

# POLICY AND DESIGN FOR HOUSING

Lessons of the Urban Development Corporation 1968-1975

**Journal Article** Design Alternatives for Low- to Moderate-Income Urban Housing  
by Mildred E. Schmertz

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**H**igh-rise, high-density, low- to moderate-income urban housing is under attack these days as inhumane, the cause of feelings of isolation and helplessness, and contributory to the collapse of the family, crime, juvenile delinquency, vandalism, indifference and neglect. Low-rise row or semi-detached housing, on the other hand, is argued to be humane, the source of feelings of well-being, and contributory to family harmony, law abiding behavior and concern for the immediate environment—one's own garden. High-rise housing is also attacked on esthetic grounds as harsh, stark, punitive, hostile, looming, cold and oppressive—imposing a rational, industrial, managerial ethic upon the captive human spirit. Low-rise housing, on the contrary, is acclaimed as the opposite of all these bad things.

In his article "Density: The Architect's Urban Choices and Attitudes" (February 1976, pages 95-100) architect Herbert McLaughlin argues that the higher densities required by expensive urban land can often be achieved more cheaply by low-rise buildings and that cities and people would be better off for it. His figures support the first part of his argument, but only in the projects cited for which no community facilities except underground parking are taken account of in his comparisons. The second part of his argument—that low-rise housing is always better—is open to serious question.

High-rise, high-density housing doesn't have to be bad. If combined with medium- and low-rise elements and thoughtfully designed to a program which incorporates a broad range of community facilities and well-planned recreational space, it can be very humane indeed.

Josep Lluís Sert, who designed Eastwood on Roosevelt Island in New York City (left and cover) and Riverview in Yonkers (also included in this study) is a leading spokesman for, and designer of, balanced, compact housing designed with an equal emphasis upon community and privacy within a range of densities. For him, balance is the key word which implies a correct relationship of all parts to the whole. At Eastwood and Riverview he and his team attempted to achieve a balance between the number of dwellings and the supporting services and amenities available. Balance was sought between people and automobiles, buildings and open space, people and trees, passive and active recreation, and between natural and man-made amenities.

Eastwood and Riverview have many qualities which were achieved through intelligent planning rather than the expenditure of money. A variety of dwelling sizes and plan layouts have been provided to offer a *range of choices* to families and individuals of different needs and life styles. Most units are open to the air and good views in at least two directions permitting cross ventilation, natural light and sunlight. All tenants have access to recreational land and other land has been set aside for community garden plots. Good proportions, scale, color and texture were achieved without additional expense.

These two projects were constructed by the New York State Urban Development Corporation under the Federal 236 rental program. Twin Parks East by Giovanni Pasanella Associates, built by other developers, was also 236. Through the use of this and other funding mechanisms it was possible to include an unusual mix of community facilities within these structures or on the sites. These include schools, daycare centers, recreational facilities for the aged, communal laundries, playgrounds, parks, open space, plazas, garages and commercial facilities. In addition areas have been set aside for future facilities.

The fourth project included in this study was also built within the Federal 236 rental program. Mott Haven Infill in the South Bronx, designed by architects Ciardullo and Ehmann, is a fine example of its kind: The spatial arrangements within the units are extremely well conceived, and economies in construction and use of materials kept costs to a minimum. Unfortunately, however, the project has only one built-in public amenity—a common playground between two rows of attached dwellings. Housing of this type is being seriously proposed by some architects and planners as preferable to developments like Eastwood, Riverview and Twin Parks East. The question is—preferable for whom? Mothers with small children can keep them under surveillance in the tiny private yards of Mott Haven or in the public playground, but where are the amenities for everyone else?

Mott Haven Infill is a feasible alternative to the first three projects only if community facilities of the quality possessed by Eastwood, Riverview and Twin Parks East become available in Mott Haven. This is not to say that the only way to get them is by constructing complexes of such size and boldness as these. But it is one way.

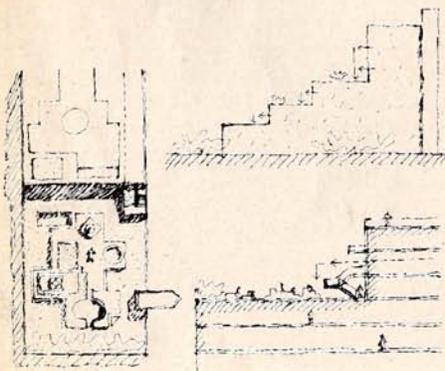
—Mildred F. Schmertz

# DESIGN ALTERNATIVES FOR LOW- TO MODERATE-INCOME URBAN HOUSING

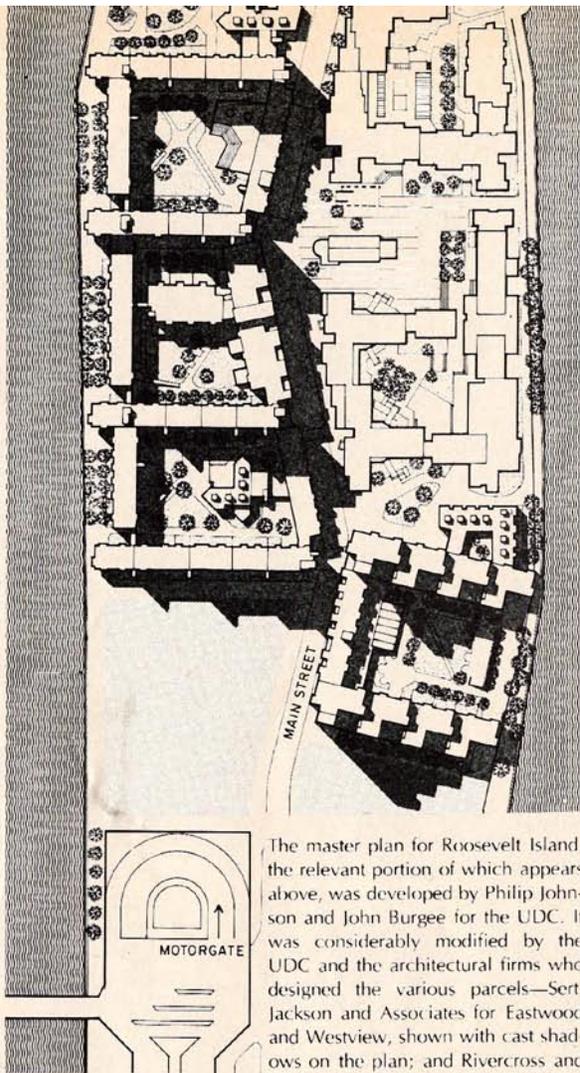


EASTWOOD: A LOW-  
TO MODERATE-INCOME  
HOUSING DEVELOPMENT ON  
ROOSEVELT ISLAND IN  
NEW YORK CITY IS A HIGHLY  
EXPERIMENTAL AND  
INNOVATIVE  
NEW-TOWN-IN-TOWN

From its very beginning, Roosevelt Island was conceived as a community with a balance of services and amenities tightly integrated into the residential fabric. It includes a complete school system composed of a series of mini-schools, two of which have been completed within the Eastwood complex, allowing every child to walk to school on the island. The two-story structure in the foreground of the photograph (far right) is an elementary school and daycare center. Health facilities and community meeting rooms are integrated within the residential buildings. Commercial space for local services such as groceries, drug stores, dry cleaning shops and small restaurants has been provided on the lower floors of the residential buildings which front upon the major pedestrian networks. Cars entering the island must park in a garage, designed by Kallmann & McKinnell, located near the point of motor access. From there an electric bus transports island residents and visitors to the units.

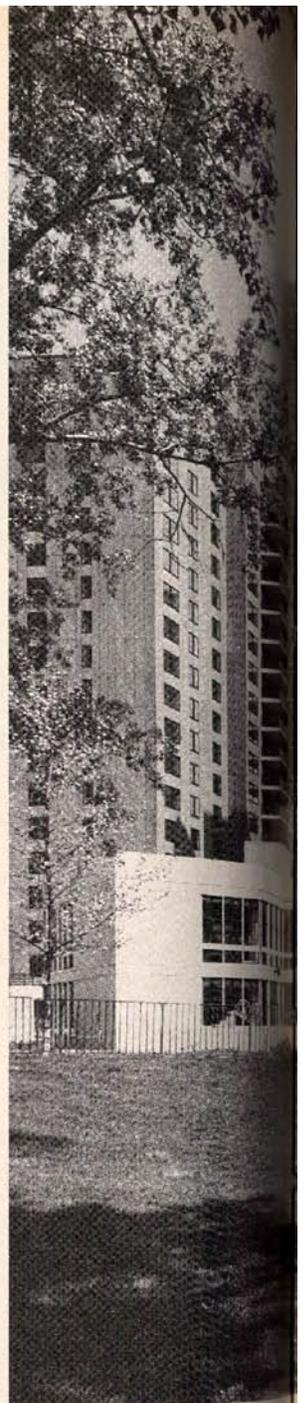


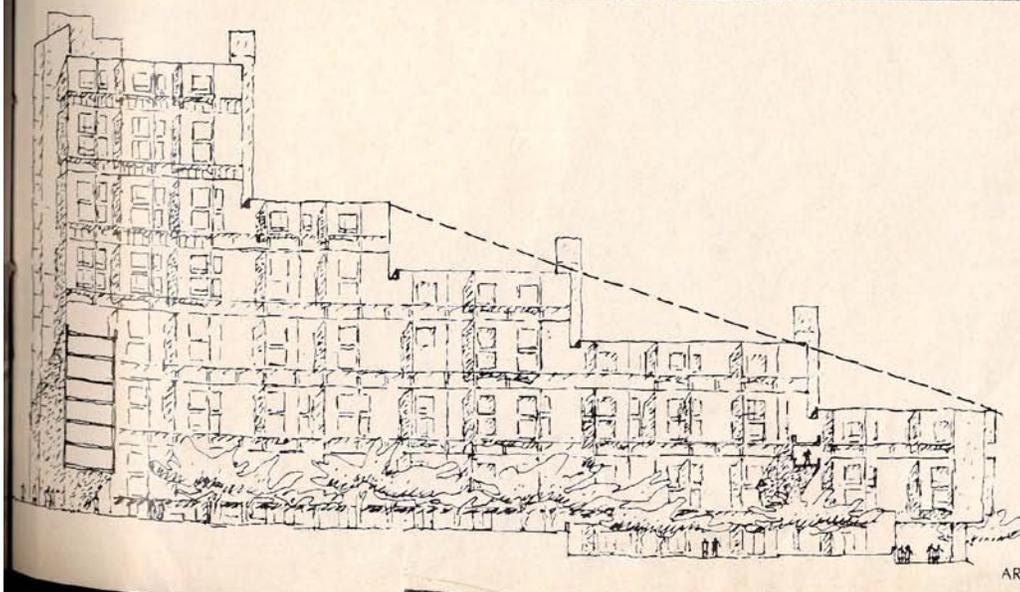
The mix of incomes on Roosevelt Island ranges from low to high—rich and poor and those in between living within a few hundred yards of each other. Eastwood consists of 1003 units of low- and moderate-income housing for approximately 4,000 people. It is located on the east side of the island facing the principal bisecting street called Main Street to the west and Queens across the river to the east. At Eastwood, senior citizens with minimum incomes of \$7000 and maximum incomes of \$13,500 pay \$191 per month, heat, gas and electricity included, for a studio apartment. The studios are reserved for the elderly only, and there are 139 of these units. One-bedroom apartments are available to the elderly and to young couples with incomes between \$10,500 and \$13,500 who pay a monthly rent of \$281. Of these, 145 units are for the elderly and 195 for young couples. 266 two-bedroom apartments



The master plan for Roosevelt Island, the relevant portion of which appears above, was developed by Philip Johnson and John Burgee for the UDC. It was considerably modified by the UDC and the architectural firms who designed the various parcels—Sert, Jackson and Associates for Eastwood and Westview, shown with cast shadows on the plan; and Rivercross and Island House designed by Johansen and Bhavnani and shown in line. Nonetheless, the basic ideas of Johnson and Burgee were maintained. Their plan called for a principal street winding down the center of the island and this has been implemented as the plan indicates. Buildings were to step down from this central spine to the water's edge and they do. Pedestrians and cyclists were to be able to move around the entire perimeter of the island unimpeded by traffic and the construction facilitates this.

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The photograph (opposite page left) taken from the entrance ramp which connects the island to a bridge from Queens, looks south toward Eastwood and Westview. The photograph above looks north toward Eastwood with an elementary school and small park in the foreground. The dotted diagonal line on the sketch at left is an over-all control line for determining the profile of the terraces. Staying within the shallow angle creates a restful contour. If Sert had prevailed over the UDC, the terraced roofs would have become play areas for children under their mother's surveillance as shown in the sketch (opposite page left). The UDC opposed this idea on the grounds that it would add considerably to costs to make the terraced roofs usable and safe, and that supervision would still be difficult.

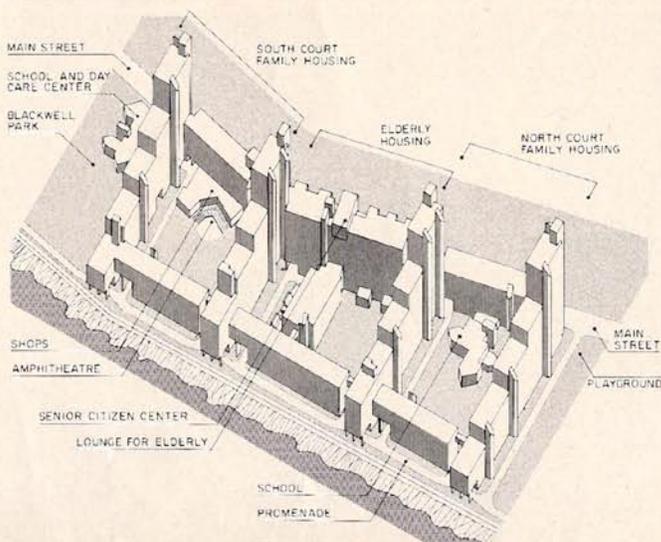
are available to persons with incomes of \$14,000 to \$22,000 depending on family size and the rent is \$359 per month. 189 three-bedroom units rent for \$395 per month and go to couples earning \$15,000 to \$23,000, again depending on family size. To get one of the 69 four-bedroom units a couple must have at least three children and an income ranging from \$16,000 to \$26,000. For this unit they must pay \$421 per month (\$764 is the fair market monthly rent for an equivalent apartment in New York City).

Westview (included in the bottom photo on page 102 but not otherwise illustrated or discussed in this article) consists of 360 units of middle-income housing constructed to the west of Main Street and facing the Manhattan skyline. Also designed by Sert, Jackson and Associates, its rents including utilities range from \$320 for studios to \$877 for three-bedroom apartments. Two other parcels designed for higher incomes and therefore beyond the scope of this article are Rivercross, a luxury co-operative, and Island House, for free-market rentals—designed by Johansen and Bhavnani.

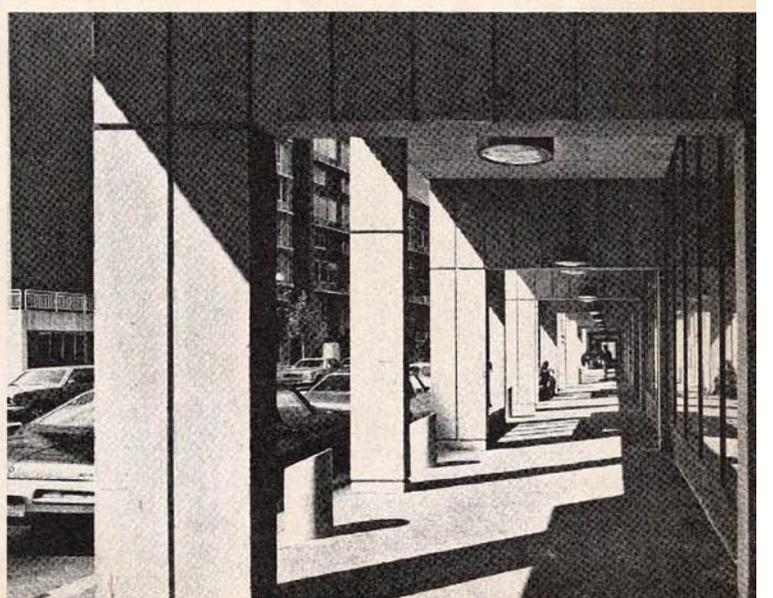
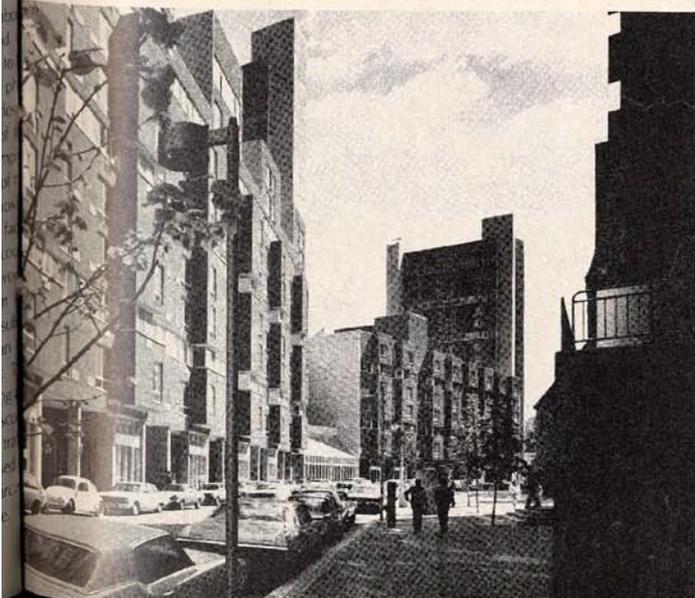
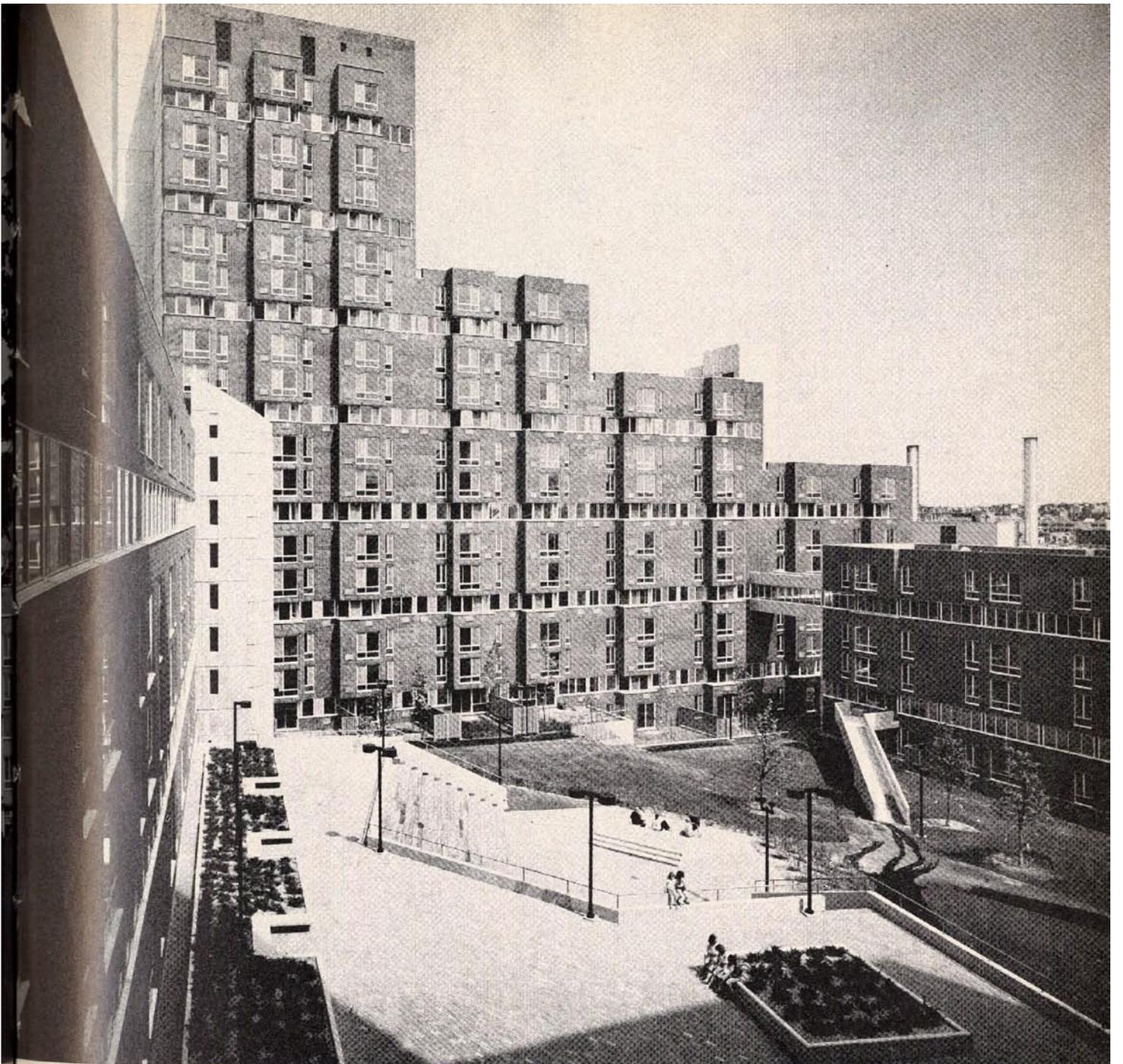
The three parcels on the east side of Roosevelt Island which comprise Eastwood cover approximately six acres. The residential buildings have a density of 166 dwelling units per acre, net. They have been placed to form a series of well-defined courtyards landscaped with large existing trees, lawns and paved walks, punctuated by natural rock outcroppings. From each courtyard one can see the East River, visible through a large pass-through. These three major courtyards are defined by stepped buildings which rise from six stories up to twenty-two stories at Main Street. At regular intervals between the tall-stepped buildings are seven-story buildings which face Main Street and admit daylight to what would otherwise be a canyon. The Eastwood buildings along Main Street project over the sidewalk forming a continuous protected arcade a thousand feet long. The commercial areas in this arcade are at present renting very slowly as prospective merchants wait for the residential units to fill up. As the shops gradually open, however, Main Street will become progressively more lively. Schools, community meeting rooms and the residential elevator lobbies also enliven the arcade.

The tallest buildings at Eastwood are not by New York standards very tall at all. Isolated tower forms were deliberately avoided by the architects, largely because of the limited human amenities provided by these forms but also because such shapes would appear dwarfed by nearby Manhattan. The best views from Roosevelt Island are up and down the river, not directly east or west. The views down river are handsomely framed by the 59th Street bridge. For this reason, most units in the taller buildings look south, down river. Even though only a small percentage of the units actually face the water's edge, nearly all of the units have some visual relationship to the water.

Eastwood contains approximately 300 units especially designed for the elderly. These units are clustered into a T-shaped building in the center court. The elderly have their own lobby, a senior citizens center and will eventu-



The plaza in the photo above opens off Main Street and includes a landmark church tower seen at the far left of the photograph. The glass-enclosed space is in front of one of the residential lobbies. The amphitheater in the foreground of residential courts (opposite page top) has commercial facilities underneath. This courtyard, one of four in Eastwood, enhances the views from buildings' corridors. The sharp bend of Main Street can be seen in the photo at right. The bend is preferable to a long broken vista and will discourage rapid movements of traffic until the streets are closed to cars as planned. The area (right) is for pedestrian use.



ally have a health care center.

The type of dwelling units developed by Sert, Jackson Associates for Eastwood (but not for Westview because UDC—but not Sert—believes that higher rent paying tenants do not want to go up or down stairs in their apartments) are organized around the elevator access system called "skip stop." The elevator stops at every third floor only and from this corridor level floor, inhabitants take a private stair up or down one flight to their apartments. A third apartment is at the corridor level. Thus a three-story stack of apartments is the basic cluster which is repeated vertically.

The basic living unit found above or below the corridor level is composed of two modules. The living module is a single through-space containing the living room, dining area and the kitchen. Adjacent is the bedroom module which has a bedroom on each side of a central bathroom. By adding another bedroom module, a four-bedroom unit is achieved, and by adding a half module, a three-bedroom unit (see plans opposite page top). All dwelling units get direct sunlight and most have two different exposures since they are floor-through apartments. Because the living module is one space subdivided by two low counter-height walls, and since all windows have operable sash, cross ventilation is possible. Only the corridor apartments are not floor-through units.

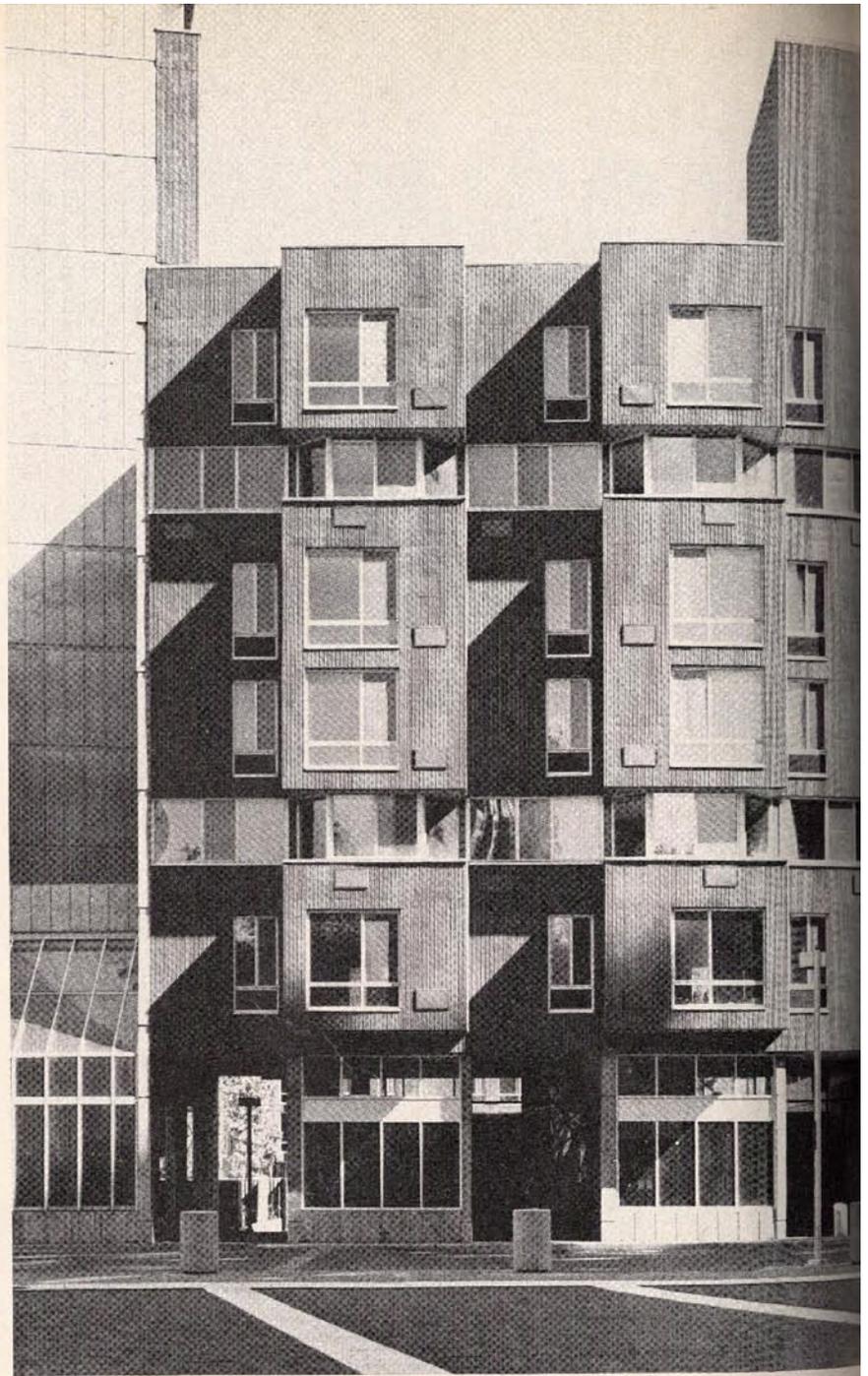
All the larger dwelling units, for families with many children, are concentrated in lower buildings and in units which are on ground level. The latter have small yards fenced in.

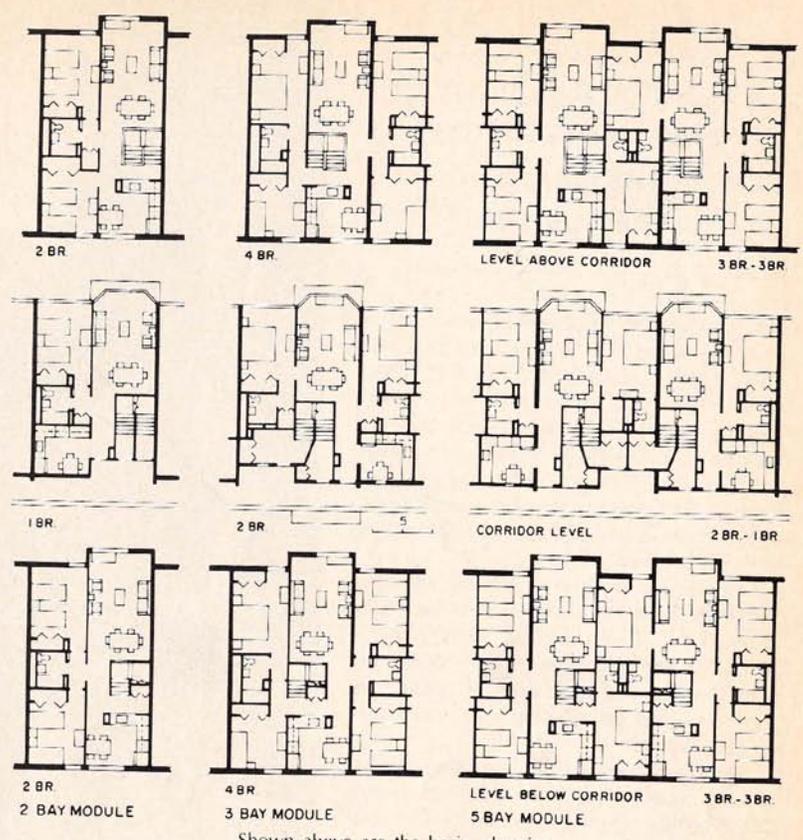
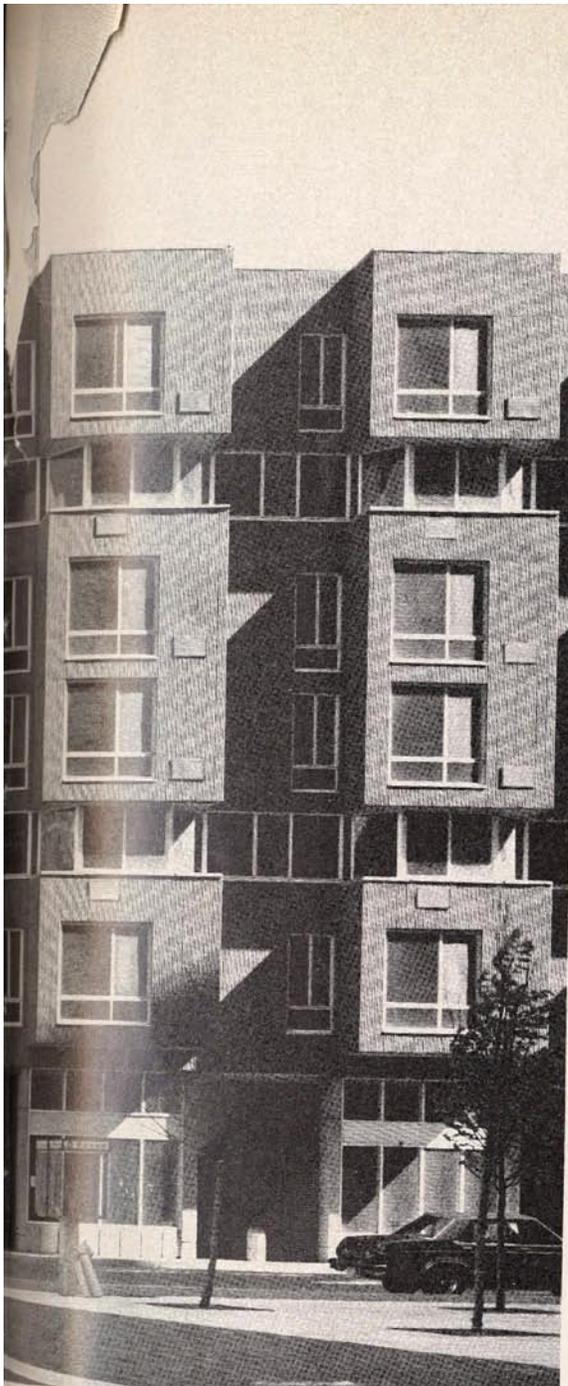
The structural system for all of the residential buildings consists of 8-inch concrete bearing walls and 6½-inch post-tensioned slabs. Non-bearing walls are brick cavity. Metal forms were used to cast the walls and "flying tables" for the slabs. The elevator towers and stair towers were slip-formed from metal forms. The mechanical provisions include all electric, heat and air conditioning sleeves. Tenants may install air conditioning units at their own expense if they desire, but it is probable that for many the cross ventilation will be adequate for all but the hottest days of summer. Trash disposal is by means of a vacuum system which propels trash under pressure through large pipes to a central processing plant for the island.

The total project includes 1.09 million square feet of residential space, 15 thousand square feet of commercial space, and 47 thousand square feet of schools, day care center and senior citizens center. The cost was \$35 million total; \$30 per square foot; \$35 thousand per dwelling unit, including schools, commercial space and all community spaces. These figures do not include parking.

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EASTWOOD, ROOSEVELT ISLAND, New York, N.Y. Client: New York State Urban Development Corporation. Architects: Sert, Jackson and Associates, Inc.—William Lindemulder (project manager); Edward T. M. Tsoi (project architect). Engineers: Paul Weidlinger Associates (structural); Cosentini Associates (plumbing and mechanical); Eitington & Schlossberg Associates (electrical). General contractors: Building Systems Housing Corporation and Turner Construction Corporation.





Shown above are the basic planning modules at three different levels. In the typical elevation (left), the projecting elements are living rooms. The sketch below shows the proportioning system for the facades. 'A' denotes a square, slightly tall to correct for perspective. 'B' is a double square, and 'C' is a golden section. Windows were carefully studied to arrive at an harmonious division of glass. Each projection is proportioned as a golden rectangle. Sert, a disciple of Le Corbusier, adapts the latter's Modulor dimensions wherever possible. Two views of a floor-through unit show their virtues—cross ventilation, views from the dwelling in two directions and exposure to sunlight during different times of the day.

