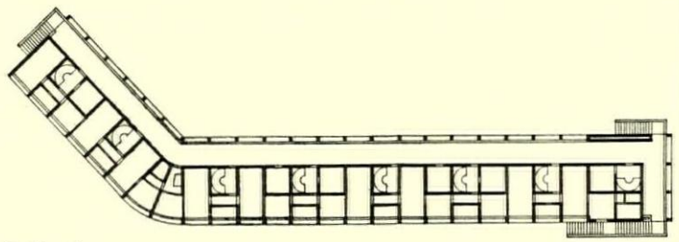


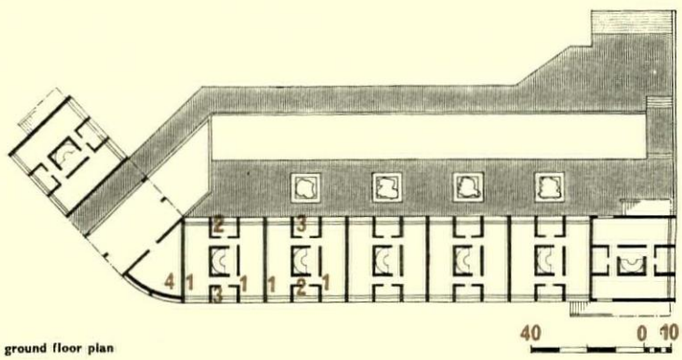
site plan

key to site plan
1, Benson Court
2, Cripps Buildings
3, Mallory Court
4, Tan Yard

key to floor plans
1, set
2, bath
3, gyp
4, store

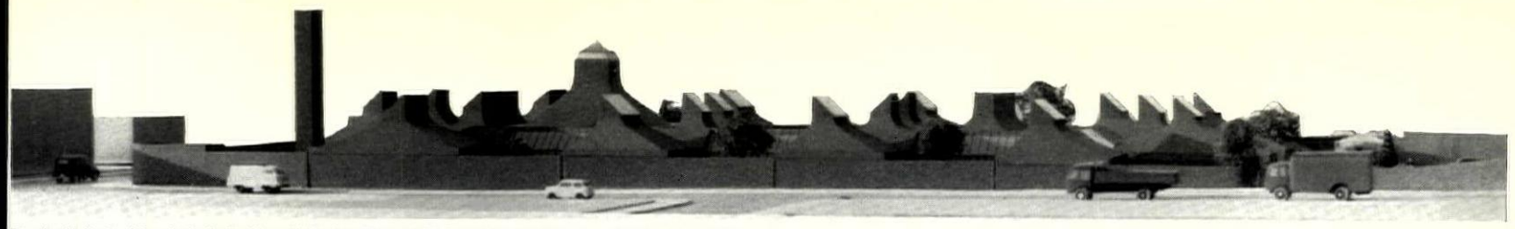

second floor plan


first floor plan

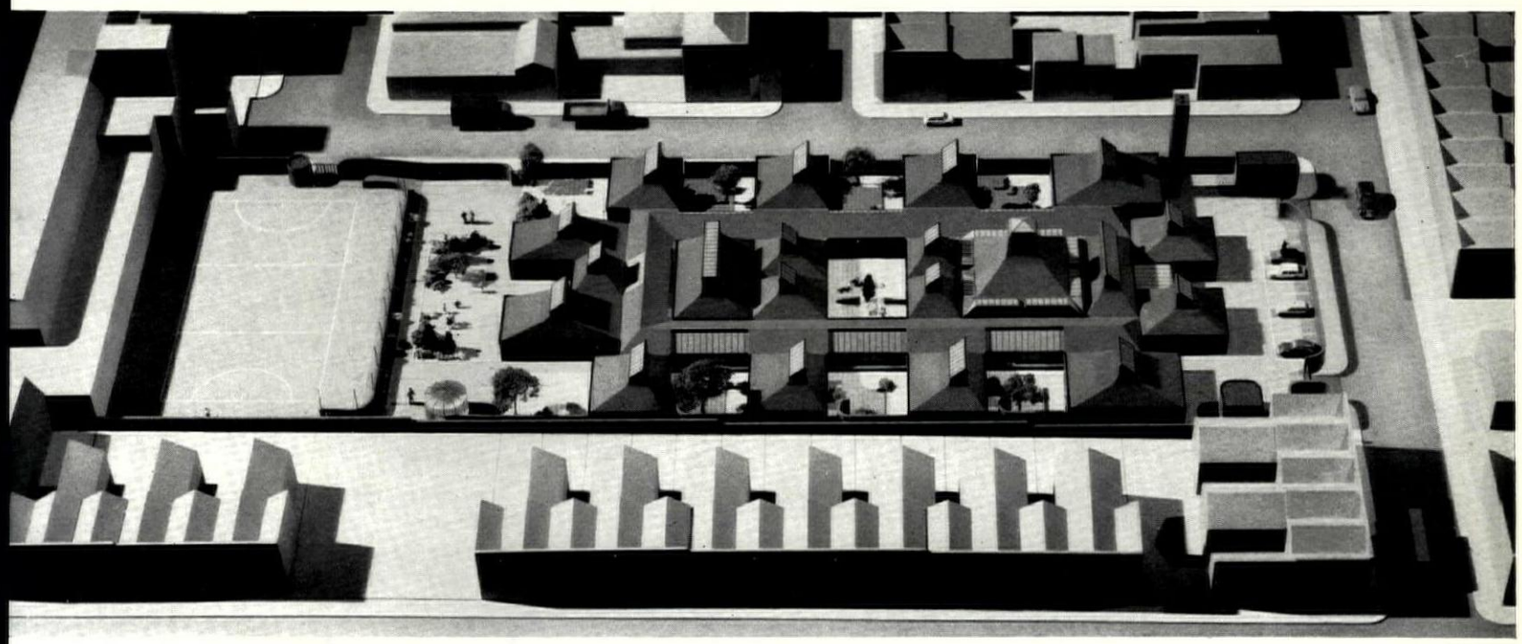


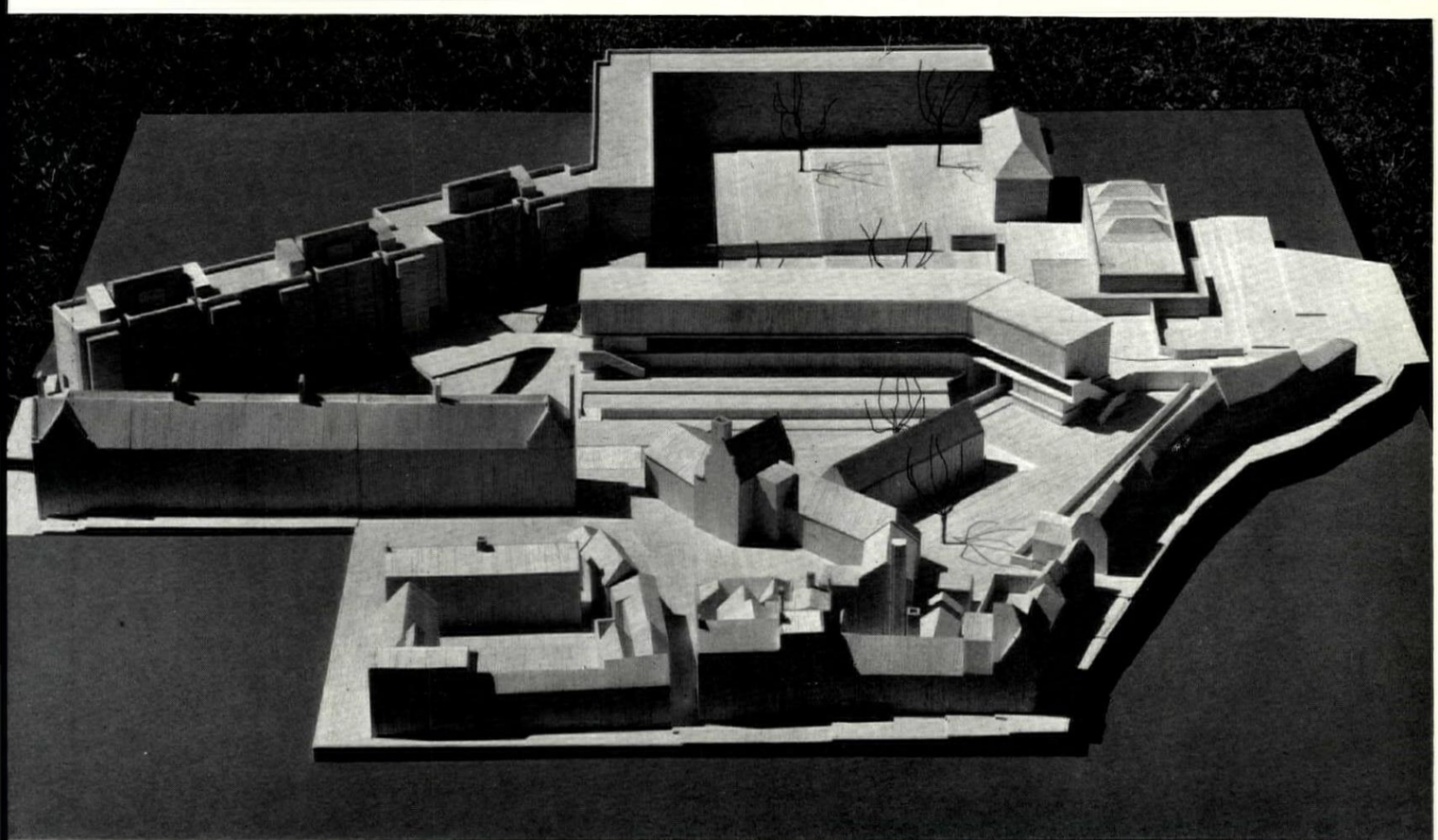
ground floor plan

EDUCATION

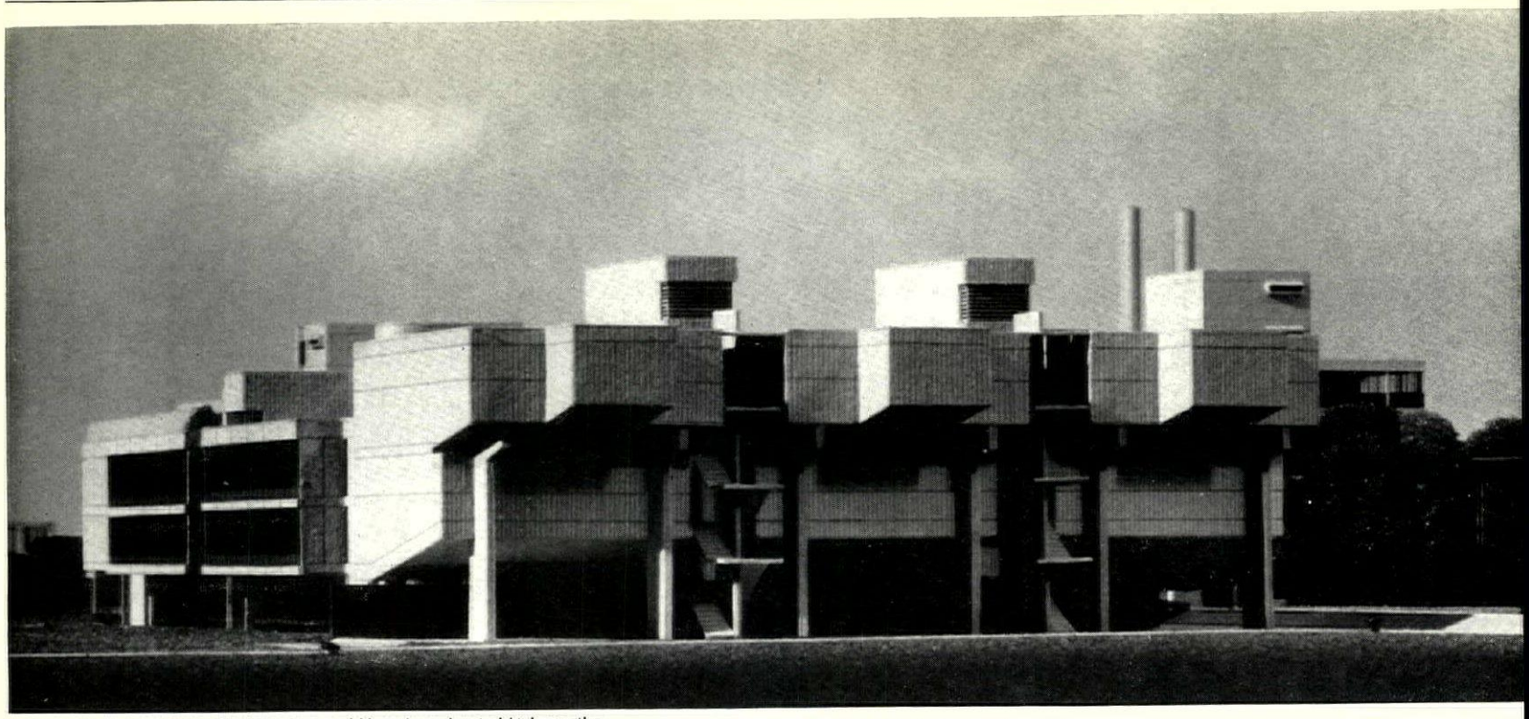


Bromley Hall school for physically handicapped, Poplar: above, model from Leven Road: below, aerial view from north

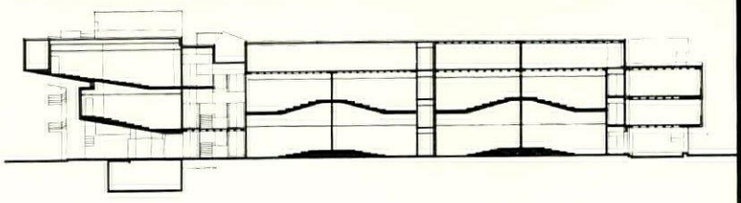


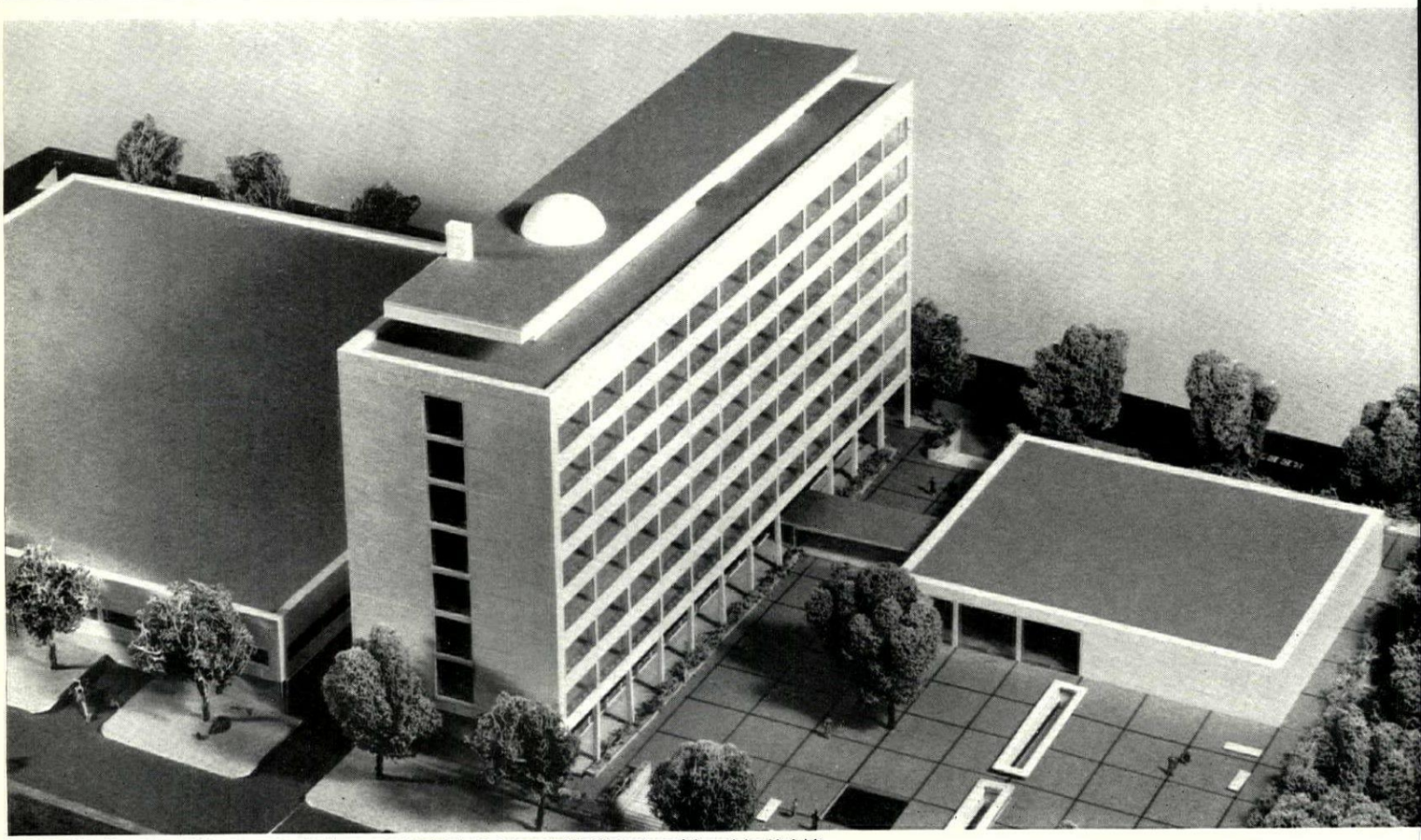


residential building, Magdalene College, Cambridge: model from the south-west, with the new building in the centre, Benson Court to the left and the Cripps Buildings of St. John's College behind



lecture theatres, Brunel University, Uxbridge: above, model from the north-east: right, long section





technical college, Greenock: model from the south, with the communal block right, the 8-storey teaching block centre and the workshop block left

LECTURE THEATRES, BRUNEL UNIVERSITY, UXBRIDGE, LONDON

Richard Sheppard, Robson and Partners

CLIENT Brunel University.

SITE On 65-acre central university site (see AR Preview, 1965).

ACCOMMODATION 16 lecture rooms seating 60, 3 lecture theatres seating 100 and 3 seating 180, 30 classrooms, 2 reading rooms, studio television and control room, coffee lounge.

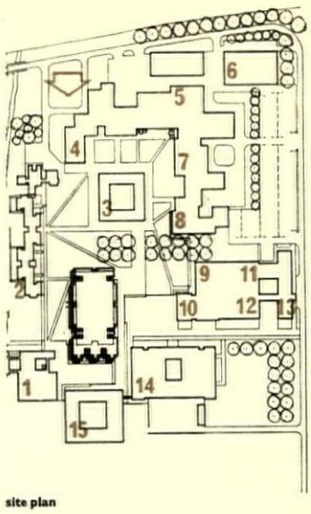
STRUCTURE Inner theatres, loadbearing brick. Remainder, r.c. frame with larger cantilevers of shell construction on 12 in. r.c. fin supports. External walls, exposed boarded concrete to large theatres, precast string courses and vertical panels. Steel windows storey height with cill wall behind glass panels.

SERVICES High pressure hot water from central boiler house to basement calorifier and switch room. Plenum system to lecture theatres, with equipment in eight separate plant rooms. Full air conditioning to one 180-seat theatre only. Classrooms and circulation heated by convectors.

COST Phase 1, £325,000. Phase 2, £234,000.

CONTRACT Phase 1, April 1966–July 1967. Phase 2, September 1966–October 1967.

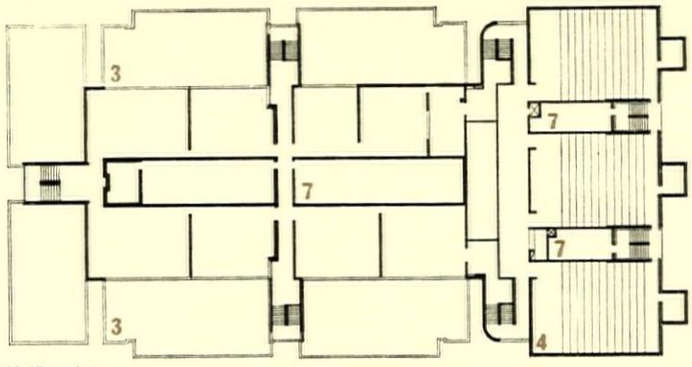
Partner-in-charge, John Heywood. Assistants, Tony Parsons, Ted Teshima and Alan Baer.



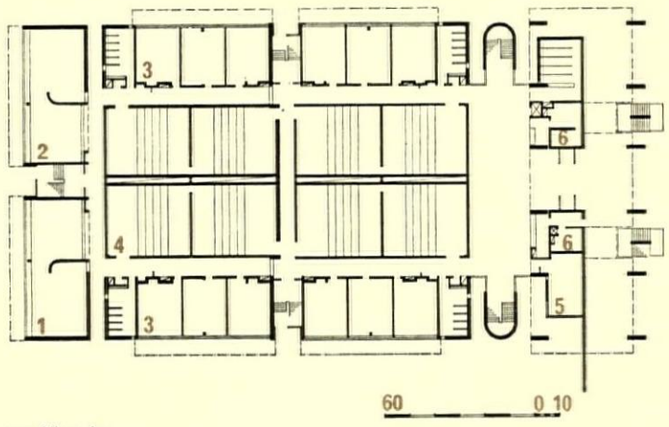
site plan

key to site plan
1, department of mathematics
2, residential
3, engineering centre
4, science equipment consortium
5, mechanical engineering
6, boiler plant
7, production
8, metallurgy
9, assembly hall
10, library
11, theatre
12, shopping arcade
13, administration
14, communal block
15, student union

key to floor plans
1, reading room
2, writing room
3, classroom
4, lecture theatre
5, staff lounge
6, store
7, plant
8, projection booth



third floor plan



ground floor plan

TECHNICAL COLLEGE, GREENOCK, SCOTLAND

Boissevain and Osmond

CLIENT Renfrewshire County Council.

SITE Newton Street in centre of town, replacing former buildings of Greenock Academy. Steep slope from north-west to south-east.

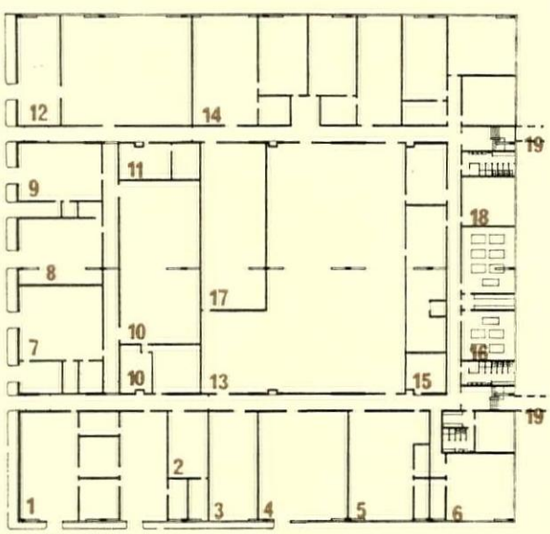
ACCOMMODATION 11 departments, 1,300 students. Teaching block, 8 storeys including lecture and tutorial rooms, classrooms, specialist rooms, common rooms, library, admin. Planetarium and wheelhouse for navigation on roof. Workshop block, 240 ft. sq., two storeys at lower end. Refectories, assembly hall, music room in separate block. Gymnasium below podium.

STRUCTURE Teaching block, r.c. frame at 20 ft. centres, concrete infill panels. Workshop, steel-framed with patent-glazed rooflights between vierendeel girders, lightweight precast panels to walls and roof. Refectories, steel-framed. Gymnasium, mixed steel and r.c. Retaining wall of precast panels.

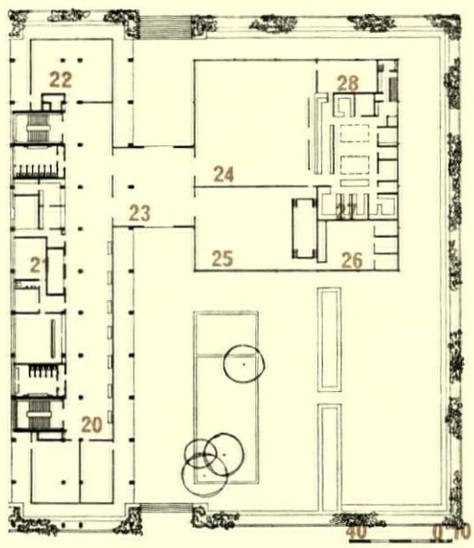
SERVICES Ceiling heating to teaching areas from oil-fired boiler in basement. Mechanical ventilation to some workshops.

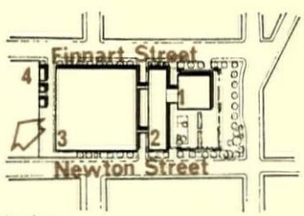
CONTRACT 1967–1969.

Partner-in-charge, Paul Boissevain. Project architect, D. G. Elderkin. Quantity surveyor, Fyfe, Gerrard and Paton. Structural consultant, W. V. Zinn and Associates.



ground floor plan





site plan

key to site plan
1, communal block
2, teaching block
3, workshop block
4, building department

key to ground floor plan
1, motor vehicle shop
2, heat treatment
3, hydraulics lab
4, thermodynamics lab
5, structure and materials lab
6, applied mechanics lab
7, painting and decorating
8, brickwork
9, plumbing
10, welding
11, students' tea
12, joinery
13, machine shop
14, electrical shops and labs
15, metrology lab
16, building science labs
17, steel shop
18, electrical technology
19, bridge
20, students' concourse
21, offices
22, joint common room
23, entrance hall
24, students' dining
25, assembly hall
26, music rooms
27, kitchen
28, staff dining

UNIVERSITY OF SURREY, GUILDFORD

Building Design Partnership

CLIENT University of Surrey.

SITE Steep slope on north side of Stag Hill below Guildford Cathedral, 85 acres. Further 290 acres at Manor Farm across A3.

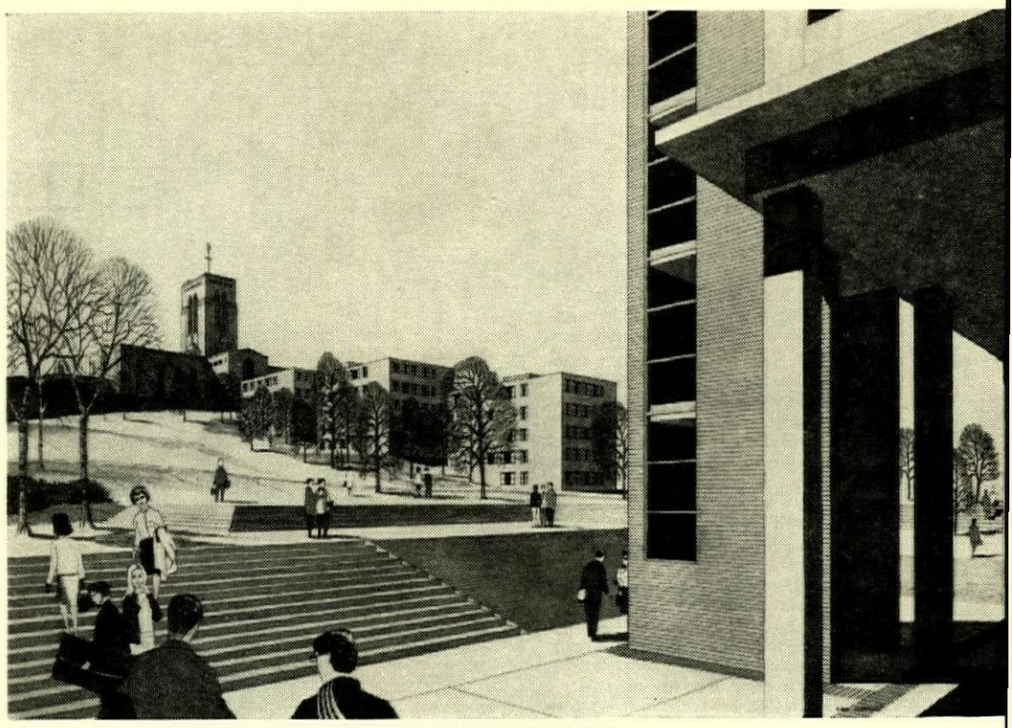
ACCOMMODATION Phase 1, for 1,200 students moved from Battersea College of Technology, with 400 in residence. 350 parking bays.

STRUCTURE Academic buildings, precast concrete frame with sand-blasted finish externally. Aluminium windows with adaptable infill panels. Brick base walls to service towers linking with brick crosswalls of residences.

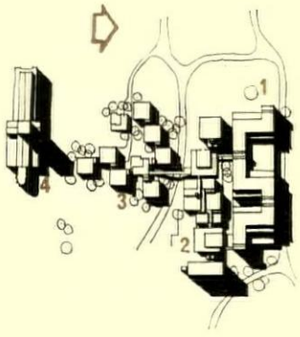
COST Phase 1, £2,700,000.

CONTRACT July 1966–July 1968.

Quantity surveyors, structural engineers and services engineers, architects' own. Landscape architect, Derek Lovejoy and Associates. Acoustics consultant, Henry R. Humphreys. Lettering, Edward Wright.

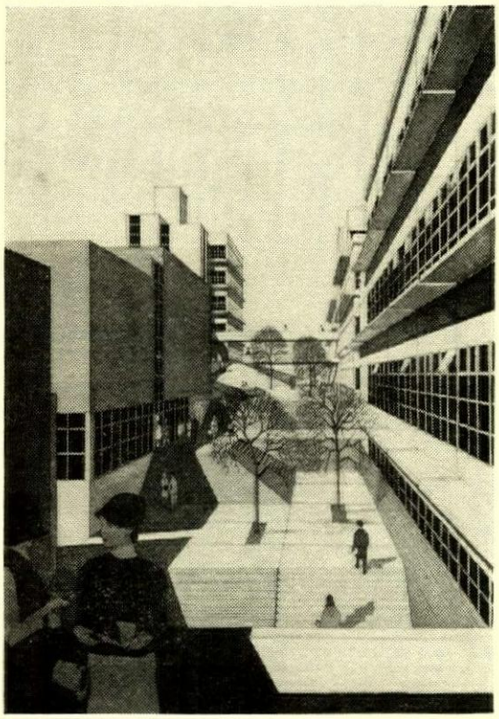


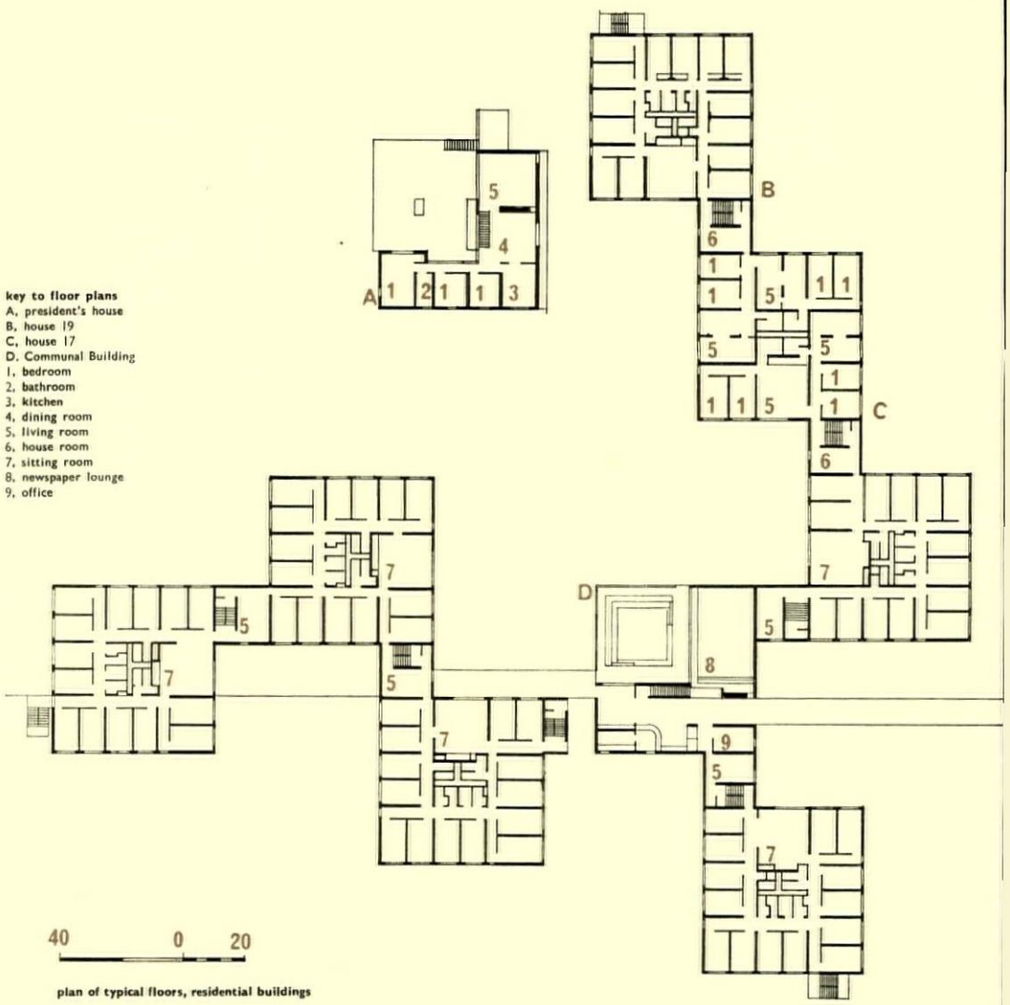
looking up to the cathedral from the south end of senate house, with the residential buildings in between



site plan: key
1, academic
2, core (senate house, restaurants, lecture theatres, library)
3, residences
4, cathedral

looking west along the main pedestrian route, with the academic buildings right





key to floor plans
A, president's house
B, house 19
C, house 17
D, Communal Building
1, bedroom
2, bathroom
3, kitchen
4, dining room
5, living room
6, house room
7, sitting room
8, newspaper lounge
9, office

plan of typical floors, residential buildings

EDUCATION

CLARE HALL, CAMBRIDGE

Ralph Erskine

CLIENT Clare College.

SITE 1.2 acres in Herschel Road, surburban and flat, with fine trees.

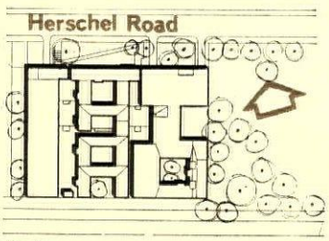
ACCOMMODATION New graduate community founded by, but eventually independent from, Clare College. 9 bed-sitter flats, 3 one-bedroom flats, 4 four-bedroom terrace houses, 3 three-bedroom court houses, 1 four-bedroom court house. Main dining hall, common room, 2 reading rooms, 19 study rooms.

STRUCTURE Brick walls, r.c. slabs for decks and floors, timber roofs. Some double glazing.

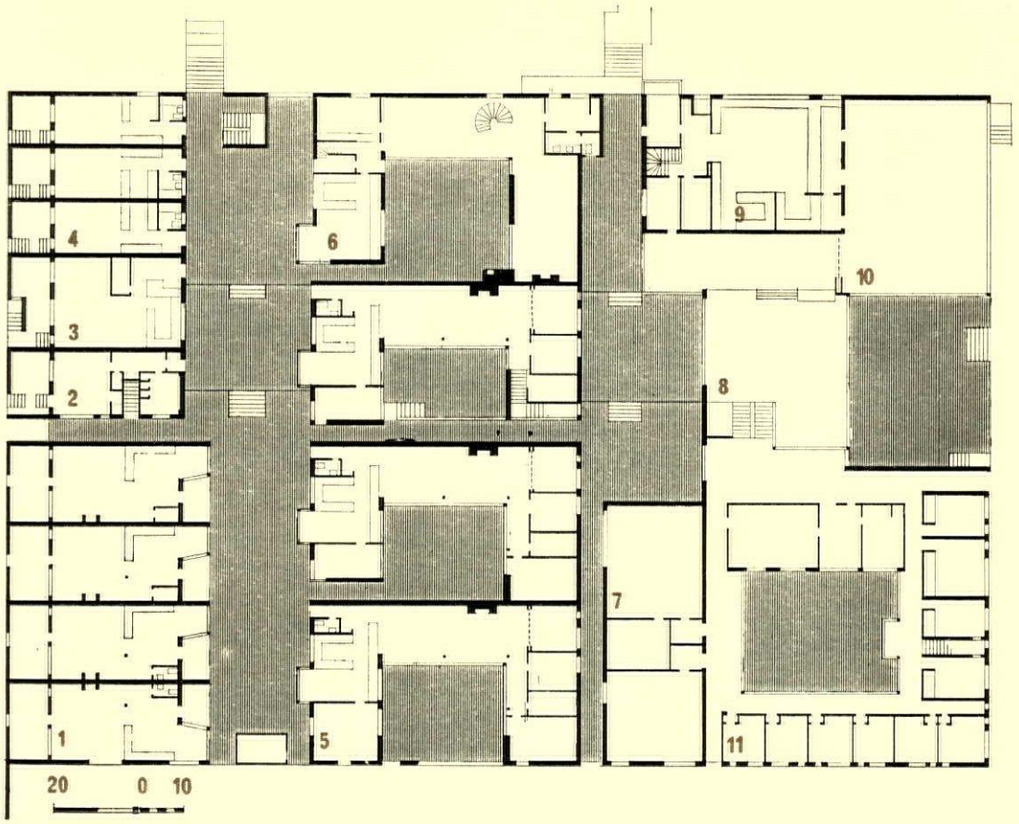
SERVICES Gas-fired central heating.

COST £300,000.

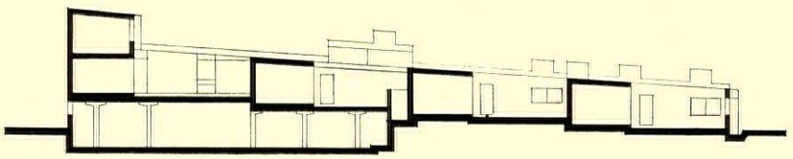
CONTRACT October 1966–summer 1968. Assistants, B. Ahlqvist, J. Ersson, M. Linnett, W. Lüthi, R. Sandström and M. Dahlbäck. Quantity surveyor, Monk and Dunstone. Structural consultant, Peter Dann. Services consultant, Wingfield-Bowles and Partners.



site plan



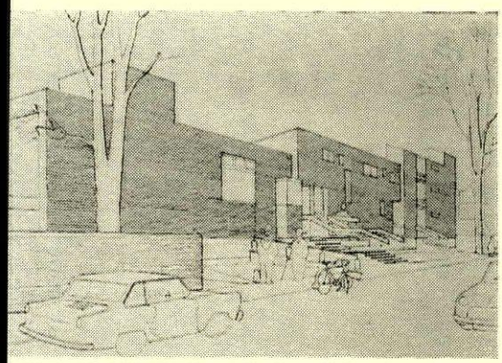
plan



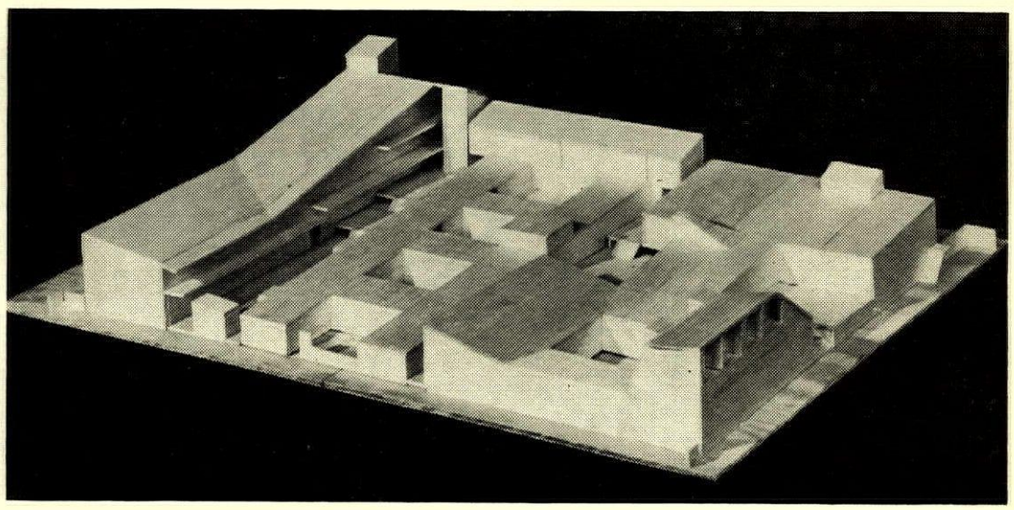
cross section

key to plan

1. 4-bedroom house
2. day nursery
3. 2-room flat
4. 1-room flat
5. 3-bedroom court house
6. 4-bedroom court house
7. reading room
8. common room
9. kitchen
10. dining
11. study



above, perspective from Herschel Road: right, model from the south-east



RESIDENTIAL BUILDING, BALLIOL COLLEGE, OXFORD

The Oxford Architects' Partnership

CLIENT Balliol College.

SITE North-west corner of college's garden quadrangle.

ACCOMMODATION 70 study-bedrooms for undergraduates.

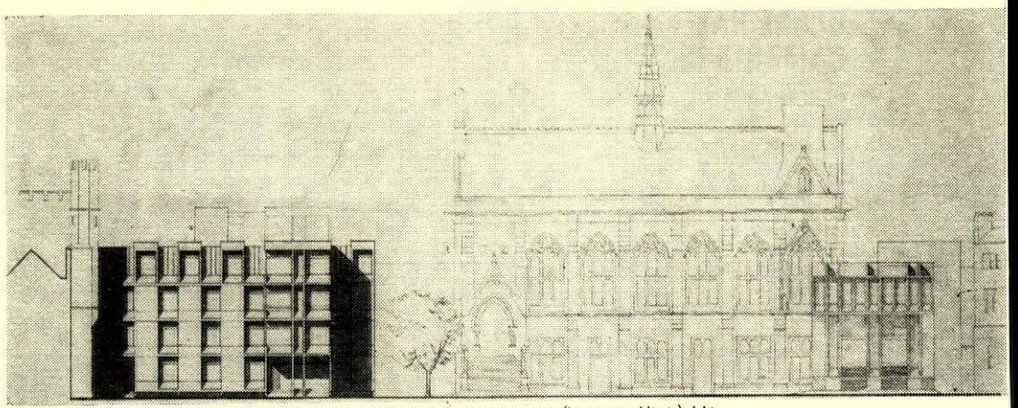
STRUCTURE Short pile foundations. Load-bearing calculated brick walls, with r.c. floors and roof. Clipsham stone facing with precast concrete cill units. Galvanized steel windows. Ceramic tiles in sanitary areas, wood strip flooring elsewhere. Walls and ceilings plastered.

SERVICES Off-peak electric space and water heating.

COST £190,000.

CONTRACT 1966–1968.

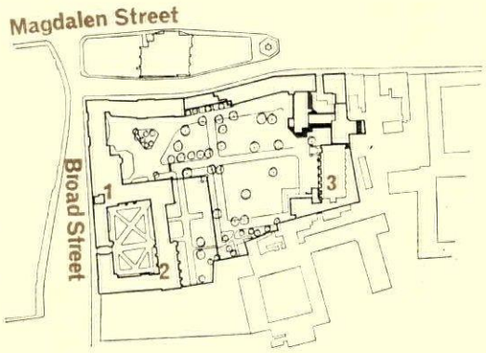
Partner-in-charge, Geoffrey Beard. Project architect, M. Drew. Assistants, Norman Love and Geoffrey Randell. Quantity surveyor, Henry Cooper and Sons. Structural consultant, E. W. H. Gifford and Partners.

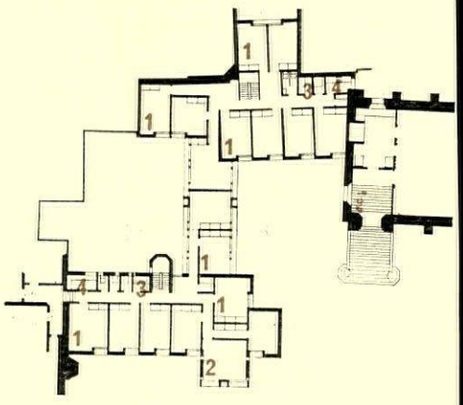


elevation to college quadrangle: residential building left, hall centre, senior common room (by same architects) right

site plan: key
1, college
2, chapel
3, hall

key to floor plan
1, bed-sitting room
2, teaching
3, bathroom
4, scout





first floor plan

ST. PAUL'S SCHOOL, BARNES, LONDON

Feilden and Mawson

CLIENT The Mercers' Company.

SITE 45 acres on the south bank of the Thames at Lonsdale Road, Barnes, next to Hammersmith Bridge.

ACCOMMODATION Public School of ancient foundation, at Hammersmith since 1870, previously in City of London. Teaching and communal buildings for 700 senior boys (13–18 years), including 60 boarders. Junior School (8–13 years) for 360 boys, including 60 boarders.

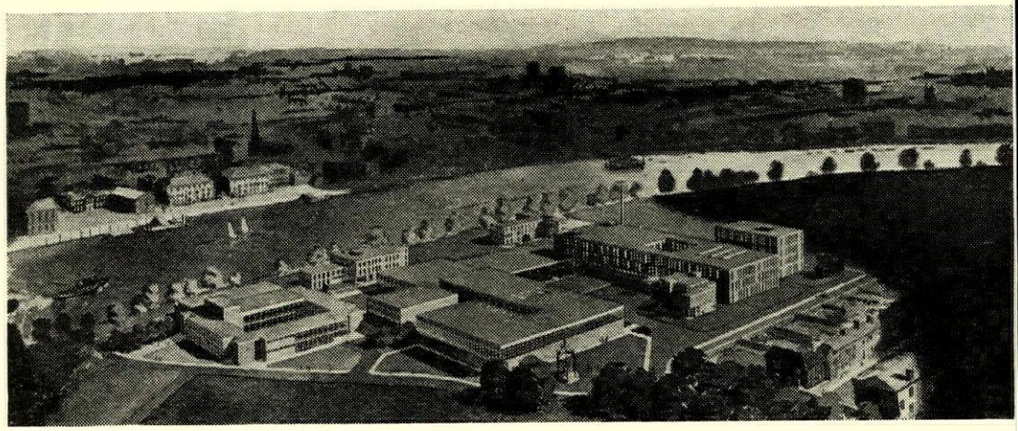
STRUCTURE CLASP Mark IV industrialized building system. Light steel frame, timber roof and floor decks. Precast concrete cladding panels, warm grey generally with white fascias. Painted timber window frames with aluminium inserts and vitreous enamel panels.

SERVICES Heating, ventilating, electrical work and communications, plumbing and internal drainage all installed by consultant.

COST Phase 1, £163,000. Phase 2, £1,500,000.

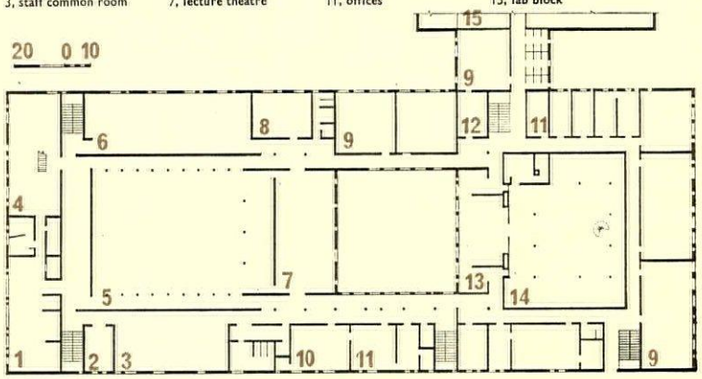
CONTRACT August 1966–May 1968.

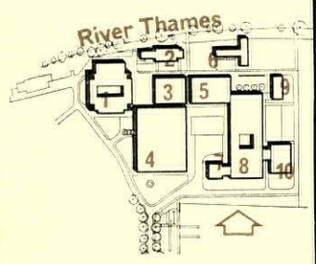
Partners-in-charge, Bernard Feilden and Raymond Thompson. Assistants, C. M. Hopkins, G. A. Keith, M. T. H. Kimmins, Mrs. M. N. Downie and B. J. Banyard. Services engineers, Andrews-Weatherfoil Ltd.



perspective from south, with school in foreground and River Thames beyond

first floor plan, main block: key
1, pottery
2, marking
3, staff common room
4, studio
5, theatre
6, common room
7, lecture theatre
8, prefects
9, classrooms
10, head master
11, offices
12, Anglo–American room
13, periodical room
14, library
15, lab block





site plan: key
1, junior school
2, junior boarding house
3, junior barn
4, covered sports centre
5, dining and kitchen
6, senior boarding house
7, chapel
8, main block, theatre and library
9, workshop/boiler house
10, lab block

LABORATORIES, EDINBURGH UNIVERSITY

Sir Basil Spence, Glover and Ferguson

CLIENT University of Edinburgh.

SITE Overlooking golf course to south and sloping 18 ft. from north-west to south-east. Part of King's Buildings.

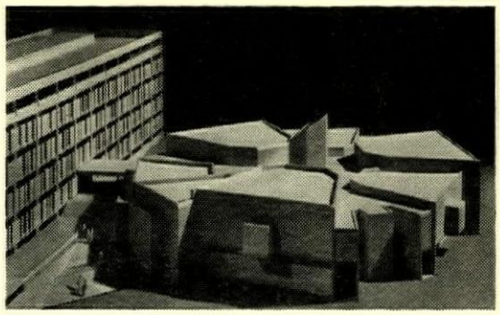
ACCOMMODATION Institute for Physics and Mathematics, 1,900 staff and students in main building. Lecture theatres with 1,000 seats. Phase 1a, regional computer centre.

STRUCTURE Main block and 2-storey block, r.c. frame on piled foundation. Lecture theatres, loadbearing brick with precast concrete floors and roofs. Facing bricks externally. Partitions of brick, painted or plastered. Corridor ceilings of demountable timber slats.

SERVICES Air conditioning to computer rooms, simple radiators elsewhere.

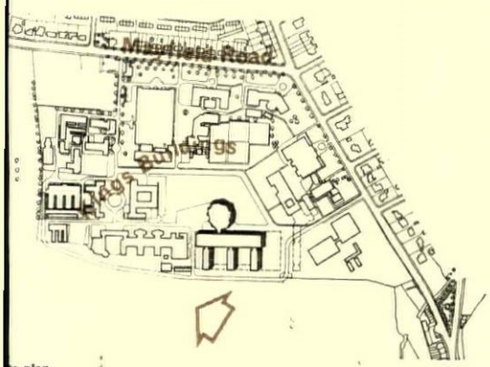
COST £2,400,000, in phases.

CONTRACT Phase Ia started, September 1966. Assistant, C. Clyne. Quantity surveyor, J. D. Gibson and Simpson. Structural consultant, T. Harley Haddow and Partners. Services consultant, Steensen, Varming, Mulcahy and Partners. Acoustics consultant, Dr. M. A. S. Ross.

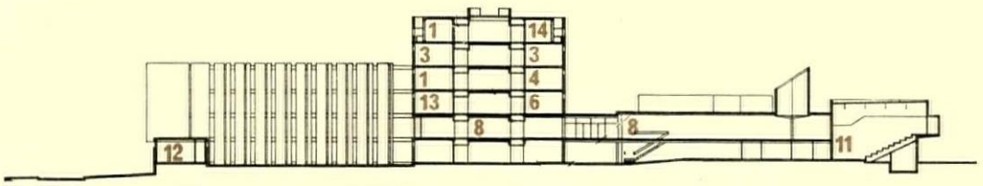


model of the lecture theatre block

first floor plan

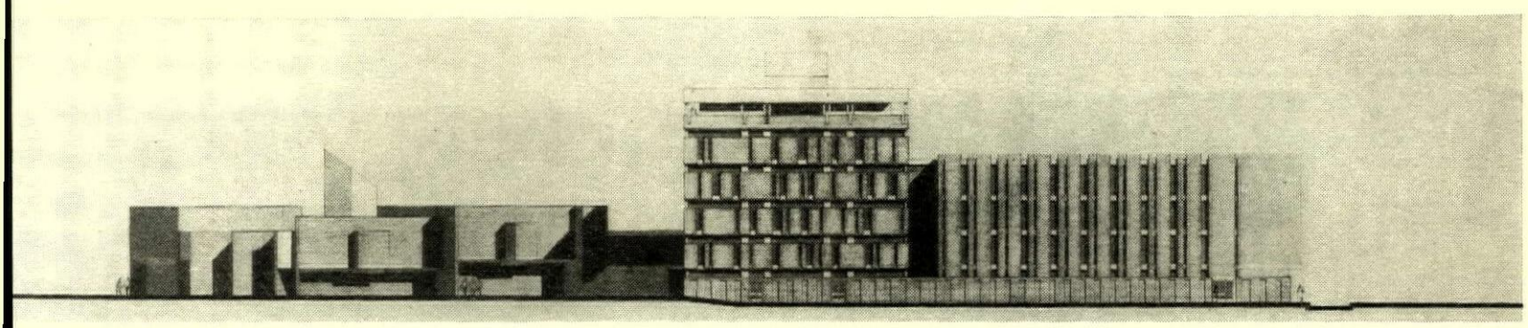


e plan

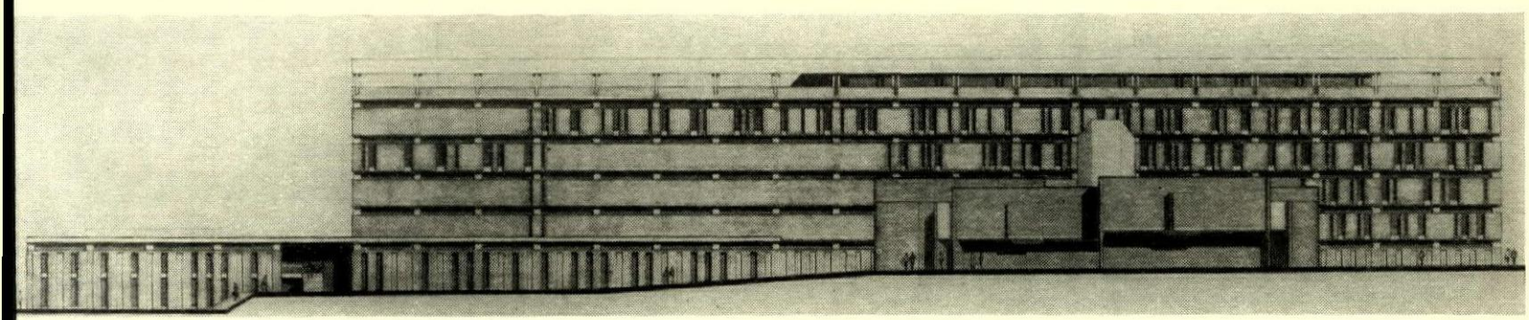


cross section

key
1. professor
2. reader
3. lecturer
4. tutorial
5. preparation
6. undergraduate calculating machine
7. lecture room
8. concourse
9. physics lab
10. staff
11. lecture theatres
12. seminar
13. secretaries
14. meteorology data



bove, west elevation: below, north elevation



EDUCATION

LABORATORIES, BRADFORD UNIVERSITY

Building Design Partnership, in association with E. Kemp, resident architect

CLIENT University of Bradford.

SITE 2 acres next to existing university buildings, falling steeply northwards.

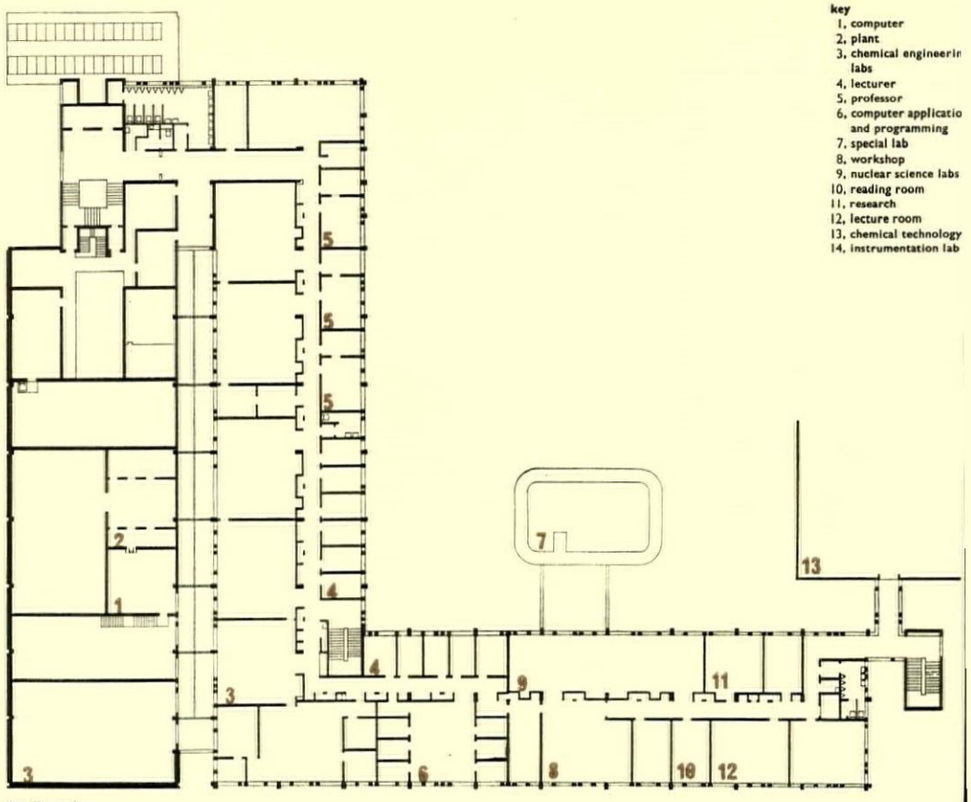
ACCOMMODATION Laboratories, workshops, lecture theatres and rooms for chemical engineering and nuclear science. Phase 1 of comprehensive plan.

STRUCTURE In situ r.c. frame and floors with sand-blasted exposed aggregate. Precast concrete cladding to high level lecture theatre and workshop block. Partitions of fairfaced block in laboratories, fairfaced brick in workshops, plastered elsewhere.

SERVICES Mechanically ventilated throughout except to offices, with medium pressure hot water heating round perimeter. Air conditioning in special areas. Vertical ducts at 20 ft. centre.

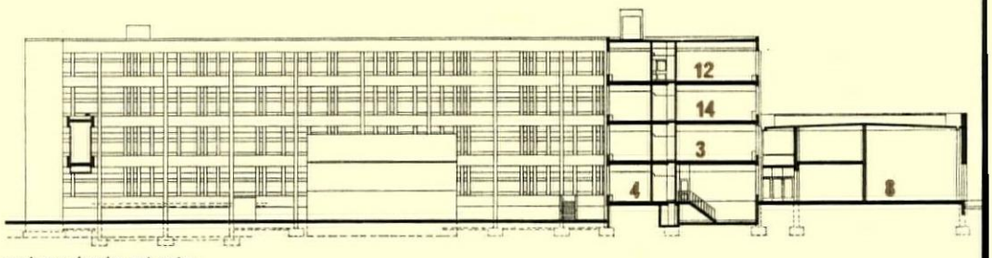
COST £1,100,000.

CONTRACT October 1966–June 1968. Partner-in-charge, S. H. Tasker. Associate-in-charge, T. Devlin. Assistants, J. F. Foy, E. Marek and E. Willan. Quantity surveyors and engineers, architects' own.



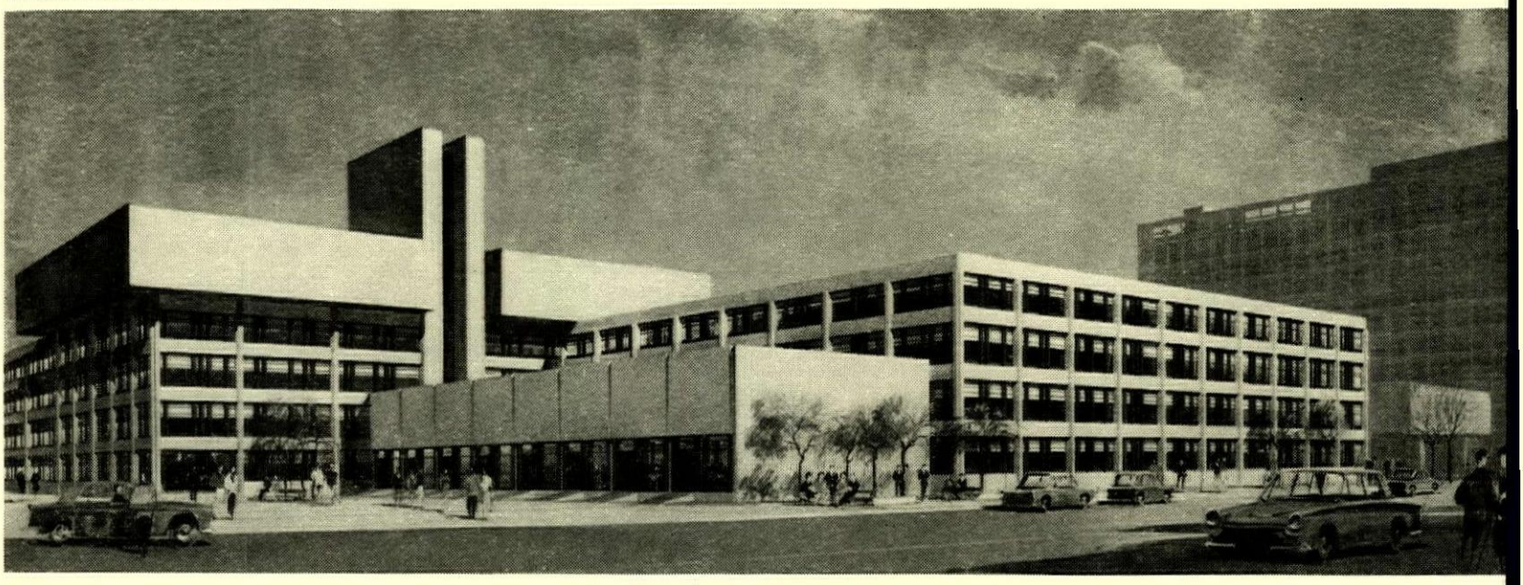
first floor plan

key: 1, future civil engineering, 2, existing university buildings



north-west elevation and section

perspective from south, with civil engineering block on left



EDUCATION

CHEMISTRY BUILDING, IMPERIAL COLLEGE, LONDON

Architects' Co-Partnership

CLIENT Imperial College of Science and Technology.

SITE South side of Imperial Institute Rd.

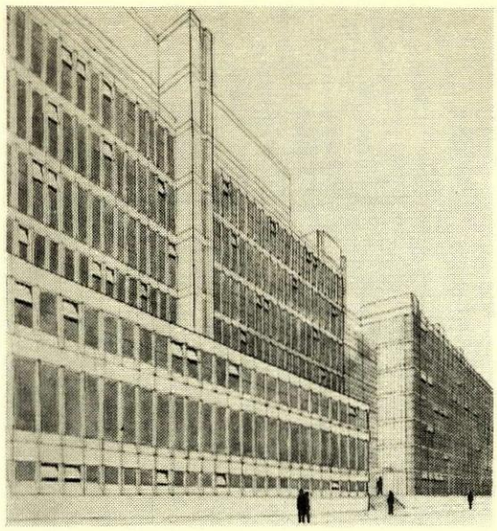
ACCOMMODATION 250 research places and 500 teaching places. Many specialized equipment rooms. Lecture theatres. Departmental library to be shared with adjoining Biochemistry (by same architects).

STRUCTURE In situ r.c. structure with precast structural mullions.

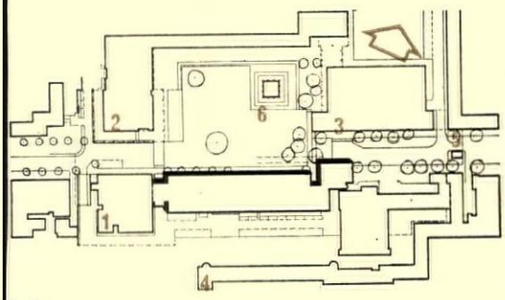
SERVICES Hot and cold water, boosted pressure cold water, cooling water, distilled water, town gas, compressed air, steam, electricity. Heating, hot water convectors for research floors, warmed air for teaching.

COST £1,750,000.

CONTRACT Autumn 1967–autumn 1969.



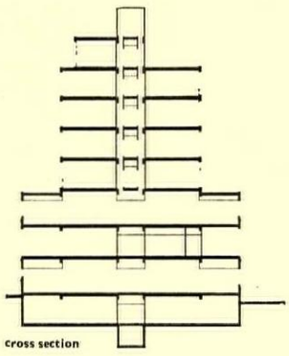
perspective from north precinct: biochemistry on right



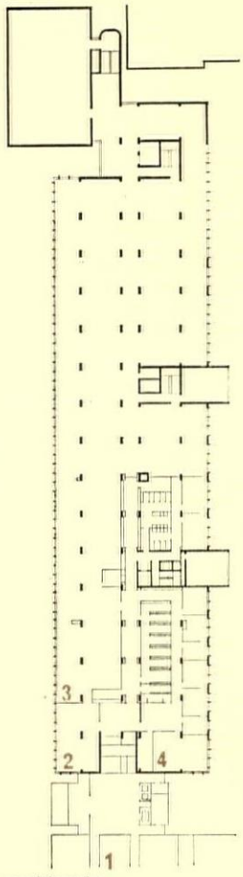
ite plan

key to site plan
1, biochemistry
2, library
3, civil engineering
4, Science Museum
5, mechanical engineering
6, Queens Tower

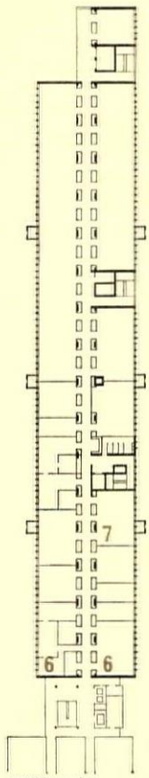
key to floor plans
1, biochemistry
2, committee room
3, library
4, administration and offices
5, Royal College of Science
6, inorganic labs
7, organic labs



cross section



second floor plan



sixth floor plan

MATHEMATICS BUILDING, BRISTOL UNIVERSITY

Whicheloe, Macfarlane and Towning Hill

CLIENT University of Bristol.

SITE 0.7 acres at University Walk, within main precinct, between Royal Fort Gardens, Stuart House and Gatehouse. Uneven rise of 16 ft. to north-west.

ACCOMMODATION 27,492 sq. ft. containing academic, research and administrative offices in central block, with computer unit and two lecture theatres, seating 104 and 80, in side wings. Covered parking for 26 cars plus cycles.

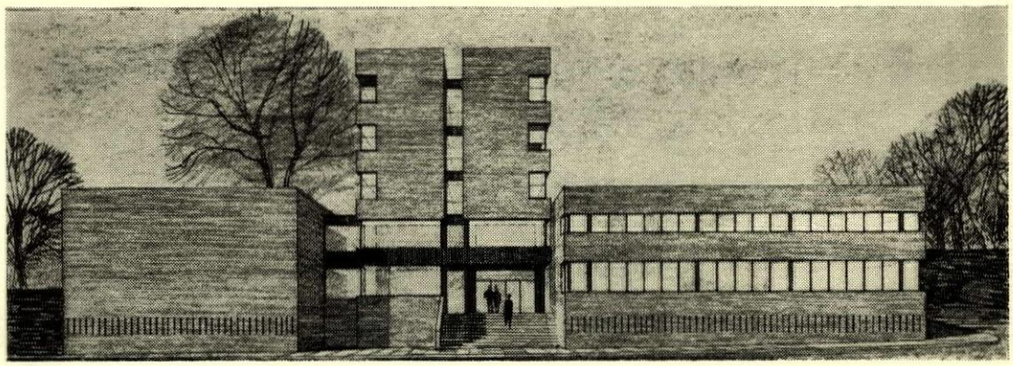
STRUCTURE In situ r.c. frame and roofs, except steel-framed roofs to lecture and computer blocks. Light buff facing bricks, grey anodized window frames, cills and fascias.

SERVICES Low pressure hot water heating. Convectors at cill line in offices, fan-assisted with separate ventilation system in theatres. Air conditioning to computer.

COST £220,000.

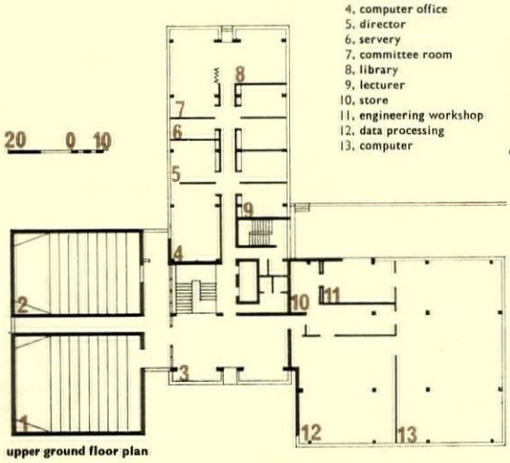
CONTRACT August 1966–April 1968.

Partner-in-charge, Norman Whicheloe. Assistant, Michael Strode. Quantity surveyor, Faithful and Gould. Structural consultant, G. C. Mander and Partners. Mechanical consultant, G. N. Haden and Sons. Electrical consultant, C. C. Shackleton and Sons.

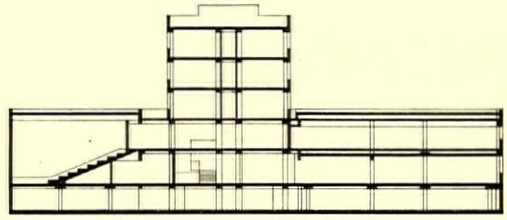


east elevation

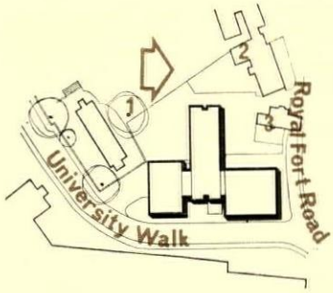
key to floor plan
1, lecture theatre for 104
2, lecture theatre for 80
3, common room
4, computer office
5, director
6, servery
7, committee room
8, library
9, lecturer
10, store
11, engineering workshop
12, data processing
13, computer



upper ground floor plan



cross section through lecture theatre, central block and workshop



site plan: key
1, Royal Fort Gardens
2, Stuart House
3, Gatehouse

COLLEGE OF ART AND DESIGN, NOTTINGHAM

David Jenkin, City Architect

CLIENT Nottingham City Council.

SITE Shakespeare Street, covered with basements of Victorian houses. North-south slope between 1 in 20 and 1 in 5.

ACCOMMODATION Departments of history of art, fine art, fashion and textiles, graphic design, interior design (with furniture and pottery).

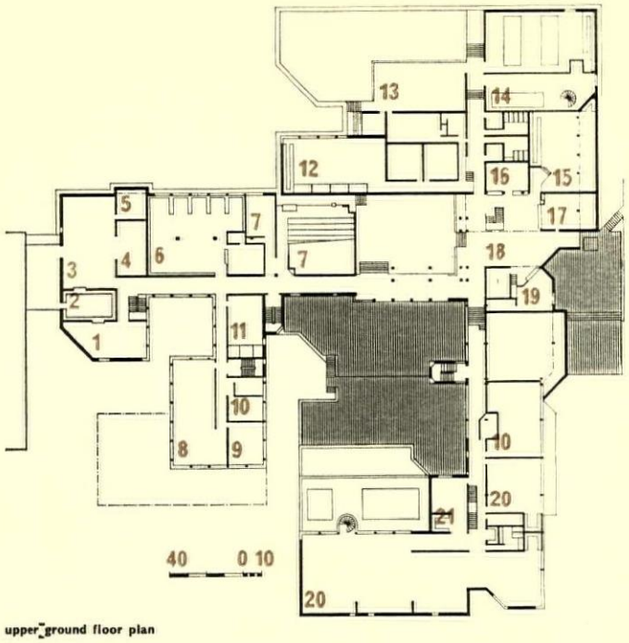
STRUCTURE Loadbearing brickwork, precast concrete floor slabs. Roof, welded trusses with woodwool slabs, roof lights of patent glazing. Materials generally self-coloured and finished.

SERVICES Gas-fired boilers.

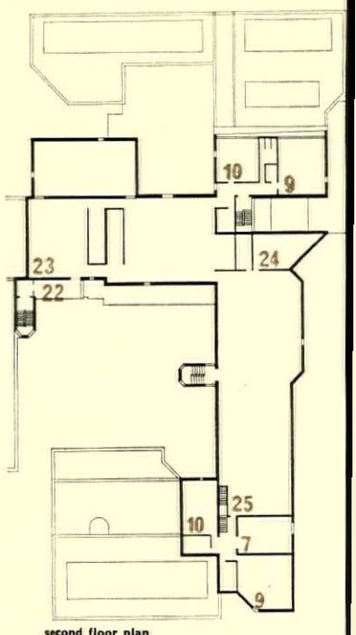
COST £345,625.

CONTRACT August 1967–July 1969.

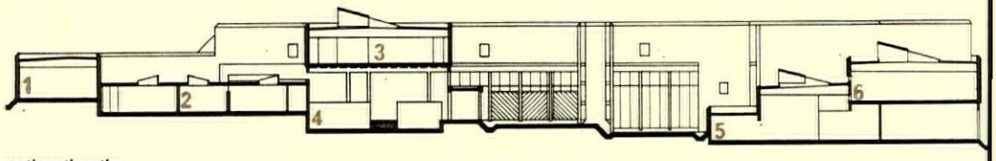
Assistant city architect, J. Gammons. Group leader, B. G. Walker. Job architect, P. Spring. Quantity surveyor, Gleeds. Structural consultant, Ove Arup and Partners. Services consultant, City Engineer.



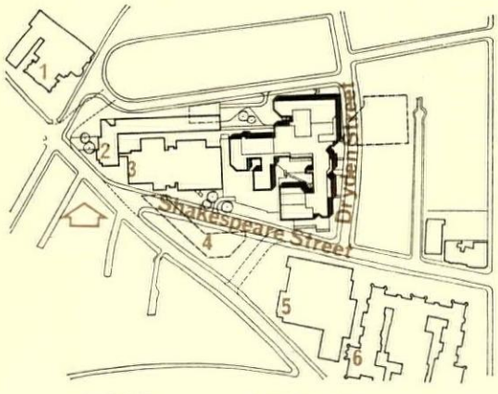
upper ground floor plan



second floor plan



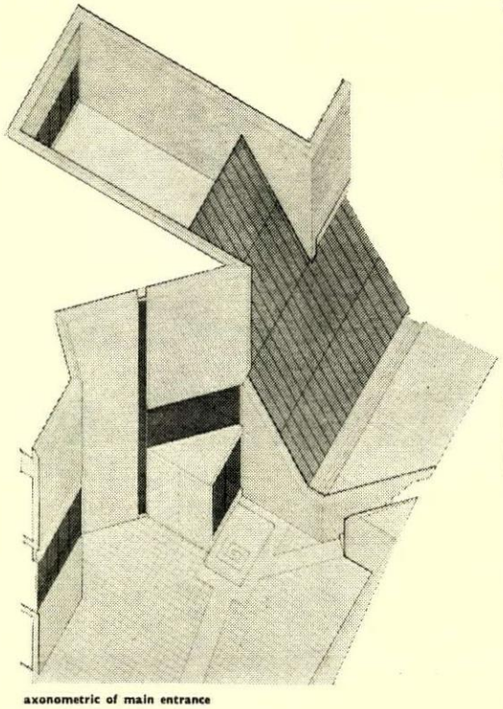
north-south section



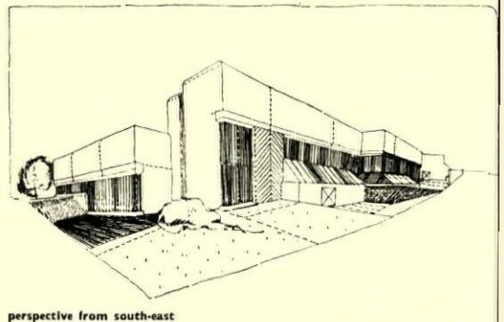
site plan: key
1, existing art school
2, hostel
3, union building
4, future extensions
5, technical college extension
6, technical college

key to plans
1, staff common room
2, servery
3, common room
4, union
5, quiet room
6, library
7, lecture
8, graphic design
9, design room
10, staff
11, science lab
12, window display
13, furniture design
14, lace machines
15, weaving
16, shop
17, telephonist/ receptionist
18, entrance hall
19, general office
20, painting studio
21, preparation
22, greenhouse
23, fashion workshops
24, model making
25, town and country planning

key to section
1, pottery
2, design
3, fashion
4, exhibition hall
5, sculpture
6, painting

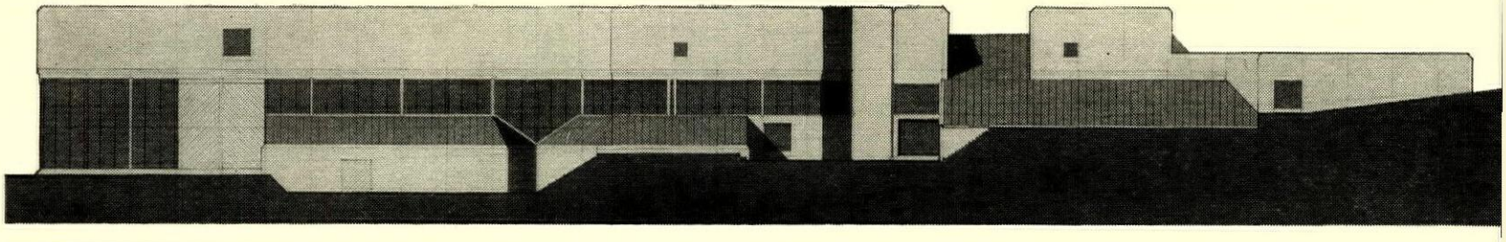


axonometric of main entrance



perspective from south-east

east elevation



EDUCATION

COLLEGE OF ART AND CRAFTS, KINGSTON-UPON-HULL, YORKS

Frederick Gibberd and Partners

CLIENT Kingston-upon-Hull City Council.

SITE 3.3 acres, enclosing Queen's Gardens at north-eastern end with frontage to Guildhall. For Art Gallery by same architects, see AR Preview, 1965.

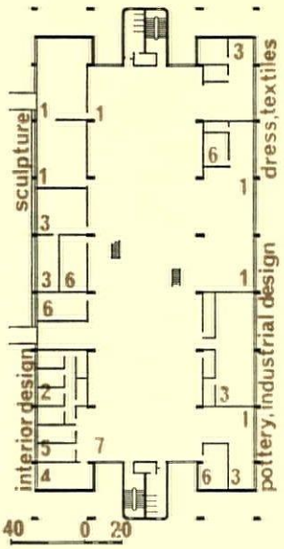
CCOMMODATION Single open hall with gallery studios at two upper levels. Enclosed stairs at ends, open bridges across centre. Total floor area, 100,000 sq. ft. Separate pavilions for music, decorating and admin.

STRUCTURE R.c. columns and plate slab floors, exposed finish throughout. Particular divisions by furniture and equipment.

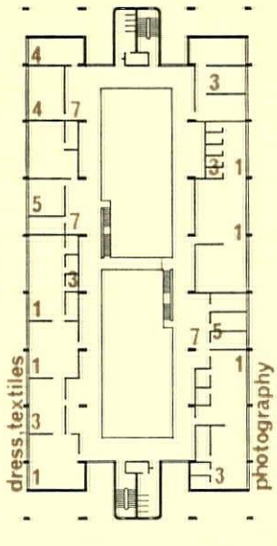
SERVICES District heating mains.

COST Phase 1, £310,000.

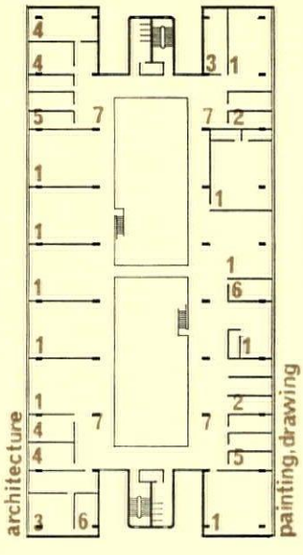
CONTRACT April 1967–April 1969. Partner-in-charge, J. B. Forrest.



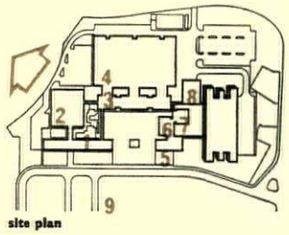
ground floor plan



first floor plan

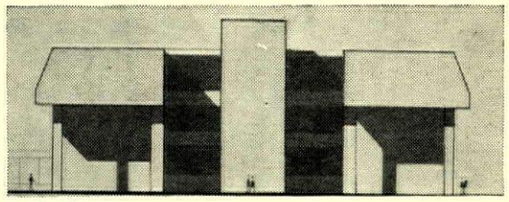


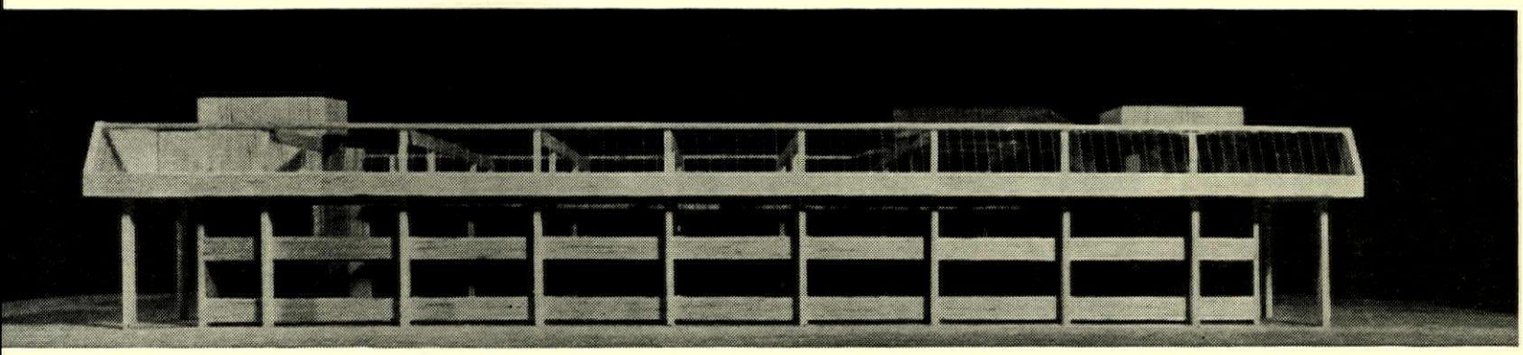
second floor plan

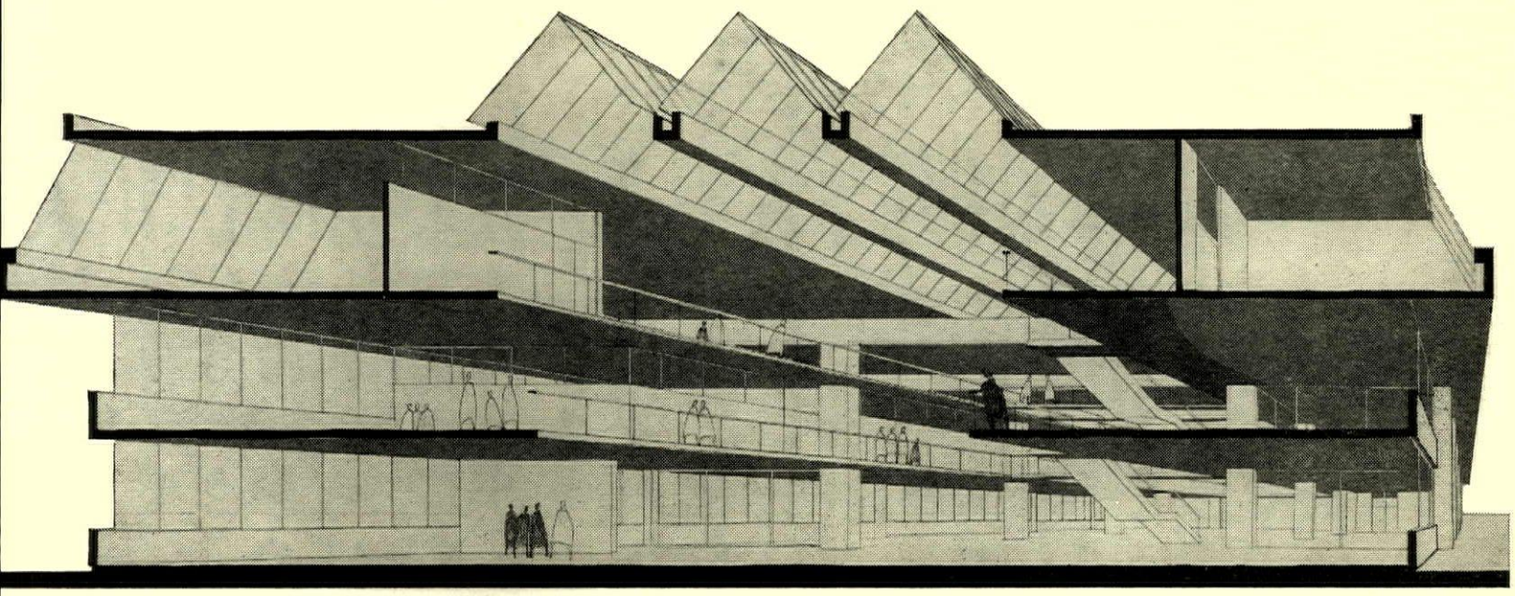

site plan

key to site plan
1. college of commerce
2. students' centre
3. laboratory block
4. workshop block
5. administration/library
6. lecture hall
7. school of music
8. painting and decorating
9. Queen's Gardens

key to plans
1. general studio
2. advanced studio
3. processing and work room
4. classroom
5. staffroom
6. stores
7. criticism and discussion area


west elevation


ove, south elevation of model: below, cut-away perspective of interior



EDUCATION

HIGH SCHOOL, MIDDLESBROUGH, YORKS

Williamson, Faulkner Brown and Partners

CLIENT Middlesbrough Borough Council.

SITE 56-acre grounds of seventeenth century house, Acklam Hall.

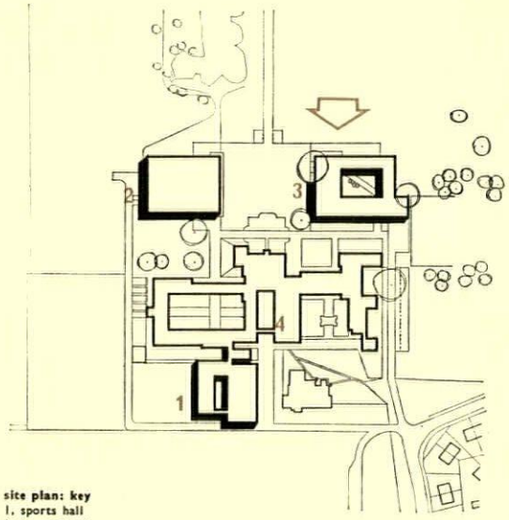
ACCOMMODATION Phase 1a, house block, swimming pool, boiler house, extensions and alterations to existing house. Phase 1b, sports hall, boiler house. Phase 2, sixth form block.

STRUCTURE Steel frame with brickwork to match existing house.

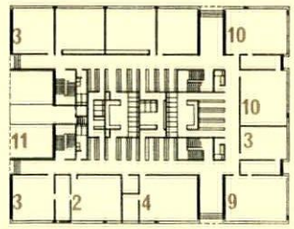
COST Phases 1a and 1b £268,000.

CONTRACT Phases 1a and 1b, March 1967–September 1968.

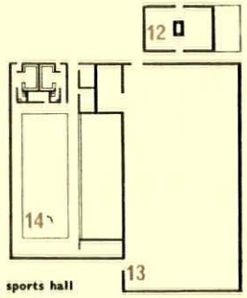
Partners-in-charge, H. Faulkner Brown and S. Hendy. Assistants, D. G. Lawson and D. H. Jones.



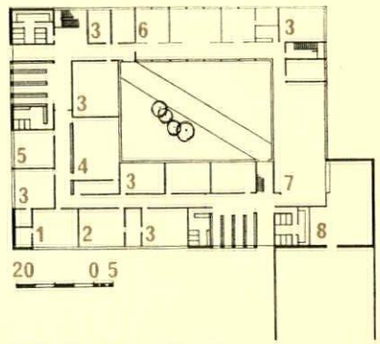
site plan: key
1, sports hall
2, house block
3, sixth form block
4, Acklam Hall



ground floor plan, house block

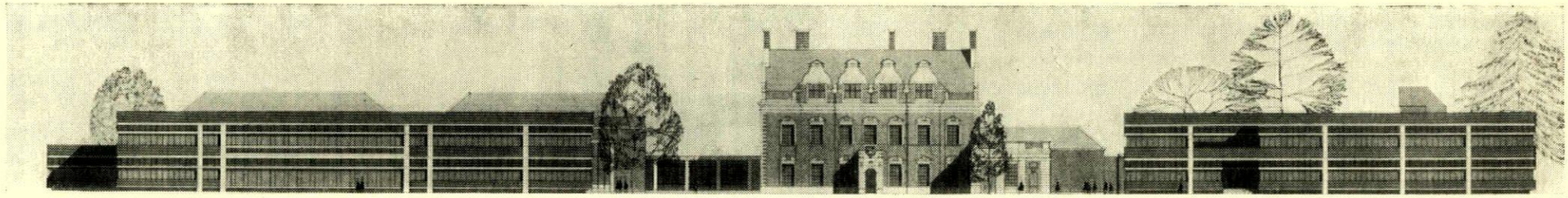


ground floor plan, sports hall



ground floor plan, sixth form block

key
1, history
2, language lab
3, classrooms
4, lecture room
5, economics
6, common rooms/study areas
7, dining room
8, kitchen
9, mathematics lab
10, geography
11, loading bays
12, plant
13, sports hall
14, swimming pool



south elevation: Acklam Hall centre, sixth form block left, house block right

TWO SCHOOLS, SYSTON, LEICS

Gollins, Melvin, Ward and Partners

CLIENT Leicestershire Education Committee.

SITE 50 acres in Melton Road, existing farmland under grass.

ACCOMMODATION Upper school, 1,440 pupils ultimately; Phase 1 for 720. High school, 630 pupils ultimately; Phase 1 for 400–500. Parking for 40 cars, unloading space for 43 school buses.

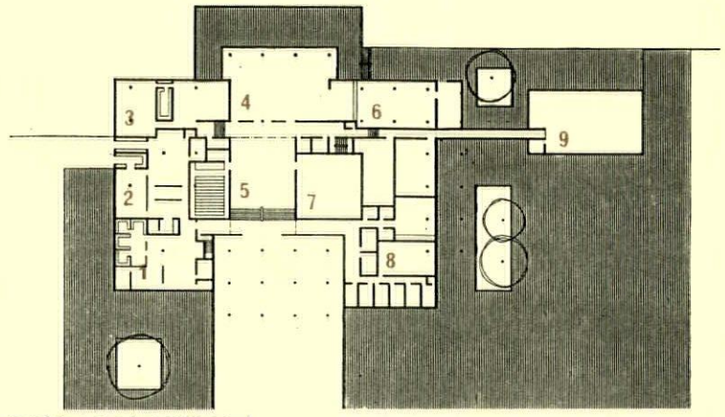
STRUCTURE In situ r.c. frame with waffle slab floors. White precast concrete facing slabs. Brick and block partitions fairfaced and painted. Floors, vinyl tile with wood block in halls.

SERVICES Solid fuel boiler in Upper School serving cabinet fan heaters.

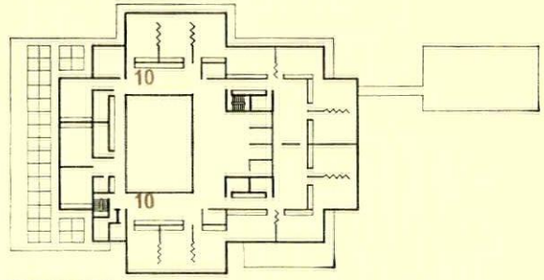
COST Upper School, £643,690 (ultimate). High School £273,160.

CONTRACT Spring 1967–August 1968.

Partners-in-charge, W. R. Headley and B. J. Mayes. Assistants, A. E.

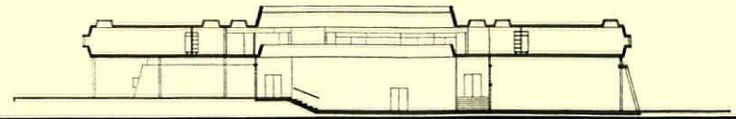


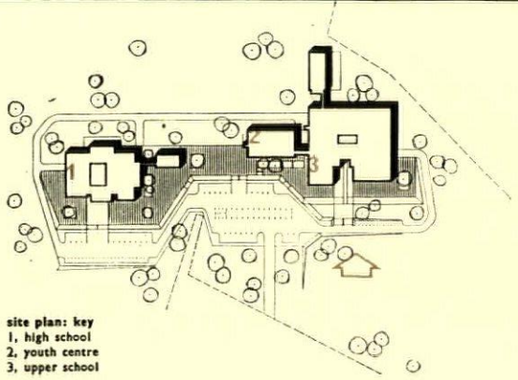
ground floor plan, Syston high school



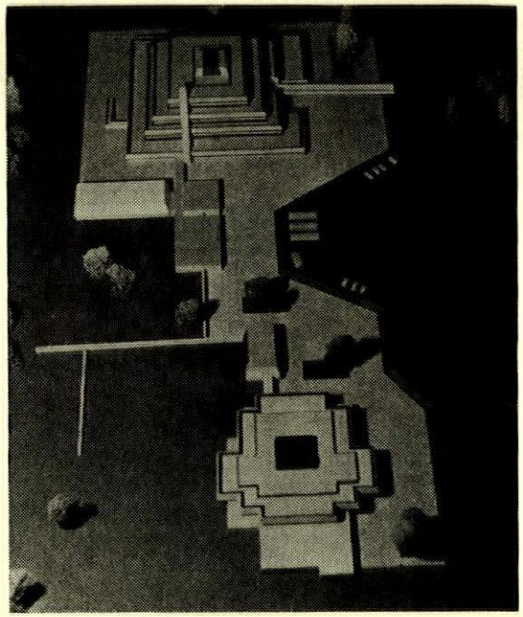
second floor plan

key
1, two-dimensional work area
2, three dimensional work area
3, science
4, hall
5, dining foyer
6, kitchen
7, drama
8, administration
9, physical education
10, classrooms and activities areas

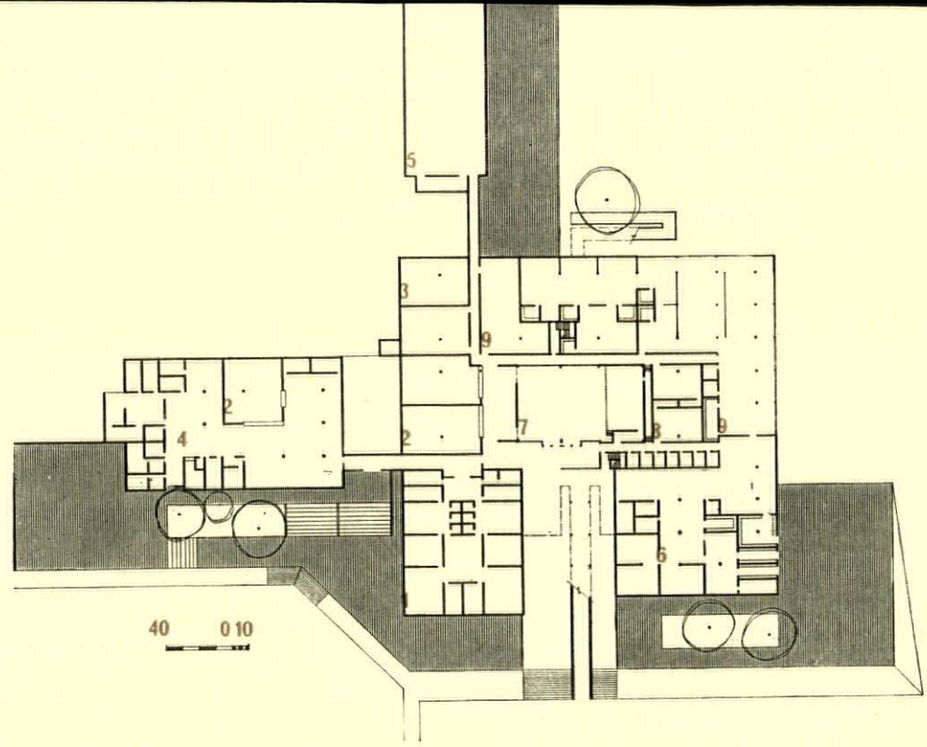




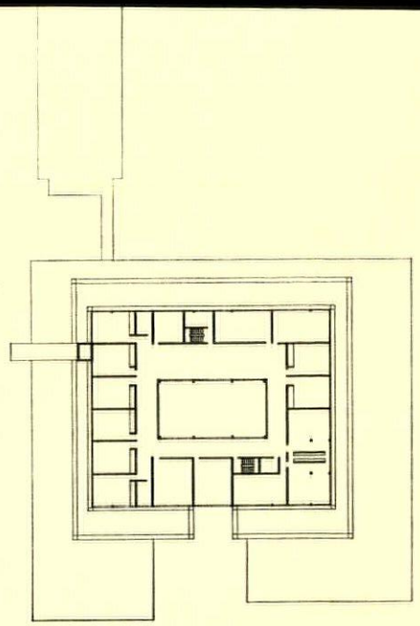
site plan: key
1, high school
2, youth centre
3, upper school



model of the two schools at Syston from the west

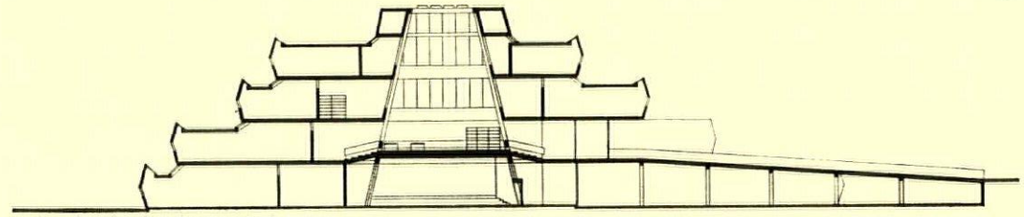


ground floor plan, Syston upper school and youth centre

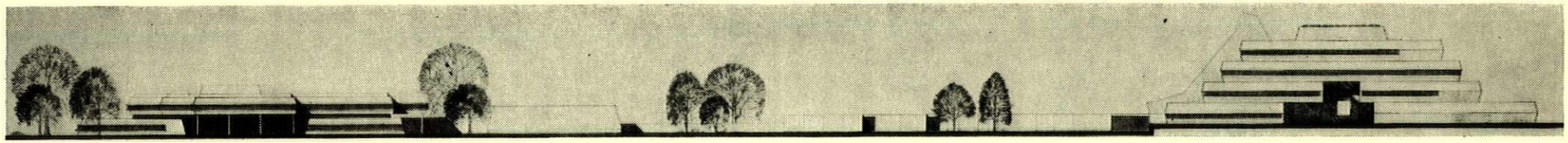


first floor plan

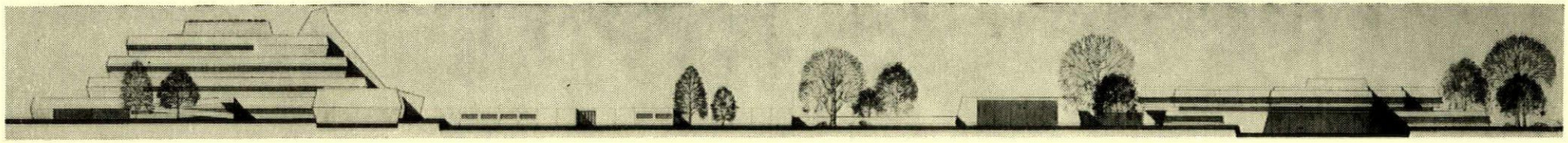
key
1, sixth form centre
2, kitchen
3, plant
4, sixth form, youth and adult social area
5, gymnasium
6, three-dimensional work area
7, hall/dining
8, music room
9, two-dimensional work area
10, classrooms and liberal studies



north-south section through upper school



above, south elevation, with the high school left and the upper school right: below, north elevation



SECONDARY SCHOOL, CLISSOLD PARK, LONDON

Stillman and Eastwick-Field

CLIENT Inner London Education Authority.

SITE 7.3 acres, gently sloping to south-east, with some large trees.

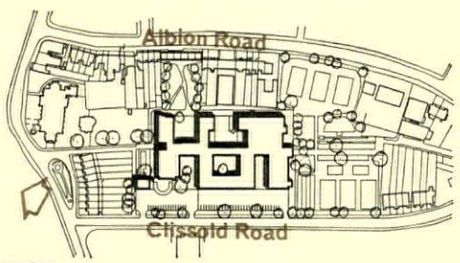
ACCOMMODATION Classrooms for 1,775 boys and girls. Assembly hall omitted because of developed drama suite with drama hall. Sports hall, youth service HQ and further education department.

STRUCTURE 3-storey loadbearing purplish-red brickwork with large exposed white concrete cill beams and slab edges. All windows of timber, painted black. Concrete hollow pot floors, timber roof. Boiler house, r.c. on brick plinth.

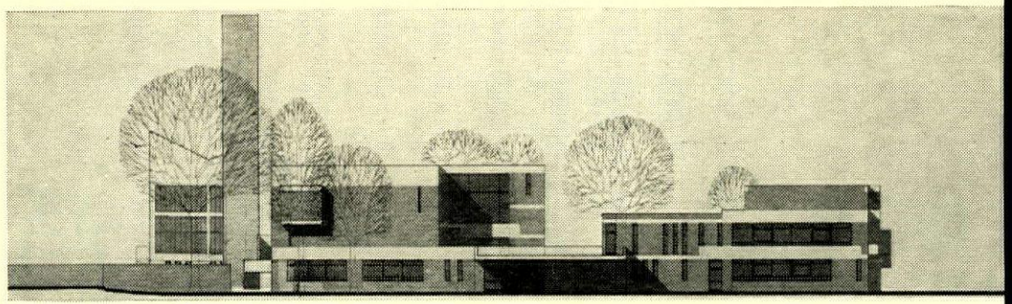
COST £875,000.

CONTRACT February 1967–1969.

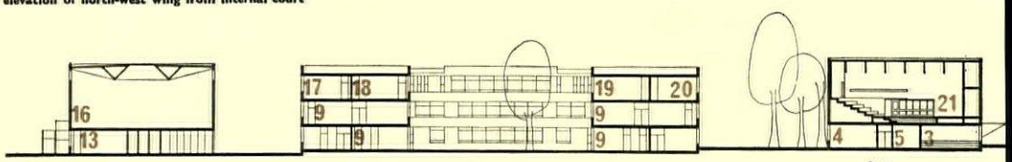
Partner-in-charge, John Stillman. Associate-in-charge, Ralph Smorczewski. Assistant, D. McCoy.



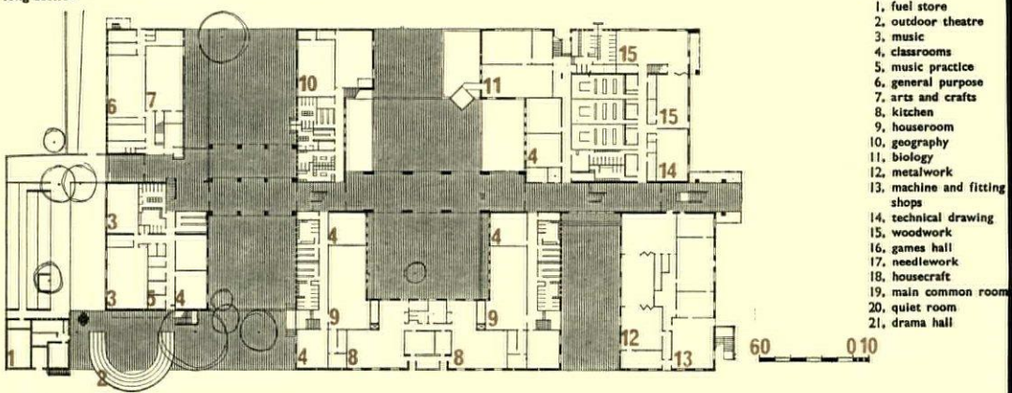
site plan



elevation of north-west wing from internal court



long section



ground floor plan

key
1. fuel store
2. outdoor theatre
3. music
4. classrooms
5. music practice
6. general purpose
7. arts and crafts
8. kitchen
9. houseroom
10. geography
11. biology
12. metalwork
13. machine and fitting shops
14. technical drawing
15. woodwork
16. games hall
17. needlework
18. housecraft
19. main common room
20. quiet room
21. drama hall

SCHOOL, HILLINGDON, LONDON

Douglas Stephen and Partners

CLIENT London Borough of Hillingdon.

SITE Level site, part of school playing fields at existing Evelyn School.

ACCOMMODATION 500 pupils in present buildings, to become Lower School. New Upper School for 535 includes 32 teaching spaces, lecture hall and assembly hall (also used by public).

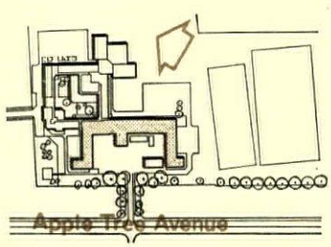
STRUCTURE R.c. frame and floors, steel joists to first floor roof, cantilevered first floor corridor. Brick outer skin with patent glazing throughout.

SERVICES Hot water radiators, warm air in assembly hall.

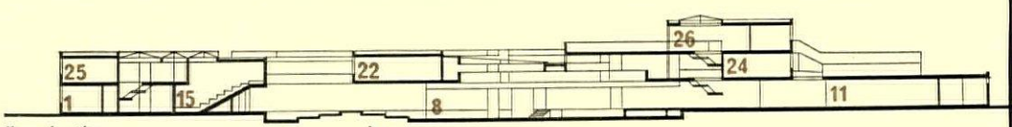
COST New building, £340,000. Renovations, £40,000.

CONTRACT March 1967–1970.

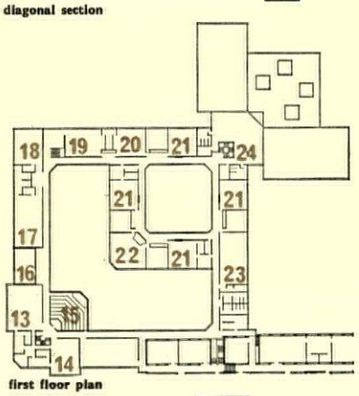
Partners-in-charge, Allan Forrest and Kenneth Frampton. Assistants, Peter Jamieson and Claire Watson.



site plan

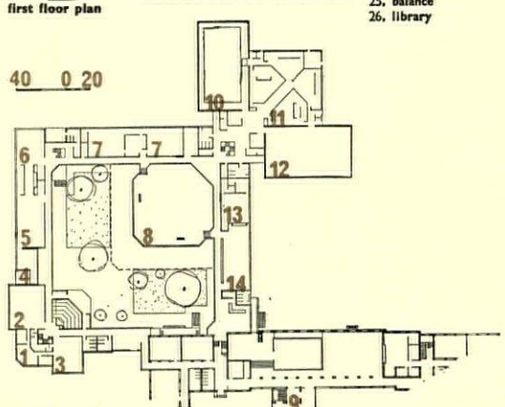


diagonal section

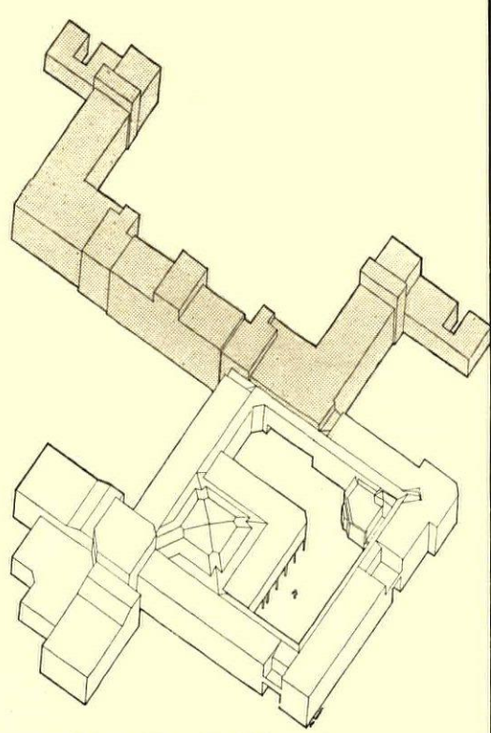


first floor plan

key
1. prep. room
2. general physics
3. advanced physics
4. external workshops
5. metalwork
6. engineering
7. commerce
8. assembly
9. entrance
10. swimming pool
11. changing
12. gymnasium
14. biology
15. lecture
16. open-air biology
17. cabinet making
18. practical drawing
19. geography
20. history
21. classroom
22. language lab
23. staff
24. upper commons
25. balance
26. library



ground floor plan



axonometric from north: new school in foreground

EDUCATION

PREPARATORY SCHOOL, SUTTON, SURREY

Team 4

CLIENT Holmfield Preparatory School Ltd.

SITE 3.25 acres of school playing field.

ACCOMMODATION Teaching space of 16,000 sq. ft. for 140 boys in senior school (8–13 years) and for 120 boys in junior school (5–8 years).

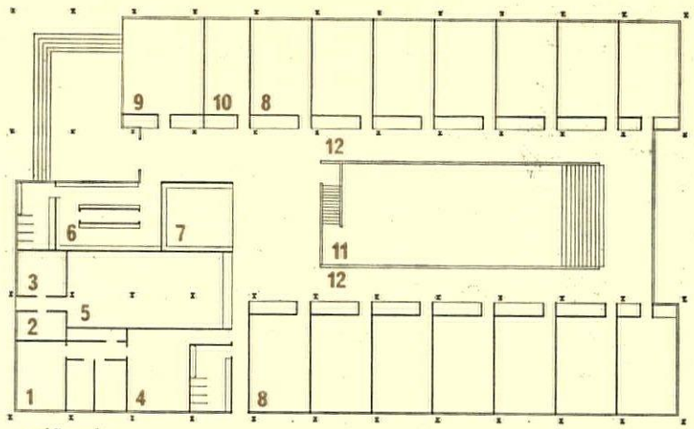
STRUCTURE Welded steel frame, r.c. slab, built-up roof on metal decking.

SERVICES Oil-fired central heating.

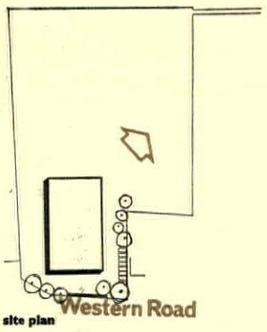
COST £70,000.

CONTRACT Starts 1967.

Quantity surveyor, G. A. Hanscomb Partnership. Structural consultant, Anthony Hunt and Partners. Mechanical consultant, David Kut and Partners. Electrical consultant, Peter Jay and Partners.



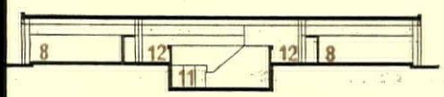
ground floor plan



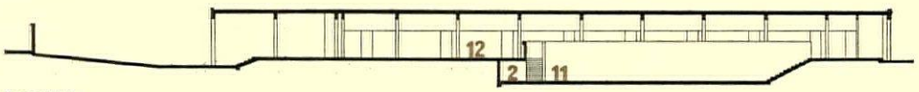
site plan

key

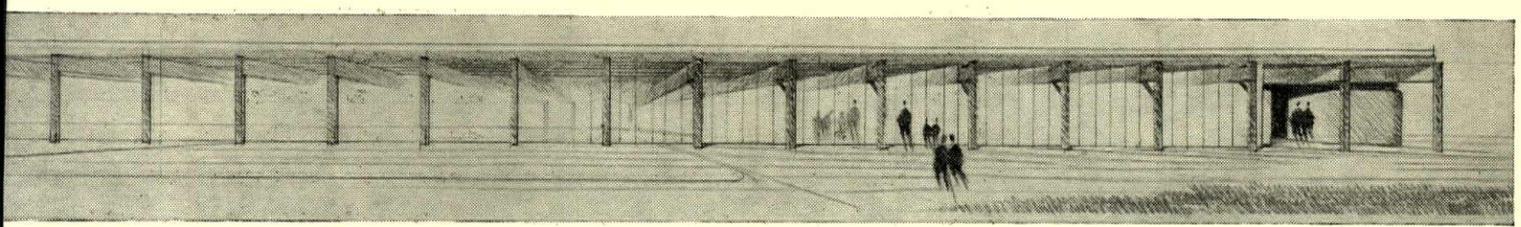
1. headmaster
2. store
3. plant
4. staff
5. kitchens
6. changing
7. library
8. classrooms
9. science
10. scholarship
11. gymnasium/assembly
12. dining



above, cross section:
below, perspective from west, showing possible future extension



long section



STAFF TRAINING COLLEGE, WALLINGFORD, BERKS

Morton, Lupton and Smith

CLIENT The Spastics Society.

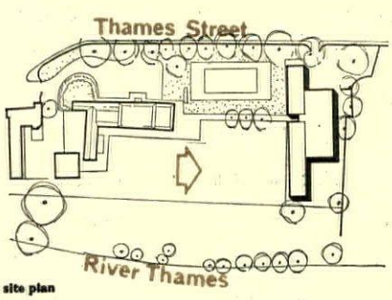
SITE Garden of nineteenth-century house near Thames, with fine trees.

ACCOMMODATION 40 study bedrooms. Teaching areas formed by different partition positions; as planned, 2 lecture rooms, domestic science room, activities room and seminar rooms.

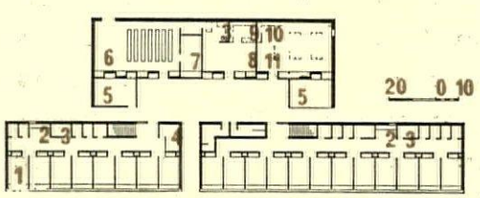
STRUCTURE Study bedrooms, brick crosswalls, timber floors and roof. Walls and ceilings plastered, cork flooring. Teaching areas, brick perimeter walls, steel columns and beams. Walls fairfaced brick, ceiling timber, flooring rubber.

SERVICES Low pressure hot water serving natural convectors in bedrooms, fan convectors in teaching areas.

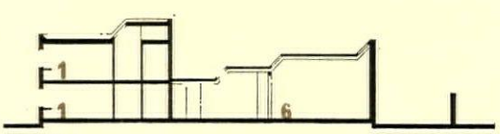
Partner-in-charge, Ivor Smith. Associate-in-charge, Timothy Hodson. Assistant, Stephen Knight. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Peter Dann. Services consultant, Henry Goddard.



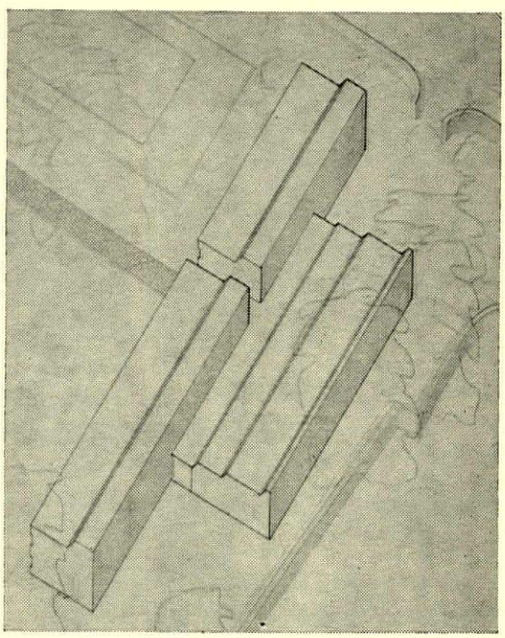
site plan



ground floor plan



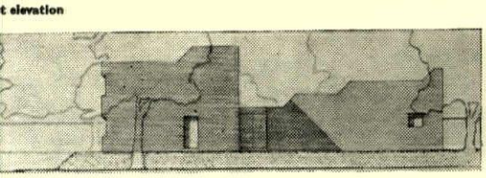
cross section



axonometric from north-east

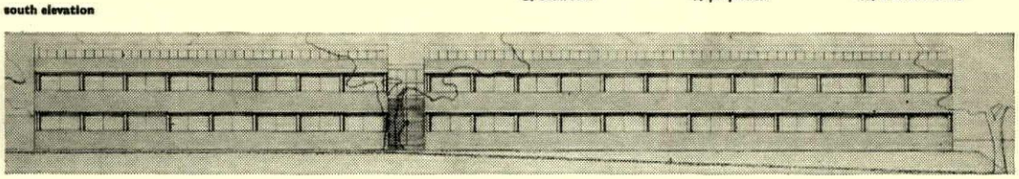
key

1. study bedroom
2. kitchen
3. bathroom
4. linen
5. seminar
6. lecture room
7. projection
8. flat
9. kitchen
10. pottery
11. arts and crafts



t elevation

south elevation



PREVIEW 67

Squeeze or no squeeze, there are never many buildings available for inclusion in this section, unsophisticated clients and oversophisticated architects generally walking separate ways. But we can be grateful for the high individual quality of those included in this year's issue. For one thing the squeeze does not seem to have affected the nationalized industries too badly. The Gas Council have commissioned the Newcastle architects, Ryder and Yates and Partners, to design a research laboratory at Killingworth New Town in Northumberland, as elegantly patrician in its way as their palazzo for the local Gas Board a few yards away (AR, April 1966). Such an aristocracy of commerce, now inevitably associated with the transatlantic style of Mies and SOM, has not been seen in the North of England since the days of Cockerell and Brodrick. Ryder and Yates's particular forte is the invention of architectural sculpture to set off against their classical uniform; undeterred by the debunking of their Minoan horns at the office block, they here offer a series of roof-top trumpets indicating hot air and a massive freestanding piece of concrete resembling a guillotine—symbolic possibly of the cutting off of gas supplies.

Such shapes recall the late Corbusier—but it is the early vocabulary of him and other pioneers that is most usually deployed these days, when the 'twenties, as James Stirling and others have recently emphasized, have acquired an heroic aura of uncommercial decisiveness and industrial purity. Douglas Stephen and Partners, always the most scholarly of these eclectics, have in their office block in this issue taken Weissenhof to Waltham Cross. Edward Cullinan in his Witham warehouse shows more direct the Stirling influence of dynamic glazing whi Quine and Newberry intend to place Wat Board typists in a beautiful Miesian aquariu (in the vegetable garden of a country house Meanwhile Penguins are to have a central po near London Airport, detailed by Arup Ass ciates with their usual tectonic zeal as a seri of trough-shaped beams. Exceptionally puri forms are used in the first stage of a lar industrial complex at Derby designed by Tea 4, whose Swindon factory opened last year Preview. This time they have adopted a mo conventional concrete frame, sheathing in black anodised aluminium. More importa is that the client chose their design, on ground of cost as well as aesthetics, in preferenc to schemes from industrial package-dealers.

Mixed uses, which the International Style doe not clothe so serenely, depend on comprehen sive property development—and the mogu have recently shown less signs of confidence i its profitability. In this issue we have a vigorou post-Corbusian scheme by Covell, Matthews an Partners on a small triangular site at Notting ham, incorporating car showrooms, multi storey parking, offices and a pub. At Edinburgh on a challenging site over against the Castl Rock, Andrew Renton's firm has designed staggered skyscraper of bedrooms for an hote which will share foyer space with an adjoinin scheme by another architect for a second Ushe Hall. The other hotel, equally Brutalist an justifiably jollier, is by the Owen Luder Partner ship—a series of holiday cabins in Malta, som plugged into a skyscraper frame, others scattere as bungalows along the beach.

INDUSTRY: COMMERCE

HOTEL, MALTA

The Owen Luder Partnership

CLIENT A private developer.

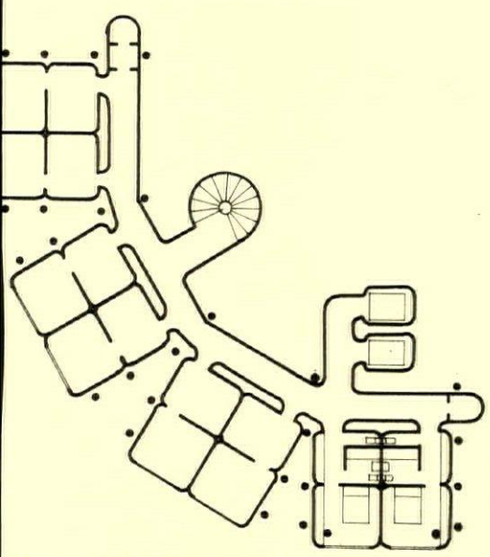
SITE Qrejten Point, rocky peninsula 4 miles from Valetta.

ACCOMMODATION 200 beach cabins, 100 bedroom suites in hotel, with night club and restaurants.

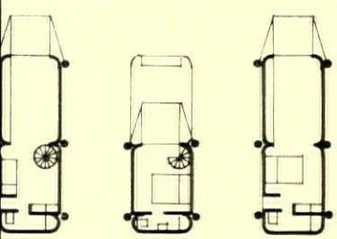
STRUCTURE Hotel, r.c. with insulated fibreglass cabins inserted into main structure. Beach cabins, insulated fibreglass units mounted on steel framework with open timber walkways.

SERVICES Modular air conditioning plant.

Partners-in-charge, Owen Luder and Rodney Gordon. Associates-in-charge, Lawrence Howard and Peter Abbott.



ical floor plan, hotel tower (8 double rooms per floor)



site plan: key

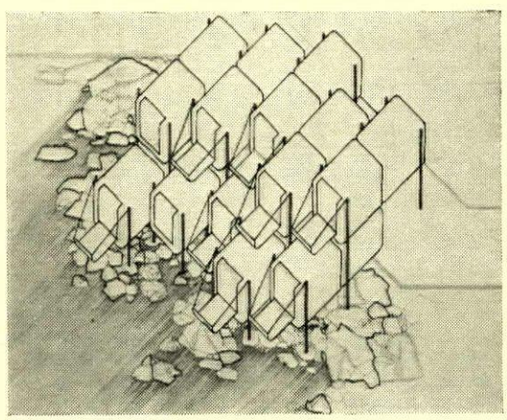
1, bar
2, sun deck
3, pool
4, harbour
5, night club
6, sun deck
7, beach
8, restaurant
9, lounge
10, hotel tower
11, reception
12, foyer
13, service
14, staff quarters
15, discotheque

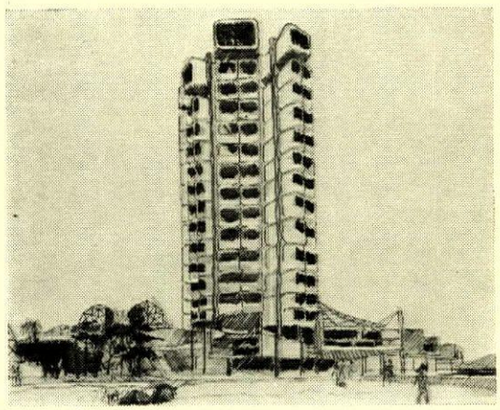
riple unit cabin ower level

triple unit cabin upper level

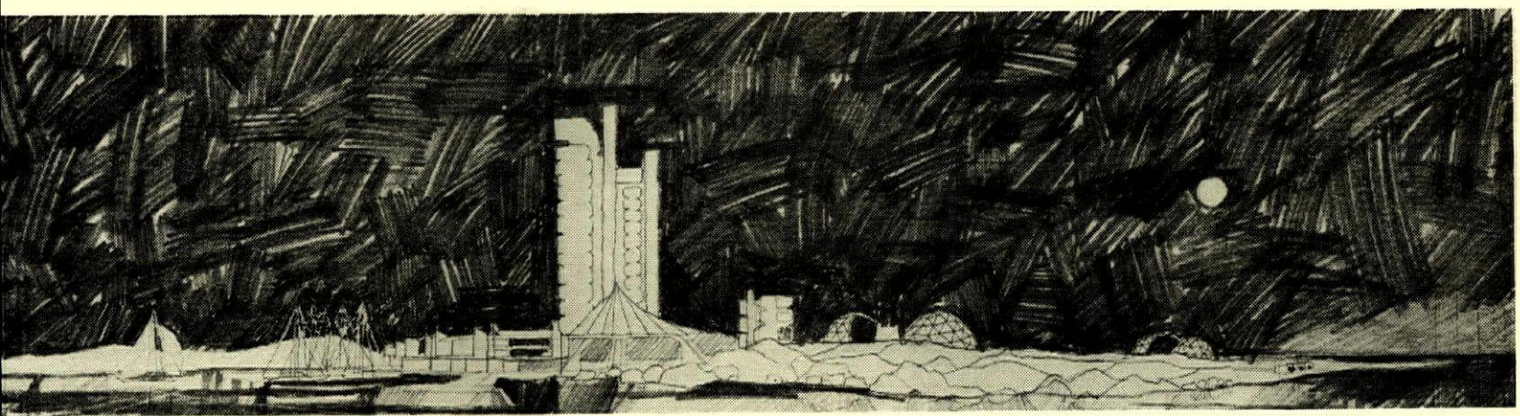
double unit cabin

0 0 10





above left, axonometric of double unit cabins: above right, perspective of hotel tower from south-east: below left, from the Mediterranean, looking south



HOTEL, EDINBURGH

Renton, Howard, Wood Associates, in association with W. H. Kininmonth, consultant on theatres and C. Wakefield-Brand, architect to the brewery

CLIENT Scottish and Newcastle Breweries Ltd.

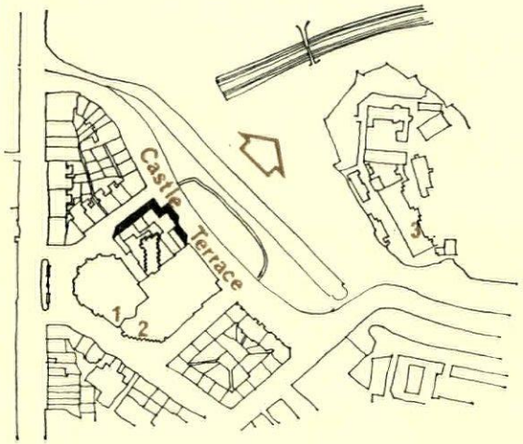
SITE 0.8 acres, below Edinburgh Castle rock and within sight of Princes Street, sloping gently south-north. Part of plan for new corporation theatres and hotel linked to existing Usher Hall.

ACCOMMODATION 130 bedrooms with private bathrooms, 6 penthouse suites, restaurant, grill room, bars. Also exhibition, banqueting, ballroom and conference facilities for use together with Usher Hall and theatres.

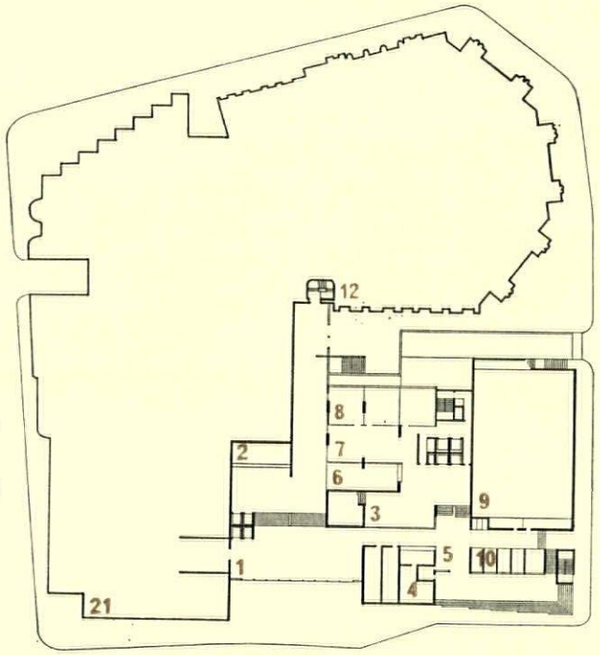
STRUCTURE Tower, crosswall construction on r.c. podium and columns. Large spans over ballroom, precast post-tensioned concrete.

SERVICES Heating by low pressure hot water. Full air conditioning in ballroom and exhibition area.

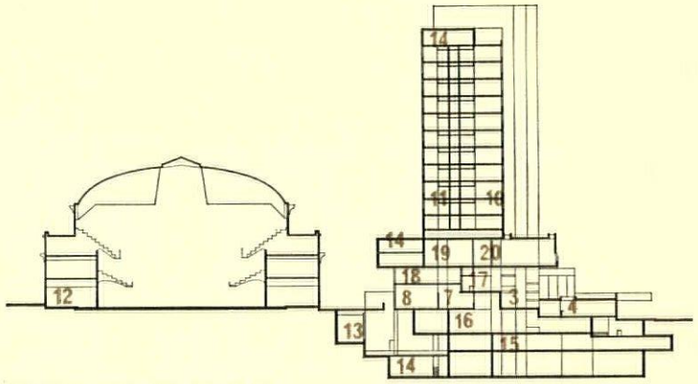
Partners-in-charge, Andrew Renton and Peter Howard. Associate-in-charge, John Kennet. Assistants, Nicholas Thompson and Robin Beynon.



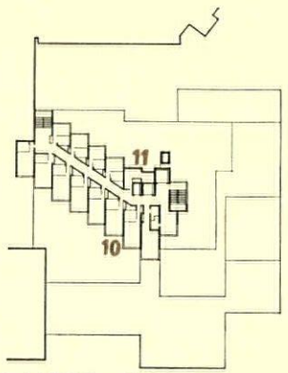
site plan: key
1, Usher Hall
2, theatre site
3, Castle



ground floor plan, showing relationship to Usher Hall



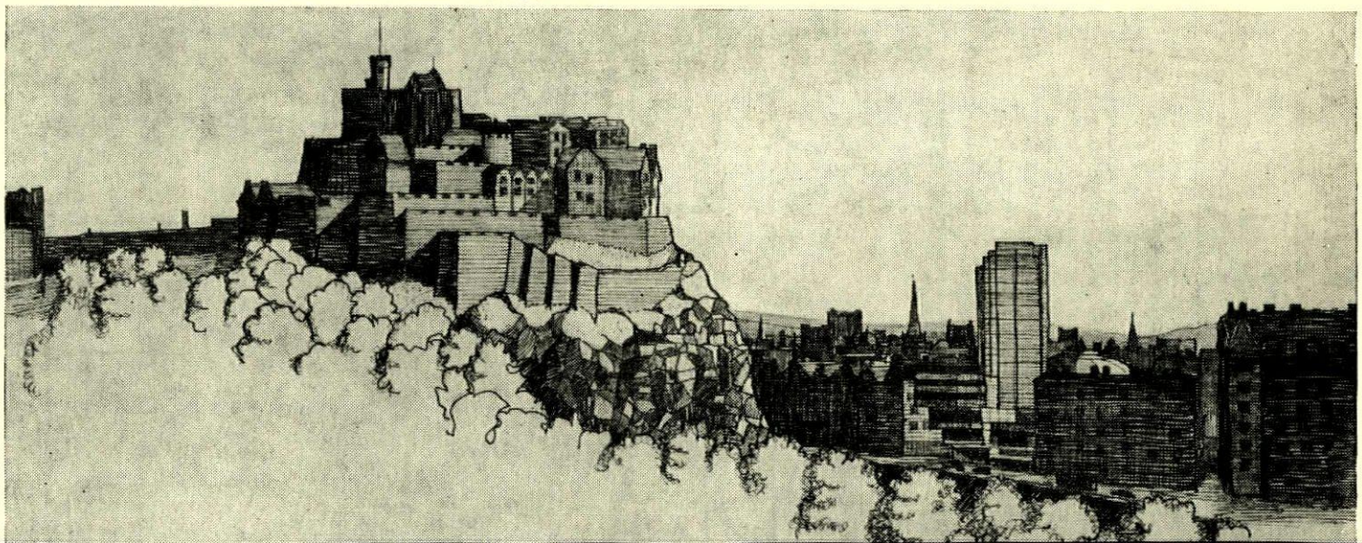
cross section through Usher Hall and hotel

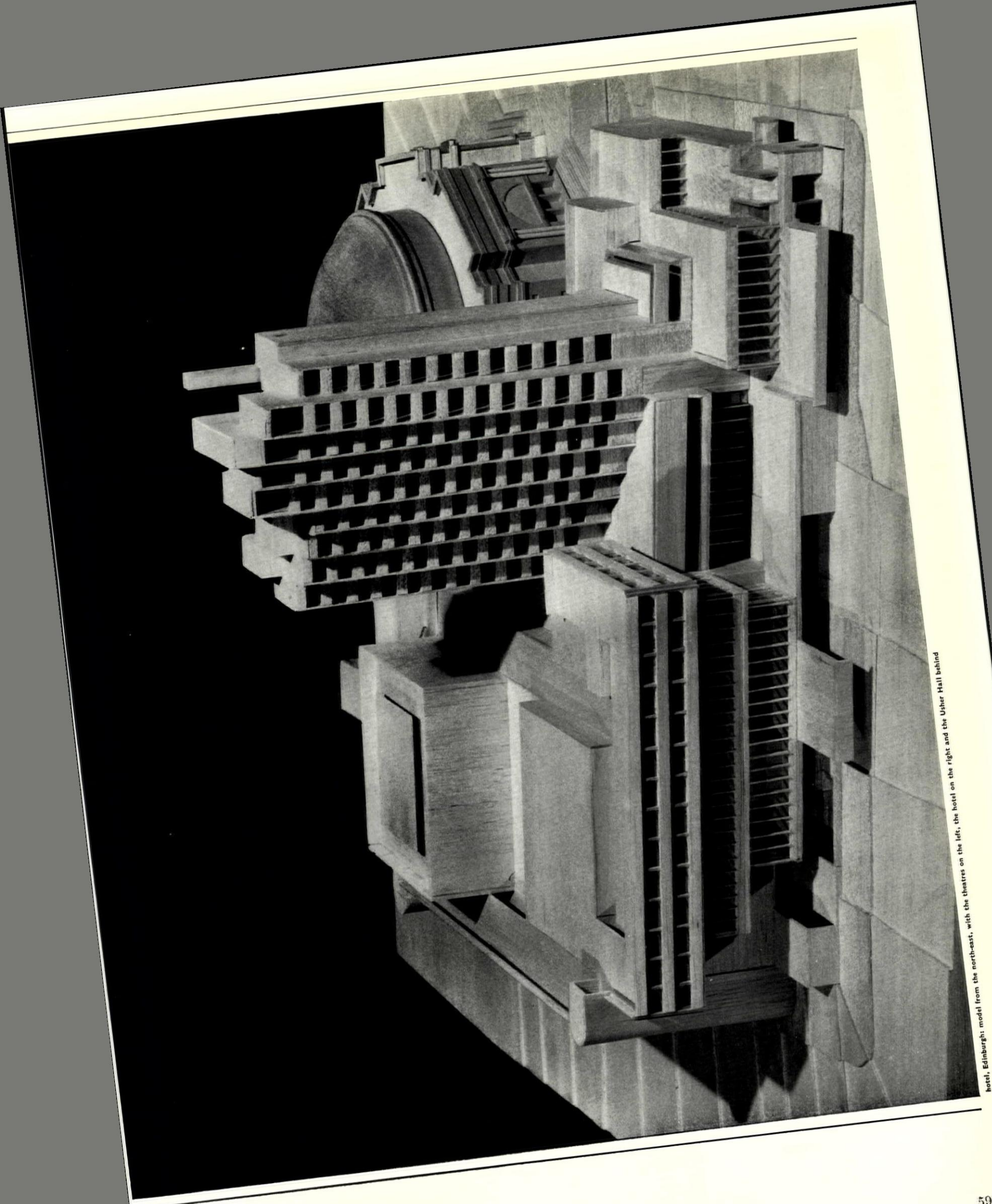


typical hotel floor plan

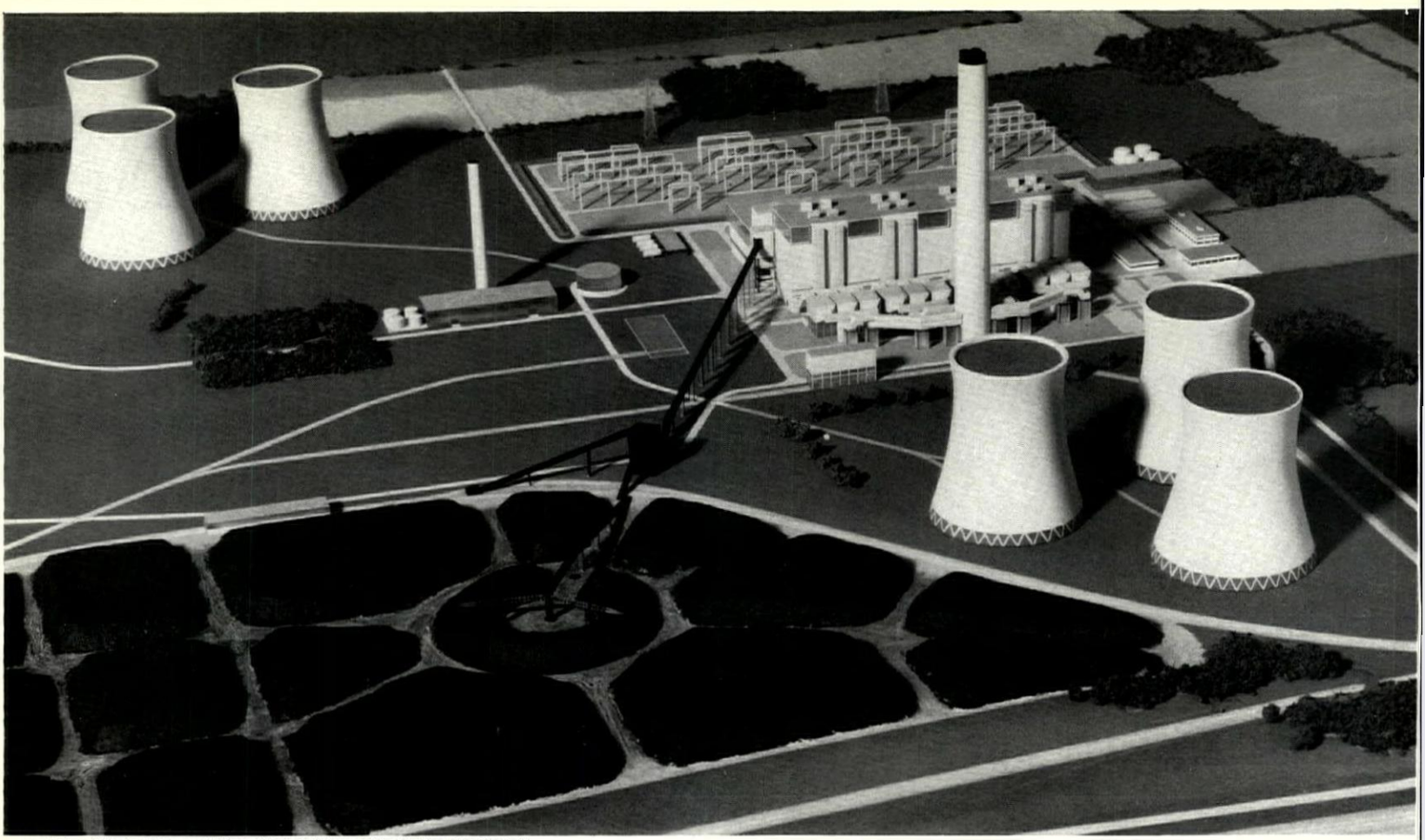
key
1, common entrance concourse
2, box office
3, lounge
4, reception, switchboard
5, foyer
6, upper part of exhibition area
7, reception area
8, dining/committee rooms
9, upper part of ballroom
10, double bedrooms
11, single bedrooms
12, Usher Hall
13, ramp
14, plant
15, car park
16, exhibition area
17, grill bar
18, administration
19, kitchen
20, restaurant
21, theatre

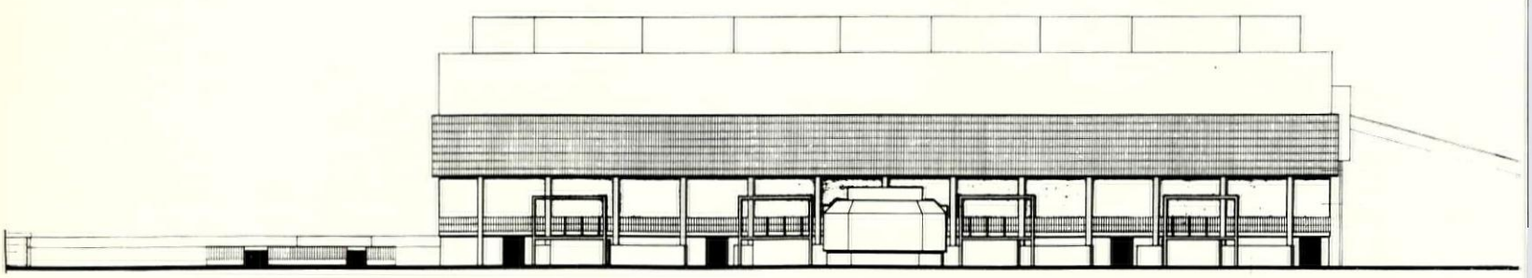
from the north, with Edinburgh Castle on the left and the hotel tower on the right



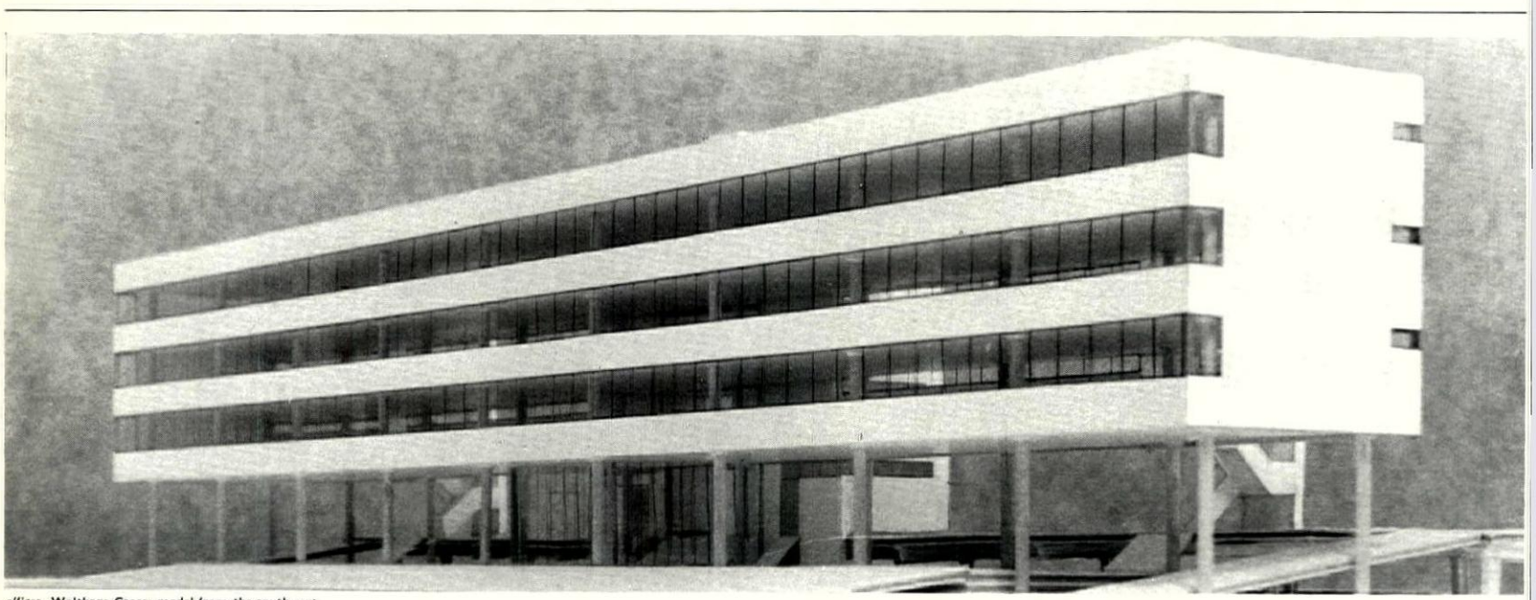


hotel, Edinburgh: model from the north-east, with the theatres on the left, the hotel on the right and the Usher Hall behind





power station, Didcot: above, model from the west: below, north elevation of turbine hall



offices, Waltham Cross: model from the south-east

POWER STATION, DIDCOT, BERKS

Frederick Gibberd and Partners, with C. S. Allott and Son, consulting engineers

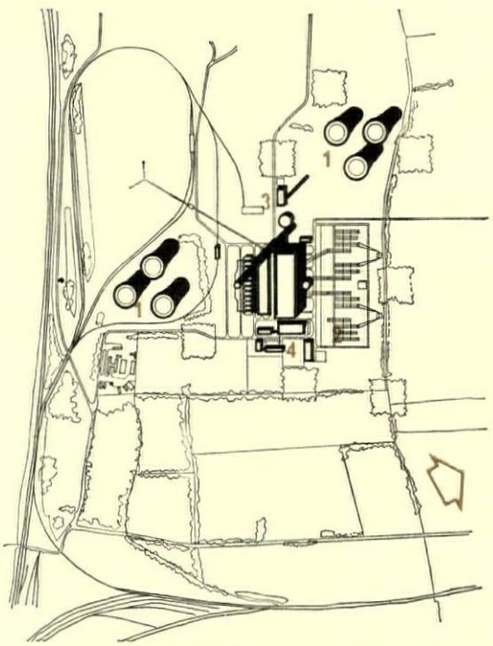
CLIENT Central Electricity Generating Board.

SITE 585 acres at former Didcot Ordnance Depot.

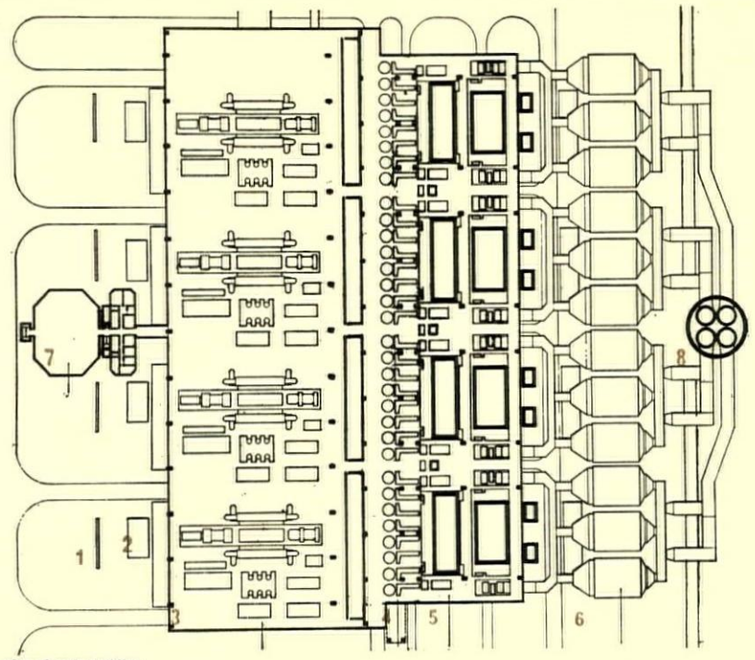
ACCOMMODATION 2,000 megawatt coal-fired power station.

STRUCTURE Plant buildings, generally steel framed, clad with ribbed aluminium sheeting, patent glazing and boarded shuttered concrete.

CONTRACT 1965–1972.
Partner-in-charge, J. W. Grimes.

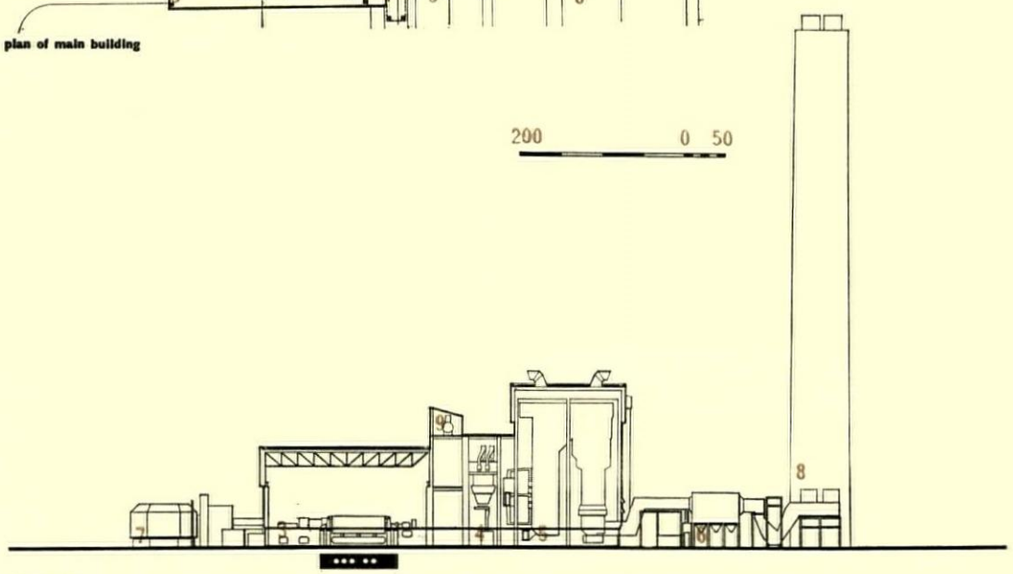


site plan: key
1, cooling towers
2, switchgear compound
3, gas turbine house
4, workshops and administration



key
1, generator transformer
2, switch house
3, turbine hall
4, bunker bay
5, boiler house
6, precipitators
7, control block
8, stack
9, de-aerator
10, workshops

plan of main building



200 0 50

long section

OFFICES, WALTHAM CROSS, HERTS

Douglas Stephen and Partners

CLIENT Davstone (Holdings) Ltd.

SITE 0.5 acres facing Trinity Lane.

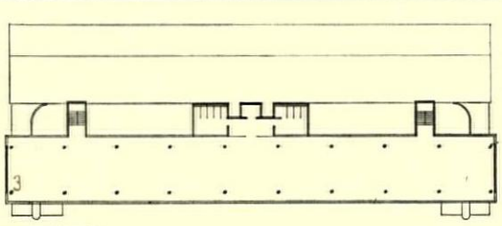
ACCOMMODATION 18,000 sq. ft. lettable floor space. Public car parking for 48 cars, office parking on upper level for 42 cars.

STRUCTURE R.c. frame with white glazed ceramic tile finish externally.

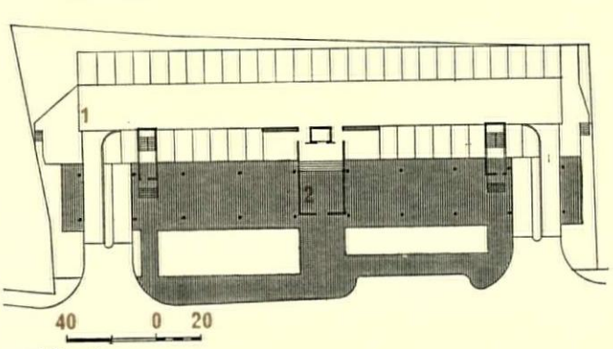
SERVICES Cill-line heating.

COST £100,000.

CONTRACT Starts March 1967.
Partner-in-charge, Douglas Stephen. Assistants, Robin Spence and Lazare Mizraki. Quantity surveyor, Brian Davis and Associates. Structural consultant, R. J. Crocker and Associates.



upper floor plan



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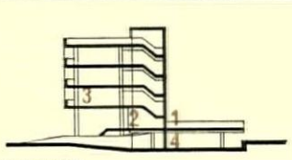
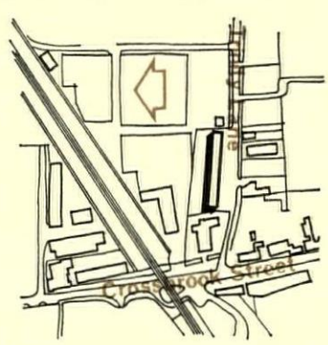
ground floor plan



cross section

key
1, office parking
2, entrance lobby
3, office space
4, public car park



site plan

INDUSTRY: COMMERCE

OFFICES, DERBY

Team 4

CLIENT Fletcher and Stewart Ltd.

SITE 7.25 acres island site, close to city centre.

ACCOMMODATION Master plan in about four phases for light industry (mining equipment) and heavy industry (sugar). Phase 1, office building, 22,248 sq. ft.

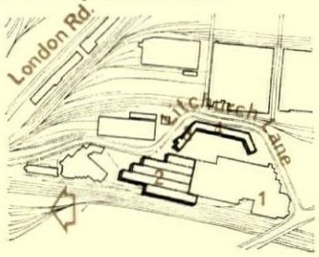
STRUCTURE R.c. frame with no internal columns, precast T-beam floors and roof, on pile foundations. External cladding of black anodised aluminium.

SERVICES Solid fuel boiler serving cill-line convectors. Fluorescent light tubes recessed in T-beams. Floor trunking in screed, with continuous access.

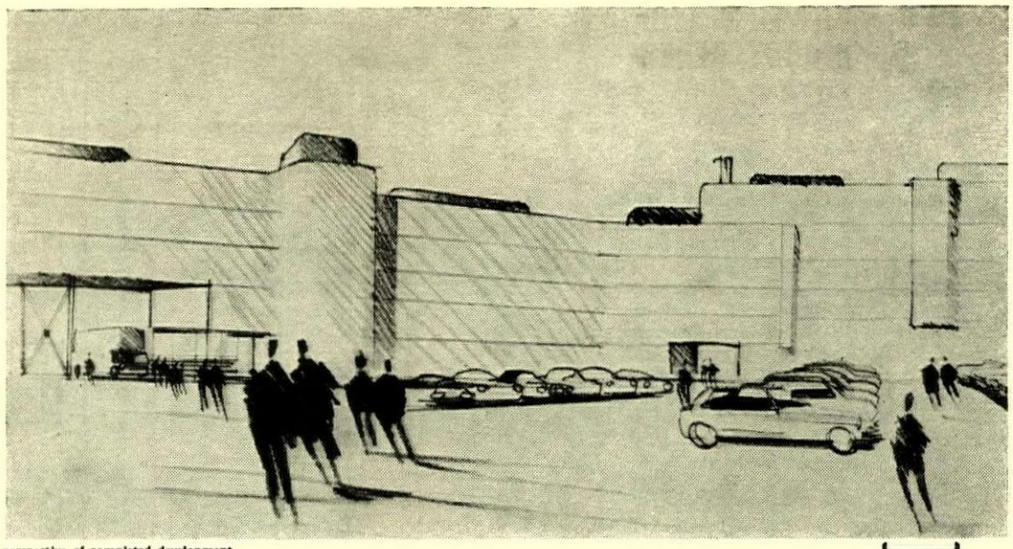
COST Phase 1, £130,000.

CONTRACT July 1966–May 1967.

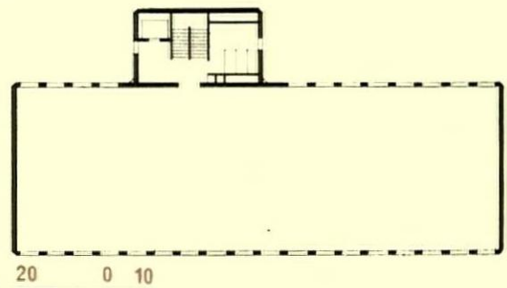
Quantity surveyor, G. A. Hanscomb Partnership. Structural consultant, Anthony Hunt and Partners. Mechanical consultant, David Kut and Partners. Electrical consultant, Peter Jay and Partners.



site plan

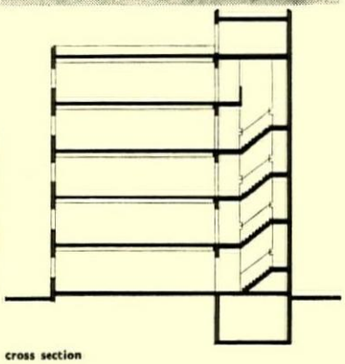


perspective of completed development



key to site plan
1, existing factory
2, assembly extension
3, administration building
4, administration extension

typical office floor plan, phase 1



cross section

MIXED DEVELOPMENT, NOTTINGHAM

Covell, Matthews and Partners

CLIENT C. and S. Bluston (Contractors).

SITE 2,400 sq. yds. in Queen's Bridge Road, flat but rising to road.

ACCOMMODATION Offices, 13,000 sq. ft. Showrooms, 25,800 sq. ft. Public house, 3,850 sq. ft. Warehouse, 28,800 sq. ft. Parking for 390 cars.

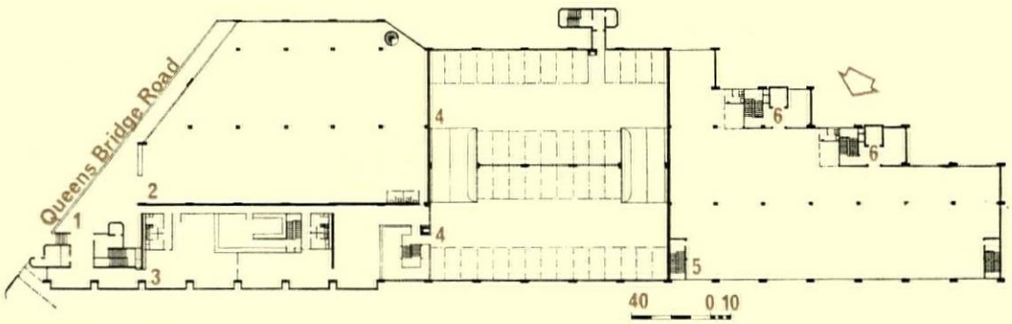
STRUCTURE R.c. frame with large span beams. Patent glazing to windows, pivot lights to offices. Lift towers, r.c. with joints emphasized.

SERVICES Offices, underfloor electric heating.

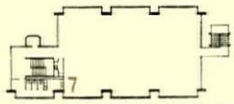
COST £350,000.

CONTRACT January 1967–July 1968.

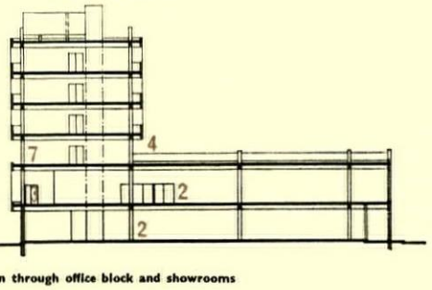
Partner-in-charge, J. R. G. Wheatley. Assistants, S. Husain, E. Yim, M. Sampson. Quantity surveyor, L. R. Kinsler and Partners. Structural consultant, Alan Grant and Partners.



site and ground floor plan

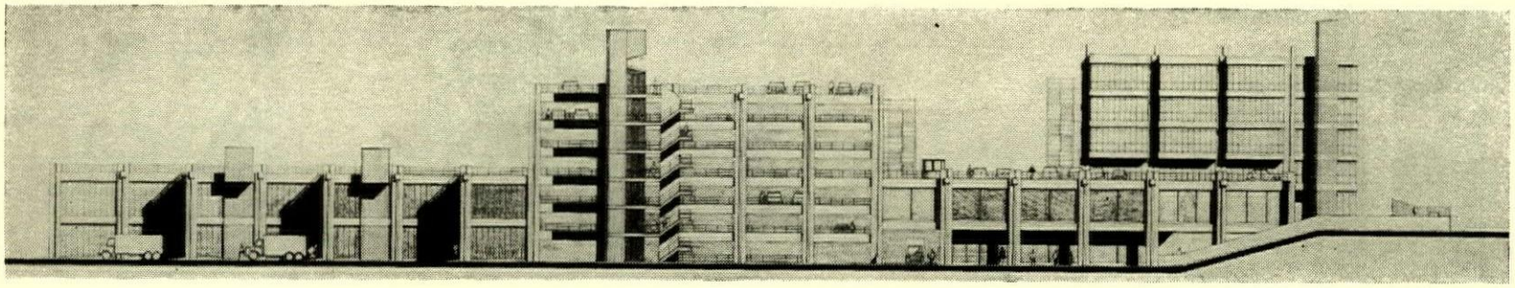


typical upper floor plan, office block



cross section through office block and showrooms

key
1, terrace
2, showroom
3, public house
4, parking
5, warehouse
6, lift lobby
7, offices



south elevation: left to right, warehouse, car park, showrooms with offices over

RESEARCH STATION, KILLINGWORTH, NORTHUMBERLAND

Ryder and Yates and Partners

CLIENT Gas Council.

SITE Nearly 10 acres, flat, next to main-line railway in New Town.

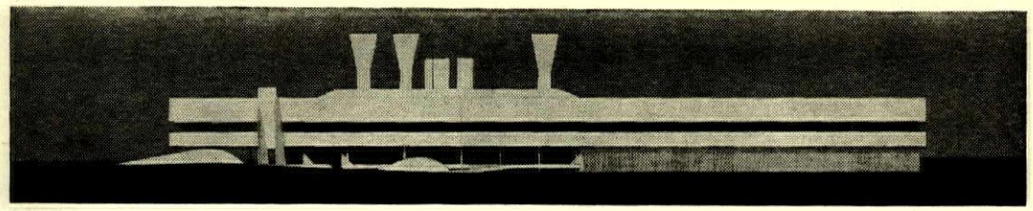
ACCOMMODATION Total area, 80,000 sq. ft., containing laboratories for research in mechanical engineering and metallurgy, crane bay, machine shop, canteen, covered parking.

STRUCTURE Car park, offices and canteen, r.c. frame on piles. Laboratories and crane bay, steel frame with vierendeel girders. Internally, fairfaced brickwork throughout. Externally, precast concrete cladding at first floor, plastic faced steel sheeting to ground floor walls.

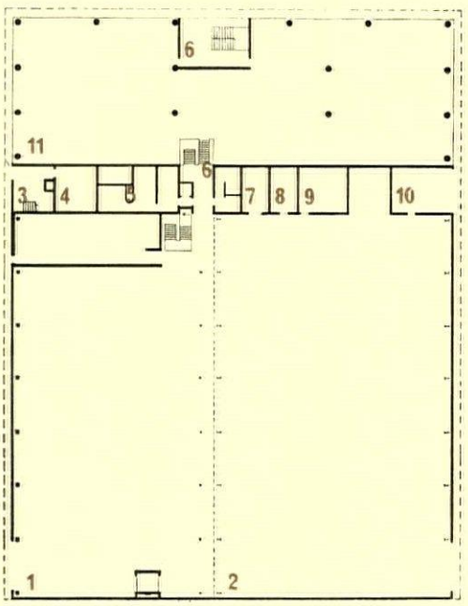
SERVICES Heating and ventilation by dual duct system, with conventional plenum and extract system.

COST £566,292.

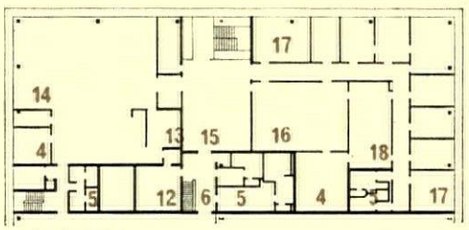
CONTRACT August 1966–November 1967.
Job architect, G. W. D. Harris.



perspective from north-east

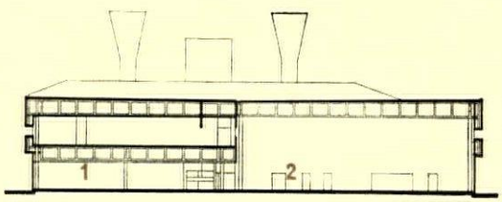


ground floor plan

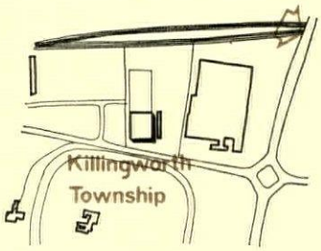


part first floor plan

key
1, machine shop
2, crane bay
3, kitchen service
4, store
5, lockers and lavatories
6, lobby
7, first aid
8, control room
9, telephone equipment
10, garage
11, parking
12, dining room
13, kitchen
14, canteen
15, reception
16, library
17, offices
18, conference room



cross section



site plan

OFFICES AND RESTAURANT, RICHMOND, SURREY

Tripe and Wakeham

CLIENT North Thames Gas Board.

SITE 1.46 acres in Manor Road next to existing gas holding and storage yard.

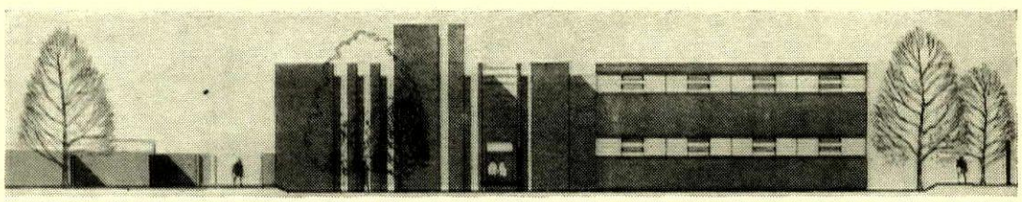
ACCOMMODATION 14,400 sq. ft. offices, including administration unit, centralizing service unit and sales unit. Restaurant, kitchen and club room.

STRUCTURE Offices and restaurant, r.c. frame. Lockers, etc., loadbearing brick. External cladding, London stock brick throughout.

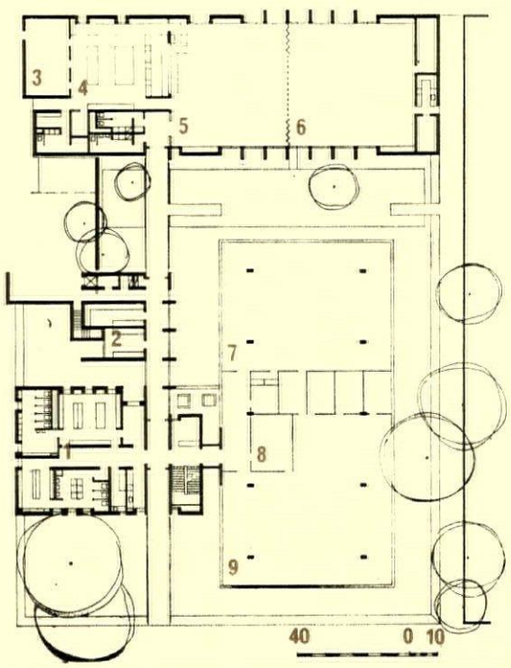
SERVICES Mechanical ventilation to offices.

COST £188,000.

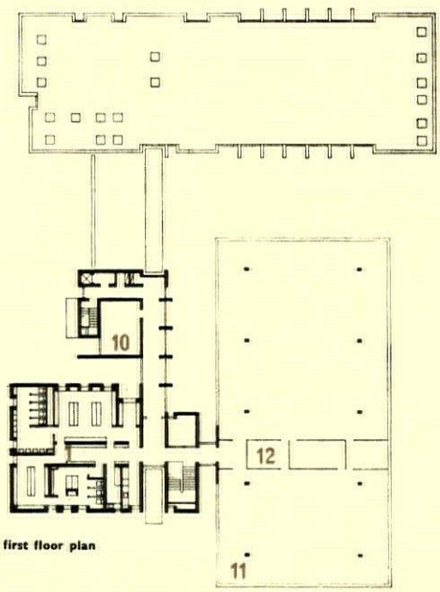
CONTRACT Starts late 1967.
Partner-in-charge, J. H. Broome.
Assistant, R. J. T. Pope.



west elevation, with main entrance in centre

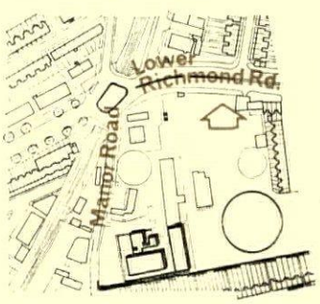


ground floor plan



first floor plan

key
1, lockers and lavatories
2, stationery and book store
3, kitchen stores
4, kitchen
5, restaurant
6, club room
7, centralized service unit
8, offices
9, administration unit
10, committee room
11, centralized sales unit
12, central supervisory offices



site plan

MICRO-ELECTRONICS FACTORY, WITHAM, ESSEX

Anthony B. Davies and Associates

CLIENT Marconi Co. Ltd.

SITE 5.6 acres, flat and open, in new industrial estate.

ACCOMMODATION Sales and administration, 8,033 sq. ft. General services, 10,588 sq. ft. Research and development, 51,179 sq. ft. Plant services, 8,049 sq. ft. Canteen, 5,748 sq. ft. Total area, 91,157 sq. ft.

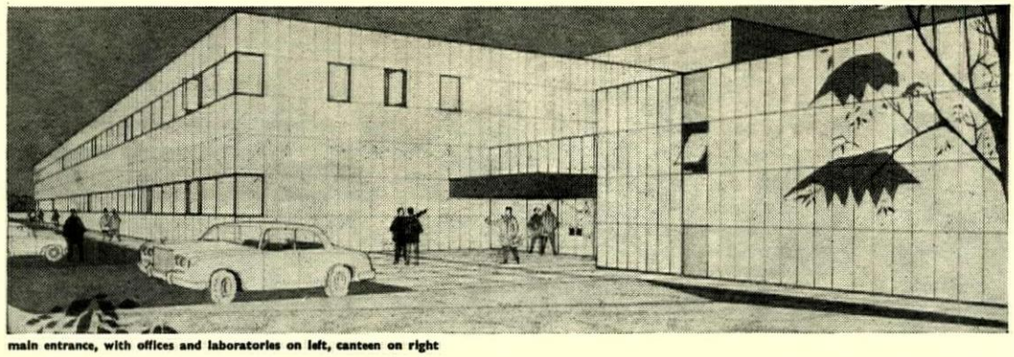
STRUCTURE Structural steel frame with 70 ft. span welded lattice beams across main area. Main production floor at first floor level of in situ heavy concrete to minimise vibration for microscope work. External wall panels, lightweight cavity concrete blocks. External cladding throughout, compressed asbestos cement panels with stove-enamelled finish.

SERVICES First floor of main block fully air conditioned. 10 ft. void in roof over and service floor below allow complex services to be maintained and adapted outside clean areas, thus avoiding contamination.

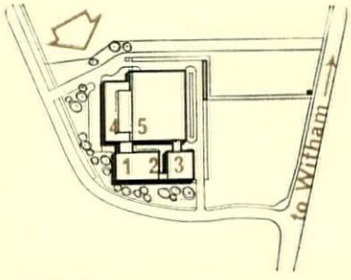
COST £900,000.

CONTRACT June 1966–October 1967.

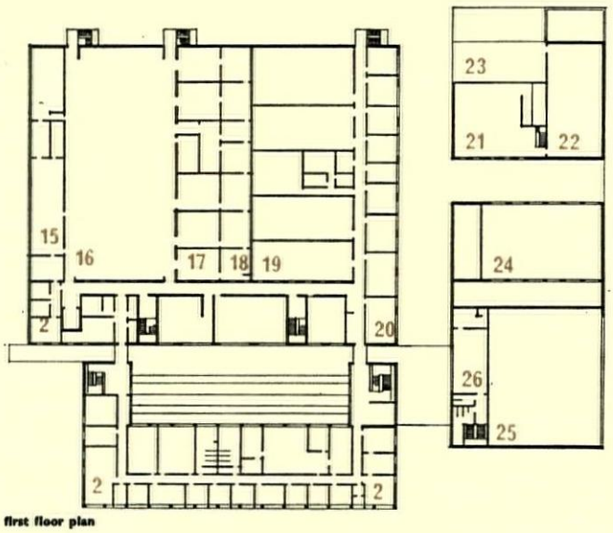
Associate-in-charge, R. S. Chesher. Assistant, D. Elliott. Quantity surveyor, E. C. Harris and Partners. Structural consultant, Clarke, Nicholls and Marcel. Services engineers, architects' own.



main entrance, with offices and laboratories on left, canteen on right

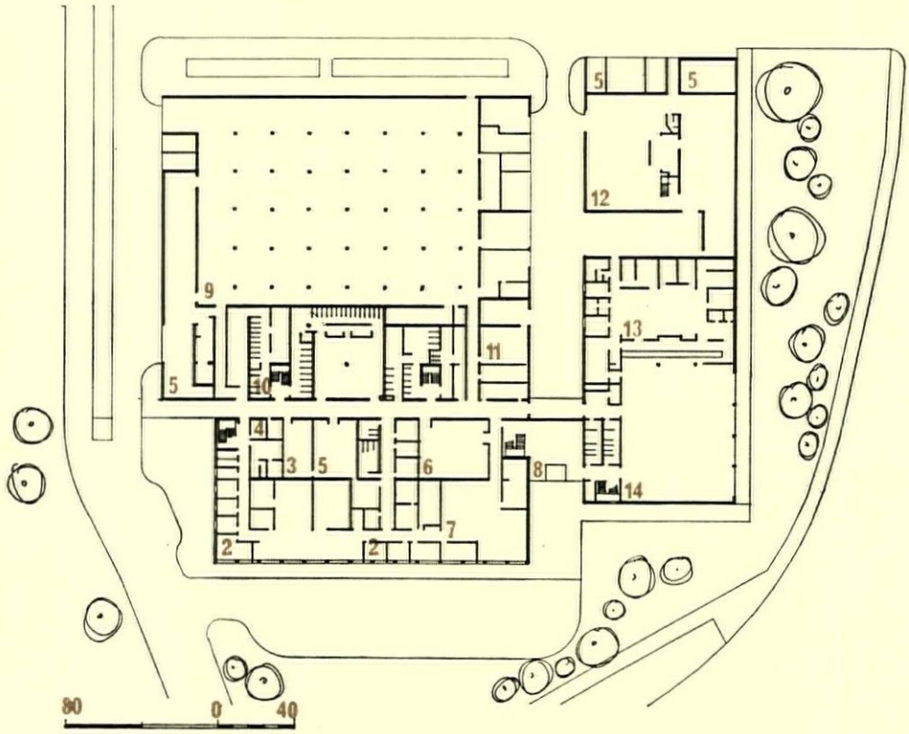


site plan: key
1. canteen
2. kitchen
3. boilers
4. offices and labs
5. production, research and development

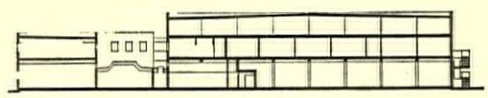


first floor plan

key to plans
1. development labs
2. offices
3. store
4. reception
5. engineers' lab
6. quality assurance
7. applications lab
8. entrance hall
9. production
10. cloaks and lockers
11. plant and labs
12. plant
13. kitchen
14. canteen
15. test area
16. pilot area
17. furnace rooms
18. chemical rooms
19. labs.
20. development offices
21. maintenance
22. water storage
23. cooling towers
24. upper part of kitchen
25. upper part of canteen
26. senior staff dining
27. production control
28. central tea bar
29. service area



ground floor plan

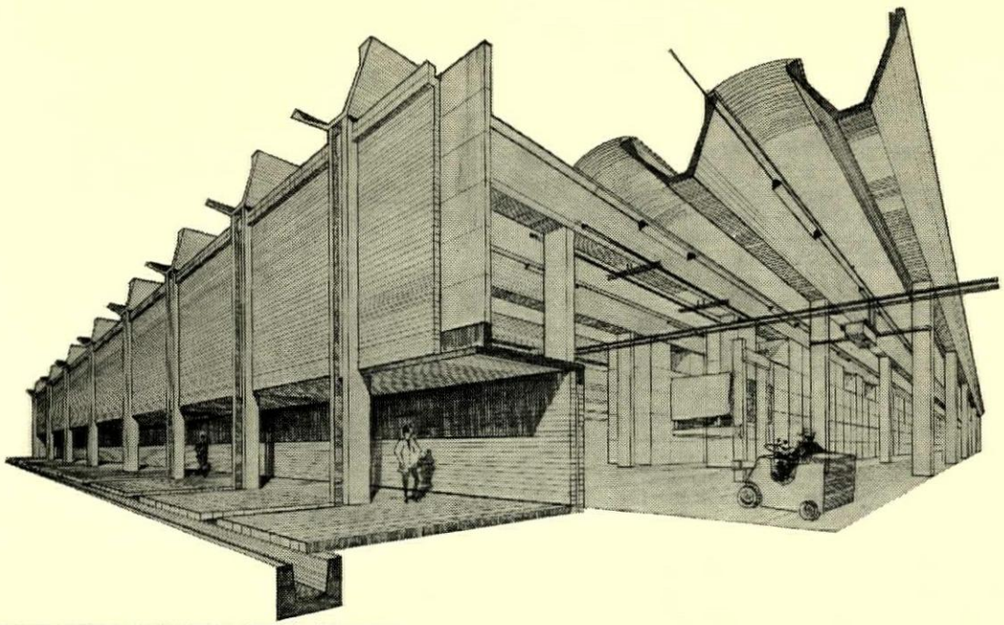


cross section through laboratories and production area

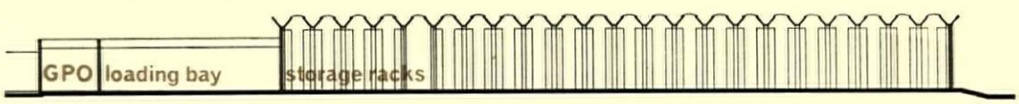
BOOK WAREHOUSE, HARMONDSWORTH, LONDON

Arup Associates

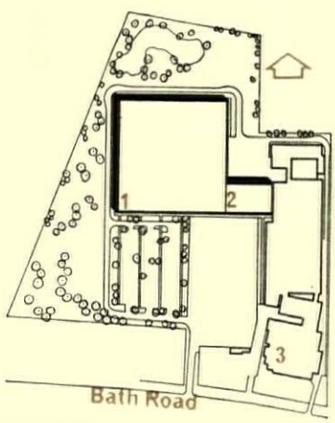
CLIENT	Penguin Books Ltd.
SITE	8 acres of open waste land in Bath Road opposite London Airport.
ACCOMMODATION	60,000 sq. ft. of warehousing for storage of 40 million paperbacks in pallets 28 ft. high.
STRUCTURE	Concrete columns at 13 ft. 6 in. centres and 77 ft. centres supporting 9 ft. 6 in. wide by 4 ft. deep V-shaped gutter beams, with 4 ft. wide glazing between.
SERVICES	Heating by high level fan heaters supplied by central boiler house.
COST	£260,000, including unloading and loading link and roads.
CONTRACT	September 1966–July 1967. Quantity surveyor, Dearle and Henderson.



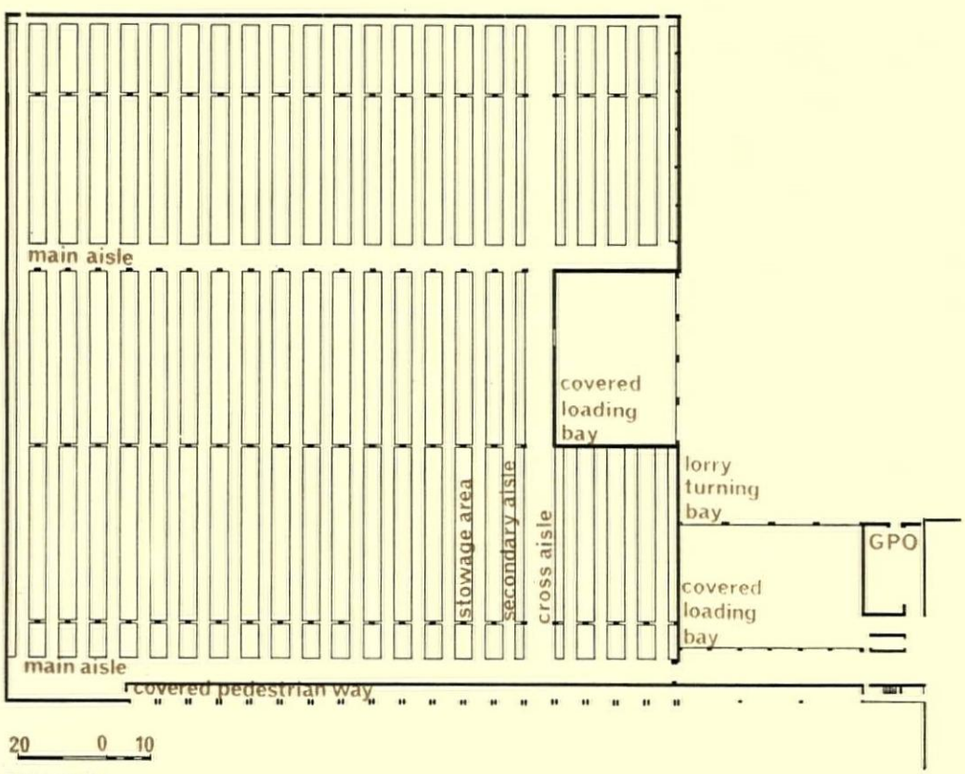
cut-away perspective of south elevation, showing book storage area



long section through link block and warehouse

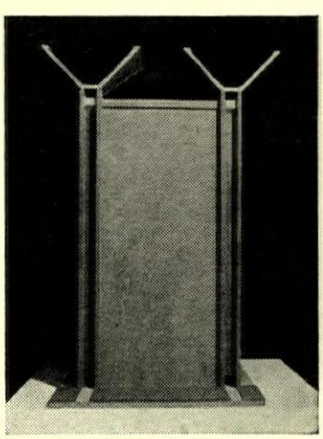


site plan: key
1, new bulk warehouse
2, link block
3, existing buildings



ground floor plan

mock-up of structural unit



WAREHOUSE AND PRINTING WORKS, WITHAM, ESSEX

Edward Cullinan

CLIENT Social Services Supplies Ltd.

SITE Plot 8A in Stepfield Industrial Area East. Slightly sloping.

ACCOMMODATION Warehouse, loading bay, printing works with offices over.

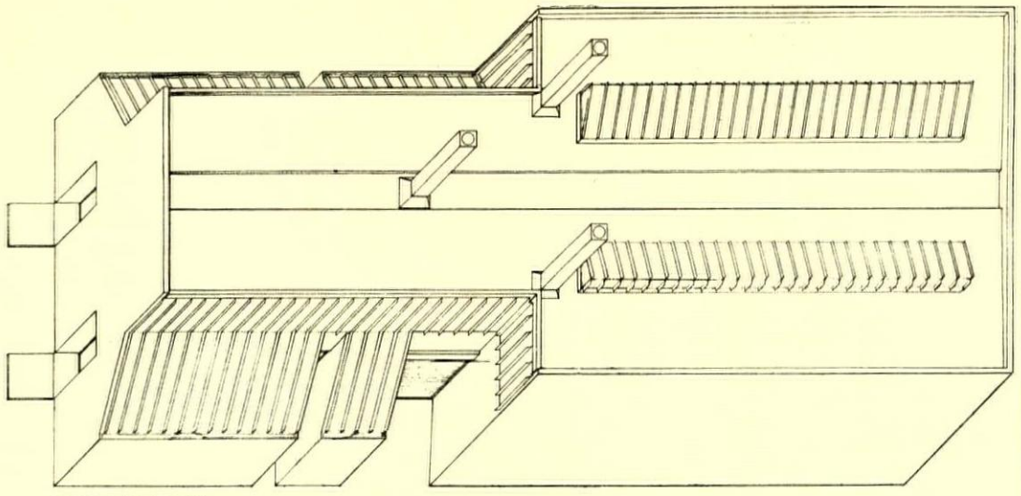
STRUCTURE White modular concrete blocks, aluminium patent glazing, concrete floors.

SERVICES Warm air heating with gas-fired boiler.

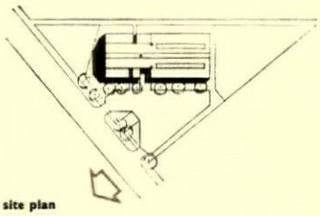
COST £27,000.

CONTRACT November 1966–July 1967.

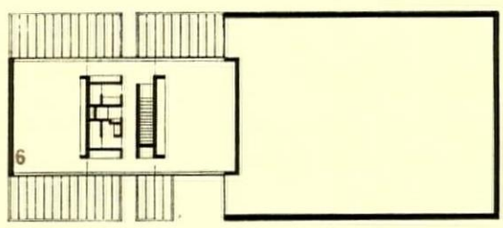
Assistants, Ian Pickering and Julian Wickham. Quantity surveyor, Stern and Albers. Structural consultant, British Reinforced Concrete Ltd.



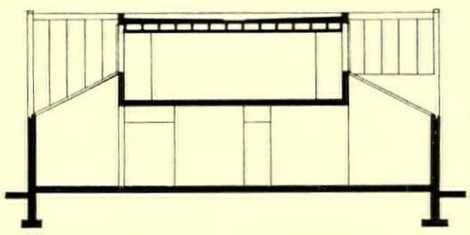
axonometric from north



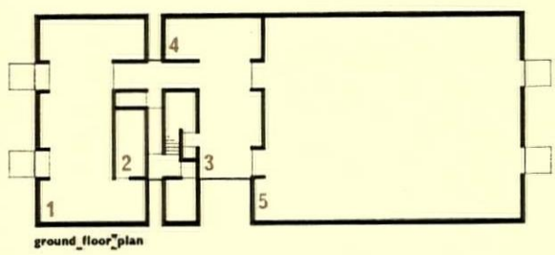
site plan



first floor plan



cross section



ground floor plan

key
1, print
2, photo
3, load
4, cut and pack
5, warehouse
6, offices

OFFICES, TADLEY HEATH, HANTS

Quine and Newberry

CLIENT Water Supply Industry Training Board.

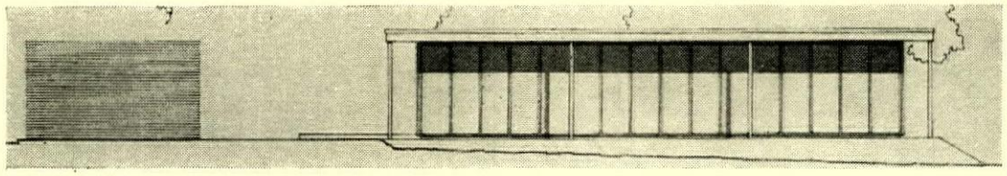
SITE 5 acres of vegetable garden of country house, Tadley Court.

ACCOMMODATION Administrative office space.

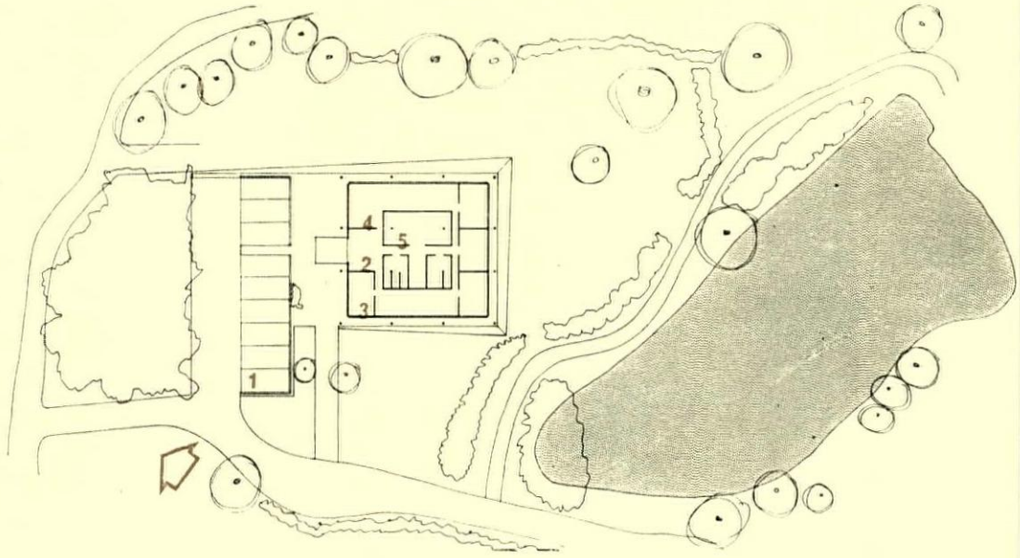
STRUCTURE Exposed steel frame, purpose made special section window frames, double glazing. Designed for future extensions.

COST Phase 1, £10,500.

Assistant, G. A. Smith, Quantity surveyor, Gordon Edworthy. Structural consultant, Derek Silver.



south-west elevation



key
1, parking
2, reception
3, offices
4, records
5, machine room

PREVIEW 67

In the incredible variety of so-called 'public buildings' to serve an affluent society, one thing only remains constant: the public themselves; and the one common ground of criticism is to analyse the response, welcoming or repelling, which the buildings make to their temporary visitors, as well as to the experts who permanently man them. This year the exceptional number of hospitals at least shows that the mistakes in costing the Hospital Plan and the consequent delays in implementing it have not yet discouraged leading private firms of architects from participating. But whether the resulting models of the familiar matchbox-on-a-muffin layout of wards over theatres will create a therapeutically welcoming (and, one hopes, eventually discharging) environment remains to be seen. Such doubts are crystallized in the adoption by Powell and Moya of a radically different system in their Wythenshawe hospital: high density, low rise wards arranged around garden courts with a diagonal spiral corridor forming a central short-cut for staff and services. Another interesting divergence, this time for reasons of climate, is the way in which Llewelyn-Davies, Weeks and Partners have been able to penetrate vertically their high-rise ward block for Pakistan's new capital city of Islamabad with a series of internal courtyards, overhung at ground level. Other hospitals are providing separate buildings for special treatment, such as Wells and Joyce's competition-winning Radiotherapy Hospital at Kuala Lumpur and Scott and McIntosh's very interesting double building at Edinburgh for Intensive Therapy and Burns (fire damage, not the poet).

In the case of St. Thomas's Hospital by Yorke, Rosenberg, Mardall, the high rise solution was dictated both by the shortage of land and by a last-minute doubling of requirements. Here a second problem arises of relationship to the public—not the public who use the building but the public who pass by and try to identify each new civic monument as a recognizable part of a familiar setting. Such feelings have led to much sentimentality in the past, but are not always to be despised. Robert Matthew, Johnson-Marshall and Partners illustrate in their ingeniously planned County Offices for Midlothian, in the centre of Edinburgh's Old Town, how difficult it is to reconcile the expanding bulk of modern bureaucracy, which has little hierarchy of use between one open-plan office and another, with the intricate texture of a formerly residential historic area. Another good example of this in a much less promising setting is Casson, Conder and Partners' Civic Hall at Swindon, achieving a satisfying monumentality with the kind of ridged surface, this time in ceramic tile, which they tried out first on the elephants.

At an opposite extreme, Darbourne and Darke have had to satisfy the organisational and traffic demands of siting a very large conference centre in the grounds of Adam's famous country house of Syon Park—a Gardening Centre which, if it had not been handled so sensitively, might have ironically done great damage to an existing landscape garden. It is, no doubt, the differing scales of surrounding traffic, as much as theological or liturgical symbolism, that have made Gerard Goalen's church at Holloway so firmly enclosed and Law and Dunbar-Nasmith's at Livingston so open (at least to its piazza and foyers). Top lighting predominates in these churches, with bulging roofs slightly a la Ronchamp and sculptural blank walls slightly a la Kahn. There are, of course, a few public buildings which the public has no reason to enter and are best screen-walled: for example, Norman and Dawbarn's Corporation Depot for Wolverhampton Borough Council (clients also for a Town Hall by Clifford Culpin in this Preview) and Jefferson, Sheard and Partners' Highways Depot for Sheffield, which both show the scale of public services, in the mechanical sense, now provided by the industrial cities.

PUBLIC BUILDINGS

CIVIC HALL, SWINDON, WILTS

Casson, Conder and Partners

CLIENT Swindon Borough Council.

SITE Vacant site in comprehensive redevelopment area, sloping.

ACCOMMODATION Civic hall seating 1,600-2,000, small hall seating 270 for lectures or 300 for dancing. Ante-room, back-stage area, admin.

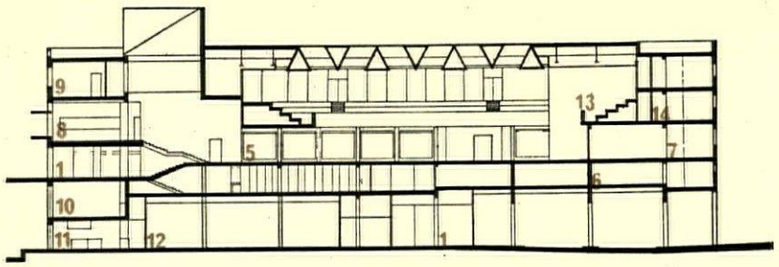
STRUCTURE R.c. structure except for roof over main hall in steel trusses. Cladding of dark ceramic tiles, deeply textured on infill panels.

SERVICES Artificially ventilated throughout except offices. Cooling equipment for halls.

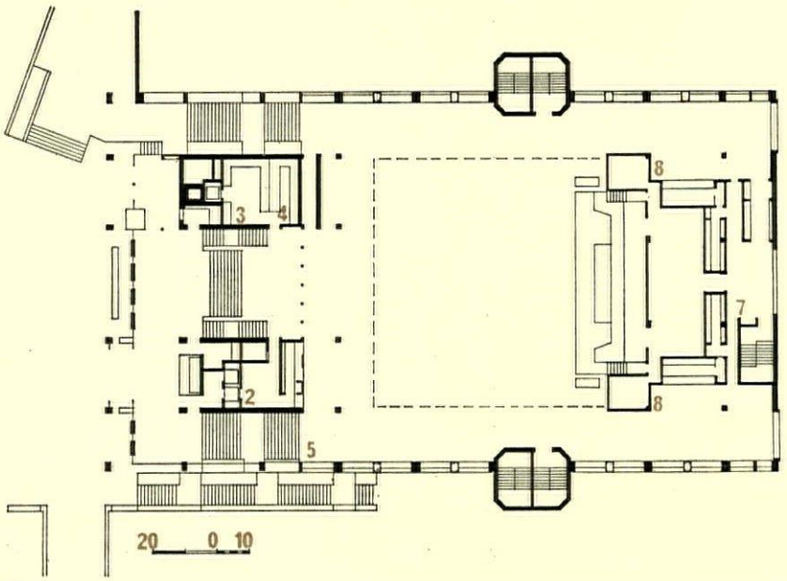
COST £1,094,000.

CONTRACT 1967–1969.

Partner-in-charge, Neville Conder. Associate-in-charge, Montague Turland. Assistant, Richard Hill. Quantity surveyor, Wilson Prichard Partnership. Structural consultant, Jenkins and Potter. Services consultant, H. D. Lockwood and Partners. Acoustics consultant, Henry R. Humphreys.

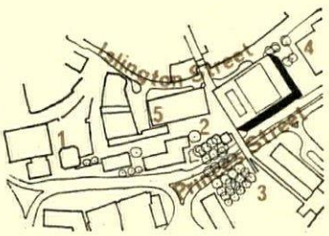


long section



plan

key to plan and section
1. foyer
2. lift lobby
3. preparation
4. servery
5. civic hall
6. store
7. green room
8. bar
9. administration
10. plant
11. kitchen
12. small hall
13. choir
14. dressing rooms



site plan: key
1. Regent Circus
2. Theatre Square
3. Old School Court
4. Courts of Justice
5. arts centre

COUNCIL OFFICES, COVENTRY

Terence Gregory, City Architect and Planning Officer

CLIENT Coventry City Council.

SITE Part of civic area redevelopment scheme, with pedestrian decks

ACCOMMODATION Office space, registry, conference room, printing department, central services.

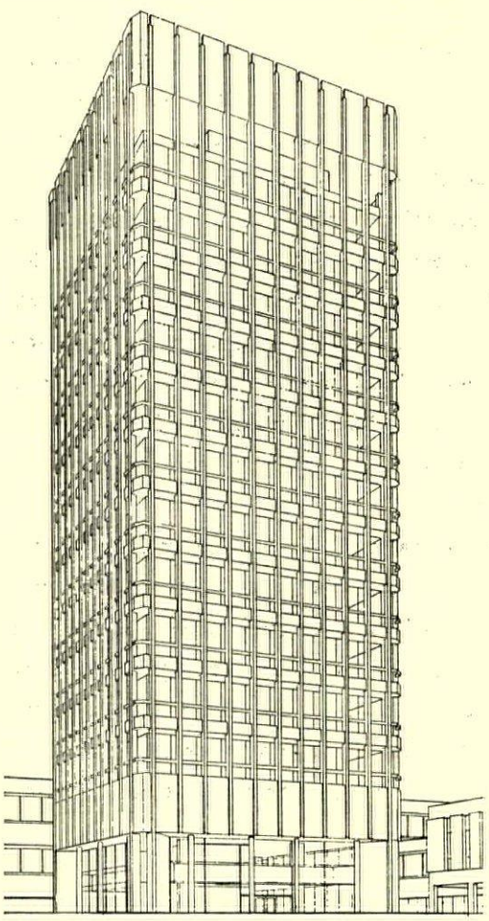
STRUCTURE In situ r.c. construction with steel columns erected from roof downwards by patented system of hydraulic jacks. Precast external wall panels and mullions. Double glazed steel windows.

SERVICES Fully air conditioned induction unit heating. Water heating from oil-fired boilers. Permanent artificial supplementary lighting. District heating installation in basement.

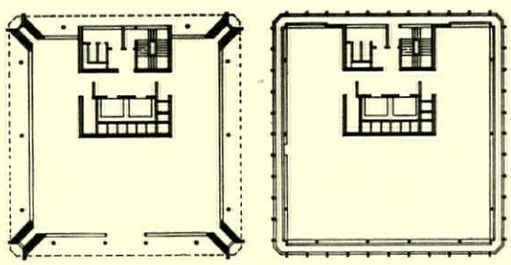
COST £576,500.

CONTRACT January 1967–March 1968.

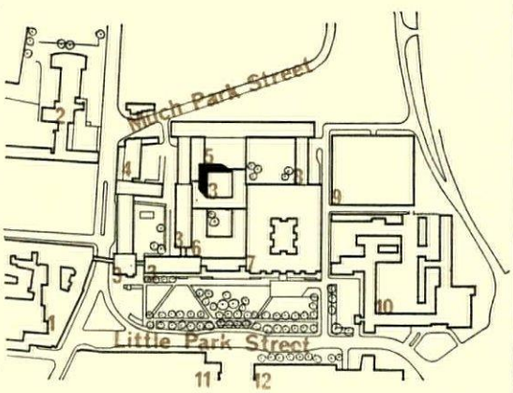
Principal architect, W. G. Sealey. Assistant principal, J. C. Beaumont. Assistants, D. K. Hartley and J. R. W. Parker. Quantity surveyor, R. F. Lear. Joint structural engineers, N. Rayman, City Engineer and Surveyor, with Felix Adler and Partners. Services consultant, City Engineer.



the entrance front to the office tower

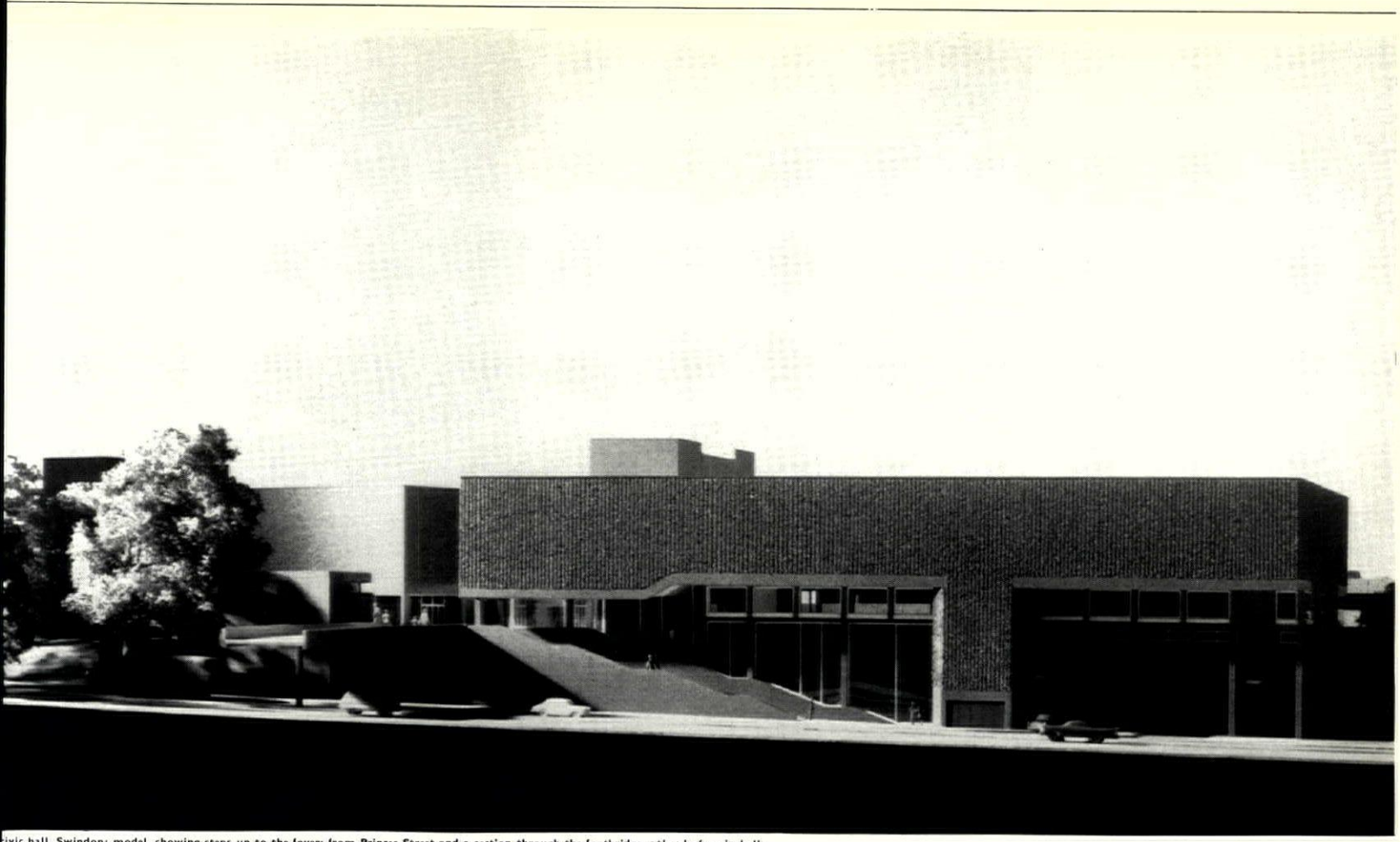


left, ground floor plan: right, typical office floor plan

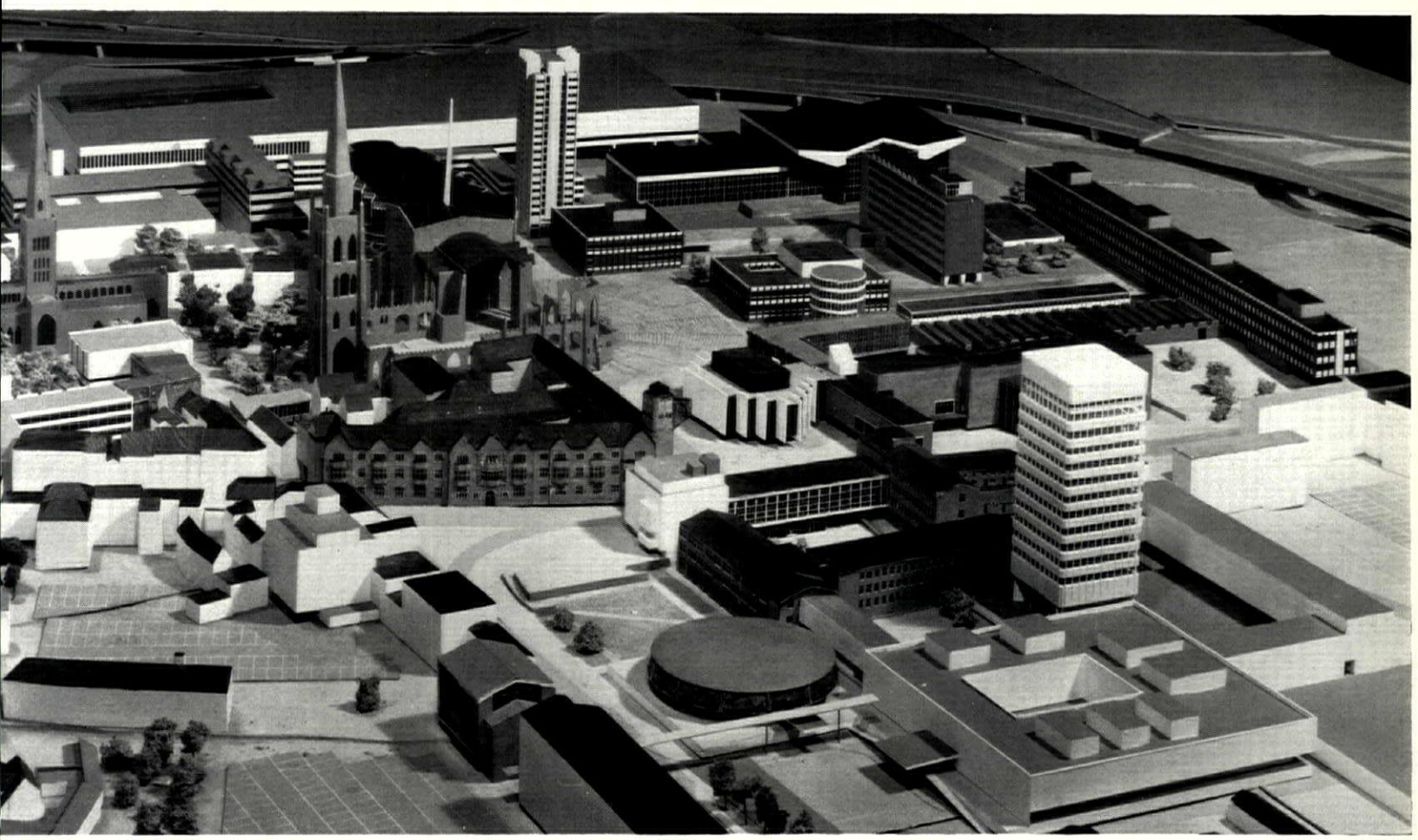


site plan: key
1. Council House
2. art gallery and museum
3. council offices
4. shops and maisonettes
5. printing and stationery department
6. staff restaurant
7. law courts
8. probation offices
9. multi-storey car park
10. police h.q.
11. commercial shops and offices
12. telephone exchange

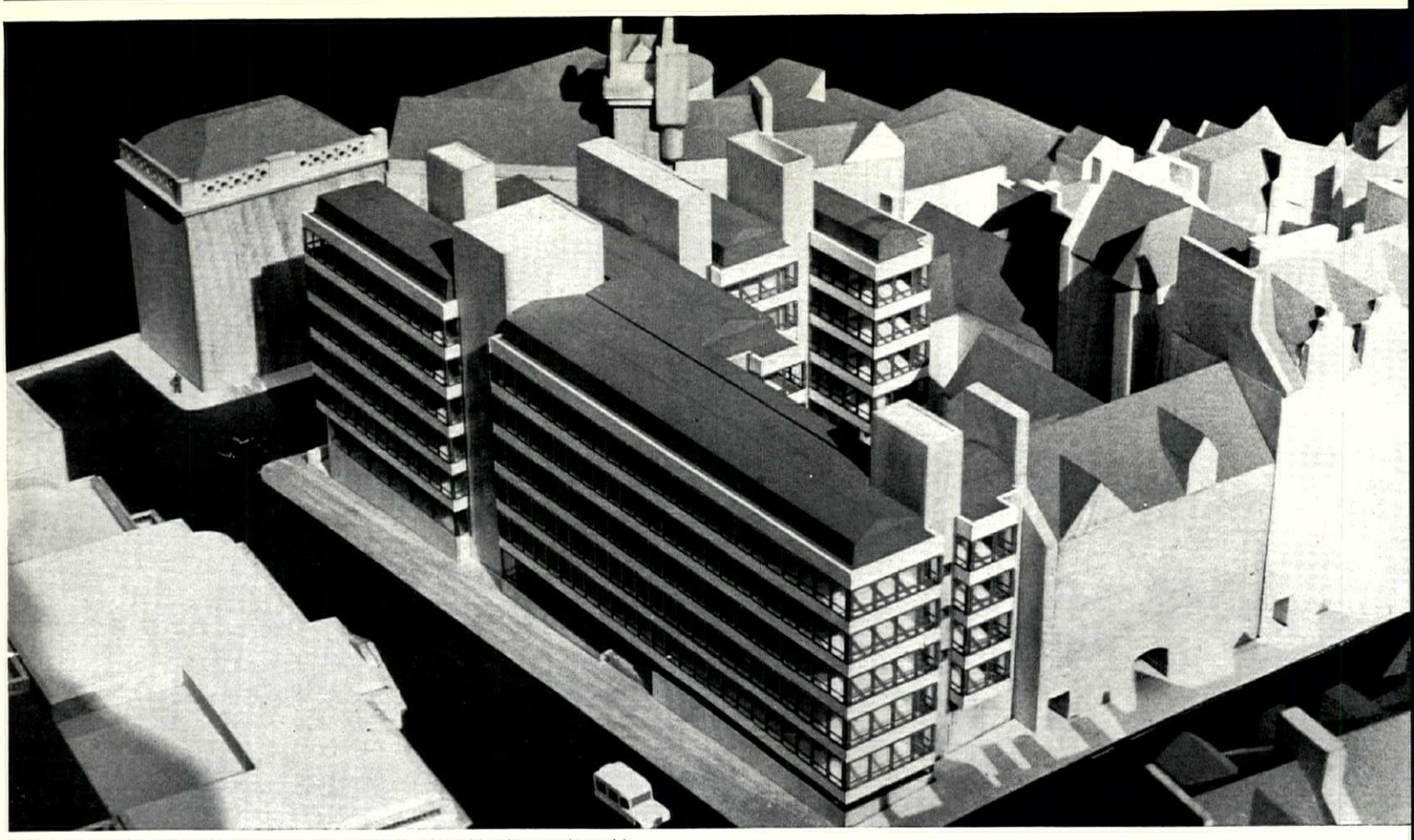
PUBLIC BUILDINGS



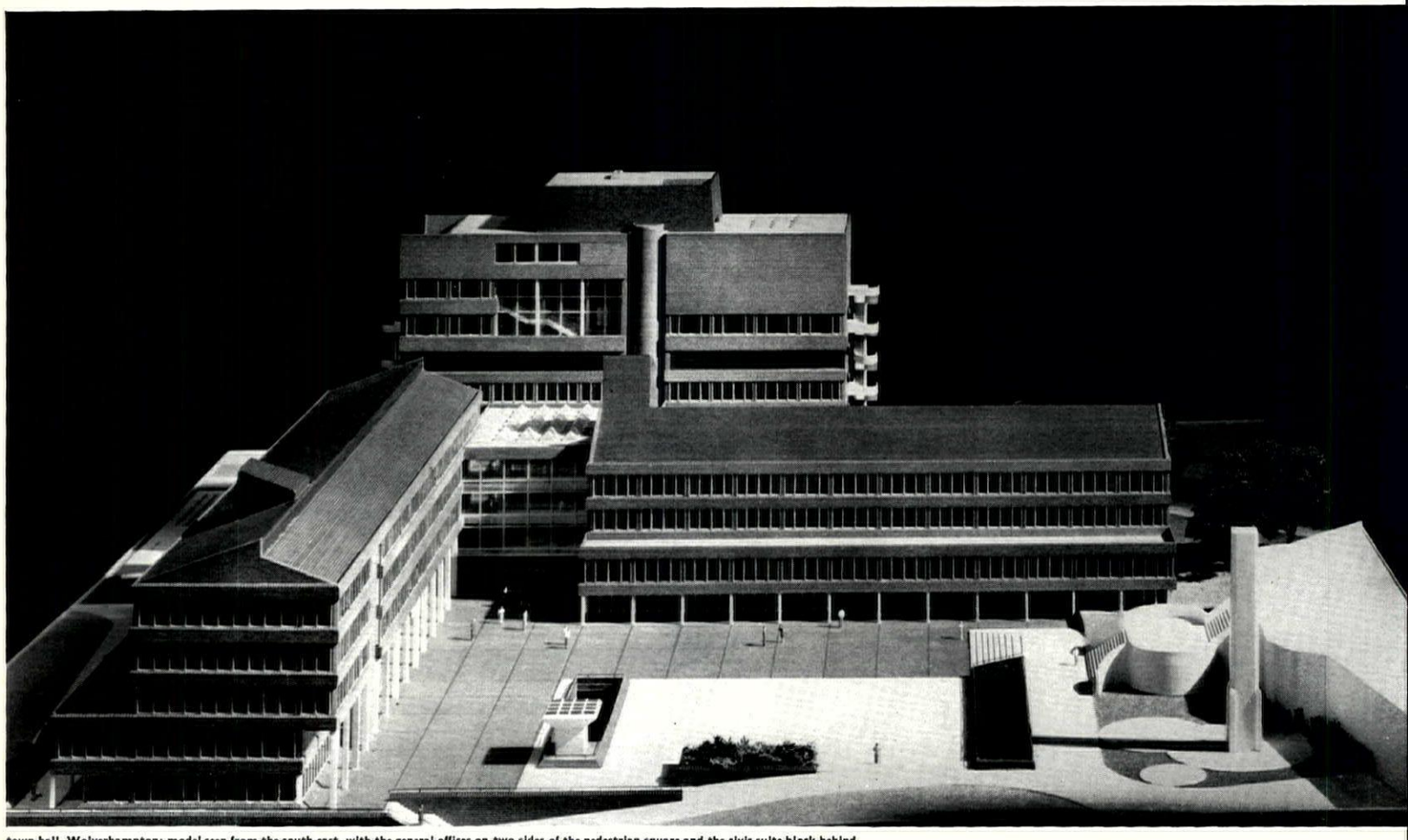
civic hall, Swindon: model, showing steps up to the foyer: from Princes Street and a section through the footbridge at level of main hall



model of Coventry civic centre from south, showing (right foreground) the quadrangular law courts, the circular civic hall (since redesigned for another site) and the tower block of offices described opposite: background, left to right, are Holy Trinity Church, the old and new Cathedrals, the Council House (neo-Tudor), the proposed library (serrated) and the proposed art gallery extensions (L-shaped and circular): right background is Lanchester College of Technology, with the hostel tower block (AR Preview, 1965), and the recently completed swimming pool



county offices, Edinburgh: model seen from the north, with George IV Bridge on left and Lawnmarket on right



town hall, Wolverhampton: model seen from the south-east, with the general offices on two sides of the pedestrian square and the civic suite block behind

COUNTY OFFICES, EDINBURGH

Robert Matthew, Johnson-Marshall and Partners, in association with B. V. K. Cottier, County Architect

CLIENT Midlothian County Council.

SITE In the old town of Edinburgh, close to St. Giles Cathedral.

ACCOMMODATION Parking for 40 cars in basement. Staff canteen and members' dining room on mezzanine. Computer room on ground floor. 45,700 sq. ft. office floor space. Linked to existing county buildings by tunnel under George IV Bridge.

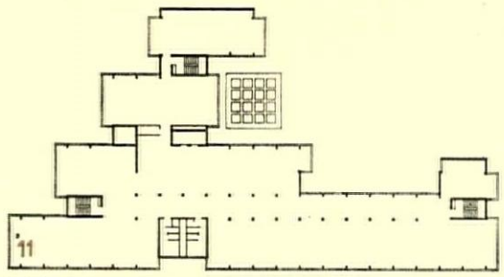
STRUCTURE Precast concrete frame of columns, floors and stairs. Foundations on rock. Service towers, in situ concrete. Roof on portal frames. All office windows double glazed. Exterior faced in stone.

SERVICES Off-peak electric heating. Ventilation by high velocity induction units.

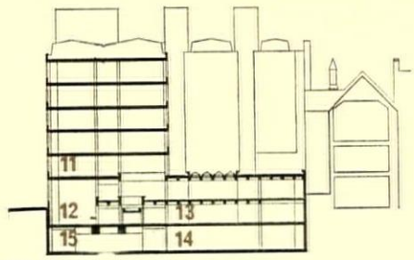
COST £1,060,000.

CONTRACT March 1967–autumn 1969.

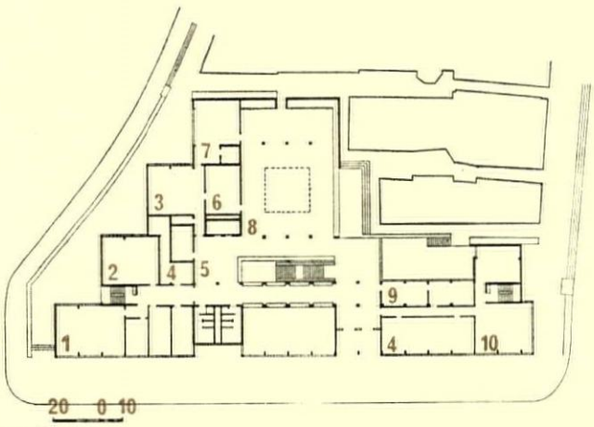
Partner-in-charge, Kenneth E. Graham. Group architect, I. M. T. Samuel. Job architect, J. Wilson Hornal. Assistants J. R. Edgar and G. D. Flockton. Quantity surveyor, J. D. Gibson and Simpson. Structural consultant, Blyth and Blyth. Services consultant, Steensen, Varming, Mulcahy and Partners.



second floor plan



cross section



ground floor plan

key to plans and section
1, accounting
2, general office
3, rates
4, store
5, lift lobby
6, rest room
7, casting
8, rent collection
9, county treasurer
10, machines
11, office space
12, motor tax department
13, staff canteen
14, plant
15, parking

site plan: key
1, Parliament House
2, existing county buildings
3, St. Giles Cathedral
4, Sheriff Court House
5, Bank of Scotland

TOWN HALL, WOLVERHAMPTON, STAFFS

Clifford Culpin and Partners

CLIENT Wolverhampton Borough Council.

SITE 2.6 acres on Market Place, falling 20 ft. to west.

ACCOMMODATION General offices, 227,648 sq. ft. Civic suite, 25,000 sq. ft. Parking for 462 cars.

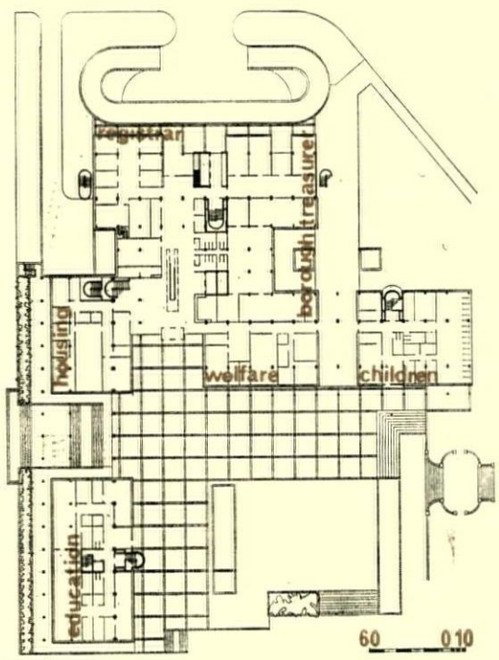
STRUCTURE R.c. frame, bronze coloured Staffordshire facing bricks.

SERVICES Air conditioning and heating.

COST £2,541,000.

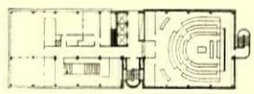
Partner-in-charge, Anthony Sargeant. Quantity surveyor, Dearle and Henderson. Structural consultant, Ove Arup and Partners. Services consultant, G. N. Haden and Son.

site plan

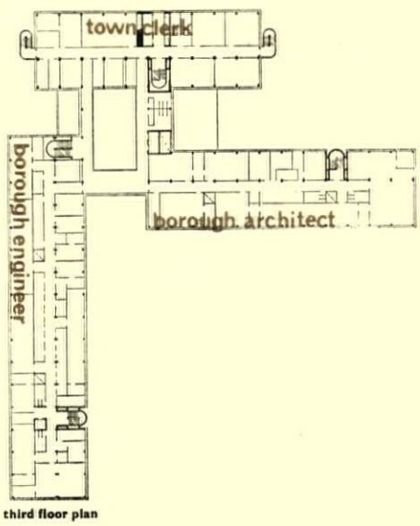


ground floor plan

key to site plan
1, civic hall
2, telephone exchange
3, Catholic church
4, magistrates' court
5, technical college
6, St. Peter's church
7, art gallery
8, square



seventh floor plan (mayoral offices and council chamber)



third floor plan

PUBLIC BUILDINGS

CORPORATION DEPOT, WOLVERHAMPTON, STAFFS

Norman and Dawbarn

CLIENT Wolverhampton Borough Council.

SITE 4.85 acres, partly disused tip, partly school to be demolished. Steep falls from Wednesfield Road and Bridge Street.

ACCOMMODATION Workshops, stores, offices, car park, welfare and social buildings, garage for 60 vehicles.

STRUCTURE Offices and garage, r.c. beam and slab construction. Workshops, welded triangular steel roof trusses with brickwork up to 10 ft. and patent glazing over.

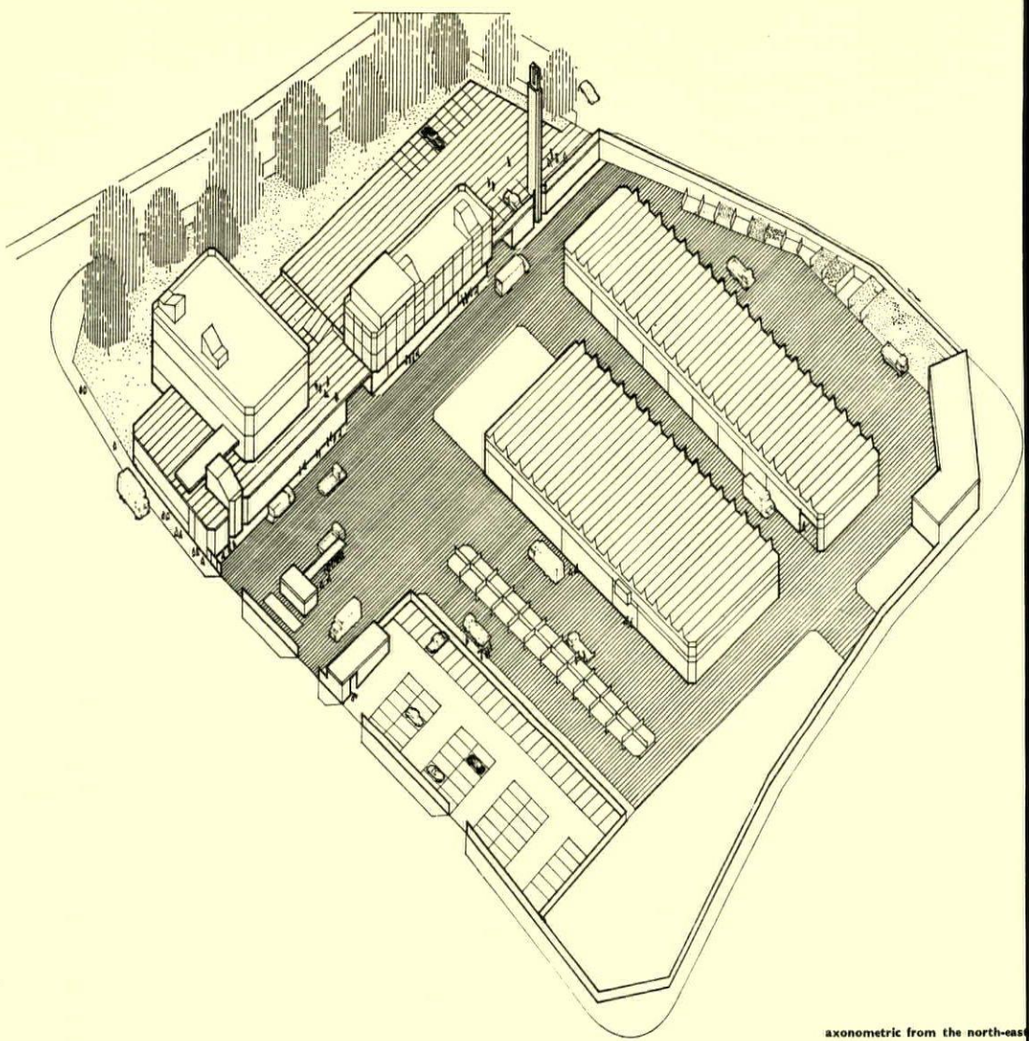
SERVICES Main oil-fired boilers serving whole site. Compressed air supply to workshops.

COST Phase 1, £303,700. Phase 2, £192,100.

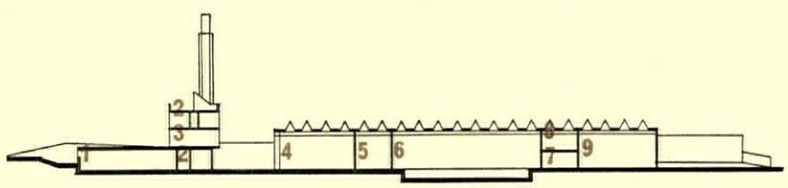
CONTRACT 1967–1969.

Partner-in-charge, H. Wilson. Associate-in-charge, K. Storey. Assistant, P. B. Mather. Quantity surveyor, Henry Vale and Sons. Structural and services engineers, architects' own.

site plan: key 1, high level station. (see AR Preview 1966) 2, low level station



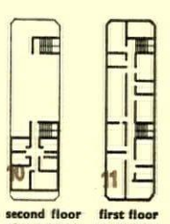
axonometric from the north-east



long section through offices and workshop

key to section
1, vehicles
2, office
3, welfare
4, covered stores
5, lubricating bay
6, pits and workshop
7, counter
8, supervisor
9, stores

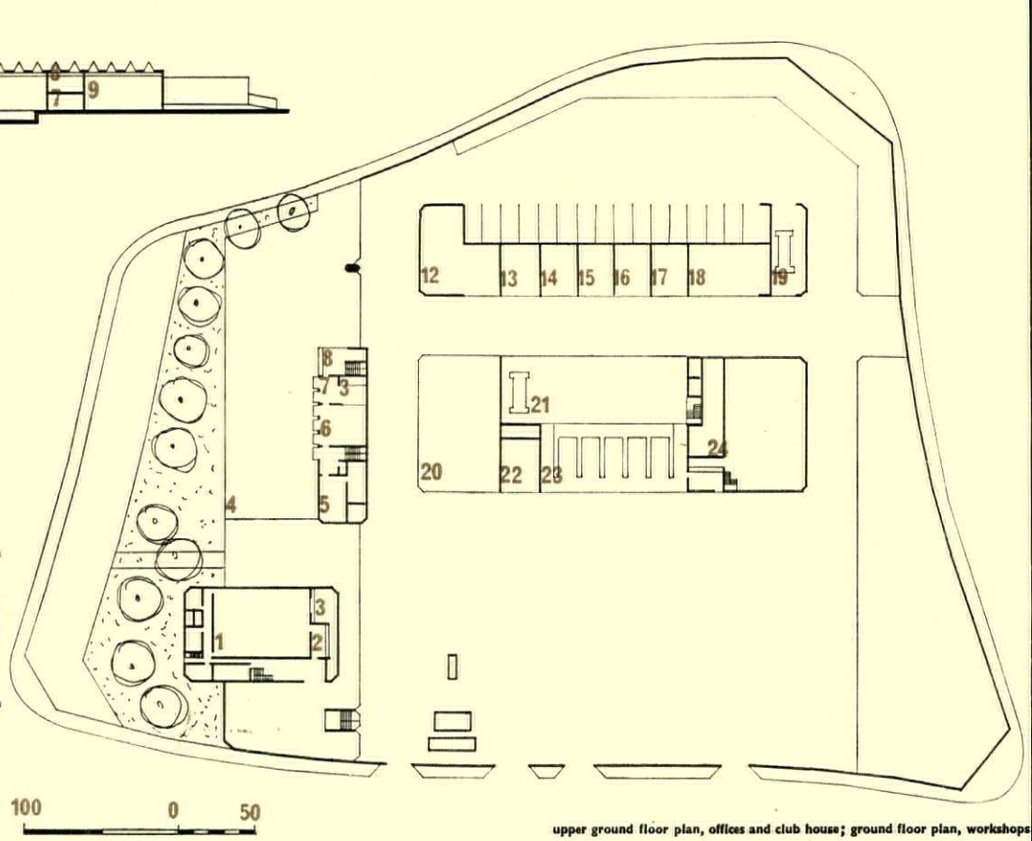
key to plans
1, social club concert room
2, bar
3, kitchen
4, parking
5, lockers
6, canteen
7, staff dining
8, entrance hall
9, games room
10, flat
11, offices
12, street lighting and electrical maintenance
13, mower
14, smith
15, panel
16, sign
17, paint
18, joiner
19, steam clean
20, future workshop
21, workshop
22, lubricating bay
23, pits
24, stores



second floor plan, offices

first floor plan, offices

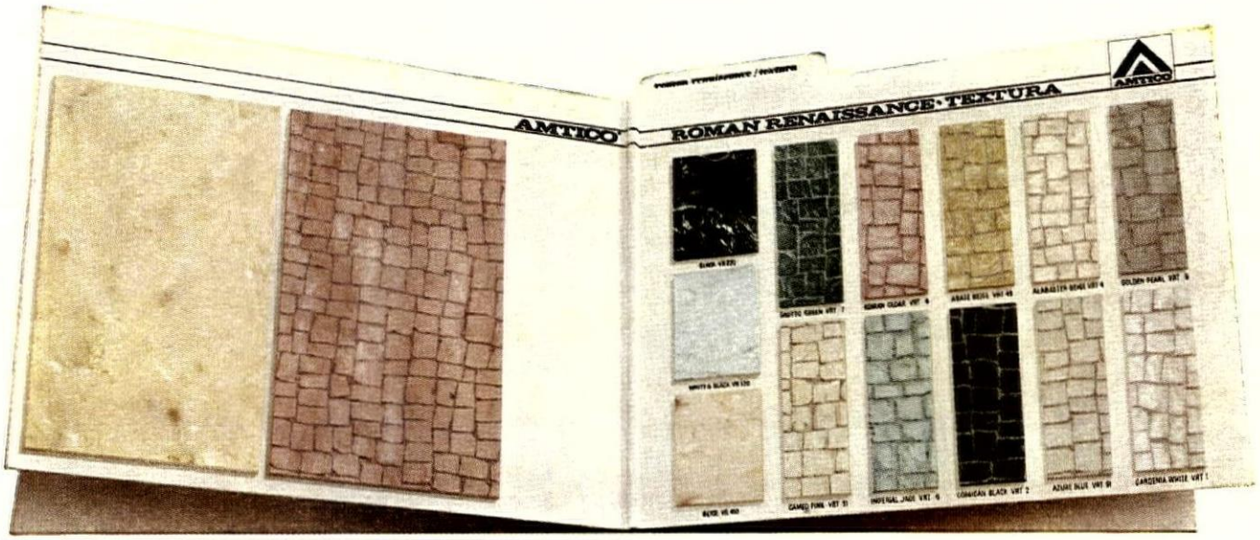
first floor plan, club house



upper ground floor plan, offices and club house; ground floor plan, workshops

The Amtico Gold Box

Why every up-to-date architect needs one around his office*



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*Please indicate as appropriate ARV

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HIGHWAY DEPOT, SHEFFIELD, YORKS

Jefferson, Sheard and Partners, in association with C. R. Warman, City Engineer.

CLIENT Sheffield City Council.

SITE 10.7 acres of existing highway depot at Olive Grove Road, 2 miles south of city centre, next to main-line railway.

ACCOMMODATION Phase 1, engineering workshops and boiler house. Phase 2, offices, staff canteen and kitchen, lecture and conference rooms, showers and lockers for 400 staff. Phase 3, highways maintenance and vehicle service units, fuel and service areas.

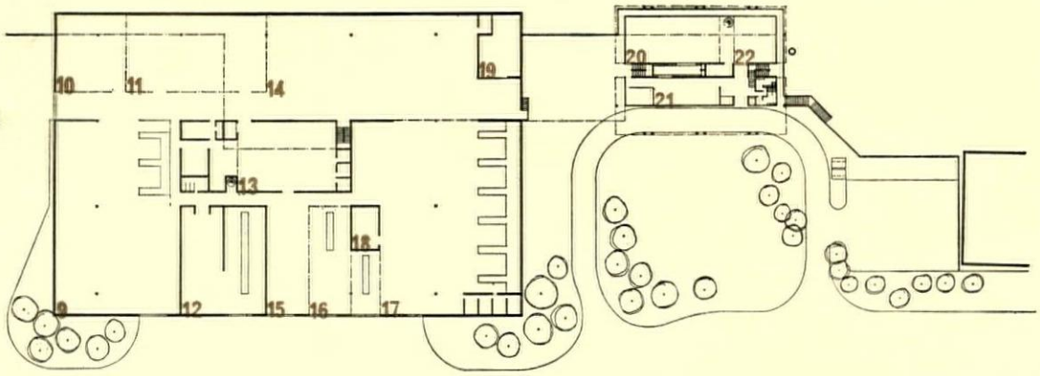
STRUCTURE Workshops, steel frame and lattice beams with monitor roof, sheet metal cladding. In situ r.c. and blue bricks to lower ground floor. Administration, in situ r.c. frame with precast structural mullions and panels.

SERVICES Special ventilation to paint, plastics and joinery workshops. Radiant strip heating to main workshops.

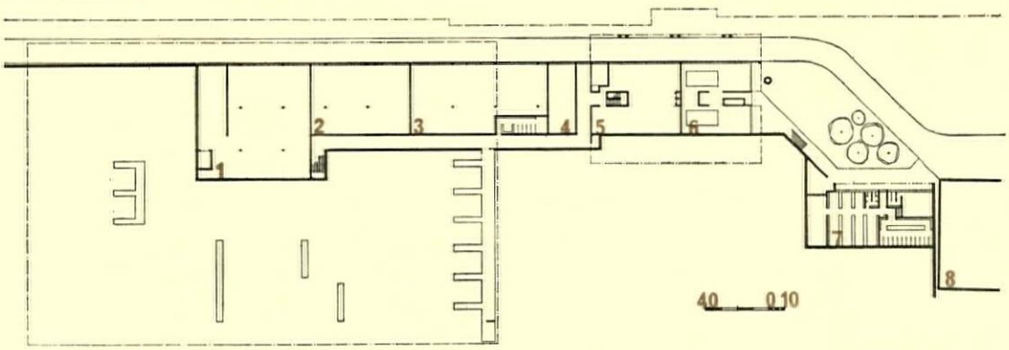
COST £589,000.

CONTRACT 1967–1970, all three phases.

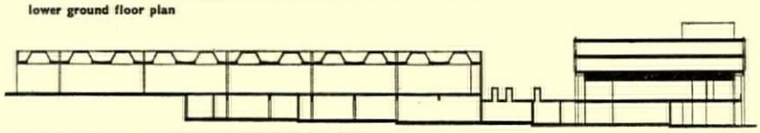
Partner-in-charge, J. B. Jefferson. Associate-in-charge, N. Porter. Assistant, R. V. Walker. Quantity surveyor, Leonard Fletcher. Structural consultant, H. L. Waterman and Partners. Mechanical consultant, Brightside Engineering Ltd. Electrical consultant, Tinsley Electric Co. Ltd.



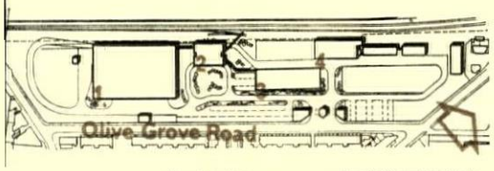
upper ground floor plan



lower ground floor plan



long section through workshops and administration block



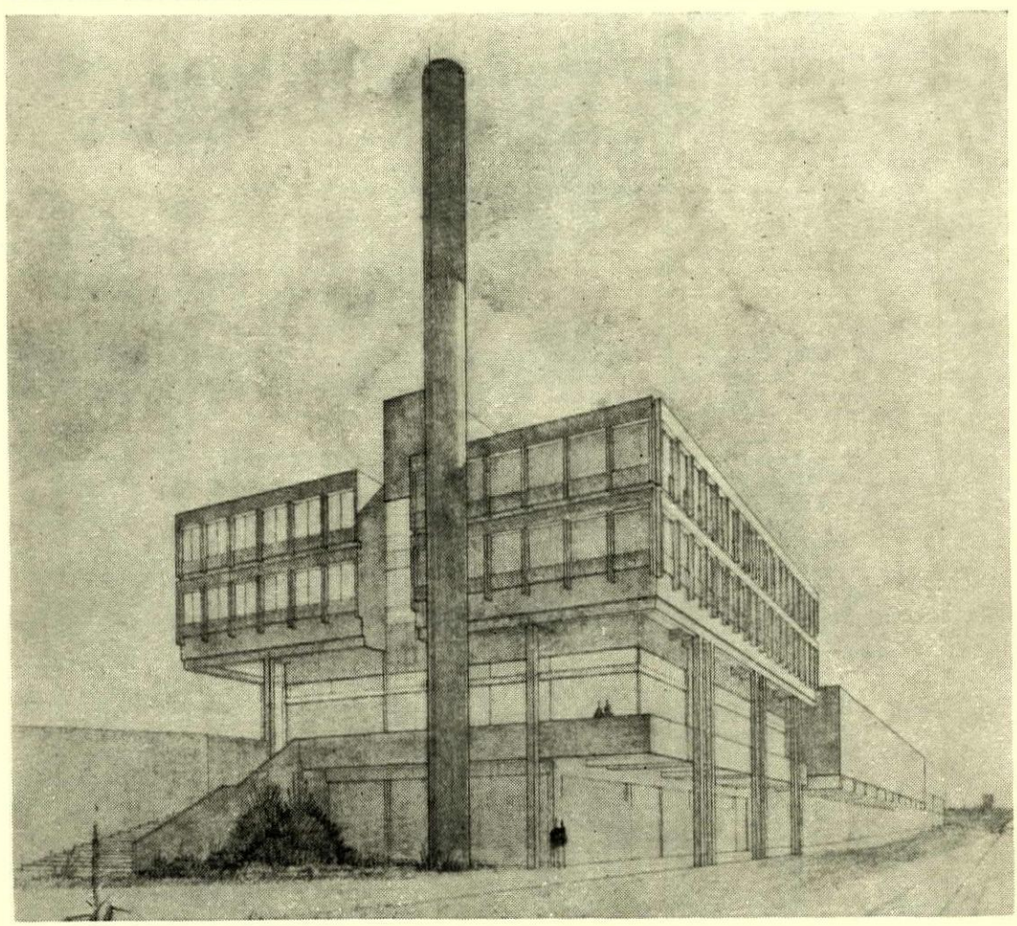
site plan: key

1, workshop block, phase 1
2, administration block, phase 2
3, existing garage
4, service units, phase 3

key to plans

1, general store
2, fencing store
3, highway store
4, traffic
5, kitchen
6, plant
7, lockers and night mess
8, existing garage
9, smiths' shop
10, metal store
11, timber store
12, painters
13, central store
14, joiners' shop
15, plumbers
16, electricians
17, machine and repair shop
18, diesel testing
19, fibreglass
20, canteen
21, staff dining
22, lecture room

the administration block and boiler house seen from the north



R.C. CHURCH, BURTON-ON-TRENT, STAFFS

Desmond Williams and Associates

CLIENT Rev. Fr. Bowker.

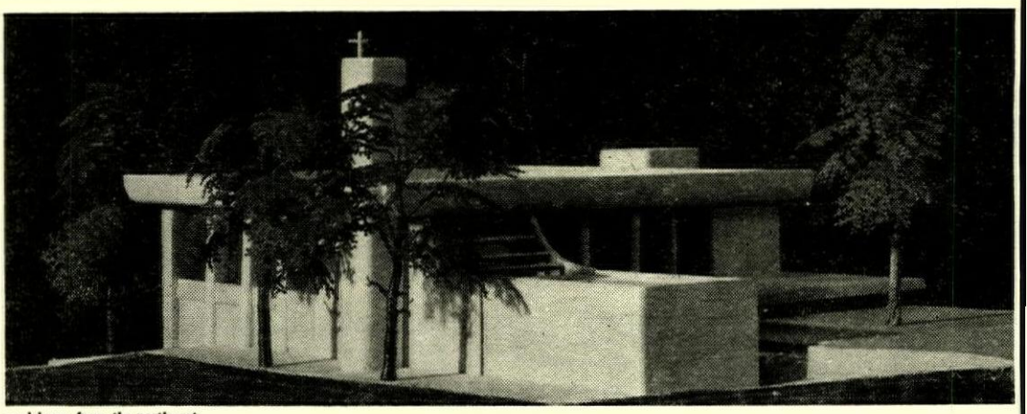
ACCOMMODATION Ground floor, 350 seats. Gallery, 50 seats. Chapel, 40 seats.

STRUCTURE Loadbearing brick with pale facings, light steel roof trusses supporting timber decking clad in aluminium. Wall and ceiling finish of textured plaster painted white.

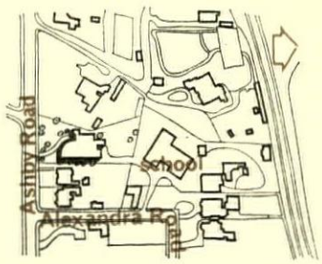
SERVICES Underfloor electric heating.

COST £50,000.

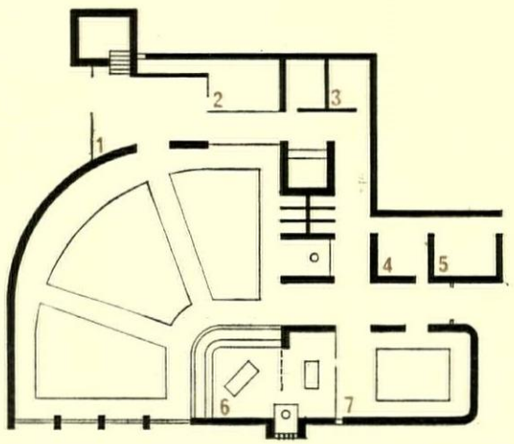
CONTRACT February 1967–September 1968. Partner-in-charge, D. J. Williams. Associate-in-charge, J. Edmondson. Assistants, R. Maycock and K. Bradbury. Quantity surveyor, Flood and Wilson. Structural consultant, Ove Arup and Partners.



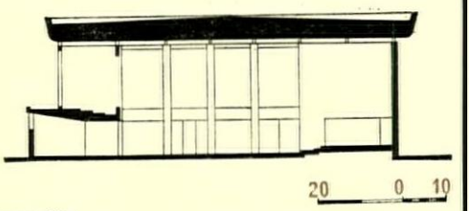
model seen from the north-east



site plan



plan



cross section

key
1. narthex
2. meeting/crying room
3. working sacristy
4. boys' sacristy
5. priest's sacristy
6. altar
7. chapel

ANGLICAN CHURCH, NORTHOLT, LONDON

Robert Maguire and Keith Murray

CLIENT London Diocesan Fund.

SITE 0.5 acres, flat, surrounded by new housing estate at Yeading Lane.

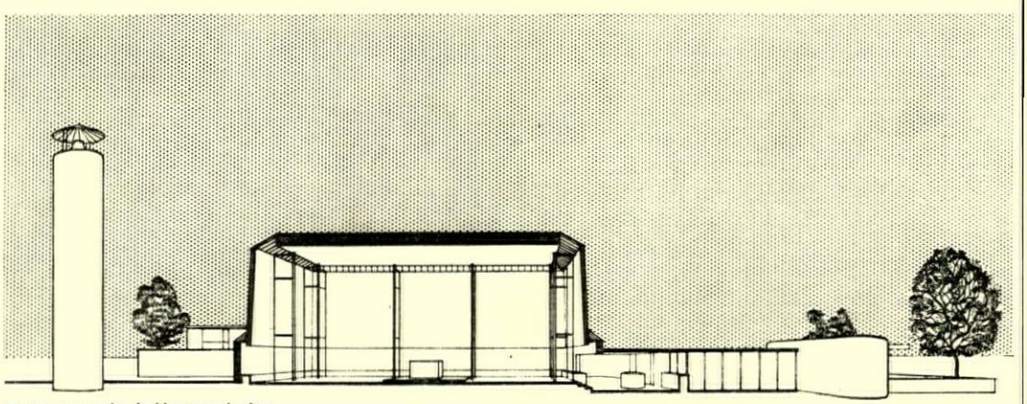
ACCOMMODATION Phase 1, St. Joseph's Church and meeting room. Later phases include chapel, entrance hall, vestries, car park and vicarage, including study/office.

STRUCTURE Church, steel orthogonal beam roof, decked. Steel double columns, inner carrying roof, outer the upper wall. Upper wall, steel and timber framed, slate hung externally and boarded internally. Lower wall, concrete blocks painted white internally. Floor, brick with timber under seating.

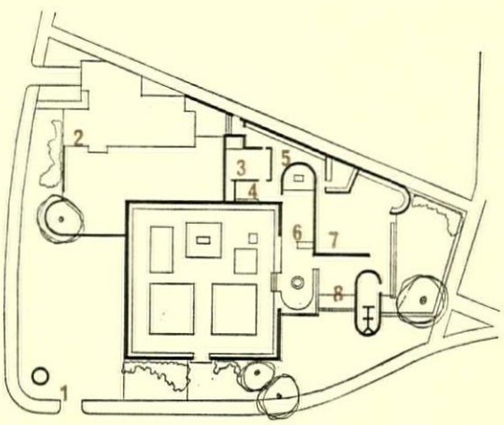
SERVICES Low temperature electric radiant heating.

COST Phase 1, £45,000.

CONTRACT Spring 1967–spring 1968. Assistant, J. Haddock. Quantity surveyor, Nigel Rose and Partners. Structural consultant, W. H. Aubrey and Partner.



cut-away perspective, looking towards altar



plan

key
1. tower
2. house
3. clergy
4. sacristy
5. choir
6. chapel
7. meeting room
8. entrance hall

site plan

PUBLIC BUILDINGS

CHURCH, LIVINGSTON, SCOTLAND

Law and Dunbar-Nasmith

CLIENT Church of Scotland Home Board.

SITE 1 acre in New Town, sloping 1 : 10 from north to south, bounded on south by main pedestrian mall and on east by Jespersen flats (AR, Preview 1965).

ACCOMMODATION Church 550 seats, large hall 300 seats, small hall 100 seats, sessions room 60 seats, vestry and manse.

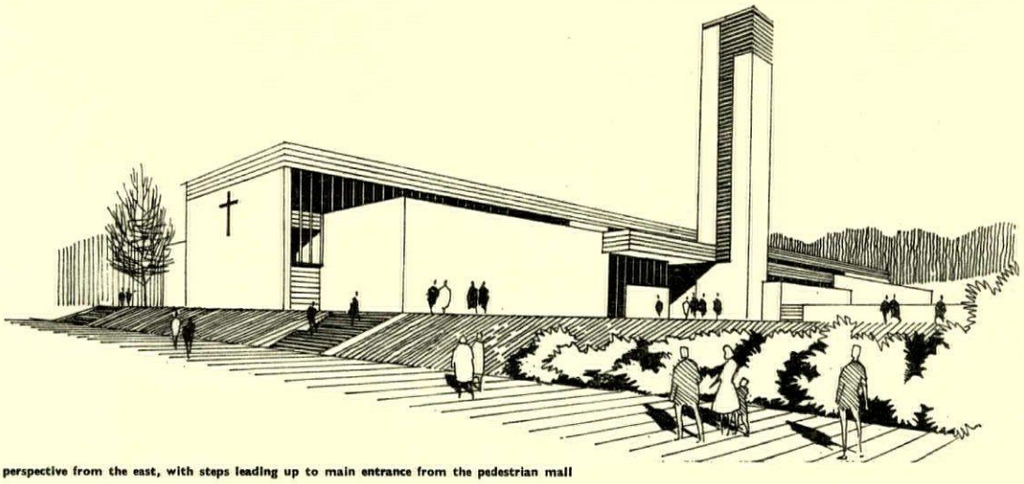
STRUCTURE Steel frame with brick walls, rendered internally and externally. Timber roof.

SERVICES Oil-fired central heating.

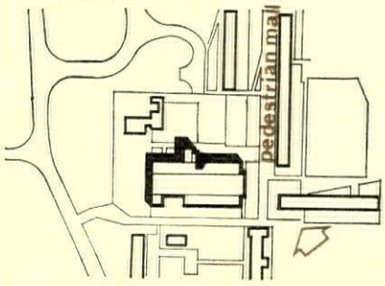
COST £60,000.

CONTRACT Started November 1966.

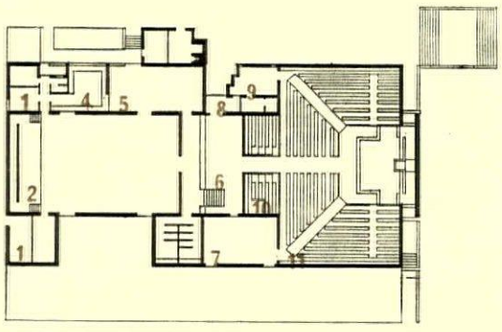
Partner-in-charge, Graham Law. Associate-in-charge, David Mason. Assistant, Hugh Rourke. Quantity surveyor, Morham and Brotchie. Structural consultant, Blyth and Blyth. Mechanical consultant, Steensen, Varming, Mulcahy and Partners.



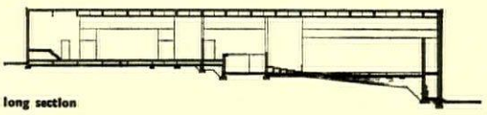
perspective from the east, with steps leading up to main entrance from the pedestrian mall



site plan

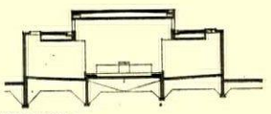


plan



long section

key
1. store
2. stage
3. large hall
4. kitchen
5. small hall
6. entrance hall
7. session room
8. lobby
9. vestry
10. choir
11. church



cross section

R.C. CHURCH AND PRESBYTERY, HOLLOWAY, LONDON

Gerard Goalen

CLIENT Archdiocese of Westminster and Rev. Fr. Thomas McNamara.

SITE Frontage to noisy Holloway Road and to mid-Victorian St. John's Villas.

ACCOMMODATION 400 permanent seats, maximum 600. Parking for 11 cars. Presbytery for parish priest, curate and housekeeper.

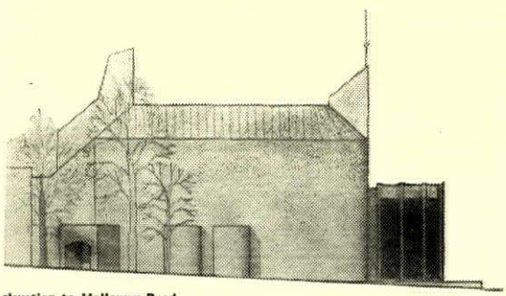
STRUCTURE Loadbearing brick external walls. Nave roof, concrete beams on free standing columns. Internally, white facing bricks and board-marked concrete. Externally, dark grey facing bricks, board-marked concrete to porch and baptistery columns, aluminium roofing to ambulatories and sanctuary.

SERVICES Church, warm air heating from off-peak storage units. Presbytery, gas-fired low-pressure hot water.

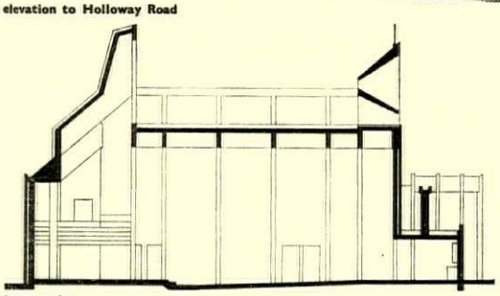
COST £89,000.

CONTRACT April 1966–July 1967.

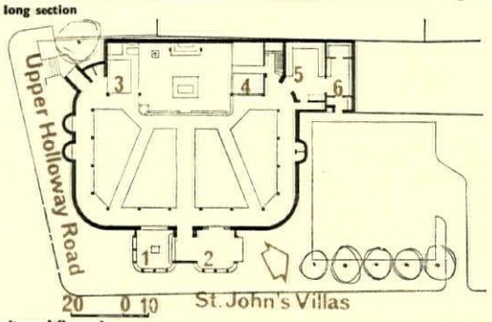
Assistants, Joyce Jones, B. A. Tubb and M. P. Cook. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Noel O'Connell. Services consultant, Peter Jay and Partners. Acoustics consultant, Hugh Creighton.



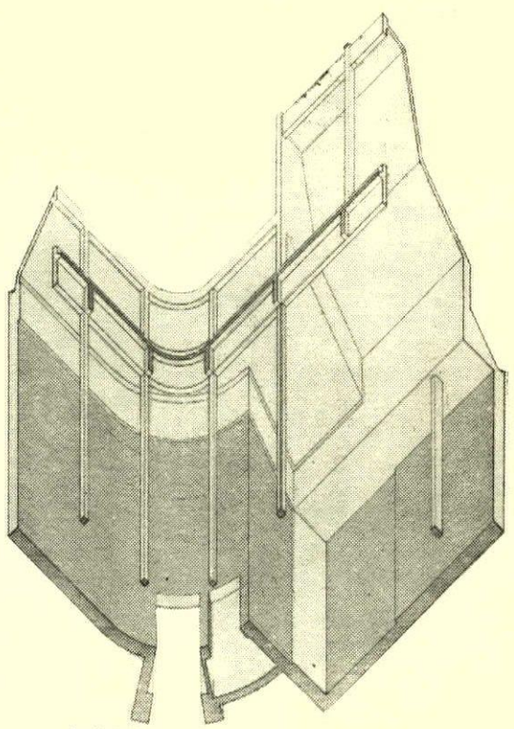
elevation to Holloway Road



long section



site and floor plan



axonometric of structure

key
1. baptistery
2. porch
3. choir
4. children's chapel
5. priests' sacristy
6. servers' sacristy

PUBLIC BUILDINGS

EXHIBITION CENTRE, SYON PARK, LONDON

Darbourne and Darke

CLIENT The Gardening Centre Ltd.

SITE 23.5 acres of Syon Park at head of narrow lake in Capability Brown landscape, next to Charles Fowler's Great Conservatory (see AR, March 1964).

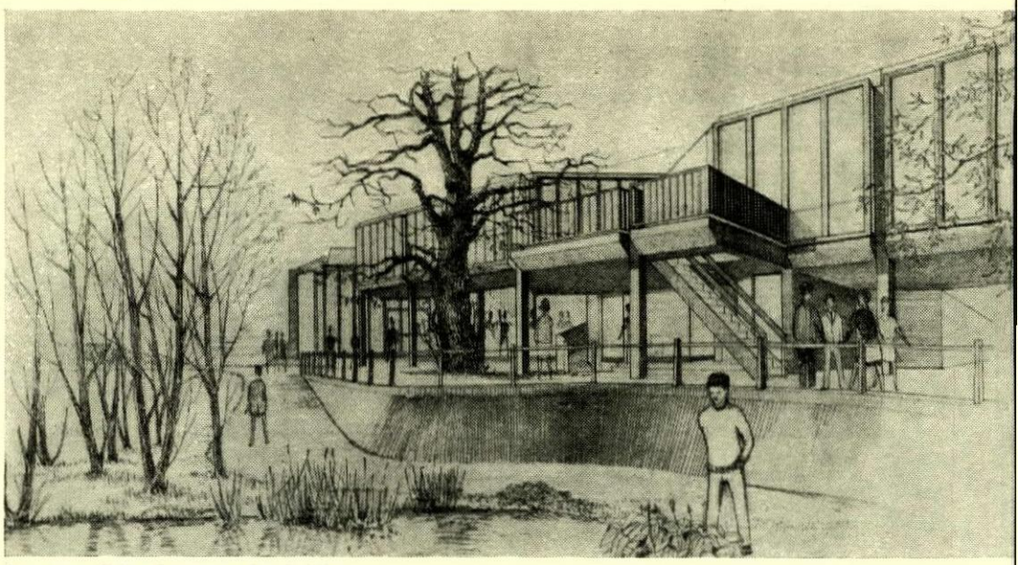
ACCOMMODATION Restaurants for 4,500. Exhibition and conference hall for 12,000. Club facilities, library, reception area, administration, 3 small shops.

STRUCTURE Offices and restaurant, r.c. frame to second floor with loadbearing partitions and brick external walls. Steel roof over halls. Timber windows in dark solignum.

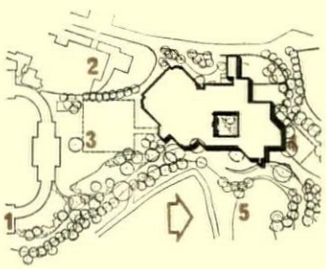
SERVICES Heating and hot water by electricity.

COST £139,000.

CONTRACT October 1966–February 1968. Partner-in-charge, John W. Darbourne. Assistant, Michael Burgess. Quantity surveyor, G. A. Hanscomb Partnership. Structural consultant, Felix J. Samuely and Partners.

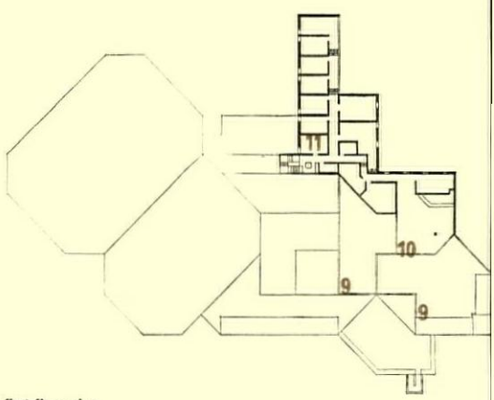


the restaurant block and terraces seen from the lake



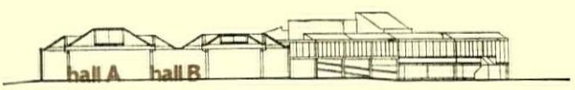
site plan: key
1, Great Conservatory
2, farm
3, marquee site
4, restaurant extension
5, lake

ground floor plan



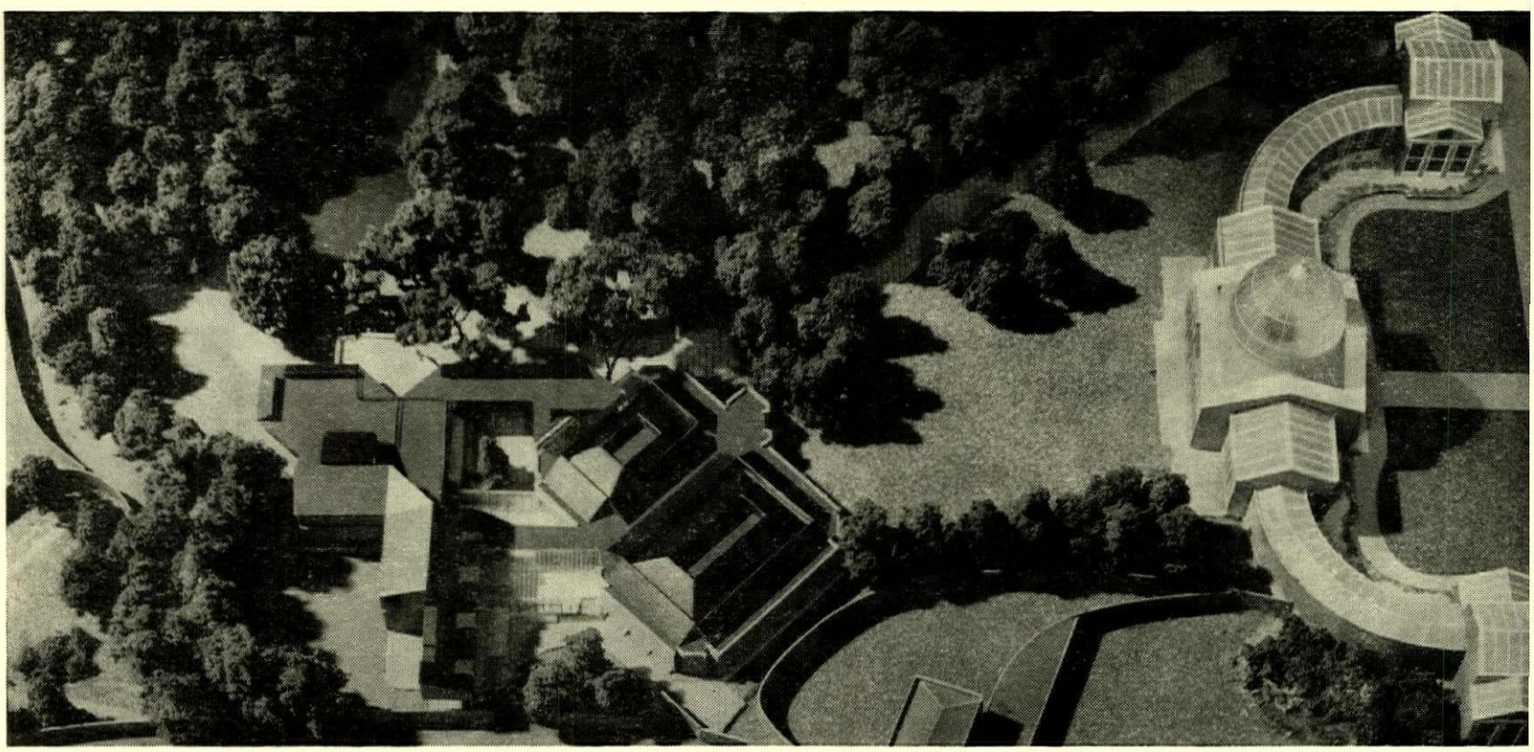
first floor plan

key to plans and section
1, hall A
2, hall B
3, restaurant mezzanine
4, restaurant
5, kitchen
6, upper reception area
7, lower reception area
8, library
9, terrace
10, lounge/bar
11, offices



long section

aerial view of model: exhibition centre on left, Great Conservatory on right



MISSION CENTRE, GRAVESEND, KENT

Lyons, Israel, Ellis and Partners

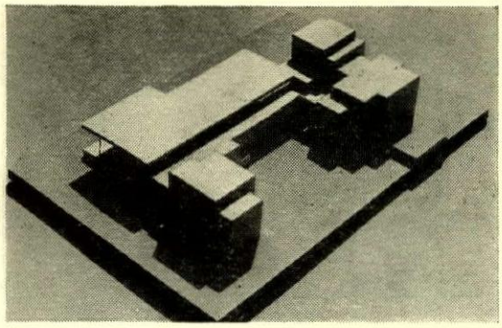
CLIENT Missions to Seamen.

SITE Flat riverside, liable to flooding, at Denton, east of town. National Sea Training Trust school adjoining for boys entering Merchant Navy.

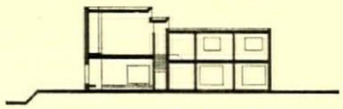
ACCOMMODATION Chaplain's house, caretaker's house, office, cloakrooms and kitchen. Canteen, games and recreation room, lounge area and chapel. Use of existing school.

STRUCTURE Small spans, loadbearing walls on raft. Large spans, steel frame. All roofs in timber. Suspended precast concrete ground floor raised for protection against flooding. Other floors of timber.

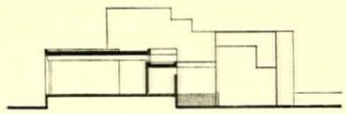
CONTRACT Starts early 1967.



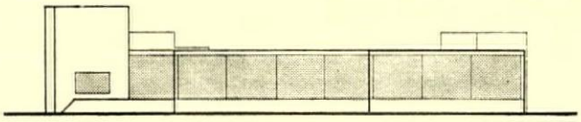
model from the south-west



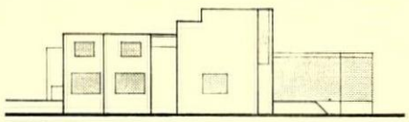
cross section through chapel and chaplaincy



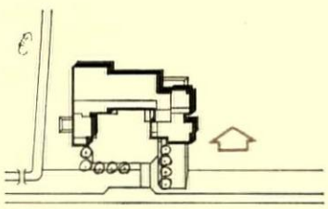
cross section through canteen



north elevation



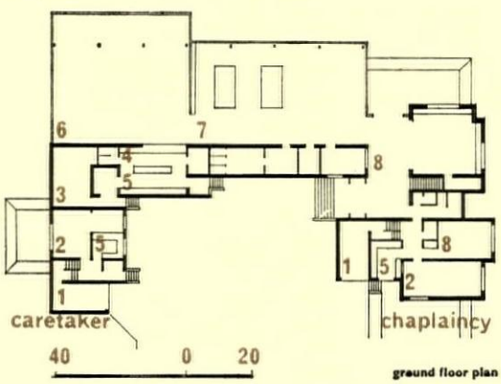
east elevation



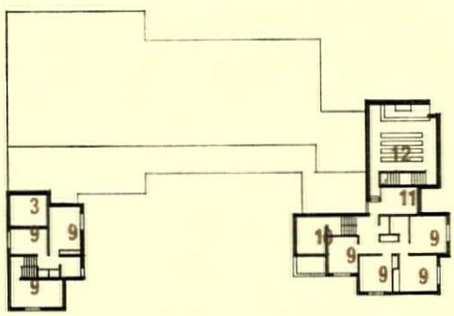
site plan

key to plans

1, garage
2, living/dining
3, plant
4, servery
5, kitchen
6, canteen
7, games
8, lounge
9, bedroom
10, study
11, chaplain
12, chapel



ground floor plan



first floor plan

UNION HEADQUARTERS, SHEFFIELD, YORKS

Jefferson, Sheard and Partners

CLIENT Amalgamated Engineering Union.

SITE Corner site on new city ring road.

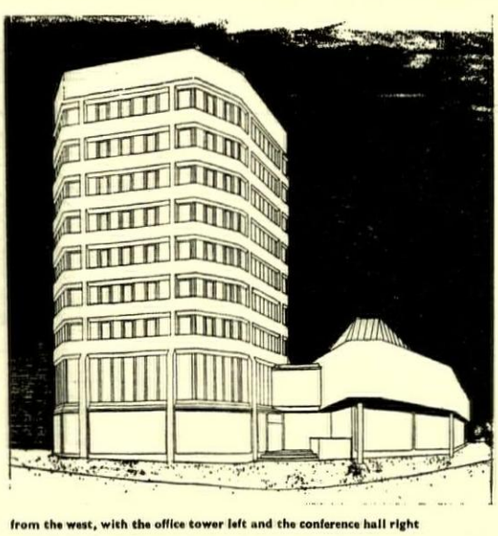
ACCOMMODATION Offices, partly for union and partly for letting. Conference hall and facilities, 3,000 sq. ft. Lettable showrooms at ground level. Basement parking for 14 cars.

STRUCTURE In situ r.c. structure, clad externally in tile. Bronze clad timber windows.

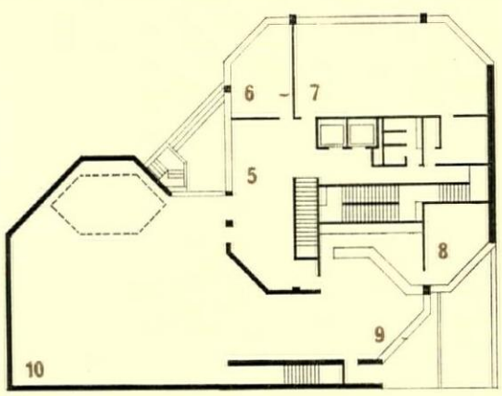
SERVICES Gas-fired plant at roof level serving cill-line convectors in offices. First floor suite and conference hall air conditioned.

CONTRACT Early 1967–mid 1968.

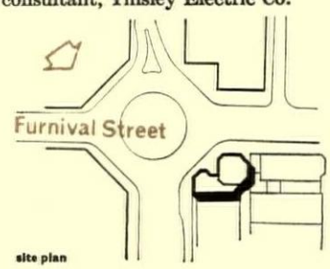
Associate-in-charge, K. H. Milton. Assistant, S. S. Bhogal. Structural consultant, Ove Arup and Partners. Mechanical consultant, Brightside Heating and Engineering Co. Ltd. Electrical consultant, Tinsley Electric Co.



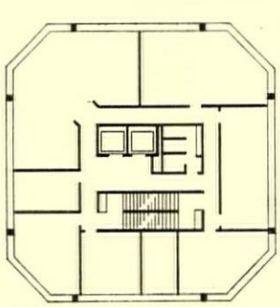
from the west, with the office tower left and the conference hall right



first floor plan



site plan

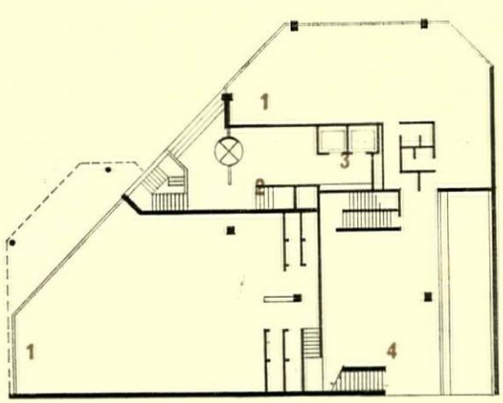


third floor plan

key to plans

1, showrooms
2, entrance hall
3, lift lobby
4, service yard
5, reception
6, interview room
7, committee room
8, kitchen
9, refreshment room
10, conference hall

20 0 10



ground floor plan

PUBLIC BUILDINGS

HOSPITAL, WYTHENSHAWE, MANCHESTER

Powell and Moya

CLIENT Manchester Regional Hospital Board.

SITE 25 acres at Floats Lane, 7 miles south of Manchester city centre. Site falls 30 ft. to north.

ACCOMMODATION Phase 1, maternity hospital (published in AR, June 1965). Phase 2, 324 beds in 7 standard and 3 special wards (one gynaecological, one orthopaedic, one ENT). Total building area, 390,000 sq. ft.

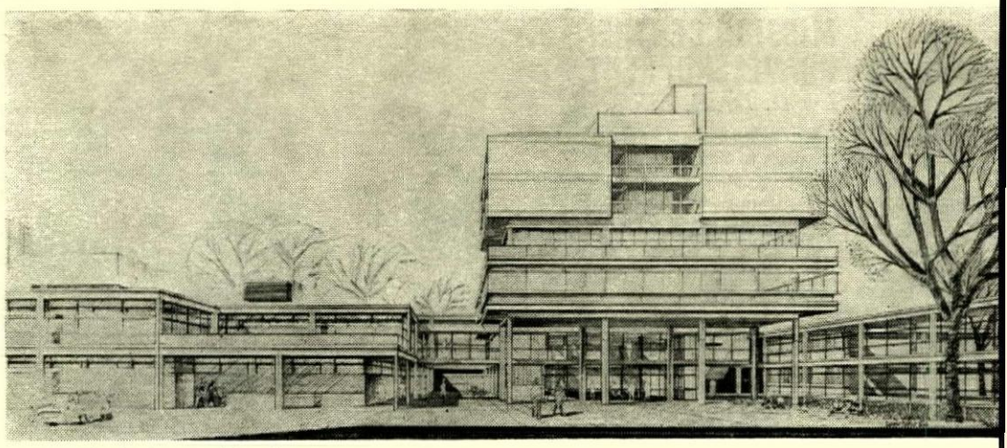
STRUCTURE Wards, brick crosswalls with reinforced concrete floors and roof. For main area, r.c. 'table' 24 ft. sq. as unit of horizontal and vertical expansion. Surfaces bush hammered. Infill in dark facing brick with timber windows.

SERVICES Pipe and radiator system, cill-line heating along main corridors. Heated ceilings elsewhere. Air conditioning in special areas. Piped medical gases, compressed air. Electrical nurse call system.

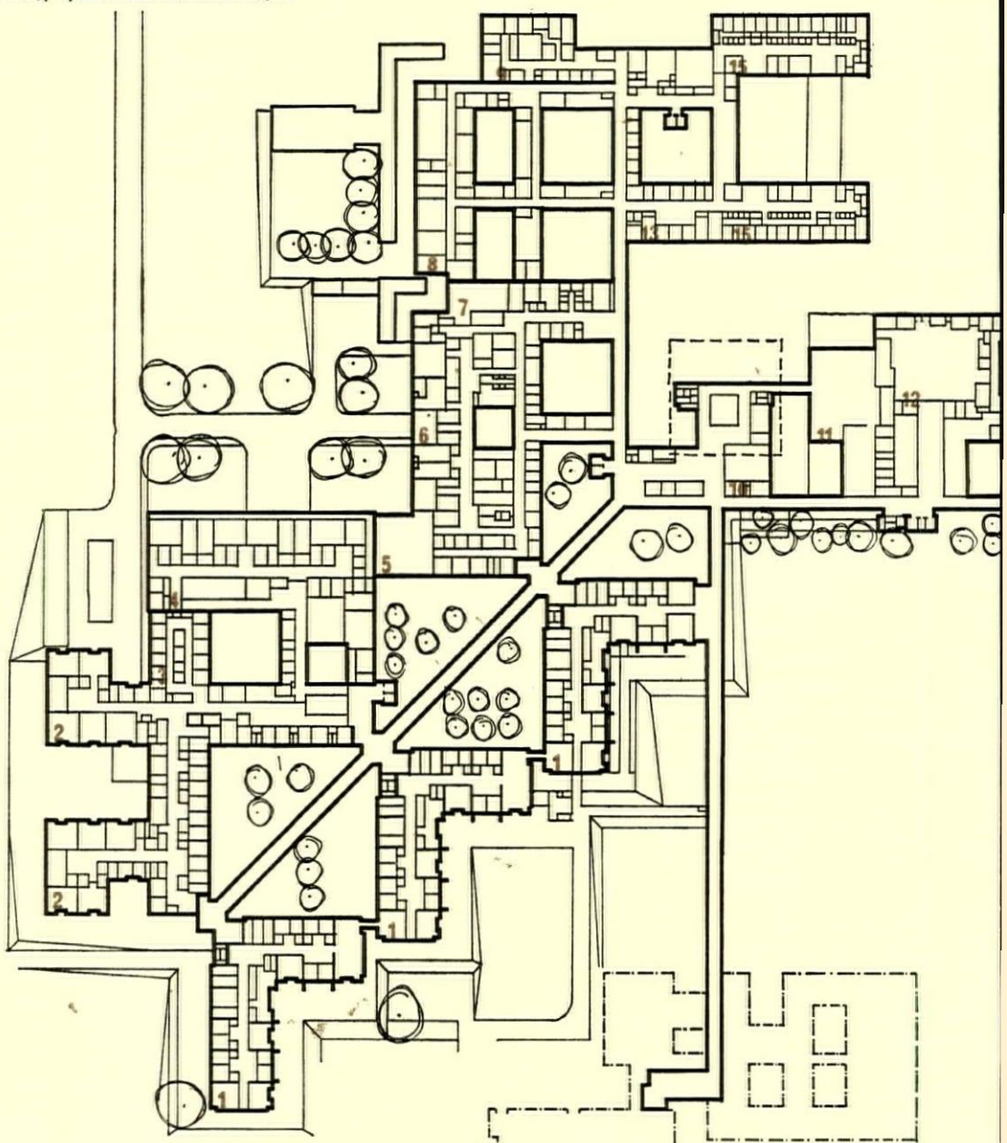
COST Phase 2a, £885,000. Phase 2b, £3,663,000 (including furniture, equipment, fees).

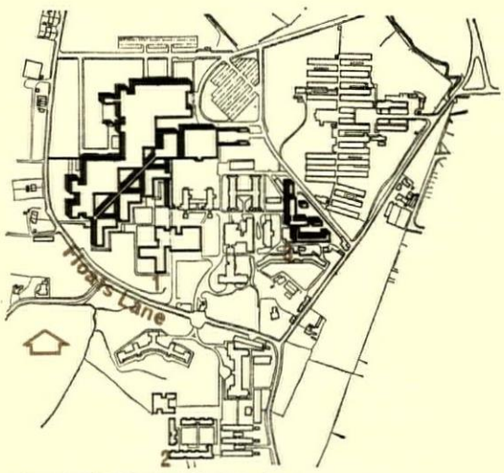
CONTRACT Phase 2a, under construction. Phase 2b, June 1967–November 1970.

Partners-in-charge, Philip Powell and Robert Henley. Assistants, R. E. Cove, D. A. Stow, G. J. Frankham, C. M. Young, M. J. Danny, D. J. Hubble, A. L. Jones and P. G. Howard. Quantity surveyor, Davis, Belfield and Everest. Structural consultant, Charles Weiss and Partners. Services consultant, Ernest Griffiths and Son.

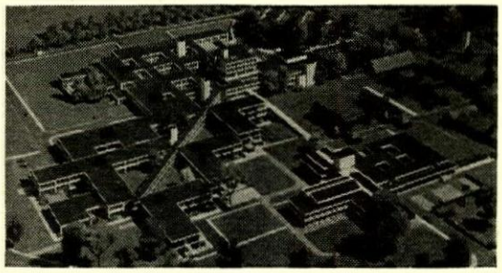


above, perspective of main entrance: below, plan





above, site plan: below, model from south-west



key to site plan
1, maternity unit
2, hostels and nurses' training school
3, animal and boiler houses, workshops

key to floor plan
1, surgical ward
2, paediatric ward
3, isolation unit
4, general operating theatres
5, intensive care unit
6, cardio-thoracic
7, investigation unit
8, pathology
9, medical illustration
10, chapel
11, staff dining
12, kitchen
13, dental clinic
14, records
15, out-patient clinic

specify it–
lay it–
forget it!

Once you've laid POLY-FLOR your worries are over. Why? Because POLY-FLOR is flexible pvc flooring, with marked advantages over all other floor coverings—*great dimensional stability, homogeneous structure; higher resistance to indentation.* And because POLY-FLOR is by far the most important flexible pvc brand, backed by the high reputation, age-long experience and thundering good service of James Halstead Limited—the POLY-FLOR people. They will see to it that you have no problems with POLY-FLOR!

POLY-FLOR *flexible pvc flooring:* Really hard wearing • Resistant to indentation • Non slip surface • Easily maintained, quickly cleaned • Will not support combustion or organic growth • Can be seam welded for complete hygiene • Far exceeds basic British Standards requirements for dimensional stability, etc.

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MEDICAL SCHOOL, KUALA LUMPUR, MALAYSIA

Wells and Joyce in association with John R. Harris

CLIENT Government of Malaysia.

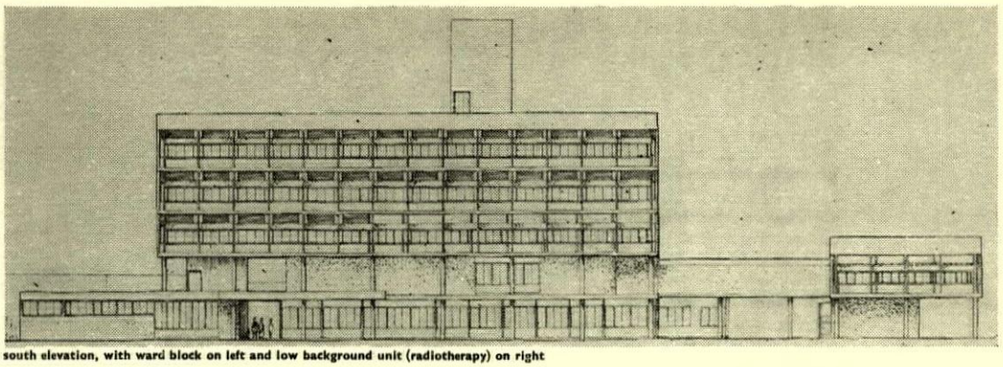
SITE 3 of 36 acres of existing hospital. Gently sloping, with coarse grass, bushes and trees.

ACCOMMODATION Radiotherapy centre and school of nuclear medicine. 96 first, second and third class beds with planned expansion for a further 96. Operation theatre for implant work and biopsies. Further major theatre planned.

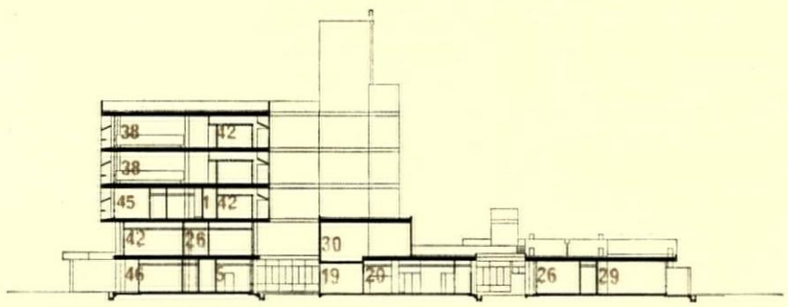
STRUCTURE R.c. columns and flat floor slabs. Lightweight concrete block walls, plastered and painted. Roofs, waterproofed concrete and screed with 6 in. stabilized earth or earth with grass where overlooked. Timber windows with ply panels. Floor, 12 in. sq. terrazzo tiles.

CONTRACT June 1966–August 1967.

Partner-in-charge, J. D. Joyce. Assistants, J. Taylor, Wong K. T. and Lum Hoong. Quantity surveyor, Public Works Department. Structural consultant, Ove Arup and Partners. Services consultant, Thomas Anderson and Partners.

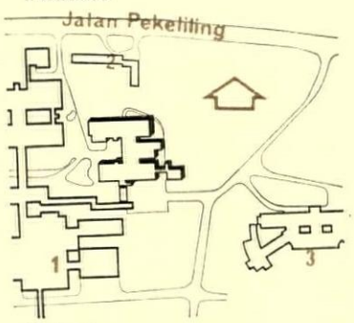


south elevation, with ward block on left and low background unit (radiotherapy) on right

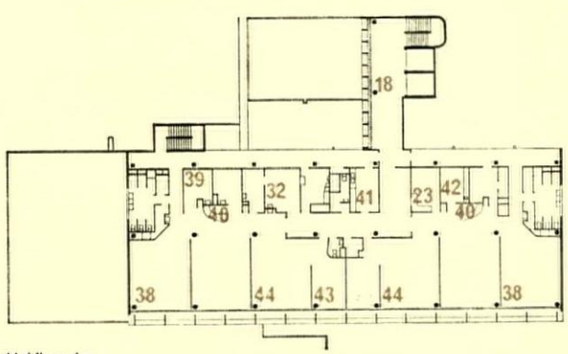


cross section through ward block and physics department

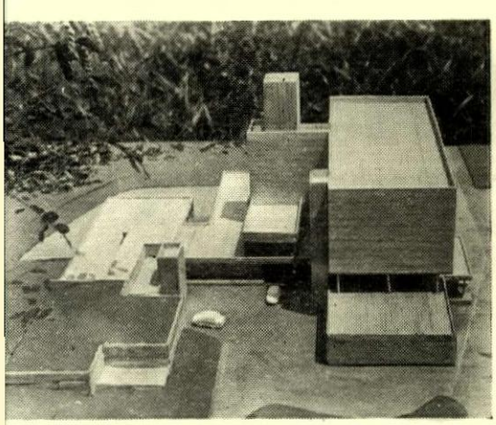
key to plans and section
1, store
2, treatment
3, staff
4, examination
5, waiting
6, dispensary
7, clinical pathology
8, cancer registry
9, radiological protection
10, tea bar
11, records
12, electrical
13, doctor
14, conference/consultant
15, almoner
16, radiographer
17, changing
18, lift lobby
19, theatre
20, sterilization and wash-up
21, anaesthetic
22, recovery room
23, sister
24, mould and plaster
25, diagnostic x-ray
26, physicist
27, planning
28, physics lab
29, physics workshop
30, plant
31, machine room
32, treatment
33, maintenance engineer
34, linear accelerator
35, deep therapy
36, pre-medical
37, superficial therapy
38, six-bed
39, isolation ward
40, nurses' station
41, kitchen
42, laboratory
43, day space
44, four-bed
45, single-bed
46, doctor



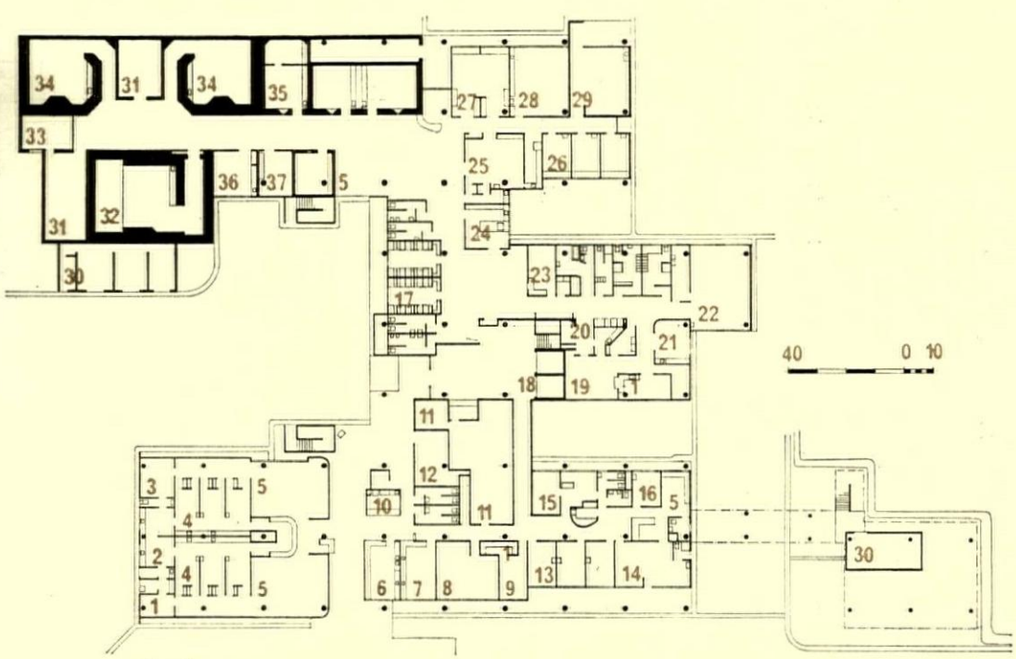
site plan: key
1, eventual new general hospital (see AR Preview, 1965)
2, housemen's mess
3, existing maternity hospital



third floor plan



he model from the west, with the linear accelerator building on the left



ground floor plan

PUBLIC BUILDINGS

MATERNITY HOSPITAL, HALIFAX, YORKS

George, Trew, Dunn, in association with P. B. Nash, Architect to the Board

CLIENT Leeds Regional Hospital Board.

SITE Levelled ground forming part of General Hospital. Banks to south and west, trees to south. Existing buildings to north and east will be demolished.

ACCOMMODATION 114 maternity beds, 20 cots in special care baby unit, ante-natal clinic, midwifery training unit.

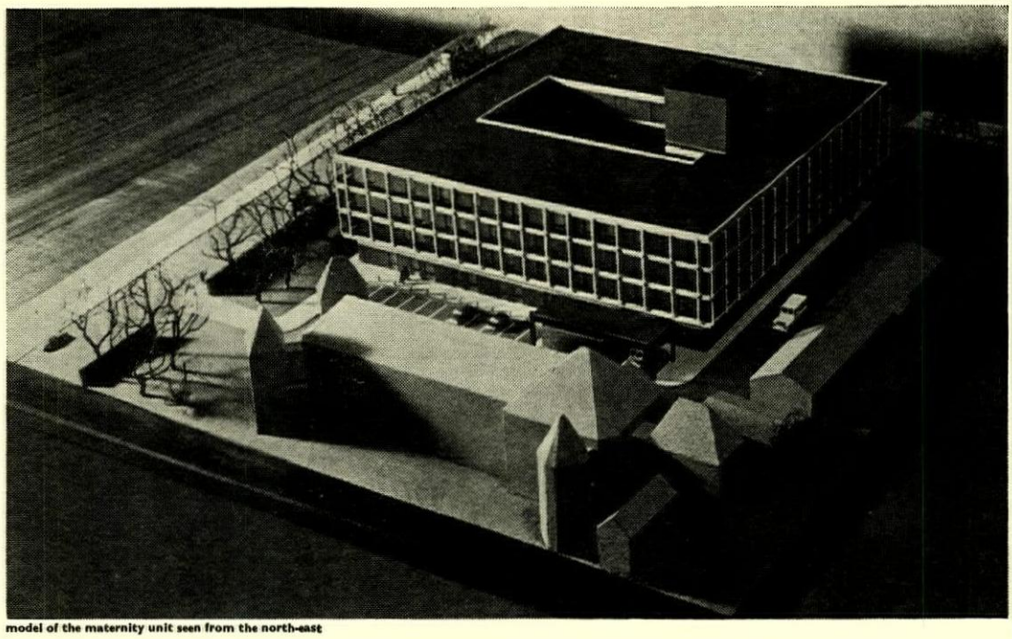
STRUCTURE R.c. columns and flat slab floors. Dark grey facing bricks. Fairfaced concrete balconies. Interior wall surfaces tiled in wet areas, painted elsewhere.

SERVICES Steam from existing boiler house via calorifiers, supplying low temperature hot water to low level radiators beneath windows and high level cupboards.

COST £682,000.

CONTRACT June 1967–June 1969.

Partner-in-charge, W. N. B. George. Associate-in-charge, R. S. Smith. Assistants, J. Lewis, P. Haddock and Miss D. Ozalins. Quantity surveyor, Rex Proctor and Partners. Structural consultant, Ove Arup and Partners. Services consultant, R. W. Gregory and Partners.

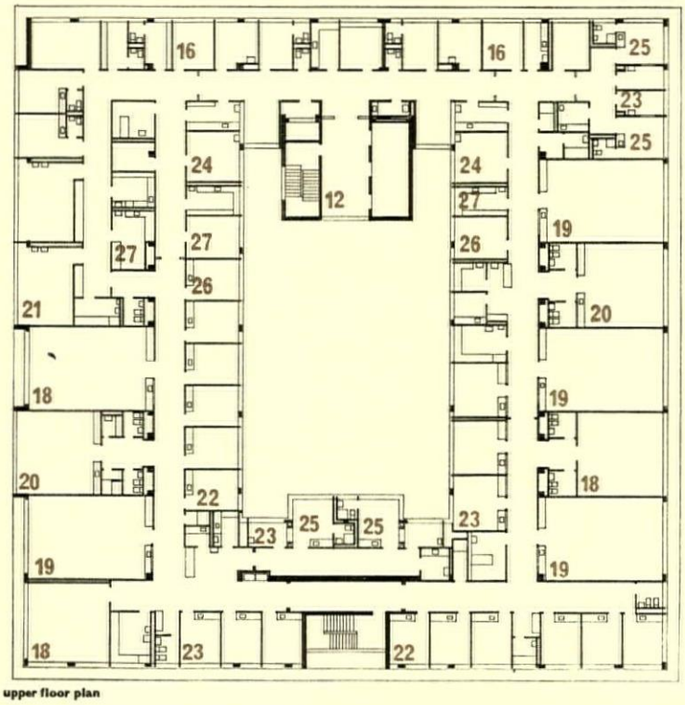


model of the maternity unit seen from the north-east

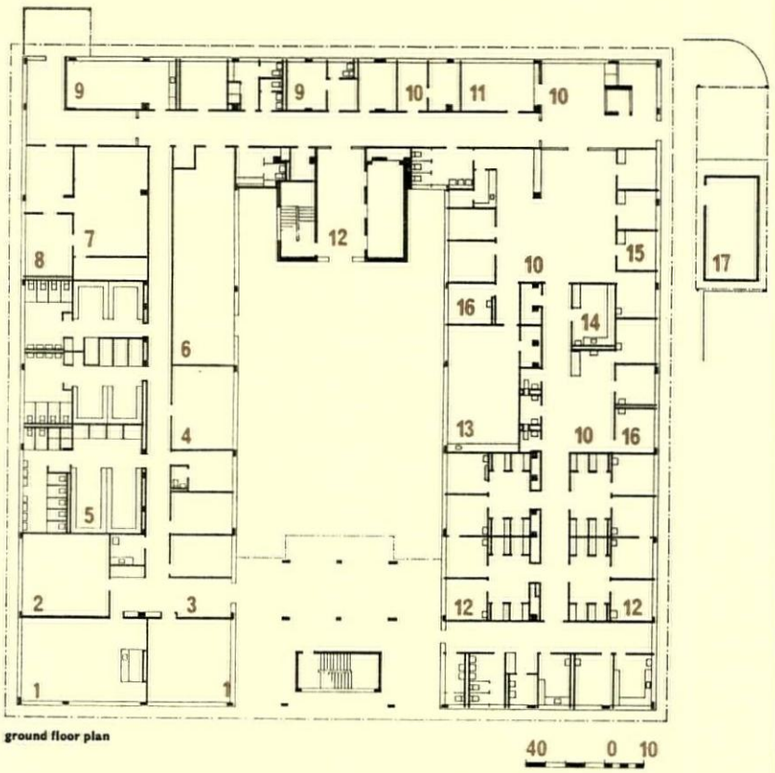
cross section

site plan: key
1, central ward block, operating theatres, o.p.d., etc.
2, psychiatric unit

key to plans
1, classrooms
2, library
3, teachers
4, common room
5, lockers
6, plant
7, kitchen
8, central wash
9, midwives
10, waiting
11, general office/records
12, examination rooms
13, mothercraft
14, blood tests
15, history taking
16, offices
17, prams
18, day room
19, six-bed
20, four-bed
21, delivery
22, single bed
23, nursery
24, treatment
25, single-bed isolation
26, duty room
27, clean utility

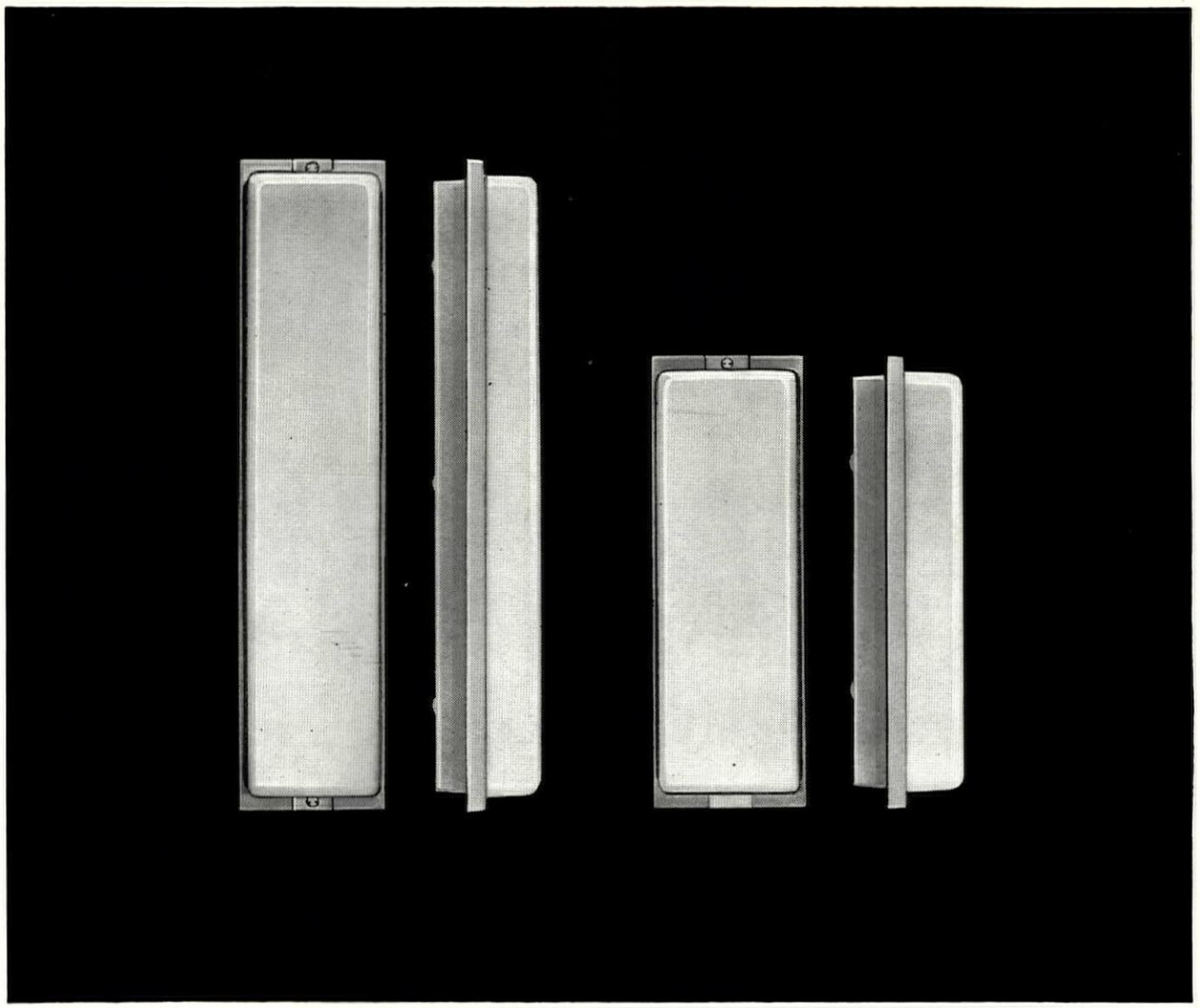


upper floor plan

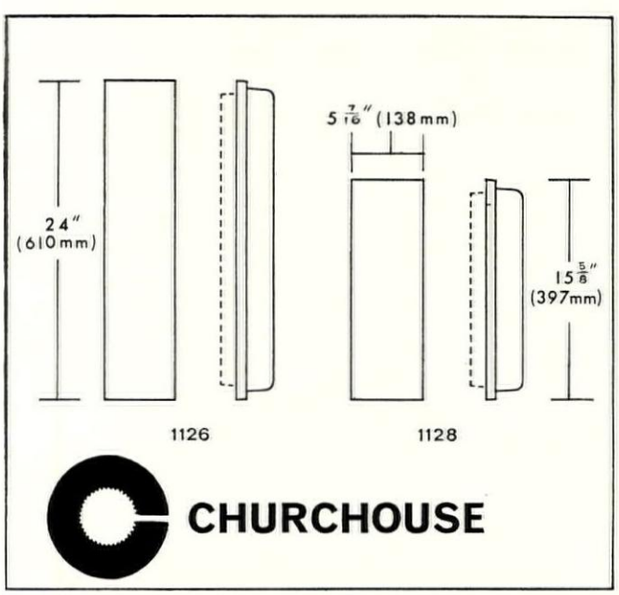


ground floor plan

40 0 10



CHURCHOUSE fluorescent bulkhead fittings



1126

Fluorescent Bulkhead fitting, designed to incorporate two 21" 13W fluorescent lamps. Injection moulded acrylic diffuser, die cast aluminium body. Length 24", Width $5\frac{7}{16}$", Height 4".

1128

Fluorescent Bulkhead fitting, designed to incorporate two 12" 8W fluorescent lamps. Injection moulded acrylic diffuser, die cast aluminium body. Length $15\frac{5}{8}$", Width $5\frac{7}{16}$", Height 4".

Both Bulkheads can be recessed, flush or corner mounted and are available with 1, 2 or 3 lamps. Alternatively, emergency lighting can be supplied by the addition of Pilot tungsten or transistorised fluorescent lamp holders and control gear which together with surrounds and wire guards are available as optional extras.

Write today if you would like further information.

C. M. Churchouse Limited, Lichfield Rd., Brownhills, Staffs. Tel: Brownhills 3551-6

HOSPITAL, ISLAMABAD, WEST PAKISTAN

Llewelyn-Davies, Weeks and Partners, in association with William Perry Associates

CLIENT Government of Pakistan.

SITE 200 acres adjoining foothills of Himalayas in new capital city.

ACCOMMODATION 546 beds for inpatients. Outpatient department. 750 beds eventually.

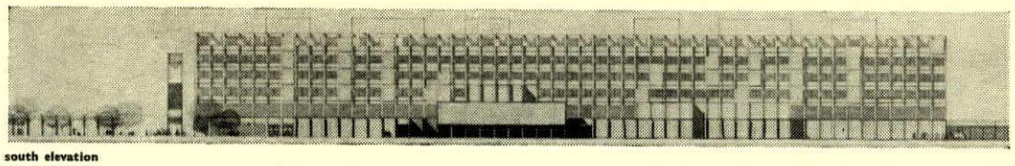
STRUCTURE Fully modular precast concrete frame of I-columns and T-beams, providing space for services with void at column-beam junctions.

SERVICES Extremes of heat and cold in climate met by system of internal courts, cool during day but radiating stored warmth at night. Air conditioning only possible for some clinical departments.

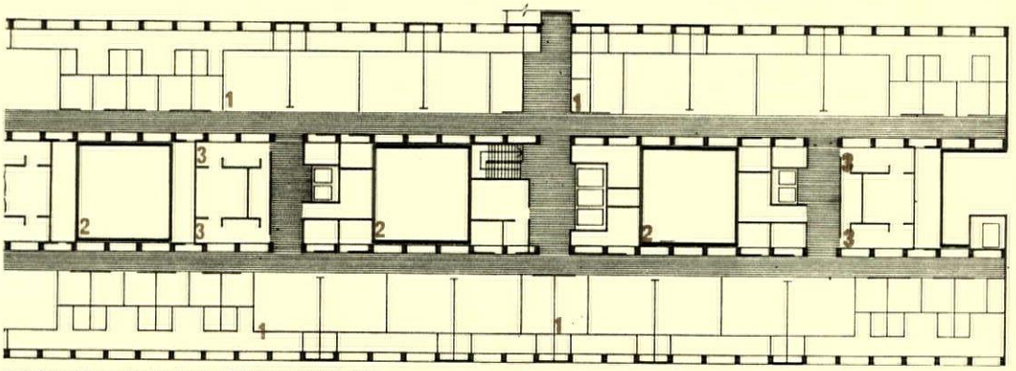
COST Phase 1, £2,300,000.

CONTRACT 1967–1971.

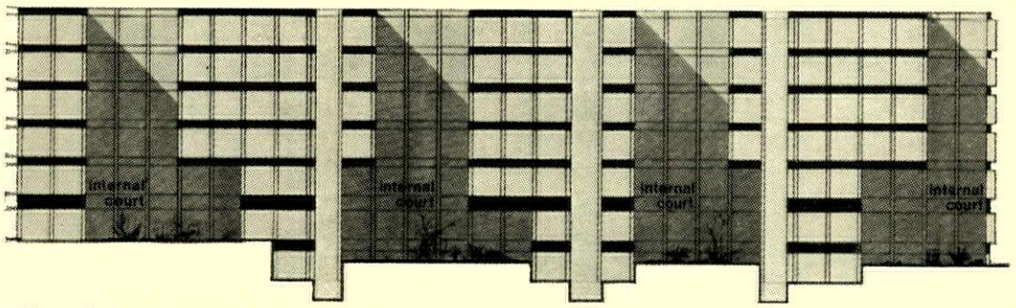
Partner-in-charge, Gwent Forestier-Walker. Project architect, Reg Gray.



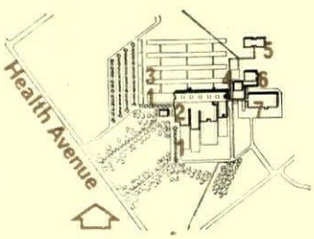
south elevation



typical ward floor plan: key 1, ward. 2, internal court. 3, nurse.



part long section



site plan: key
1. area of growth
2. hospital
3. future medical school
4. medical staff residence
5. nurses' residence
6. isolation unit
7. services block

HOSPITAL EXTENSION, HACKNEY, LONDON

Lyons, Israel, Ellis and Partners in association with W. G. Plant, Architect to the Board

CLIENT North Eastern Metropolitan Regional Hospital Board.

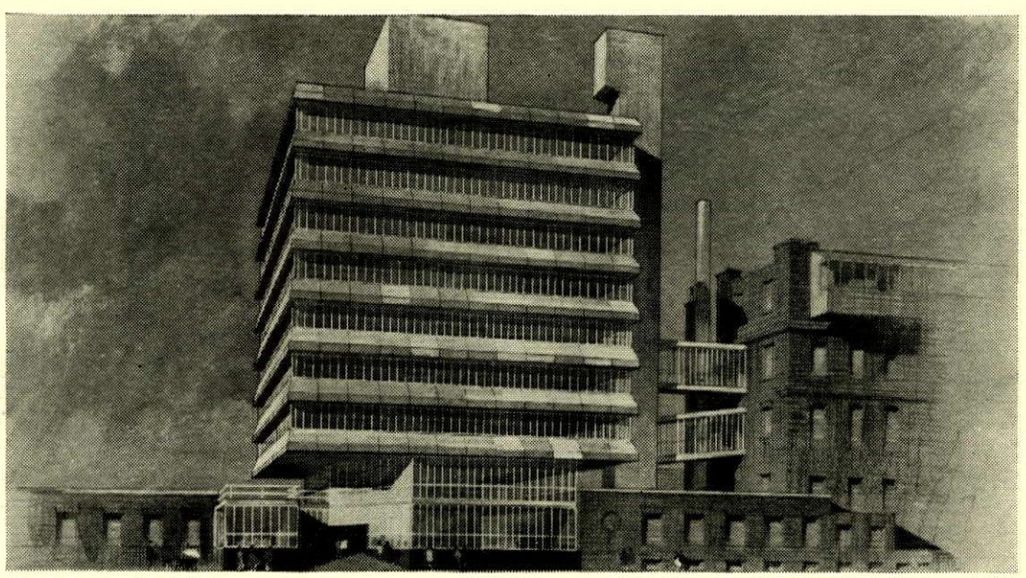
SITE Existing hospital site in Hackney Road.

ACCOMMODATION Research laboratories (given by Hayward Foundation), library, operating theatres, intensive care unit, theatre sterile supply unit.

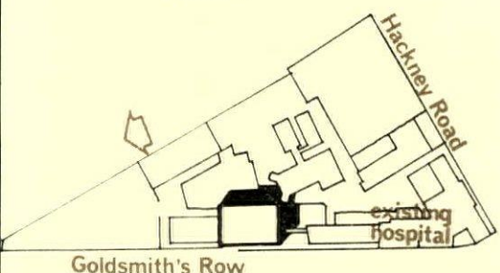
STRUCTURE R.c. frame, bronze windows.

CONTRACT Starts September 1967.

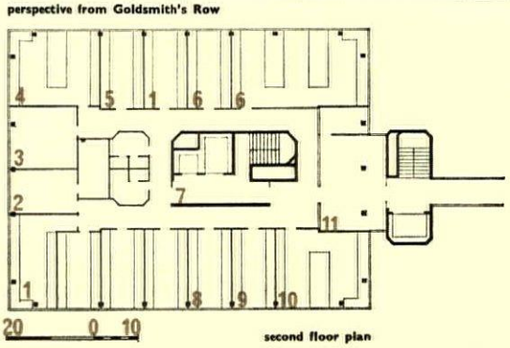
Quantity surveyor, Mercer and Miller. Structural consultant, Felix J. Samuely and Partners. Mechanical and electrical consultant, Zisman, Bowyer and Partners.



perspective from Goldsmith's Row



key to plans
1. research
2. free radioactive
3. patients
4. virology
5. preparation
6. bacteriology
7. lifts
8. hormone
9. radio counting
10. instruments
11. staff
12. store
13. sterilizing
14. special and intensive care and therapy



second floor plan

sixth floor plan

PUBLIC BUILDINGS

PLASTIC SURGERY CENTRE, EDINBURGH

Scott and McIntosh, in association with John Holt, Architect to the Board

CLIENT South Eastern Regional Hospital Board (Scotland).

SITE 11 acres at Greenbank Drive, secluded and wooded, in grounds of existing City Hospital.

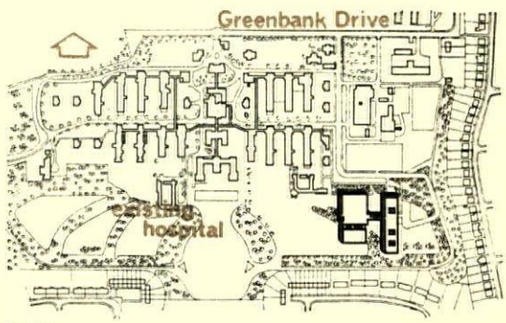
ACCOMMODATION 3-storey ward block, 60 beds for plastic surgery, 20 for oral surgery. Single-storey central operating suite and intensive therapy and burns unit.

STRUCTURE Ward block, r.c. frame clad in mosaic. Single-storey block r.c. frame with exposed finish.

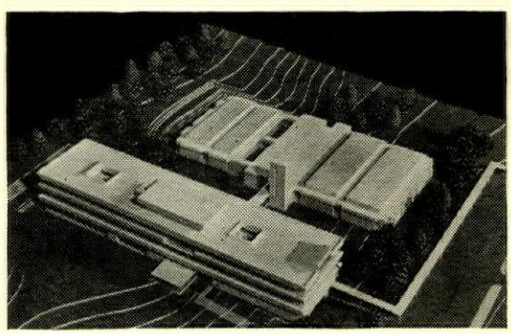
SERVICES Electronic patient monitoring and full air conditioning in central operating suite and intensive therapy unit.

COST £750,000.

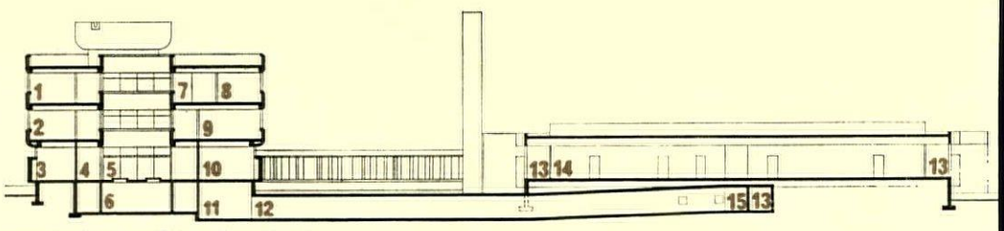
Assistant, W. Fergus Smith. Quantity surveyor, James Gentles and Son. Structural consultant, Leonard and Partners. Services consultant, Hulley and Kirkwood.



site plan



aerial view of model from north-east, with ward block in foreground



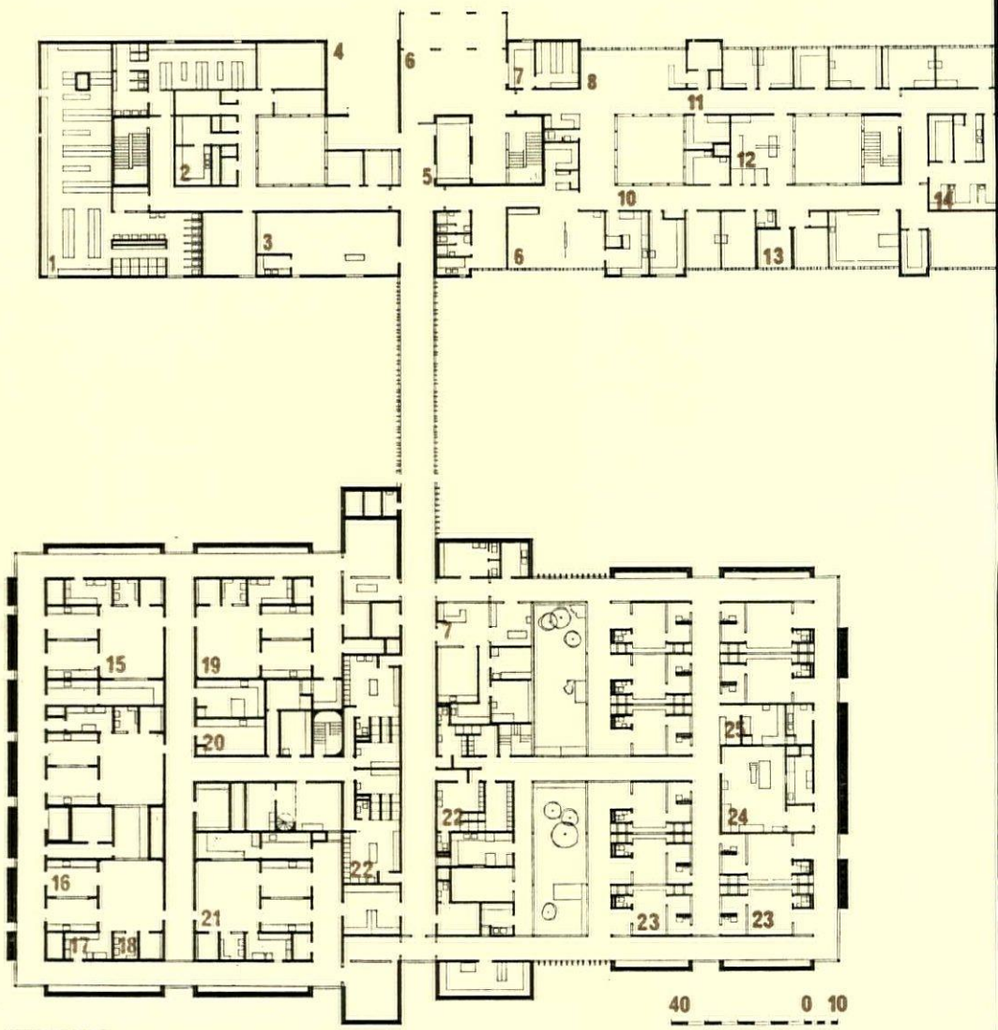
cross section through ward block and operating suite

key to plan

1, staff changing
2, photographic department
3, post anaesthetic recovery
4, ambulance bay
5, lift lobby
6, main entrance
7, reception
8, waiting
9, day bed area
10, out-patients' department
11, dental department
12, radiography
13, therapy
14, technicians' workshops and plaster rooms
15, operating theatre
16, anaesthetic
17, disposal
18, scrub
19, o.p.d. theatre
20, blood store
21, burns theatre
22, changing
23, single bed
24, treatment
25, preparation and sterile supplies

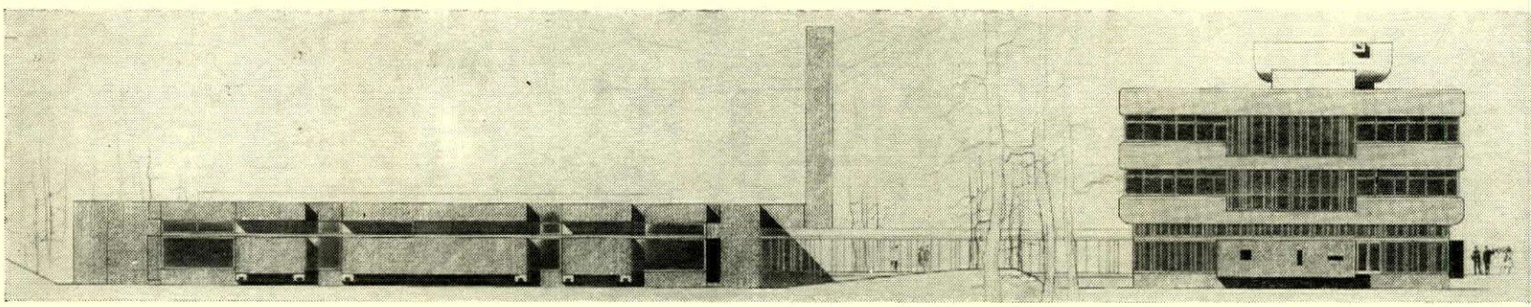
key to section

1, lab
2, treatment
3, studio
4, office
5, court
6, plant
7, waiting
8, consultant
9, four-bed
10, changing
11, sterilizing
12, supply corridor
13, disposal
14, theatre hall
15, supply



ground floor plan

south elevation: operating suite left, ward block right



DISTRICT HOSPITAL, EALING, LONDON

John R. Harris, in association with F. A. C. Maunder, Architect to the Board

CLIENT North West Metropolitan Regional Hospital Board.

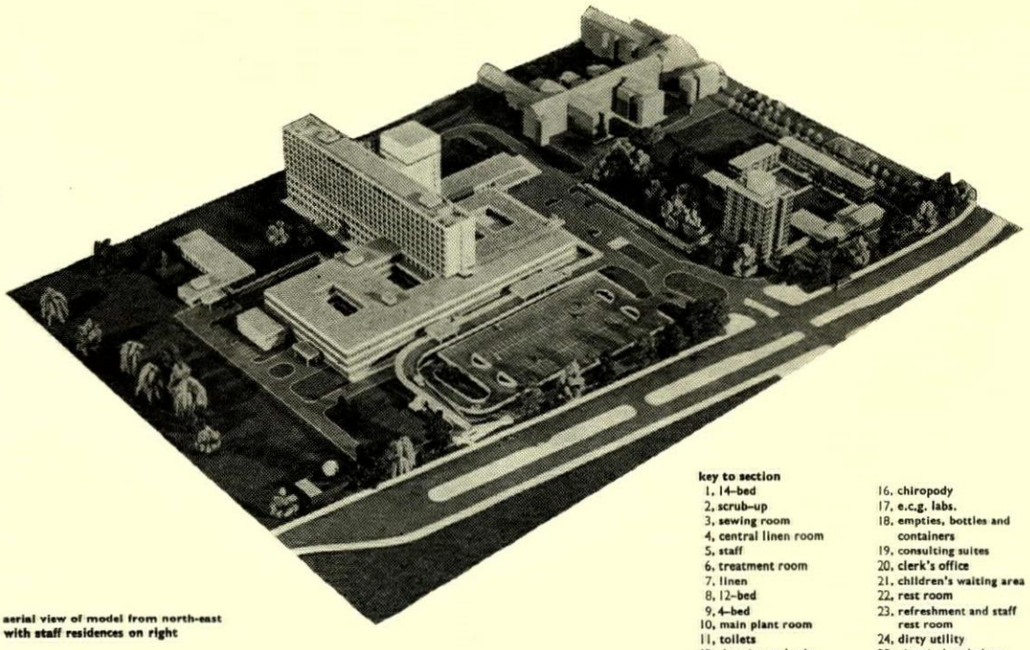
SITE 14 acres with uniform 12 ft. fall eastward to River Brent.

ACCOMMODATION King Edward Memorial Hospital, 3-storey podium containing ancillary services with 7-storey ward block over. Phase 1, 396 beds: 90 general medicine, 60 general surgery, 60 traumatic and orthopaedic, 30 gynaecological, 20 geriatric, 30 E.N.T., 40 paediatric, 16 dermatological, 20 communicable diseases. Phase 1 residences for 214 staff.

STRUCTURE Precast r.c. frame and panels. Residences, loadbearing brick.

SERVICES Steam supply from adjacent hospital boiler house and shared centralized laundry. Disposal hoists for refuse and dirty linen discharging to independent basement service tunnel.

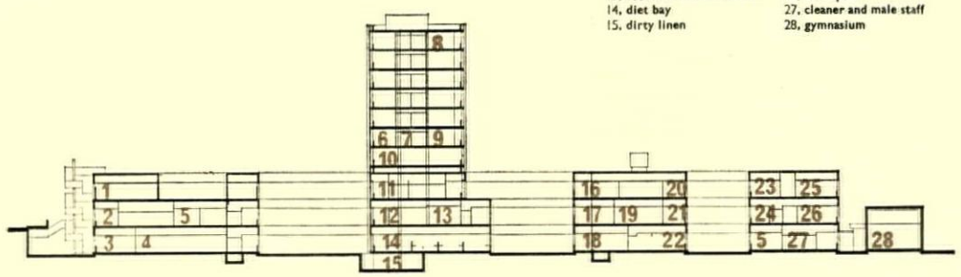
Associate-in-charge, S. R. Aston. Principal assistant, J. Lane. Quantity surveyor, Widnell and Trollope. Structural consultant, C. J. Pell and Partners. Services consultant, R. C. Hodge, Engineer to the Board.



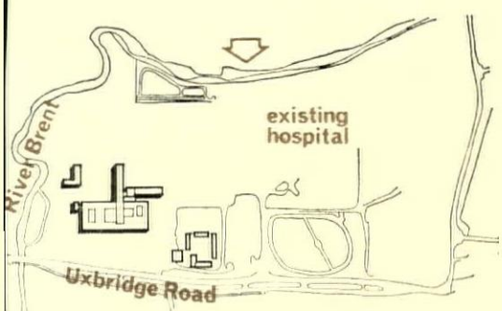
aerial view of model from north-east with staff residences on right

key to section

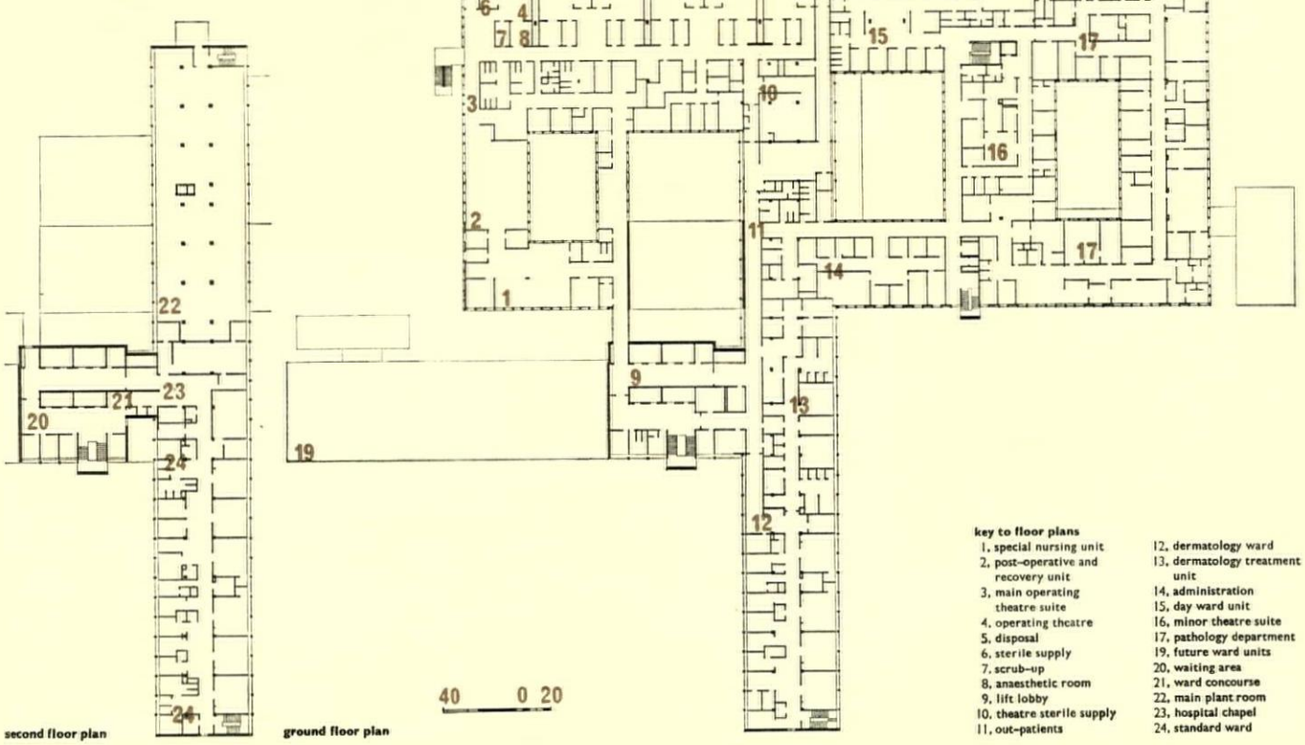
1, 14-bed
2, scrub-up
3, sewing room
4, central linen room
5, staff
6, treatment room
7, linen
8, 12-bed
9, 4-bed
10, main plant room
11, toilets
12, dressing and sub-waiting area
13, 100 m.m. camera room
14, diet bay
15, dirty linen
16, chiropody
17, e.c.g. labs.
18, empties, bottles and containers
19, consulting suites
20, clerk's office
21, children's waiting area
22, rest room
23, refreshment and staff rest room
24, dirty utility
25, chemical pathology, general lab
26, orthoptist
27, cleaner and male staff
28, gymnasium



long section



site plan



second floor plan

ground floor plan

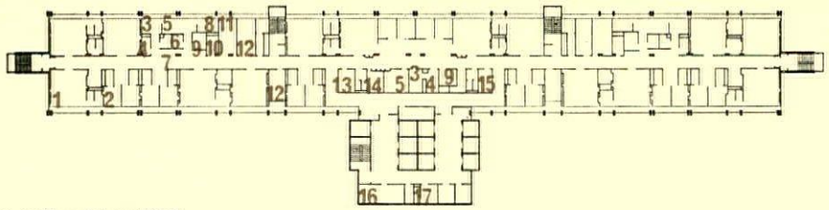
key to floor plans

1, special nursing unit
2, post-operative and recovery unit
3, main operating theatre suite
4, operating theatre
5, disposal
6, sterile supply
7, scrub-up
8, anaesthetic room
9, lift lobby
10, theatre sterile supply
11, out-patients
12, dermatology ward
13, dermatology treatment unit
14, administration
15, day ward unit
16, minor theatre suite
17, pathology department
19, future ward units
20, waiting area
21, ward concourse
22, main plant room
23, hospital chapel
24, standard ward

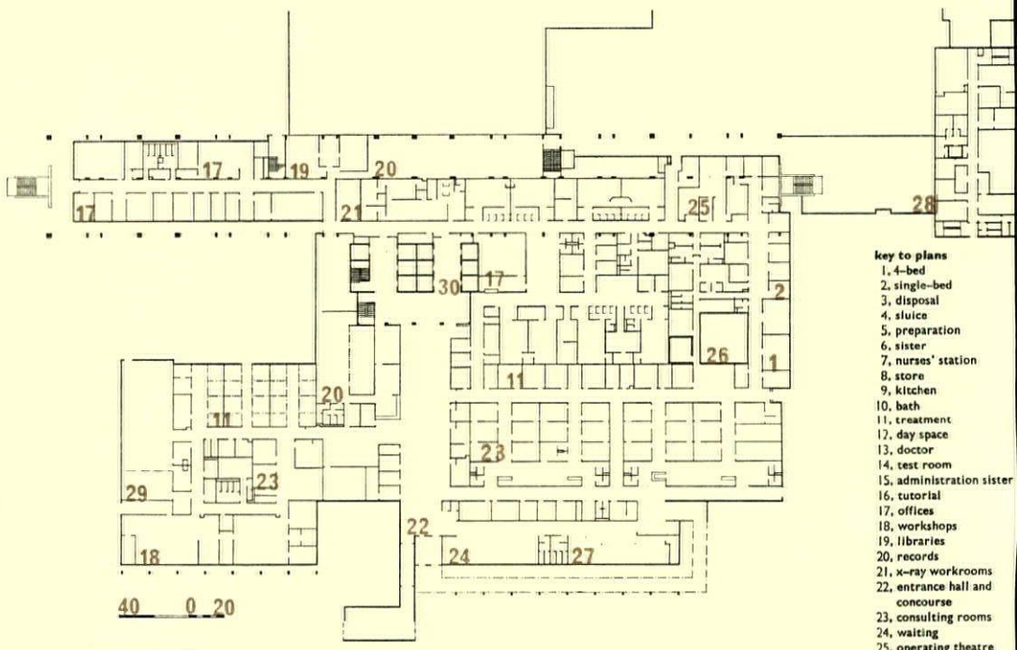
DISTRICT GENERAL HOSPITAL, GLASGOW

Keppie, Henderson and Partners

CLIENT	Western Regional Hospital Board.
SITE	25 acres at Gartnavel, parkland with trees.
ACCOMMODATION	576 beds, with Phase 1 residences for about 300 staff. Future expansion to 900 beds.
STRUCTURE	Precast concrete structure with exposed aggregate cladding panels.
SERVICES	Primary high pressure hot water serving heat stations containing calorifiers for space heating and domestic hot water.
COST	Phase 1, £5,000,000.
CONTRACT	July 1967–December 1970. Quantity surveyor, Dansken and Purdie. Structural consultants, Ove Arup and Partners. Mechanical consultant, Donald Smith, Seymour and Rooley. Electrical consultant, Ramsay and Primrose.

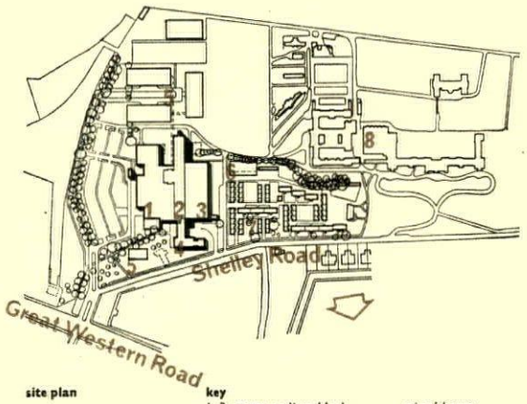


typical floor plan, ward block



ground floor plan

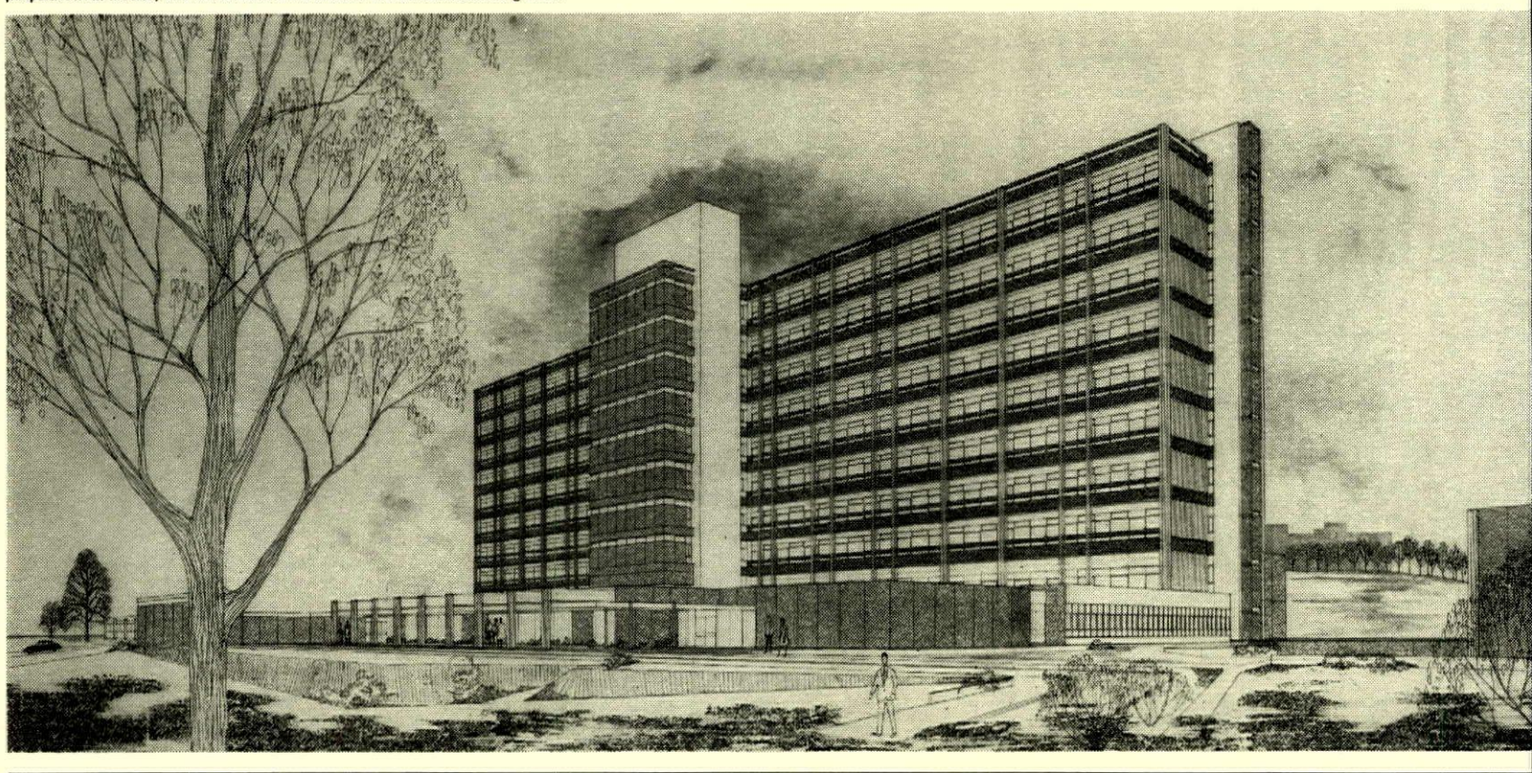
key to plans
1. 4-bed
2. single-bed
3. disposal
4. sluice
5. preparation
6. sister
7. nurses' station
8. store
9. kitchen
10. bath
11. treatment
12. day space
13. doctor
14. test room
15. administration sister
16. tutorial
17. offices
18. workshops
19. libraries
20. records
21. x-ray workrooms
22. entrance hall and concourse
23. consulting rooms
24. waiting
25. operating theatre
26. courtyard
27. cafeteria
28. pathology and labs
29. gym
30. lift lobby



site plan

key
1. 2-storey podium block d.g.h.
2. 10-storey ward block d.g.h.
3. 3-storey podium block
4. 3-storey lab. and animal house
5. later stage buildings
6. nurses' training school
7. staff residential area
8. Gartnavel Royal Hospital

perspective from the east, with the lift tower in the centre of the slab block containing wards



TEACHING HOSPITAL, LAMBETH, LONDON

Yorke, Rosenberg, Mardall

CLIENT St. Thomas's Hospital.

SITE 10 acres of original hospital on South Bank opposite Houses of Parliament enlarged as far back as re-aligned Lambeth Palace Road.

ACCOMMODATION Phase 2, 612-bed ward block, with laboratories and administration. Lower treatment block, including out-patients, operating theatres, X-ray, physical medicine and clinical research institute (given by Max Rayne Foundation). Communal block next river with staff dining rooms, Governors' Hall, chapel and some flats. Nurses' residence and training school next to Westminster Bridge Road, with space for 400 cars in basement.

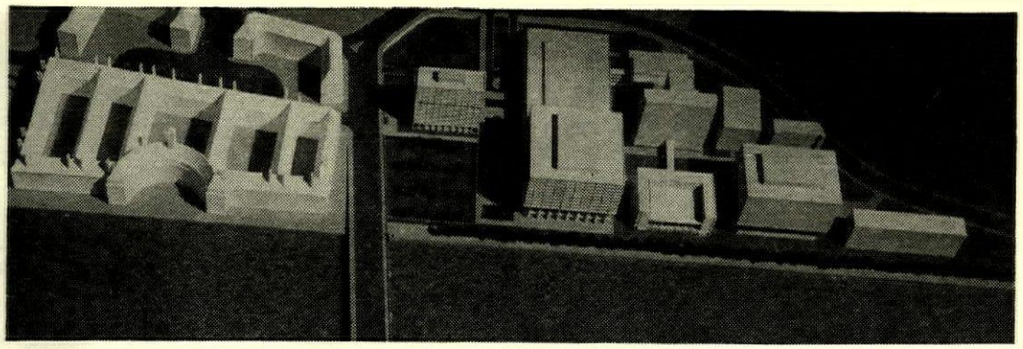
STRUCTURE In situ r.c. frame clad in glazed ceramic tiles.

SERVICES Full air conditioning throughout ward and treatment blocks. Radiators in residence.

COST £13,250,000.

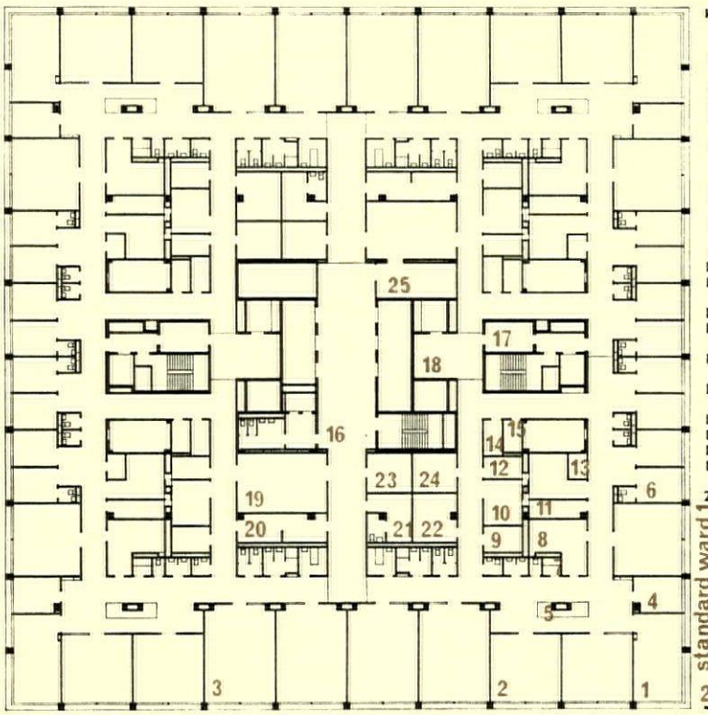
CONTRACT Starts 1968.

Quantity surveyor, Franklin and Andrews. Structural consultant, Felix J. Samuely and Partners. Services consultant, Steensen, Varming, Mulcahy and Partners. Drainage consultant, A. P. I. Cotterell and Son.



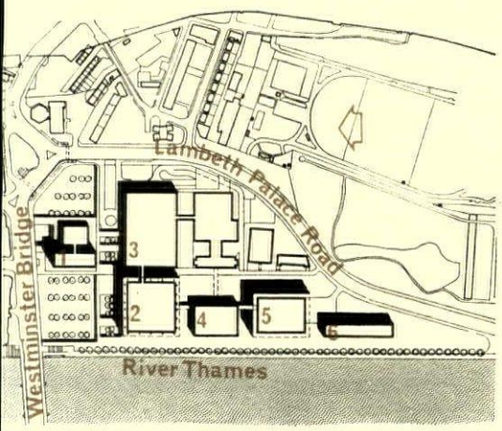
aerial view of model, with hospital on right and County Hall on left

key to floor plan
1. patients' day room
2. 4-bed
3. 6-bed
4. sister
5. nurses' station
6. single bed
7. bath
8. sluice
9. pantry
10. treatment
11. dirty utility
12. clean utility
13. flowers
14. linen
15. h.m.c.
16. lift lobby
17. disposal
18. supply
19. seminar
20. student labs.
21. visitors' room
22. registrar's room
23. students' room
24. doctors' room
25. clinical investigation



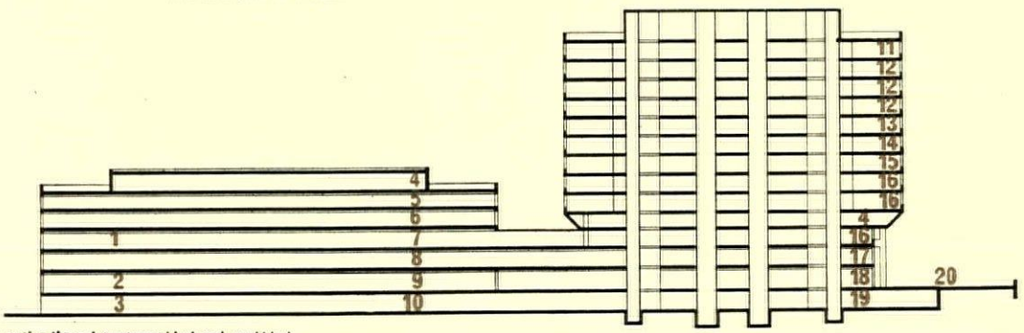
key to section
1. e.n.t. department, clinical photography
2. pharmacy, surgical outpatients
3. pharmacy stores
4. plant
5. clinical research institute
6. physical medicine, theatre viewing, mothercraft
7. main theatres, ophthalmic department
8. x-ray, cardiac, v.d., chest isotope labs
9. medical outpatients
10. records, radiotherapy
11. private patients, sick staff bay
12. standard wards
13. paediatric wards, ophthalmic wards
14. obstetric wards, delivery
15. surgical, endocrine, obstetric lab
16. labs
17. administration
18. main entrance
19. c.s.s.d., patients' kitchen
20. terrace

ninth floor plan, ward block



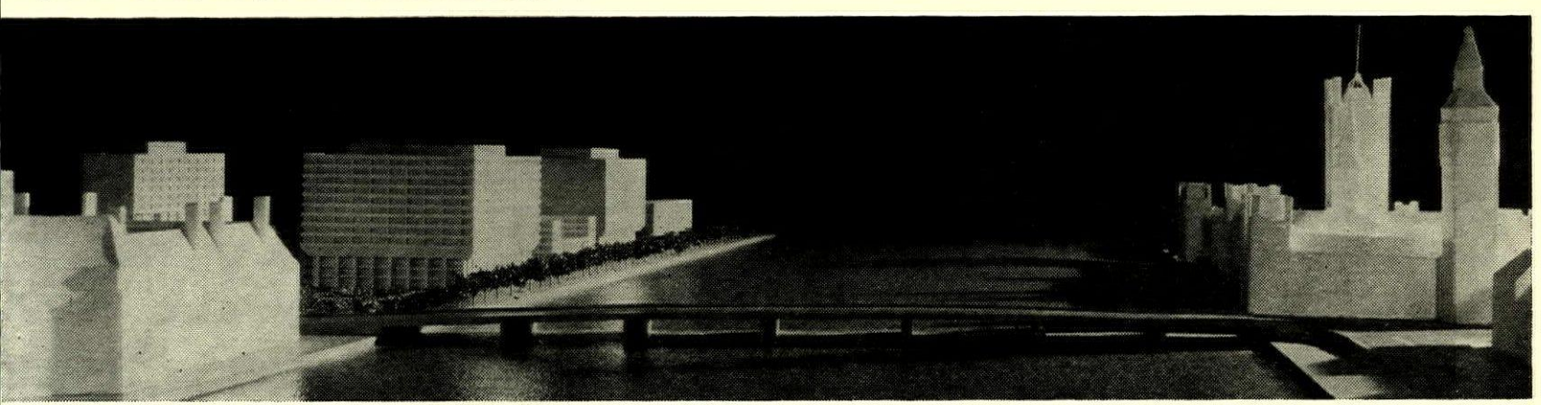
site plan

key
1. nurses' school
2. wards
3. treatment
4. communal
5. medical school and wards
6. medical school, residential



section through treatment block and ward block

looking south down the Thames, with hospital on left and Houses of Parliament on right



HOSPITAL, TORQUAY, DEVON

Fry, Drew and Partners, in association with H. Woods, Architect to the Board

CLIENT South Western Regional Hospital Board.

SITE Next to existing Torbay Hospital, on top and side of steep hill, 2 miles north of town.

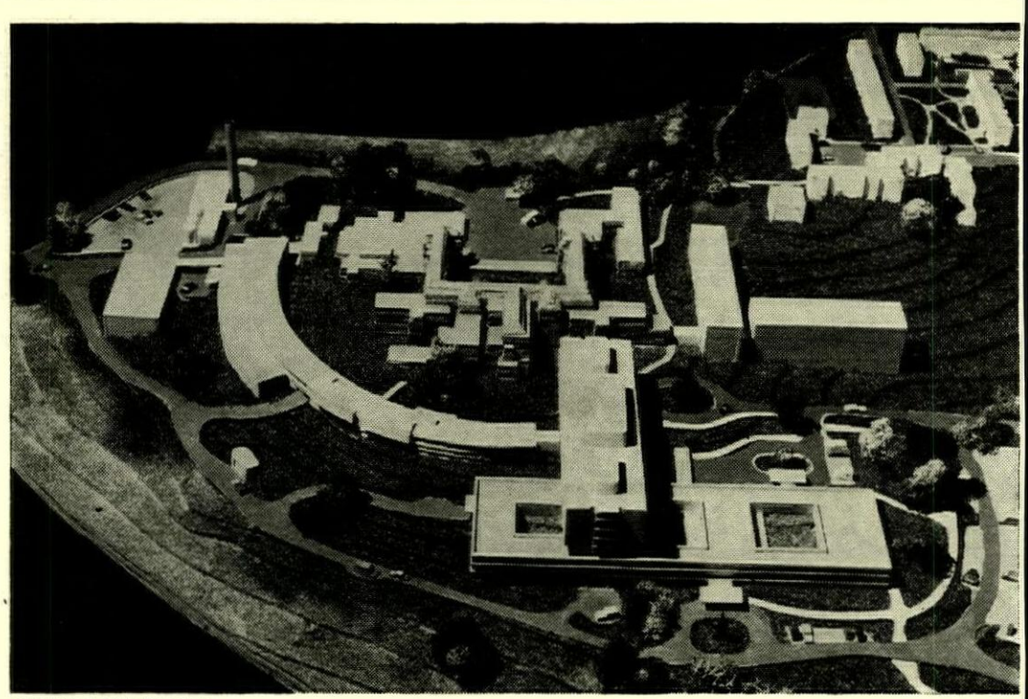
ACCOMMODATION Phase 1, 194,000 sq. ft. in 4 'race track' ward units of 28 beds each. Operating theatres and other hospital facilities. Separate nurses' residence, training unit and boiler house. Future phases shown on plan.

STRUCTURE R.c. frame and floor slabs with brick and tile cladding. Boiler house, steel with asbestos cladding.

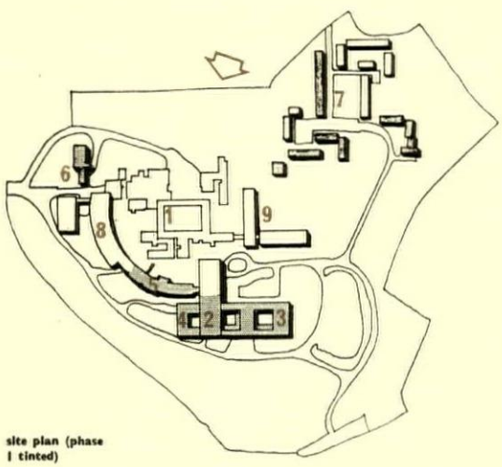
SERVICES Standard hospital services.

COST Phase 1, £2,000,000.

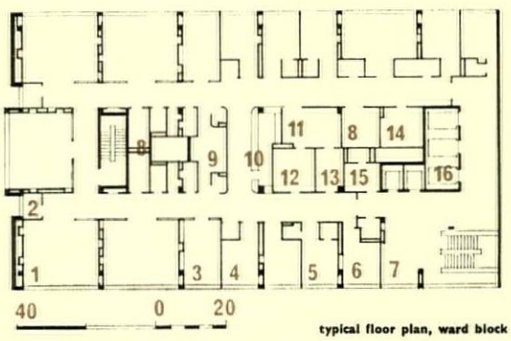
CONTRACT October 1966–September 1969. Partner-in-charge, Jane B. Drew. Assistant-in-charge, Derrick Lees. Board liaison architect, R. Hook. Assistants, J. Meyerowitz, A. Poole, B. Jones, Yoka King Lip and E. de Silva. Quantity surveyor, Widnell and Trollope. Structural consultant, W. V. Zinn and Associates. Services consultant, Donald Smith, Seymour and Rooley.



aerial view of model from north



site plan (phase 1 tinted)

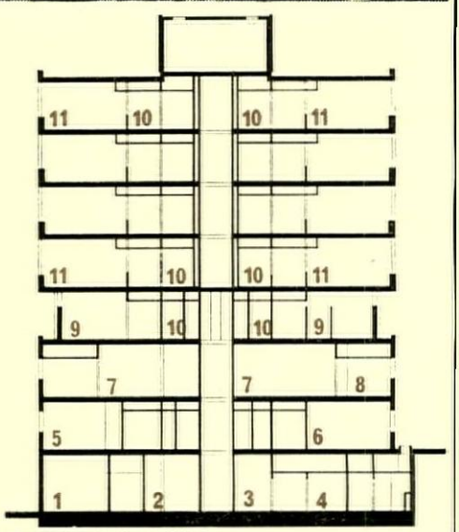


typical floor plan, ward block

key to site plan
1, existing hospital
2, ward block
3, outpatients
4, pharmacy, pathology
5, operating theatres
6, boiler house
7, nurses' accommodation
8, proposed maternity
9, proposed geriatric and psychiatric units

key to section
1, transformer
2, heat exchanger
3, specimens
4, mortuary
5, e.n.t. treatment
6, orthoptic
7, radiodiagnostic
8, waiting space for private patients
9, non-resident female staff
10, ablution
11, 4-bed

key to plan
1, 4-bed
2, ablution
3, day room
4, single bed
5, isolation ward
6, staff
7, waiting
8, bathroom
9, sluice
10, nurses' station
11, treatment room
12, clean utility
13, dirty utility
14, kitchen
15, change
16, lifts



cross section through ward block

CONTRACTORS ETC

Housing, Northern Area, Windsor, Berks. *Architects:* Mathews, Ryan and Simpson. *General contractor:* Wates (London) Ltd.

Housing, Field End Road, Hillingdon, London. *Architects:* The Austin Smith/Salmon/Lord Partnership. In association with Thurston Williams, Borough Architect. *General contractor:* Howard Farrow Ltd.

Housing, Wetherby Road, Leeds, Yorks. *Architect:* Derek Walker and Architects' Design Group. *General contractor:* Peters Bolton Ltd.

Housing, Park Hill, Croydon. *Architects:* Atelier 5. *General contractor:* Wates Ltd.

Housing, Broadwater Farm, Haringey, London. *Architects:* C.E. Jacob, Borough Architect. *General contractor:* Taylor Woodrow-Anglian Ltd.

Private House, Campden Hill, London. *Architect:* Tom Kay. *General contractor:* R. Mansell Ltd. *Sub-contractors: Electrical:* S. Mathews Ltd. *Double glazing:* Plyglass Ltd. *Heaters:* Copperad Ltd. *Ironmongery:* G. & S. Algood Ltd. *Hoist:* Hoisting Appliances Ltd. *Sanitary ware:* J. Bolding & Sons. *Kitchen equipment:* Hygena, G. E. C. Anderson Ltd., Moffat Ltd.

Architect's House, Kentish Town, London. *Architects:* Howard & Pank. *General contractor:* Clemens Brothers. *Sub-contractors: Heating:* Cooper Evans Ltd. *Glazing:* British Patent Glazing. *Sanitary fittings:* Adamsez. *Ogro ironmongery:* G. E. C. Anderson Ltd. *Timber:* W. W. Howard Brothers. *Floors:* Hewetsons.

University of Surrey. *Architects:* Building Design Partnership. *General contractor:* James Longley & Co. *Sub-contractor:* Concrete (Southern) Ltd.

Laboratories, Edinburgh University. *Architects:* Sir Basil Spence, Glover and Ferguson. *General contractor (for Regional Computer Centre):* Gilbert Ash (Scotland) Ltd.

Lecture Theatres, Brunel University, Uxbridge, London. *Architects:* Richard Sheppard, Robson and Partners. *General contractor:* George Wimpey & Co. *Sub-contractors: Mechanical:* Norris Warming Co. *Electrical:* T. Clarke & Co. *Concrete cladding units:* Stent Precast Concrete. *Flush doors:* Golding & Ansell. *Ironmongery:* H. & C. Davis. *Metal windows:* James Gibbons Ltd. *Lifts:* Marryat & Scott.

St. Paul's School, Barnes, London *Architects:* Feilden and Mawson. *General contractor (contract 1):* James Longley & Co.

Micro-Electronics Factory, Witham, Essex. *Architects:* Anthony B. Davies and Associates. *General contractor:* Richard Costain (Construction) Ltd.

Research Station, Killingworth, Northumberland. *Architects:* Ryder & Yates and Partners. *General contractor:* Brims & Co.

Power Station, Didcot, Berkshire. *Architects:* Frederick Gibberd and Partners, with C. S. Allott & Son, consulting engineer. *Contractors: Foundations:* Kier Ltd. *Superstructure:* G. Percy Trentham Ltd. *Switchgear compound and coal handling:* Peter Lind & Co. *Chimney:* Tileman & Co. *Cooling towers:* Film Cooling Towers (Concrete) Ltd. *Structural steel:* Redpath & Co.

Book Warehouse, Harmondsworth, London. *Architects and engineers:* Arup Associates. *General contractor:* Rush & Tompkins.

Council Offices, Coventry. *Architect:* Terence Gregory, City Architect and Planning Officer. *General contractor:* Wm. Moss & Sons.

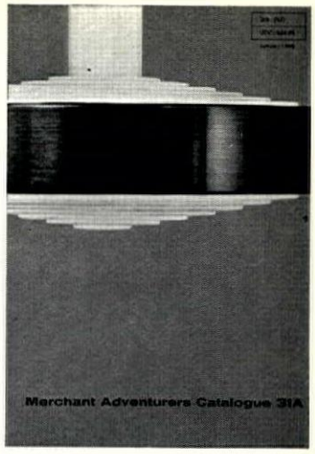
Union Headquarters, Sheffield. *Architects:* Jefferson, Sheard and Partners. *General contractor:* G. Percy Trentham Ltd.

Church and Presbytery, Holloway, London. *Architect:* Gerard Goalen. *General contractor:* Marshall-Andrew & Co. *Sub-contractors: Aluminium roofing:* Roberts Adlard & Co. *Electrical:* Freeman Electrical Co. (London) Ltd. *Patent glazing:* Faulkner Greene & Co. Ltd. *Porch and baptistery glazing:* James Clark & Eaton. *Aluminium windows to presbytery:* Alumin Building Components Ltd. *External facing bricks:* Hall & Co. *Internal facing bricks:* N. McCarthy & Sons.

Hospital, Torquay, Devon. *Architects:* Fry, Drew and Partners, in association with H. J. Woods, Architect to the Board *General contractor:* E.B.C and Sleeman.

lighting concepts . . .

Available in 3 alternative versions with louvre opal glass diffuser or lens, these units form part of a wide range in the recessed section of Catalogue 31A, which illustrates some of the best ideas in tungsten lighting to-day

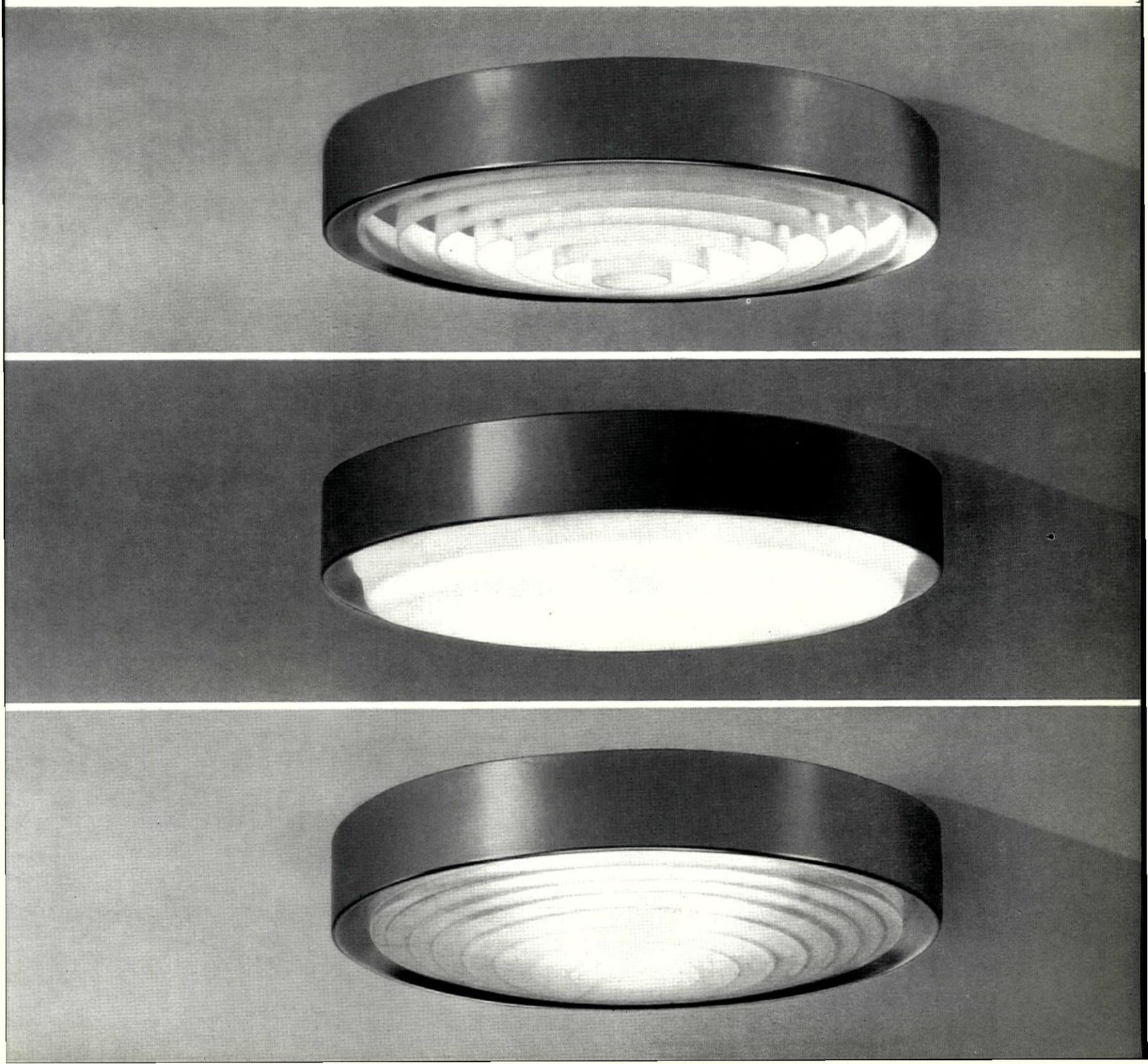


Merchant Adventurers

Feltham, Middlesex. London Showroom: 231 Tottenham Court Rd. W1

MA LIGHTING

1940 anodised aluminium semi-recessed units made in 7 sizes up to 16" diameter



Ian Nairn

STOP PRESS

A monthly anthology from all over Britain of townscape problems, outrages and opportunities, compiled by Ian Nairn with drawings by G. J. Nason.

S.O.S.

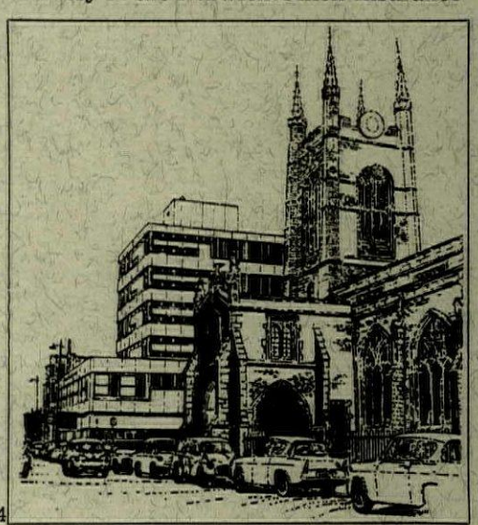
LADYKIRK HOUSE, BERWICKSHIRE
A good Georgian house in anyone's county, 1. The inside is now sold up; the outside has to be removed within twelve months. The owner has closed it as uneconomical and moved to a modern house half a mile away. Why could it not at least have been left to make a very handsome ruin?

CLAYTON, NEAR BRADFORD
A group of cottages which are to be demolished to allow access to a new estate of houses, when they could clearly become the nucleus of a new village centre, 2. Just another neglected bit of the industrial West Riding, where sites and buildings that would be precious in the south are thrown away heedless.

OUTRAGE

NEAR MOFFAT, SCOTLAND
Afforestation on the Edinburgh road north of the Devil's Beef Tub, 3. The whole stretch is one of the finest sequences in the Lowlands, and no place to be nibbled at by miles of conifers. With so many lowland sites suitable for afforestation this is a real tragedy.

PETERBOROUGH
How not to match up old and new, 4, courtesy of the Norwich Union Insurance



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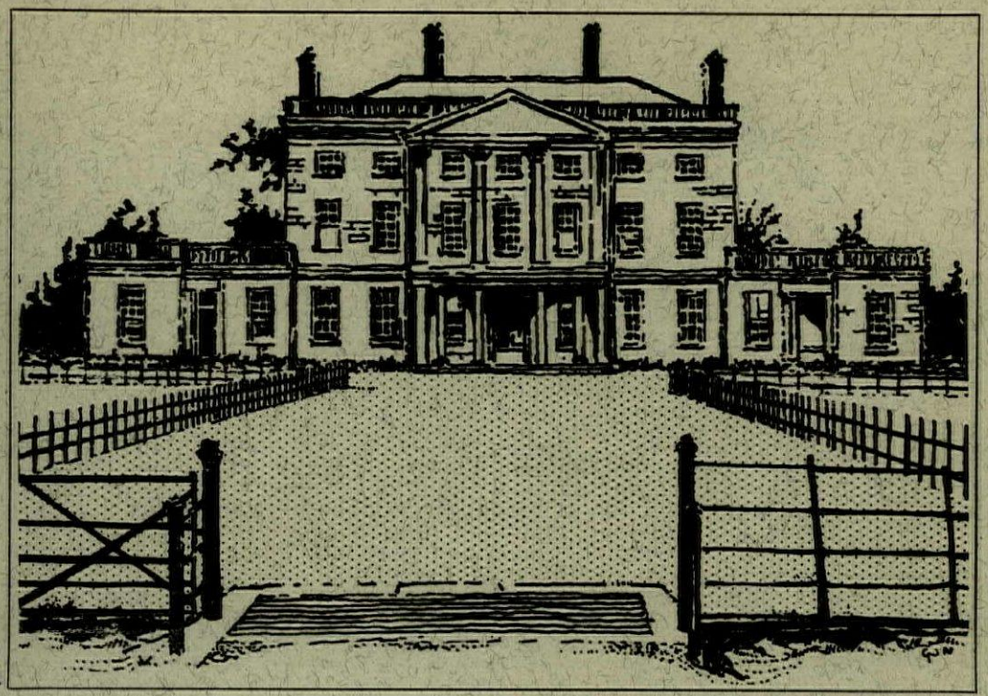


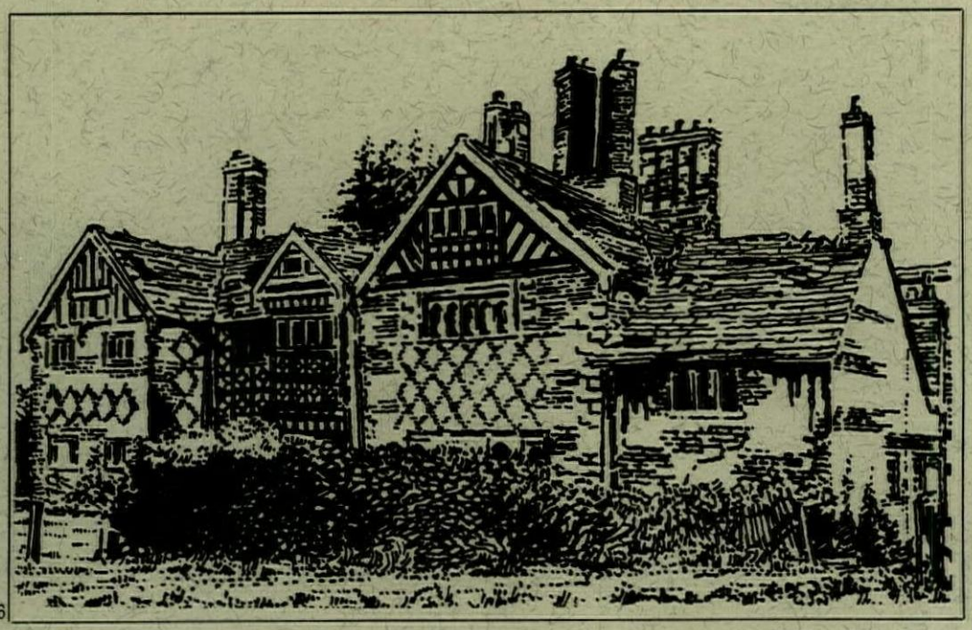
1

2

3

Co.—the architects, surprisingly enough, were Feilden and Mawson—and turning the other way, 5, the area in front of the Market Hall has been made into an 'amenity' which feels as glum as it looks. It was formerly the open market, and seems headed for some award or other.

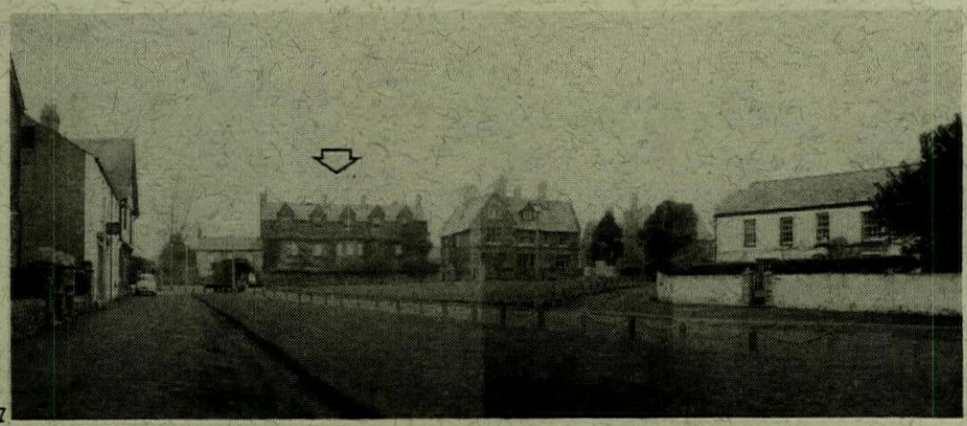
5



6

R.I.P.

NEWTON LE WILLOWS, LANCS
Newton Hall (1635) from this year's NMR report, 6. This was one of those buildings which would never get in the history books, yet was unreplaceable both in mixture of styles and for its industrial setting. It must have cheered thousands of travellers along the busy A49 between Warrington and Wigan. Many old buildings are a sad loss; this in its modest way was really irreplaceable.

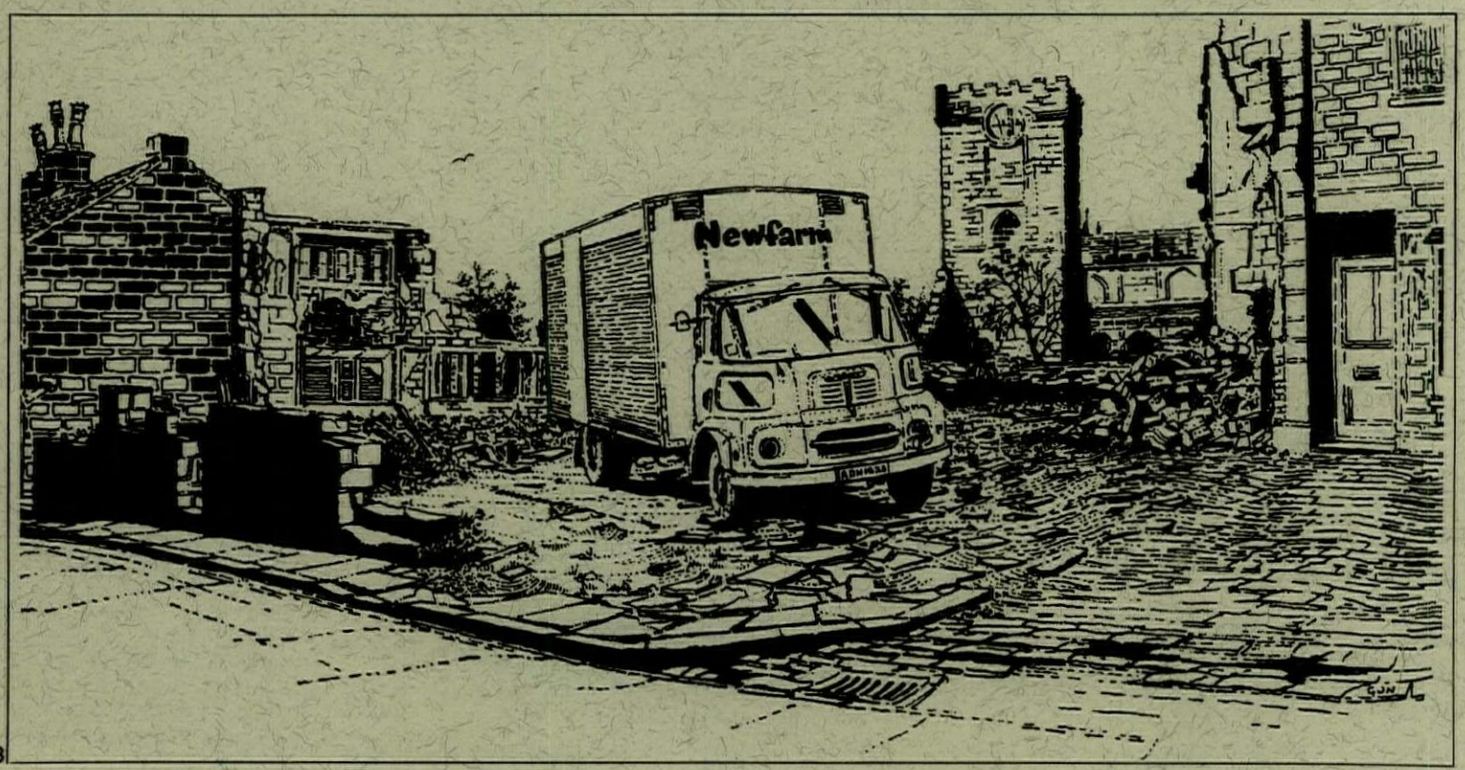


7

OPPORTUNITY

LLANDAFF, CARDIFF
The Old Schoolhouse (arrowed) due to be replaced on the green just uphill from Llandaff Cathedral, 7. At a time when the City planning office has just produced a perceptive study of Llandaff it would offer a good opportunity for South Wales to show that it can successfully match old and new.

HEPTONSTALL, YORKS, W.R.
A magnificent village on the side of the Pennines above Hebden Bridge, made up of very narrow streets and stone buildings. The first gap has just appeared in the centre, 8. It could become a small square with houses on one side and a slit view to the churches—one ruined, one Victorian—on the other. But, as at Bradford nobody cares.



8

Why
buy Dunham-Bush's hot air?

please turn page

Dunham-Bush have brought out a complete central heating and domestic hot water system in one unit for £175.

If you're an architect, consulting engineer, building contractor, industrialised builder, fuel authority or simply interested in keeping people warm, read on.

The new Dunham-Bush unit consists of a boiler, a hot water cylinder, and a heat exchanger fitted into two matching steel cabinets: they also include an airing cupboard, ducts and a plenum chamber.

Each cabinet measures 20″ x 20″ x 90″ high.

They can be put side by side or on top of each other.

Either way they form a central core providing warm air heating and hot water to a four bedroom, two storey house.

They are ideal for incorporating into designs for Industrialised housing.

They are also ideal for use in building large numbers of houses to a standardised design.

They can be used effectively in single new houses.

Versatility

The component units, i.e. the boiler, cylinder, heat exchanger and airing cupboard can be arranged inside the two cabinets in any order or combination.

The boiler can be either Solid Fuel, Gas or Oil.

Planning

The Dunham-Bush unit suits modern architectural thinking, and modern constructional pre-planning.

The use of circulated and filtered warm air cuts out heating furniture, radiators, piping, etc.

The maximum space required is 22″ x 44″ x 90″.

Simplicity

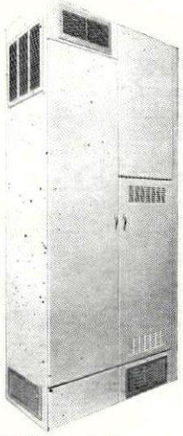
The self contained nature of the unit eliminates a great deal of costly plumbing, electrical work and joinery on site. It also cuts down problems of co-ordination, storage and delivery.

Speed

The unit can be installed in under a day.

Cost

Depending on whether Solid Fuel, Gas or Oil is used, the unit cost is approximately £175, reducing for large quantities.



These are the facts. We think this is the hottest news in industrialised building this year. For a more detailed specification get in touch with Dunham-Bush Ltd., Farlington, Portsmouth.
Tel: Cosham 70161

**'Don't just talk about marble laminates.
Show me some that really look like marble.**

The professional decorative laminate

So we did . . . (and could you tell the difference?)

New Travertine, Antique Venetian, Beige Milano, Black Corinthian—these are just a few of the marble finishes made by Arborite. And made so technically perfect that you just can't tell which is Arborite and which is marble—even in extreme close-up. You can have Arborite 'marble' with a polished or unpolished effect (unpolished is what Arborite call their texture finish). So Arborite gives you the same kind of choice as you would have in a stonemason's yard. Except that Arborite 'marble' is much, much less expensive. And of course much easier to handle. Think about it. Then read on what else there is for you in Arborite.

Over 300 colours and patterns. 51 subtle plain colours (41 of them exact or close matches of B.S. specifications). Plain colours are difficult technically. Must be absolutely flawless. Only Arborite go to lengths of offering so many.

Texture finish in all colours and patterns including woodgrains. Professionals who specify large areas of wall cladding are sometimes shy of high-gloss surfaces. Obviously. Reflected light plays unsightly tricks. Texture finish gives the pleasing non-reflecting surface they want. And only Arborite can give it in any colour or pattern they want.

Twin Trim for 'invisible' joints and corners. Familiar aluminium extrusions become exclusive to Arborite when coated with a matching laminate. Cove, corner, counter-nosing, cap and divider profiles can match many Arborite colours and patterns.

Postforming grade—curves as small as $\frac{3}{8}$″ inside radius. Controlled application of heat needed . . . but what an advance in laminate techniques for contoured working surfaces and other fittings involving small radius bends.

Solid grade Arborite—practically a new material in itself. Exceptionally strong and rigid. Solid thicknesses of Arborite up to $1\frac{1}{4}$″ are in use as laboratory bench tops, shower cubicles or window sills, partitions, etc. Only Arborite offer you Solid Grade.

What else can we do? Apart from these special features, Arborite meets all the normal specification needs. High gloss and furniture finish (matt) as well as texture. Variety of thickness grades from $\frac{1}{32}$″ to $1\frac{1}{4}$″. Normal bending grades for 3″ radius curves upwards. Standard size 10′ x 4′ with others, including 12′ x 5′, available. Edge Trim—flexible strips of bending grade Arborite for neat edging.

Technically minded—technical service. Just as we control the quality of Arborite at every stage by expert laboratory work—so we like to help you control the quality of your installation. From the design to the finished job, just call our technical service whenever needed.

Arborite is in business to do more for architects than any other laminate can.

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BOMTAR

Send for your Arborite manual and samples

Arborite Ltd., Bilton House, 54/58 Uxbridge Road, Ealing, London, W.5. Telephone: EALing 0116

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Company.....

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Please send me Arborite literature and samples. AR/M

HOPTON WOOD

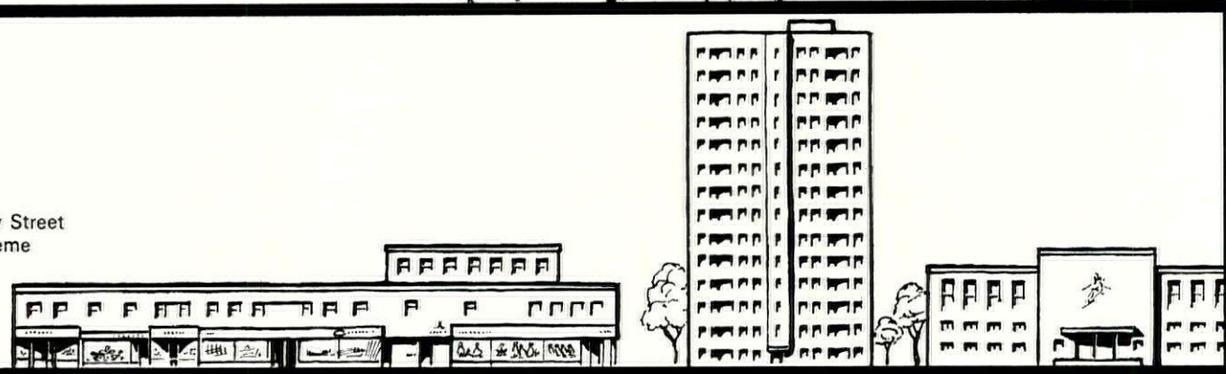
has moved outside

Internal decorations of many famous buildings testify to the beauty of Hopton Wood. In the demanding arena of modern building methods which call for speed, exact specifications and pleasing effect this famous stone now finds another outlet as a white limestone aggregate. Hopton Wood 'GRANITOS' are ideal where a white finish is specified either in fine texture or exposed.

'GRANITOS' SPECIFIED AND SUPPLIED TO:

MANCHESTER
Wythenshawe Multi Storey Flats
St. Mary's New Maternity Hospital, Whitworth Park.

COVENTRY
New Central Library
17 Storey Flats, Meadow Street
Bull Yard Shopping Scheme



OXFORD
New Fire Station, Witney

For range of samples contact:

Derbyshire Stone Sales Ltd.

Bank House, Matlock, Derbyshire. Telephone: Matlock 3456 (9 lines)

A member of the Derbyshire Stone Group

This is a Gliksten Mark 12 door

You can buy doors that are cheaper... and look it

The Gliksten Mark 12 flush door looks beautiful in West African Cedar veneer. You can find doors that cost just a little less, but they don't have the Mark 12's looks and lasting quality. Mark 12 doors have built-in salesmanship. They create an air of elegance that impresses the prospective buyer and helps to sway a sale. It makes that little extra cost a good investment. When required, Mark 12 doors can be matched in pairs, or in sets.
The Gliksten Mark 12 Door and the famous "Silkstone" door (the best door in the world for painting) can also be supplied as complete G.K. door units, with hardwood threshold, "Yale" latch and rustproof butts.
Both these finishes are incorporated in Gliksten "Pividors" — a space-saving system providing the most economical and efficient form of closure for built-in cupboards and wardrobes. These doors glide easily on spring-loaded pivots, and run in an overhead track designed to eliminate the need for a bottom track without loss of rigidity.

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Fill in and send coupon below for full details of the doors in the Gliksten range:

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Please send full details of all the doors in the Gliksten range

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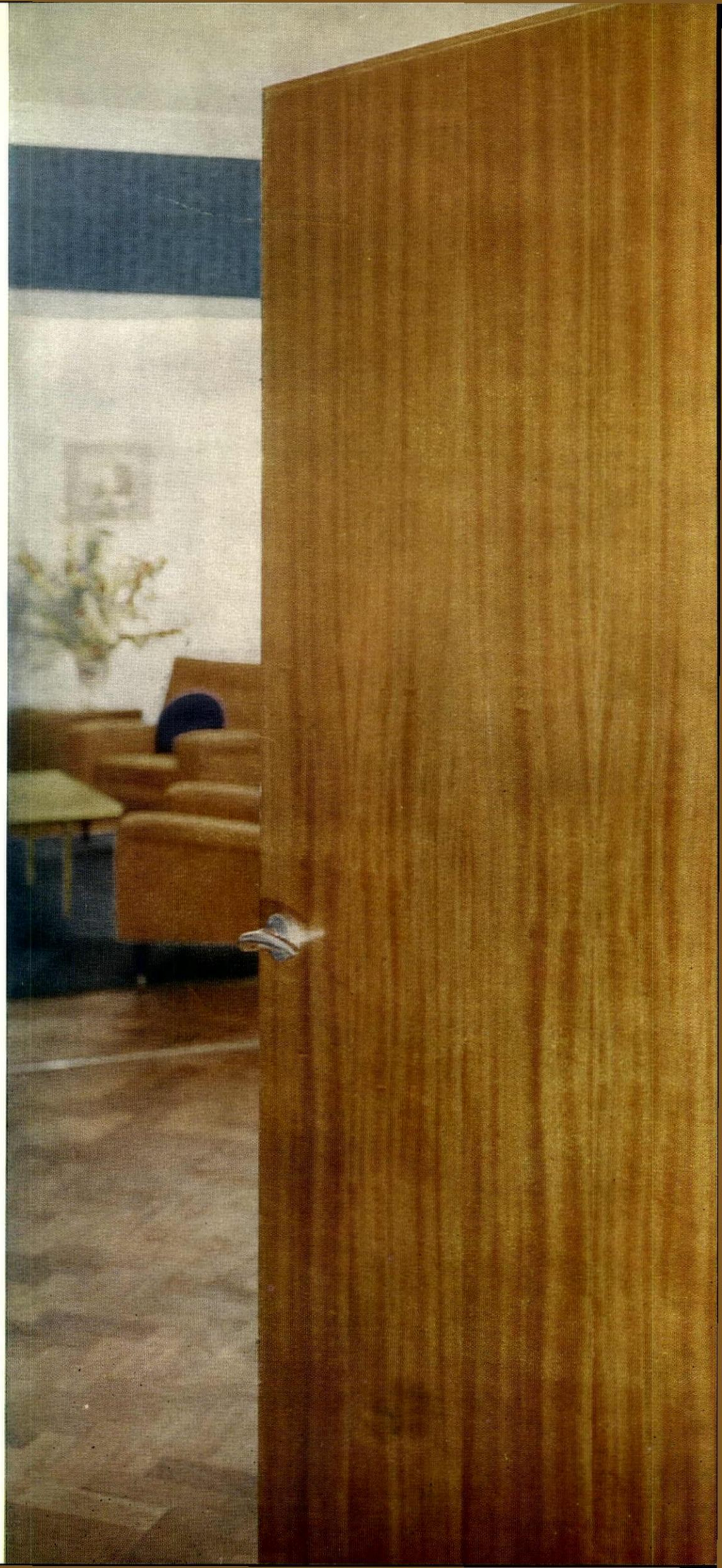
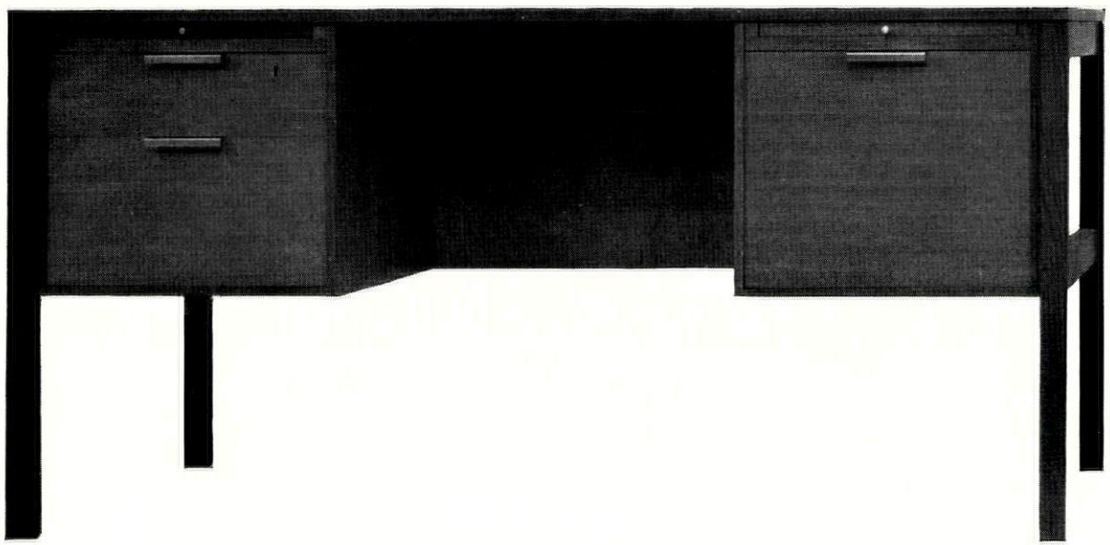
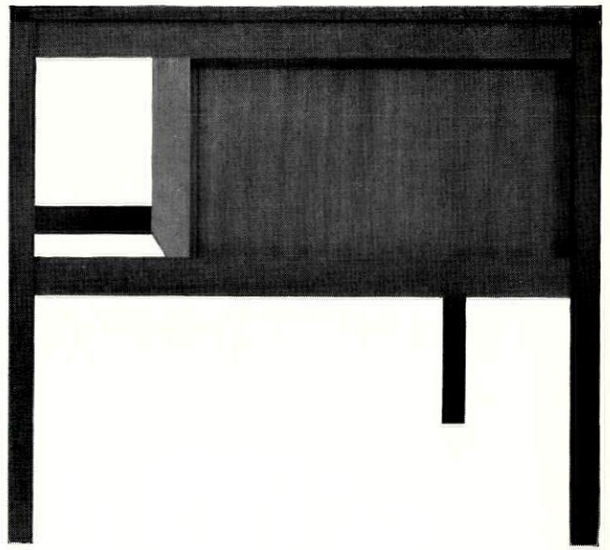




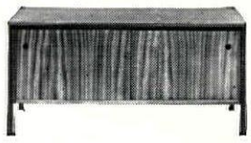


LUCAS FURNITURE Double pedestal desk, Model LD46, from the Lucas Range. Designed by Herbert Berry FSIA and Christopher Cattle MSIA, it is available in mahogany or oak at £35 12s including tax. The construction used makes it easily demountable for access where space is limited. The Range includes double and single pedestal desks, tables and storage. Lucas provide furniture for all contract needs. Four ranges of desks, tables, storage, plan chests, beds and a wide range of chairs. On show in The Design Centre, London, and in our showrooms. Write or telephone for details to Lucas Furniture, Old Ford, London E3, Advance 3232. Barbour Index File **No. SfB 82**

linear|C office equipment by Abbess

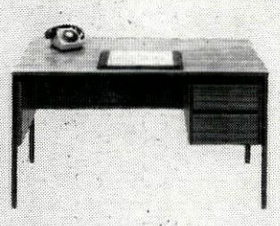
The linear/C series—an original design by Abbess—comprise a full range of office furniture, modern in outlook, functional in operation and economically priced. A few items are illustrated below together with some models from an extensive seating range.

Model X.638 Swivel Armchair
Price £23.9s.4d. (moquette)

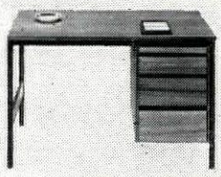


Model LC.8050/SU Storage Unit
Price £24.15s.0d.

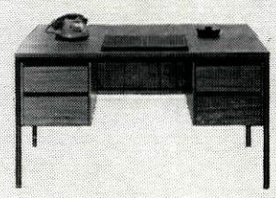
Model X.608 Swivel Chair
Price £17.0s.9d. (moquette)



Model LC.8446 Single Pedestal Desk
Price £20.1s.10d.



Model LC.8236 Typist Desk
Price £18.12s.10d.



Model LC 8646 Popular Desk
Price £24.2s.2d.

Model LC.8750 Double Pedestal Desk, Price £32.9s.4d.

All prices quoted include Purchase Tax and free delivery in England and Wales. Scotland and Northen Ireland prices upon request.

Abbess

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Telephone: SOUthall 6961

Interdel

SfB (66)

UDC 69.026.6/.7

Mechanical movement is as important in today's multi-floored administrative buildings as in factories. Build-in one of these three British systems which eliminate interfloor messengers. The INTERDEL systems are becoming as much a standard practice as central heating in office and hospital block design. Fast, accurate, it works all day and every day—conveying mail, correspondence and paperwork between points—constantly and efficiently circulating data, records and supplies. Remote floors are now minutes away from each other. A building is unified; effecting considerable saving in time, effort and money. Horizontal conveyors can also be introduced and used in conjunction with the INTERDEL systems. Three comprehensive systems of inter-floor transit are available for varying requirements.

RAPID AUTOMATIC INTER-FLOOR FEED FOR CORRESPONDENCE DOCUMENTS SMALL INTERDEPARTMENTAL SUPPLIES, ETC.

Interdel 1

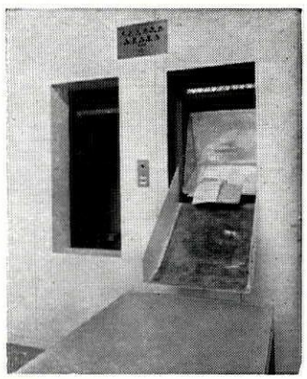
A fundamental type Paternoster Elevator with tipping containers discharging at any desired floor by means of press button selective mechanism. In this type each travelling carrier, these being separated by about 10 ft., and travelling at about 40 f.p.m., has a series of push buttons, one for each floor, and a tipping tray, the procedure being that the tray is loaded at any floor on the descending side, the operator pressing the appropriate button for the floor at which it is desired to unload.

Interdel 2

A Paternoster Elevator suitable for a much wider range of loads and which can be used for relatively fragile objects, e.g. hospital supplies including suitably packaged bottles, phials, etc. Selection of the floor of destination is made either by push buttons or by setting tabs.

Interdel 3

Simpler, more compact, and for the same range of height or number of floors roughly half the price of the Paternoster type. Suitable only for paperwork of limited size. *Patent applied for*



Owing to their size, cost and importance, all installations are specially designed on standard principles. A wide variety of different arrangements is available and special studies are made of new problems as they arise
For further details send for leaflet 1063

All enquires to leaflet 1063 from

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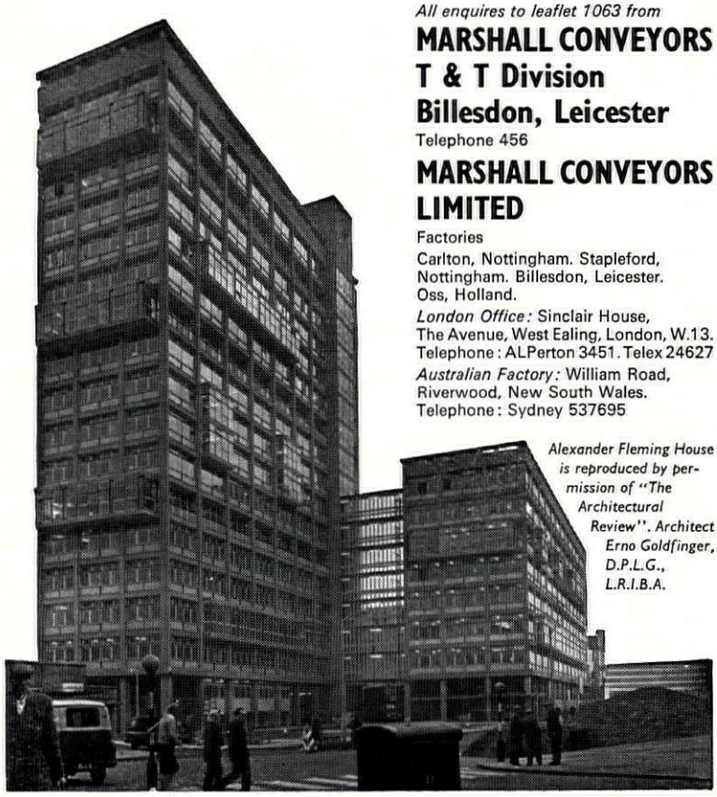

Alexander Fleming House is reproduced by permission of "The Architectural Review". Architect Erno Goldfinger, D.P.L.G., L.R.I.B.A.

Rilsan Nylon Deconyl RP 95 is its name. It's a new finish for purpose made steel windows marketed by Mellowes of Sheffield. Application is by sintering process and windows with this finish never require painting. The colour is permanent, much harder wearing than conventional paint finishes and there is no possibility of the metal corroding.
Colours currently available include white, black and light or metallic grey.

For the full story, please write to the Sales Manager at Sheffield.

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MAKE THE MOST OF NATURAL LIGHT

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YOU CAN DO
ANYTHING
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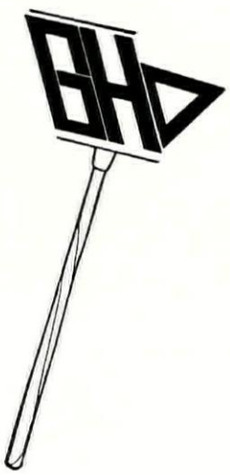
What's your problem . . . load-bearing, weather-proofing, a matter of appearance, the question of cost? Or building to withstand the utmost rigours of our temperamental climate?

On any count you'll find it worthwhile to look at the Downing range of bricks — high in quality, extensive in choice, economic in design or use. Specify Downing's bricks . . . You'll never be accused of dropping one! Downings are makers of high quality facing and engineering bricks, and of "Acme" clay roofing tiles and ornamental tiles, including profile cladding tiles in various colours.



G. H. DOWNING & CO. LTD. Brampton Hill, Newcastle, Staffs.
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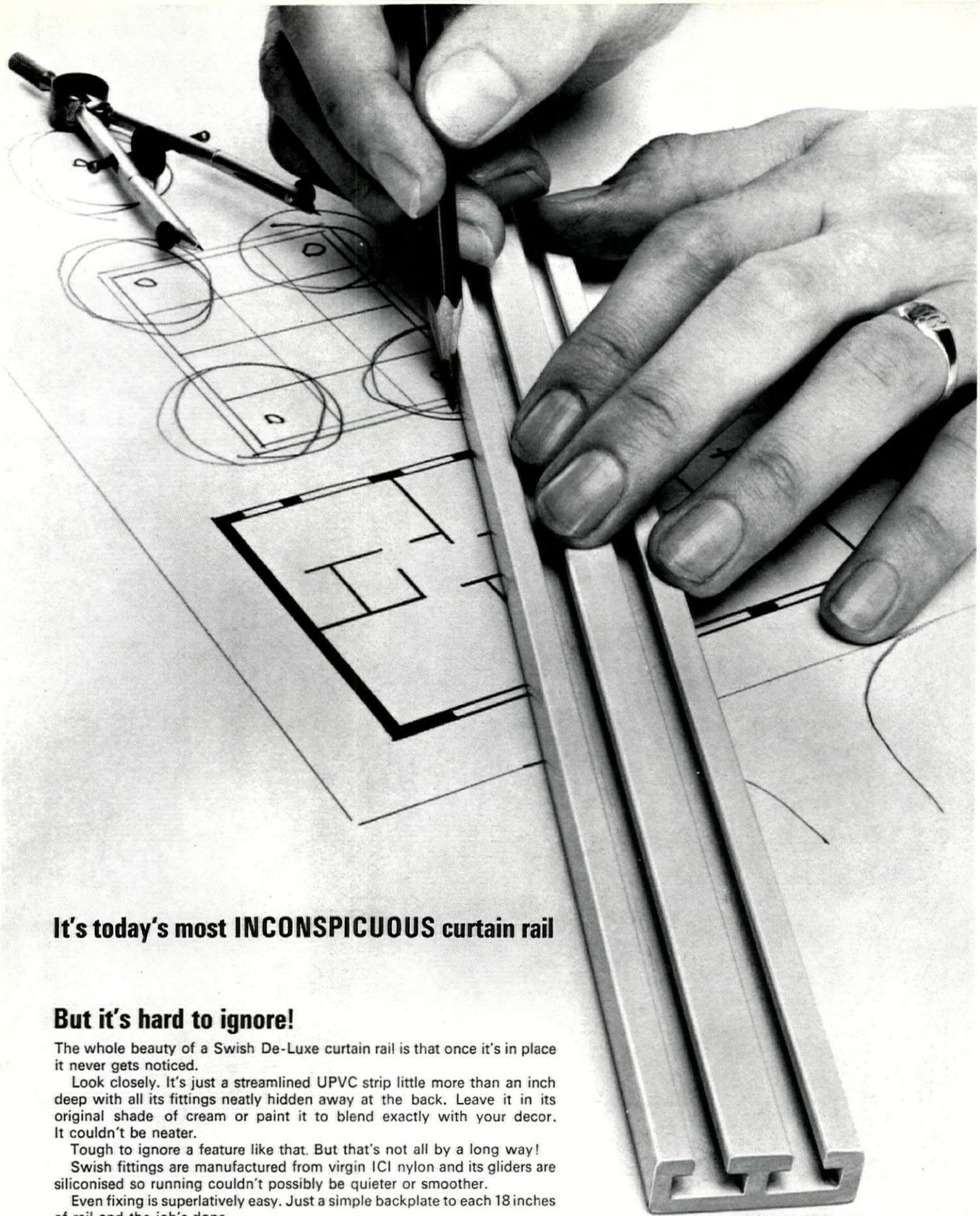

It's today's most INCONSPICUOUS curtain rail

But it's hard to ignore!

The whole beauty of a Swish De-Luxe curtain rail is that once it's in place it never gets noticed.

Look closely. It's just a streamlined UPVC strip little more than an inch deep with all its fittings neatly hidden away at the back. Leave it in its original shade of cream or paint it to blend exactly with your decor. It couldn't be neater.

Tough to ignore a feature like that. But that's not all by a long way!

Swish fittings are manufactured from virgin ICI nylon and its gliders are siliconised so running couldn't possibly be quieter or smoother.

Even fixing is superlatively easy. Just a simple backplate to each 18 inches of rail and the job's done.

And not content with producing today's finest curtain rail Swish go on to offer an alternative in Swish Nylonglyde and superb cording sets to match both of them.

Now, if you'd like data sheets and free sample lengths complete with fittings, clip this advertisement to your letterheading and send to:

Swish Products Limited, Tamworth, Staffordshire. Telephone 3811

Swish

new system of sliding doors

NEWMANS Automatic Doors Limited, Grove House, London Rd., Isleworth, Middx.

The recently opened premises of Chipstead of Kensington Limited are fitted with Compactaway Doors. These doors are designed to provide an efficient and quickly operated method of obtaining a clear passage through any opening requiring a battery of doors. All the load of the door is taken by the floor unit, thus allowing a greater number of doors to be installed in one battery without any sag in the lintel. Throughout the whole operation of folding or unfolding the doors are under positive control and cannot run wild. Automatic location is provided in the top track to register the doors in either swinging or folded position. The unit is supplied complete with threshold tread plates and security locks in the top and bottom rail of the doors. The floor unit only requires a trench 13″ wide x 6″ deep, whilst the transom track is only 2¼″ deep.

When we first started talking about heating, lighting, ventilating and sound absorption through ceilings, some people thought we were joking

Now let's see who's laughing

The point is – we're not just talking. We've done it. We do it every day. One ceiling design incorporating one or all of these functions. Nothing to clutter up the building. And one designer, one manufacturer means no shared responsibility. Cuts costs. Cuts problems.

For sceptics, and anyone else who is interested, we can point to the evidence:

e.g. Cumberland Hotel, London. Step into the Cumberland Hotel. Take a quiet walk down those corridors in which we have designed and built the Lamina acoustic ceilings and integral lighting. Note the difference. (*Architect: Cumberland Hotels Premises Dept.*)

e.g . Norgas House, Killingworth. The special metal tray ceiling built for Northern Gas Board at Killingworth, (Lighting, Air-Conditioning, and Acoustics). Norgas House won the regional award for architectural design in 1966. (*Architect: Ryder and Yates & Ptnrs.*)

e.g. The Billingham Sports Forum. HT Ceilings are supplying a special Lamina suspended ceiling for the ice-rink and swimming pool at the Billingham Sports Forum. This will be one of the largest suspended ceilings in the country, incorporating acoustics, lighting and ventilation grilles. (*Architect: Elder and Lester*).

At HT we live, dream, breathe and talk nothing but ceilings. We've a team of experts ready to advise you from the drawing-board stage onwards. Ready and willing to stay and see the project through.

But don't just take our word for it (we're biased). Go and have a look at some of our HT Ceilings. Write for SfB classified technical literature. Or ask the HT man to call.

Heat through 'em. HT 'STRATOHEAT' Heating Ceiling Systems, with unique new electrical element built right in, give gentle, uniform warmth at low running cost. The ceiling operating at around 100°F has an exceptional safety margin. There are no unsightly dust-collecting radiators or pipes. And what's more – no maintenance.

Light through 'em. HT Luminous ceilings give you glare-free, shadow-free lighting at any level. They can provide up to 100 lumens per sq. ft. – or more. Pretty bright, eh ? And HT Ceilings put any size or shape of lighting unit into any ceiling, integrated to suit design requirements.

HOLOFORM

The British Petroleum Company's new headquarters building, Moorfields, London.

GENERAL DATA:

Height of building: 395 feet. **Curtain walling:** by Morris Singer using 'Holoform' units formed of 'Silver Fox' 316 stainless steel supplied by Samuel Fox & Co. Ltd. **Total weight of stainless steel** 180 Tons. **Architects:** Joseph, F. Milton Cashmore & Partners.

REFER TO BARBOUR INDEX FILE SfB(21)

A LANDMARK IN THE PROGRESS OF STAINLESS STEEL CURTAIN WALLING

This impressive tower block, now nearing completion is totally enclosed with HOLOFORM curtain wall units formed of stainless steel. The long-term cost-saving advantages of simple maintenance over large exterior surfaces, coinciding with normal window cleaning operations, is a vital factor when considering initial installation costs.

MORRIS SINGER

Morris Singer & Haskins Ltd. Ferry Lane Works, Forest Road, London, E.17. Telephone: Larkswood 1055.

Asbestos-Cement '67

One of the most important building projects with which TAC are associated this year is the multi-storey Red Road Development at Balornock, Glasgow. This project is part of Scotland's vast and enterprising housing schemes now at various stages of completion throughout the country. TAC Asbestos-Cement materials have already been supplied for multi-storey buildings in the four principal satellite towns of East Kilbride, Cumbernauld, Glenrothes and Livingston. At Red Road, Balornock, the highest flats in Europe, large quantities of POILITE Asbestos-Cement Fully-Compressed Flat Sheets are being used for the outer and inner skins to the external facing of the Cladding system. EVERITE Asbestos-Cement Flue Goods are also being installed in the A.I.R. system of bathroom and kitchen ventilation throughout the flats.

TAC

A TURNER & NEWALL COMPANY

T&N

Red Road Development, Balornock, Glasgow

Architects: Sam Bunton & Associates, Glasgow
Consulting Engineers: W. A. Fairhurst & Partners, Glasgow.
Principal Contractors: The Corporation of Glasgow, Housing & Works Dept.
Cladding Sub-Contractors: Weir Housing Corporation, Coatbridge.

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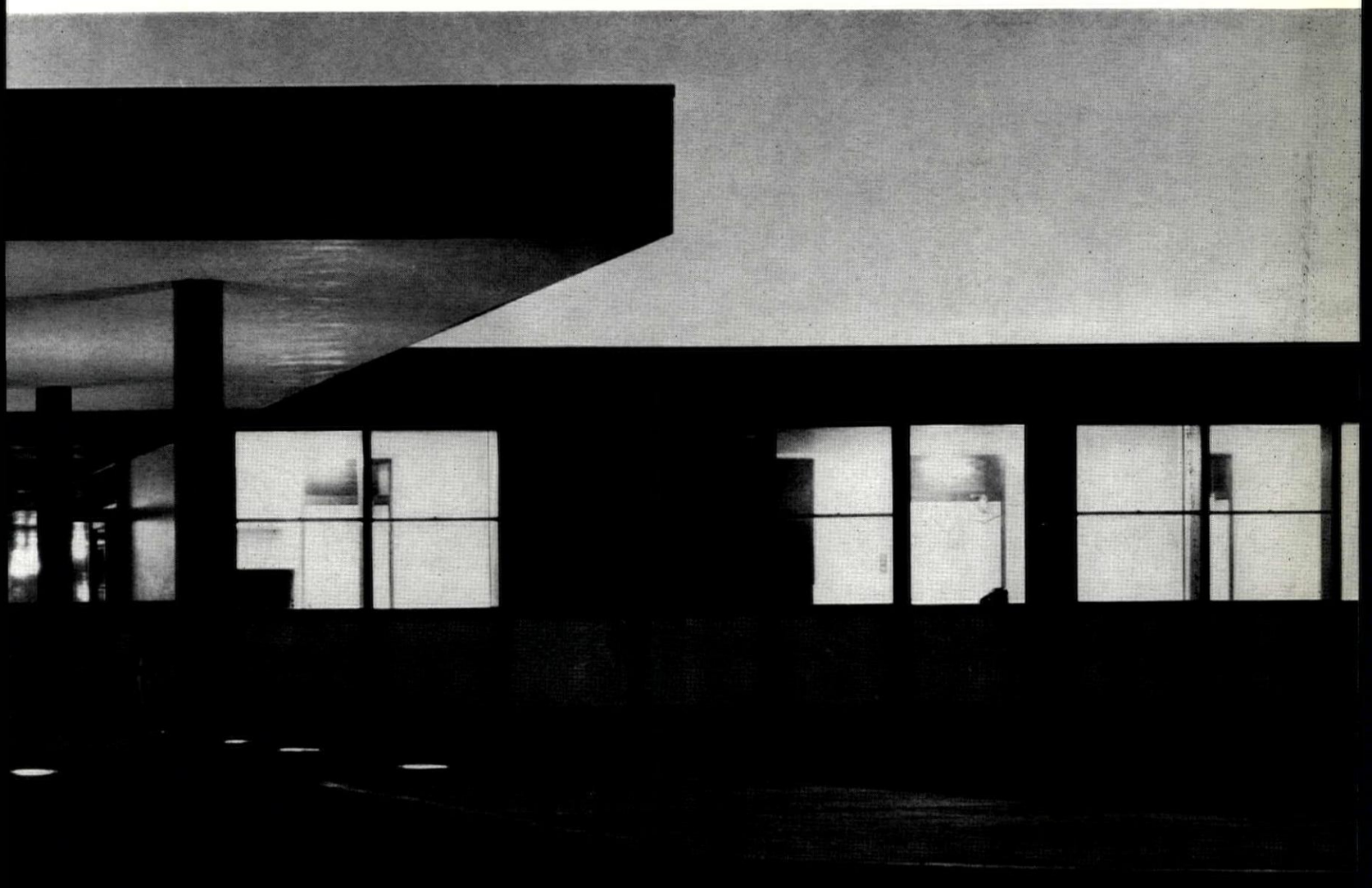

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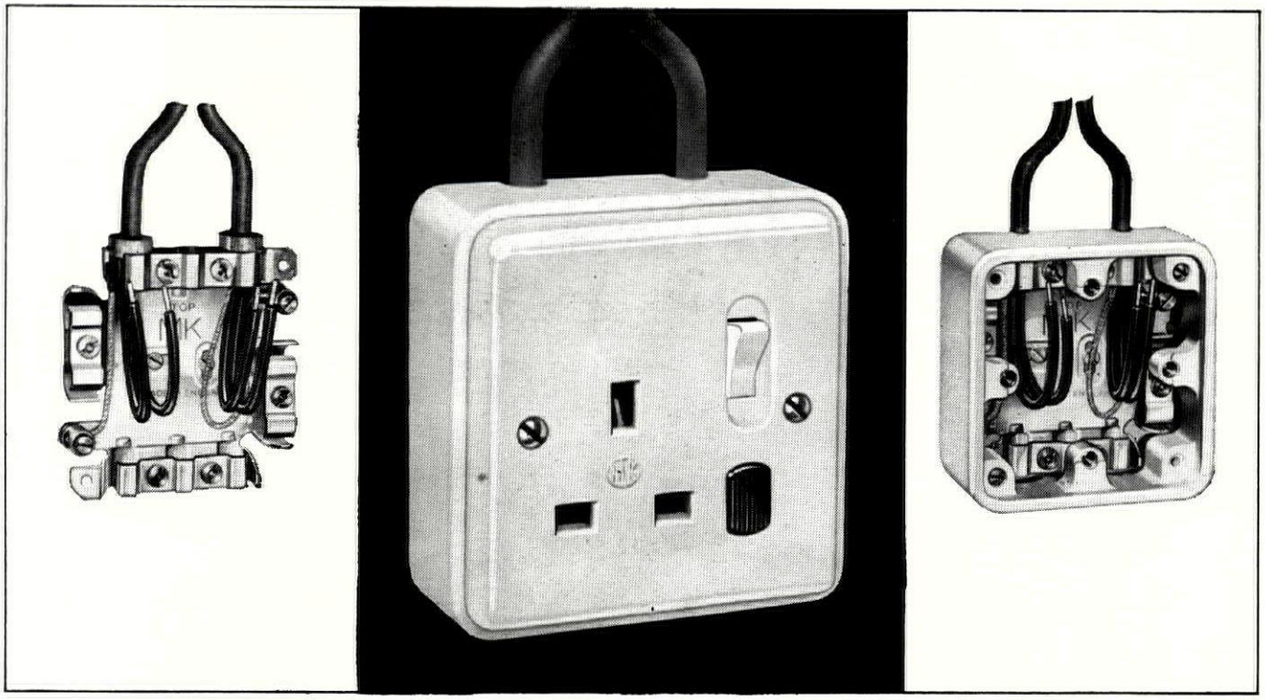

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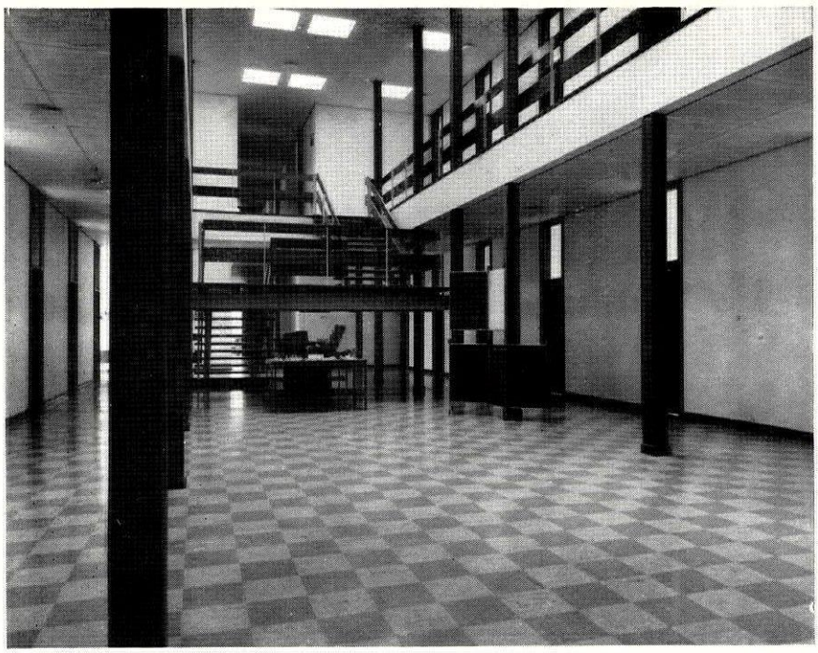

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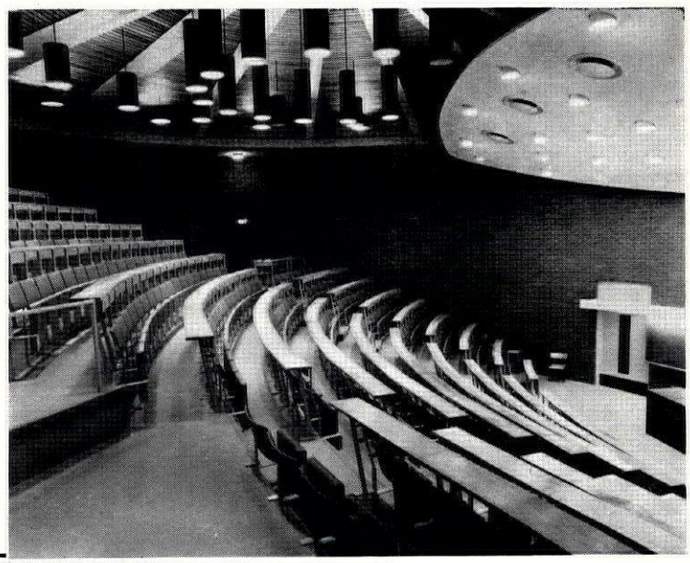

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