

MILLBANK DEVELOPMENT

The 3½ acre Development consists of a 34 storey (above ground) Tower Block, an 8-storey 'Y' Block and a 12-storey Flats Block. In addition there is a three-tier Car Park, a Conference Hall, Restaurants, and a low level Podium linking the Tower Block and the 'Y' Block along the Millbank Frontage.

The Layout, and in particular the location and height of the Tower Block resulted from the restrictive Town Planning angles imposed on the North and South boundaries, which forced the bulk of the Development towards the River frontage. It was felt that the most satisfactory method of providing the larger part of the office accommodation for the maximum permitted plot ratio of 3½:1 was by means of a Tower Block. This forms a visual stop to the existing "cliff" development along both sides of this stretch of the River.

The Development generally has been kept as open as possible at ground level, space for occupation not generally commencing until the first floor. Maximum advantage has been taken of this by providing gardens and open courtyards.

The Development, which provides approximately 350,000 sq.ft. of office space, 10 hotel rooms, and 80 flats has been commissioned by Messrs. Vickers Ltd., and is being financed by the Legal & General Assurance Society Ltd. The site is owned by the Crown.

The Architects for the Development are Messrs. Ronald Ward & Partners, the Partner in charge being Mr. D.H. Marriott. The Consulting Engineer is G.W. Kirkland Esq., M.B.E. (Mil) of Messrs. R. Travers Morgan & Partners, and the Quantity Surveyors are Messrs. Franklin & Andrews.

The project is scheduled to be completed by the Autumn of 1962.

TOWER BLOCK

The roof of this structure is 387 feet above pavement level with one basement. It is founded on an 11-foot thick heavily reinforced concrete raft over 163 No. 3-foot diameter piles, bored to an average depth of 90 feet below ground level. These occur at 8-foot centres. This work was carried out within a sheet pile cofferdam which was necessitated by the high water table due to the proximity of the Thames. Basements are formed of good quality vibrated concrete, no damp proof membrane being used. The superstructure is mainly in-situ reinforced concrete with the exception of structural steel within the cores as lift trimmers and prestressed pre-cast concrete floor beams to the centre bays. The building, which is fully air-conditioned, is clad in a specially developed continuous curtain walling of stainless steel with fixed double windows and venetian blinds. The inner casements open for cleaning purposes. Spandril Panels are of cast glass with coloured metal backing panel and insulated with foamed P.V.C. Back up walls are of 4" foamed concrete blocks. The external face of the building will be cleaned by an 'Escaler' machine, garaged on the 32nd floor, and running up and down the building on bronze guides fixed to the external face of every fourth curtain wall mullion.

There are four local lifts which serve floors 1 to 15 and five express lifts which travel non-stop to the 15th and then serve each floor above, travelling at a maximum speed of 800 feet per minute. A fireman's/Goods lift adjoining the main staircase serves each floor. The top three floors of the Tower Block and the basement are largely taken up by lift motor rooms, heating and air conditioning plant rooms, water storage tanks and electrical sub-stations etc. A viewing platform is provided at 31st floor level.

FLATS BLOCK

This building is also founded on 3-foot diameter bored piles with one basement which forms the Boiler House for the whole Development, hot water being ducted across the site to the other buildings.

The superstructure is entirely reinforced concrete and is clad in exposed aggregate (washed mill flint and cornish granite) concrete panels with the exposed concrete framing faced in mosaic. There are two lifts serving the various floors. The first floor comprises 10 service hotel suites and the remainder 80 one and two-bedroomed flats.

'Y' BLOCK

An 8-storey reinforced concrete office building founded on piles, clad similar to the Tower Block in stainless steel curtain walling but using an aluminium core spanning between floor slabs. Exposed concrete facias and columns are faced with mosaic. This building, which is also fully air-conditioned, has an extensive basement providing plant rooms. 4 passenger and one goods lift serve each floor.

CAR PARK

This is an L-shaped reinforced concrete structure providing accommodation for 250 cars on three levels. These are approached by a road from Millbank, running between the Tower and the 'Y' Block at ground level, with access to a circular ramp leading up to the higher levels of the Car Park. The centre of the circular ramp forms the post-tensioned concrete water storage tank for the Development of approximately 30,000 gallons. Access to the car park lower level is also provided through the Flats Block. There are two vehicular exits one South of the Tower to Millbank and the other under the 'Y' Block to Thorney Street.

PODIUM

The two-storey podium also fully air conditioned forms a link between the 'Y' Block, Tower and Conference Hall. In addition to general office space it will accommodate kitchens and restaurants etc. Except for a bank at the North end this section is open at ground level giving views through the courtyards and gardens beyond.

TECHNICAL DATA

Total number of piles	491
Total quantity of concrete	60,000 cu.yds.
Total quantity of steel	3,200 tons

BUILDING CUBES

Tower Block & Conference Hall	5,250,000 cu.ft.
Y Block) 2,000,000 cu.ft.
Podium	
Car Park	500,000 cu.ft.
Flats Block	<u>1,500,000</u> cu.ft.
	9,250,000 cu.ft.

BUILDING NETT SUPER AREAS

Tower Block & Conference Hall	275,000 sq.ft.
Y Block) 120,000 sq.ft.
Podium	
Flats Block	50,000 sq.ft.

FLOOR HEIGHTS

	<u>Floor to floor</u>	<u>Floor to ceiling</u>
Tower & Y Block	10'-9"	9'-0"
Flats Block	9'-4"	8'-6"
Car Park	10'-0"	9'-4" (7'10" clear)

INTERNAL FINISHES

OFFICES -

Floors - Linoleum and rubber on screed and mineral wool quilt.
 Ceilings - demountable accoustic tiles.
 Walls - plastered and panelled.
 Air conditioning Units - veneered timber fronts, plastic tops.

FLATS -

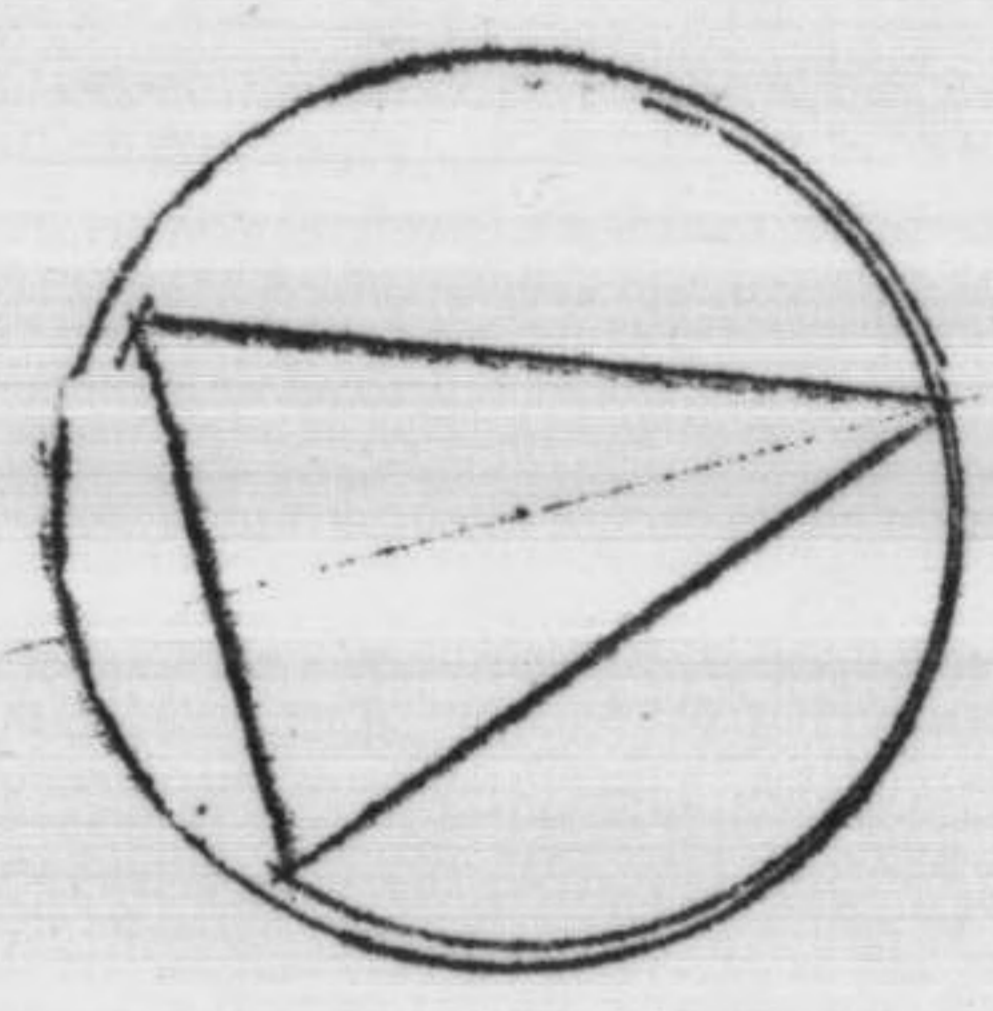
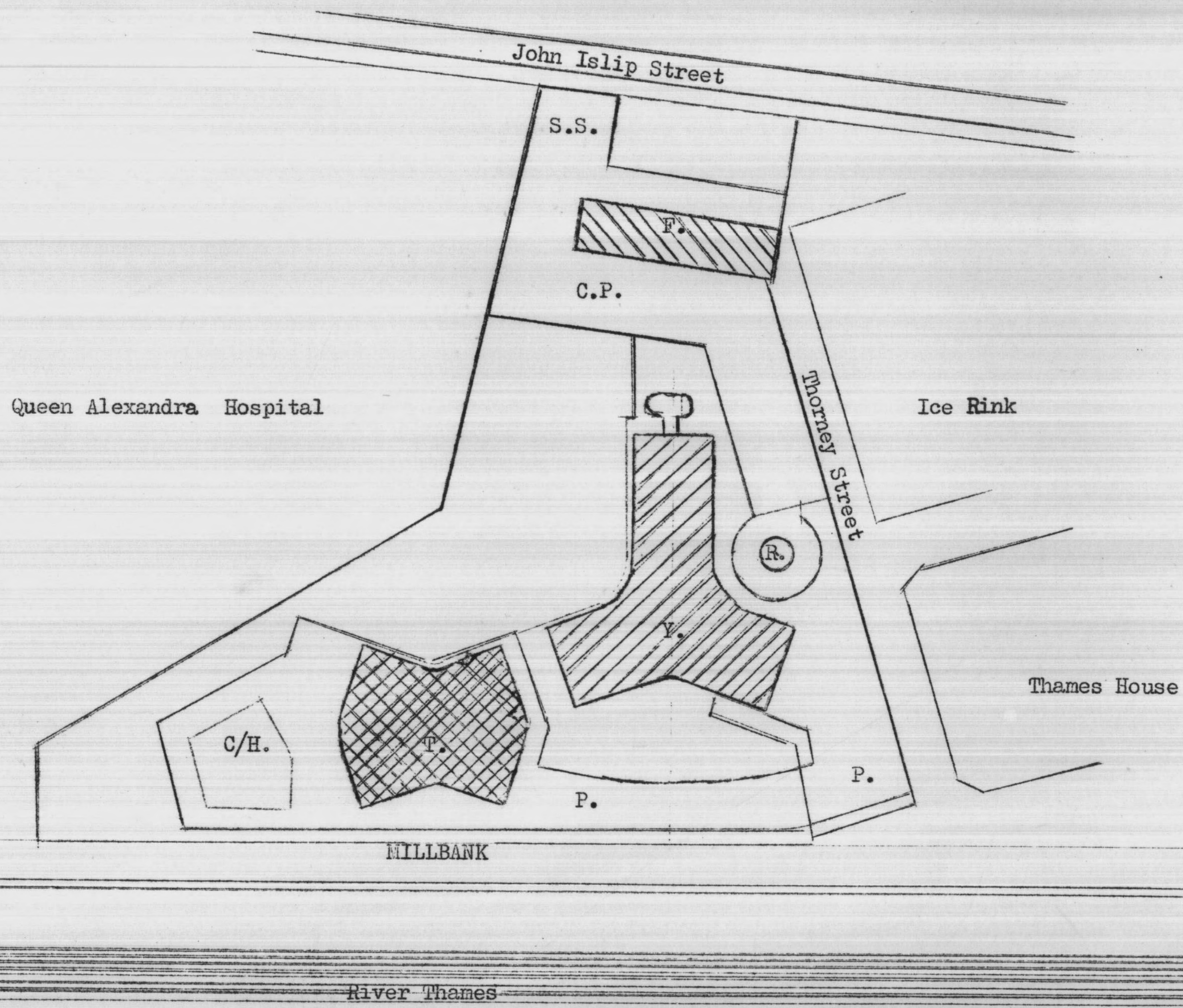
Plastered walls, ceilings, screeded floors on mineral wool quilt.
Restaurants - Wood block floors, Kitchen all tiled surfaces.
 Entrance Halls and special areas finished with various materials.
Lavatories - tiled, plastic veneered partitions.

AIR CONDITIONING

High velocity air/water system with refrigeration, using under window air induction units.
 Hot water supplied by oil fired boilers.
 Refrigeration by Centrifugal and absorption machines.

ELECTRICS

Fluorescent lighting generally.
 Ring mains via skirting ducts for power.
 Total Electric supply approximately 7,000 K.V.A.



- C/H Conference Hall.
- T Tower Block
- P Podium
- Y 'Y' Block
- R Circular Ramp
- C.P. Car Park
- F. Flats Block
- S.S. Speakers Stables

Scale $\frac{1}{1250}$ approx.

River Thames

THE MILLBANK DEVELOPMENT

The Development is situated in an unrivalled position on Millbank, between Vauxhall and Lambeth Bridges, and provides outstanding office accommodation with panoramic views from the Tower Block, over London and the Home Counties.

On completion of the buildings, towards the end of 1962, the Tower Block and also the "Y"-shaped building will be two of the finest Headquarter Office Buildings in London, affording the maximum of efficiency, comfort and convenience consistent with present day standards of design, construction and equipment.

The amenities provided include:-

Advanced air conditioning and refrigeration system with individual finger tip controls

Double windows with Venetian blinds to ensure conditions of maximum comfort

Fully automatic passenger lifts travelling at 800 feet per minute

Service lifts

Conference Hall/Cinema (seating capacity 226)

Staff Restaurants

Banking facilities within the Development

Kiosks for the sale of tobacco, confectionery, newspapers, etc.

Landscaped terraced gardens and forecourts

Spacious off-road car parking and garage facilities.

GENERAL INFORMATION

Construction throughout has been kept as light as possible and is of reinforced concrete on bored pile foundations, part of the floors to the Tower Block being precast prestressed units. These piles reach a depth of 100' and altogether there are more than seven miles of piles in the foundations of the buildings. When completed it will be the tallest building of its kind in this country and the third tallest in Europe.

The cladding of the Tower Block is in a specially designed glass curtain wall framed in stainless steel. Facings to exposed columns will be marble, bush hammered or fair face concrete, depending on their location. The exposed concrete framing, panels, facias, etc. generally, will be faced with a warm, white ceramic mosaic.

The 34-storey, 387 feet high office Tower, the 8-storey, 97 feet high "Y"-shaped office block, and the 11-storey, 123 feet high Residential Block are linked together physically and architecturally by a low level "Podium" and a 3-tier Car Park.

The Development has as far as possible been kept open at ground level, the office space for occupation commencing at first floor. This allows pleasant vistas from the ground through to gardens and open courtyard.

The site has one main vehicle entrance and exit in the centre of Millbank, passing between the Tower and "Y" Blocks. A lay-by is provided off this access road and also one on Millbank in front of the Tower for the convenience of embarking and disembarking passengers without obstruction to other traffic. There are two exits, one at the south end of Millbank and one to Thorney Street.

A Conference Hall/Cinema to seat over 200 people is situated at ground floor level, on the south side of the Tower. Although linked to the main entrance hall, it has its own entrance, foyer, cloakrooms, etc. and could conveniently be used for functions independently of the main block.

Provision for kitchen and dining rooms is made in the Podium over the Conference Hall, for use in conjunction with the Tower, and also at the north end of the Podium for use in conjunction with the "Y" Block.

A 3-storey car park is provided for about 250 cars, with access to the second and third levels by means of a spiral ramp, cantilevered from a central water storage tower.

TOWER BLOCK

The Tower Block consists of basement, ground and 33 upper floors, with a viewing platform at the 31st floor level. Above this level the majority of space is occupied by plant rooms. The office space has been designed to a basic module of 4'3", floor to ceiling heights are 9' and floor to floor heights 10' 9". The office space is provided around a central structural core, containing lifts, staircases, lavatories and other services.

There will be a large double storey height entrance hall entered through draught lobbies with doors opening automatically on approach.

A new type of fully demountable expanded metal acoustic tile ceiling and plastic fabric-faced portable partitioning will provide flexibility in the division of floor space.

Flooring to lift lobbies will be in rubber tile, and to the office space in linoleum.

The casings to the columns are special metal sheeting bonded with a plastic facing. The air-conditioning unit casings, which are continuous around the perimeter, are finished on the top with heat-resistant plastic, and veneered mahogany fronts. All doors throughout the building are similarly veneered.

There are double windows throughout the Tower Block, the outer being fixed and the inner one openable (only for purposes of maintenance) with a Venetian blind between. The main central staircase is finished in terrazzo.

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SERVICES PROVIDED IN THE TOWER BLOCK

The windows are cleaned externally by the use of a power-operated cradle attached to the face of the building.

The building is fully air-conditioned, including refrigeration for cooling in summer, giving maximum possible comfort conditions for the occupants.

The latest type of fully automatic inter-connected passenger lifts are provided, travelling at 800 feet per minute. An express group of five lifts operate from ground, non-stop to 15th and serves every floor above. The local group of four lifts serving all floors from ground to 15th.

There is also a large goods lift adjoining the secondary staircase, serving each floor, and travelling at 500 feet per minute, with access direct from a loading bank.

Fluorescent lighting has generally been provided with semi-flush fittings.

Continuous skirting ducts are provided around the perimeter of each floor for electric and G.P.O. points. Partitioning also accommodates wiring for power and lighting switches and G.P.O. telephones.