

# POLICY AND DESIGN FOR HOUSING

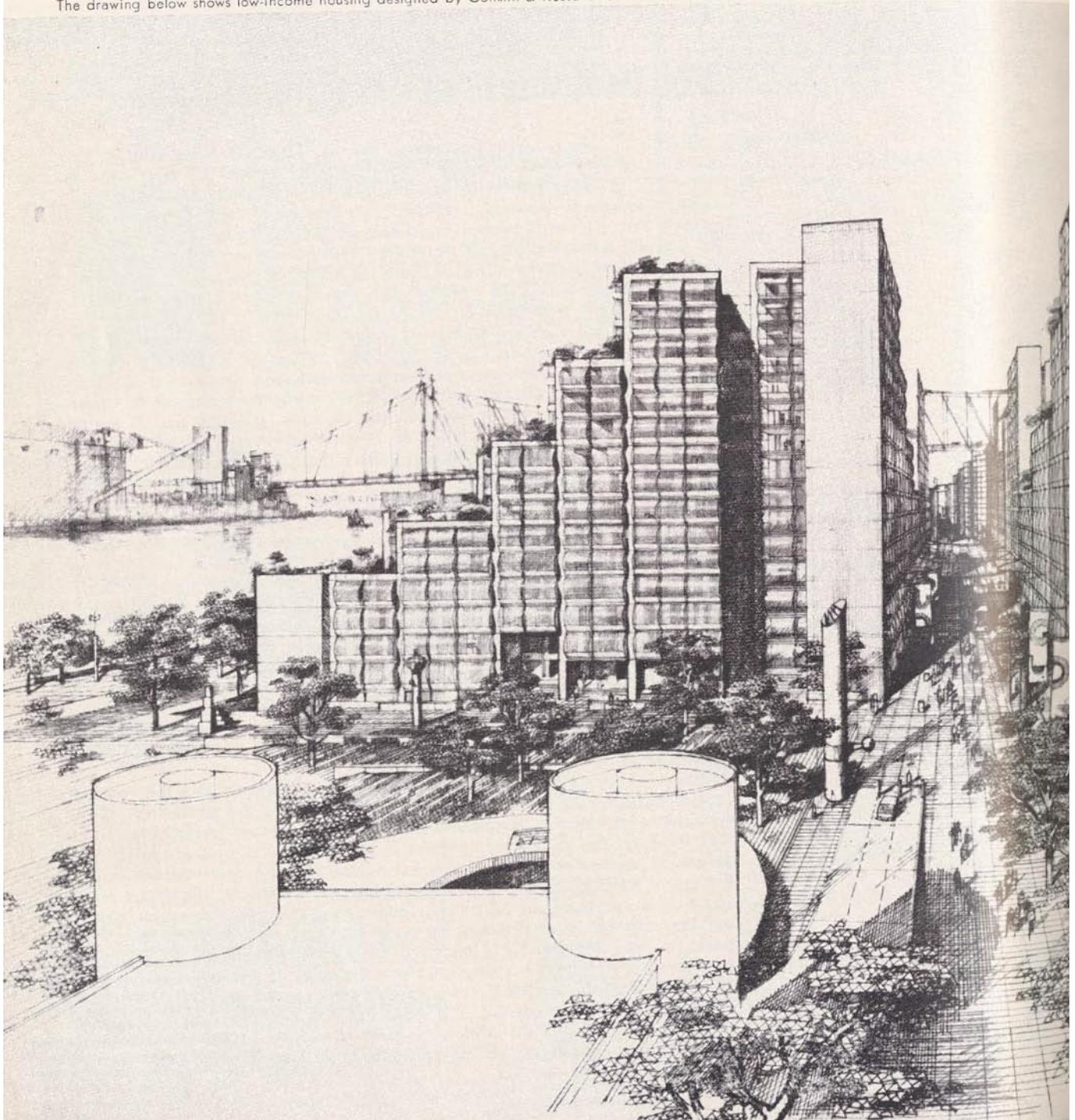
Lessons of the Urban Development Corporation 1968-1975

**Journal Article** Welfare Island: A Totally Designed Environment  
by Frank Kendig  
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# Welfare Island: A Totally Designed Environment

*By Frank Kendig*

The drawing below shows low-income housing designed by Conklin & Rossant for Welfare Island.

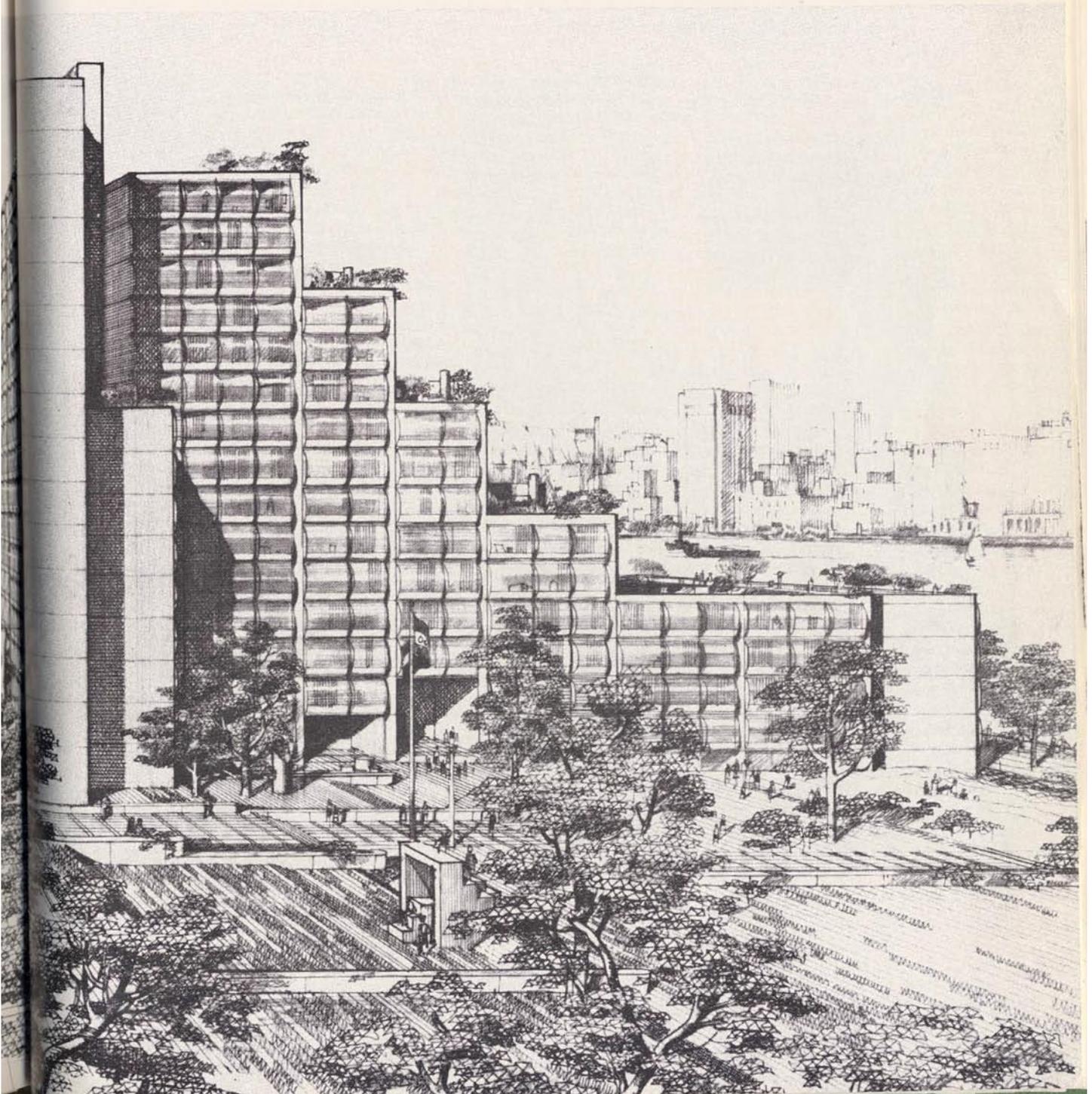


In the middle of the East River, dividing Manhattan and Queens lies a long, narrow strip of land called Welfare Island. The island contains a few hospitals and some historic but abandoned buildings. Charles Dickens once visited Welfare Island, liked it, and men persistently referred to it as "Rhode Island." Mayor John V. Lindsay once called it "the most under-utilized island in the world."

Welfare Island is now being utilized. The New York State Urban Development Corp. is about to spend some \$200 million to build a town on the island, a totally designed environment.

The development of Welfare Island is one of the most promising design projects attempted in this country, because it incorporates many of the elements thought necessary if man is to successfully redesign his environment—a team approach

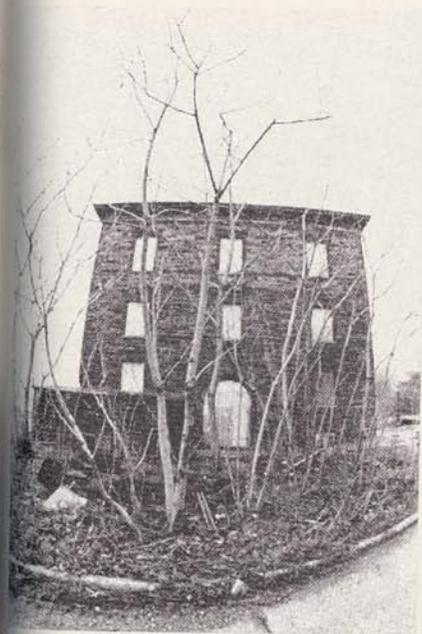
to design, a sensitive overall plan, a genuine racial and economic mix, and a powerful new government agency dedicated to new technology and equipped to bypass the usual snarls of red tape and to provide the funds necessary. There is little precedent in this country for a project of this size and scope. As a result, designers will want to pay close attention to both the successes and failures on Welfare Island.



The Indians called it Minnahonock, "an island place."  
The Dutch called it Varcken Eylant, "Hog's Island." In 1686 the island became Blackwell's Island after its owner, Robert Blackwell. Today it is Welfare Island, and its view of Manhattan is unparalleled.



View of Manhattan's East Side from Southern tip, Welfare Island.



Strocker Hospital, 1892, now demolished.



Lighthouse, 1860's, to be preserved.



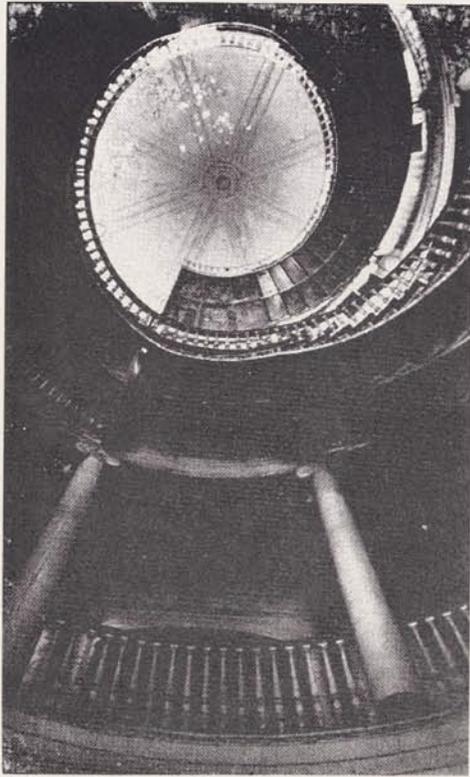
Dormer windows, City Hospital, 1858, now being demolished.

Photographer Jack Schrier, who took the photos shown in this essay, went out for a ride one day and ended up on Welfare Island. He had never been there before and, fascinated by what he saw, he photographed much of the island. Two weeks later he returned and found that some of the buildings he had seen that first day were gone. Realizing that soon it would all be gone, he photographed the island extensively. His work forms a valuable document of an environment soon to be destroyed.

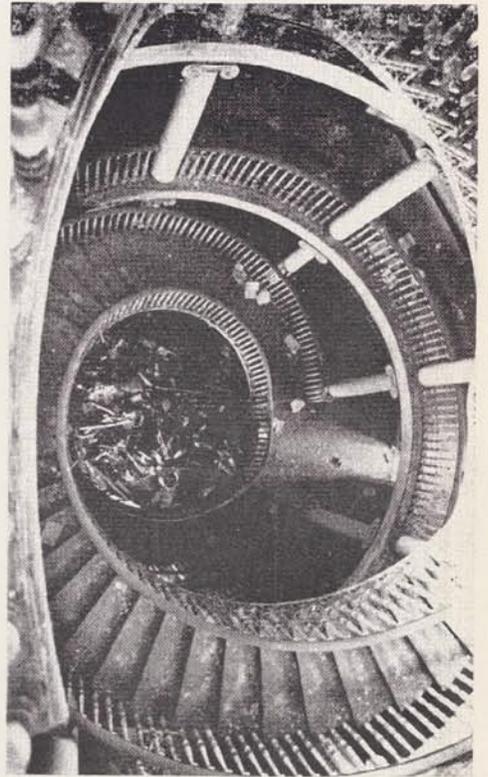
Charles Dickens called the old lunatic asylum on Welfare Island "remarkable for a spacious and elegant staircase." Architectural historian Henry Russell Hitchcock said the rotunda is "perhaps the grandest interior space in New York City, earlier than Grand Central Station."



Lunatic Asylum, 1829, to be preserved.



Asylum stairway, looking up.



Asylum stairway, looking down.

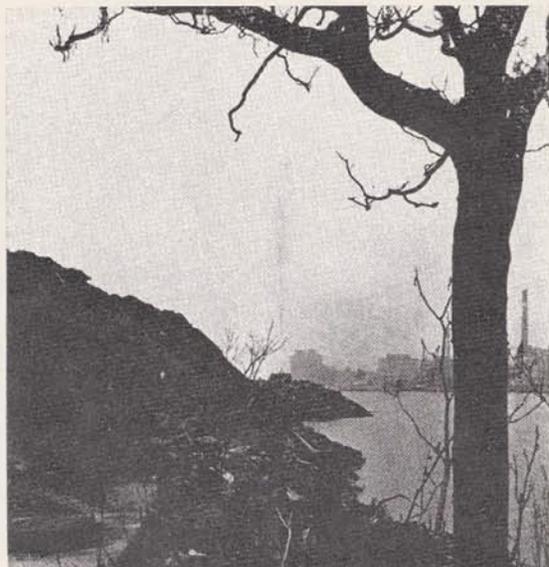
In the early part of the 19th Century, the City of New York purchased Welfare Island and used it to house an odd mixture of hospitals, nursing homes, alms houses, insane asylums and prisons. Most of these institutions were later abandoned and the island itself forgotten. Now, as indicated by the sign (right), the island is experiencing the birth pangs of a new life.



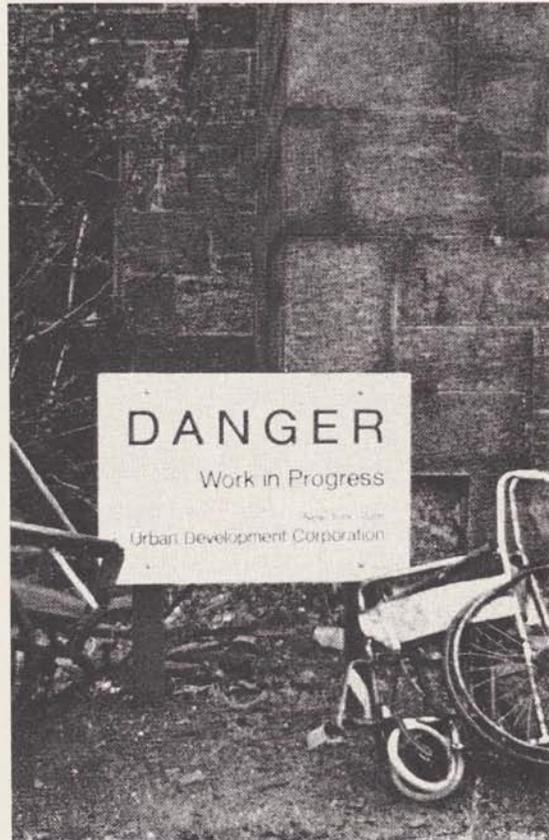
Children's Hospital, now demolished.



View of Queensborough Bridge from Welfare Island, looking west toward Manhattan.

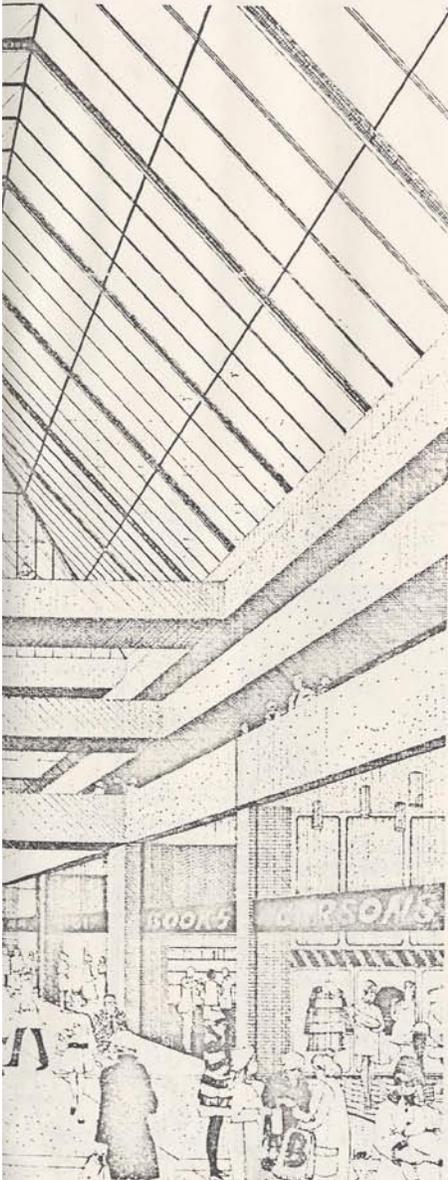


View from bank of Welfare Island, looking south to Delacorte Fountain.



City Hospital, now being demolished.

A spectacular team of designers, working from a sensitive "master plan" and guided by a super-agency, are redesigning the environment on Welfare Island. The project has already been highly praised and occasionally criticized, but real evaluation of the new environment is to be made by the 20,000 people who will live in the new community.



Sketch of glass-roofed pedestrian arcade.

### The Master Plan

In October of 1969 the "master plan" for Welfare Island, the creation of architects Philip Johnson and John Burgee, was exhibited at the Metropolitan Museum of Art. (This in itself was a remarkable event, for although London, for example, requires by law that the plans for its building projects be displayed to the public, government sponsored projects in this country are traditionally guarded like military secrets.) Criticism of the plan soon followed. Analysts of urban problems were quick to point out that a new town of 20,000 would not make much of a dent in New York's housing shortage. For this very reason, however, the Johnson-Burgee plan, with its low rise buildings and open spaces, describes a community that seems eminently habitable. The density of the island works out to be about 110 dwelling units per acre, incredibly low for urban housing, especially in New York City where the density often runs upwards of 400 units per acre.

The Johnson-Burgee plan for an automobile-free island community is a brilliant piece of work, (see foldout page 29). It describes an almost ideal urban community; an island designed for pedestrians, lying in the shadow of Manhattan, with unobstructed views from almost any place you care to stop and look. Consider two of the other plans proposed, covering the island with high density housing and turning it into one large island park. As Philip Johnson says, "the plan may look like a compromise, but it isn't. Green spaces are much more important with people in them."

Welfare Island is Johnson's first move into low-income housing. Usually regarded as the architect of the super-rich, Johnson glibly remarks about his change: "We all have a social conscience these days." Undoubtedly he also was attracted by the opportunity to design a total environment on a large scale. "It's everybody's dream to play God and bend a street," he says.

### The Team

In April of 1970, the engineering firm of Gibbs & Hill was retained to design the infrastructure (utilities, transportation network, sewage system) of the new town. Three months later the "master plan," sliced up into bite-sized bits, was parcelled out to eight of the nation's leading architecture and landscape architecture firms, a group that forms one of the most high-powered design teams assembled in years (see list, page 28).

The team approach is not a new notion to UDC president Ed Logue. He also parcelled out sections of I.M. Pei's plan for the Boston Government

Center to another team of top designers. The reason, supposedly, is that this glittering lineup of designers will lend class and variety to the town and prevent a "project look." The problem, however, is that this is a team without a captain. Remember when Wallace Harrison knocked some famous heads together—including the heads of Corbusier and Breuer—in an effort to coordinate the design of the United Nations headquarters in New York? Welfare Island may yet regret the absence of a head-knocker like Harrison.

As it is, the coordination of Welfare Island rests with the UDC. The UDC has retained several firms to aid in the coordination of projects such as Welfare Island. The firm of Gruzen and Partners, Architects, for example, is reviewing the work of the design team and reporting to the UDC. They are also working to see that there is some sort of commonality in building techniques—that a building system or material selected for one structure will also work for the others. Gibbs & Hill, by nature of the fact that they are the only firm working all through the island, has also taken on coordination responsibilities. Whether any or all of these "coordinators" can bridle the impulses of the team remains to be seen.

### The Super-Agency

The UDC is probably the most powerful government agency in New York, possibly in any state. As *Business Week* put it, "on paper it can build almost anything anywhere in New York State." The goal of the UDC is to provide two million new dwelling units for New York State by 1980.

To reach this goal the UDC has been granted awesome powers by the state. Briefly, it has the power to condemn property, the power to override local codes and zoning laws, developmental powers ranging from construction to management, and a host of financing options including the power to issue a billion dollars worth of bonds.

Armed with these powers, the UDC has adopted a policy of restraint. "Just because you have a meat ax doesn't mean you have to use it," says UDC general manager Robert McCabe. He adds, however, that "it does help if everybody knows you have it in the kitchen."

One of the most formidable sources of UDC's power is its president, Edward J. Logue. Logue, who made his mark on urban affairs with his work on the redevelopment of New Haven and the Boston Government Center, has strong opinions on the problem of housing. "There is an ample supply

of vacant land suitable for housing low-income families in a ten-mile-wide belt around just about every one of our major cities," he says. "Yet access to the land has been denied to low-income families, particularly black families, on a systematic basis . . . The noble tool of zoning has been perverted to maintaining the character of affluent, lily-white suburbs."

Logue also suggests building low-income housing—in groups of 40-50 houses—in the heart of the suburbs. This housing—limited to five per cent of the local housing supply to guarantee that no community's character would be basically changed—could be constructed, Logue believes, at a saving of 25-40 percent over the cost of building housing in urban centers.

Logue is a strong advocate of new towns like Welfare Island. "We should have a large-scale program of building new towns," he says. "The British now have almost a million people living in

26 new towns built since 1946. Tapiola, the Finnish Garden City, and the Stockholm suburbs of Vallingby and Farsta have accomplished the same objectives, and are strikingly attractive, as are most of the new British towns."

#### The Occupants

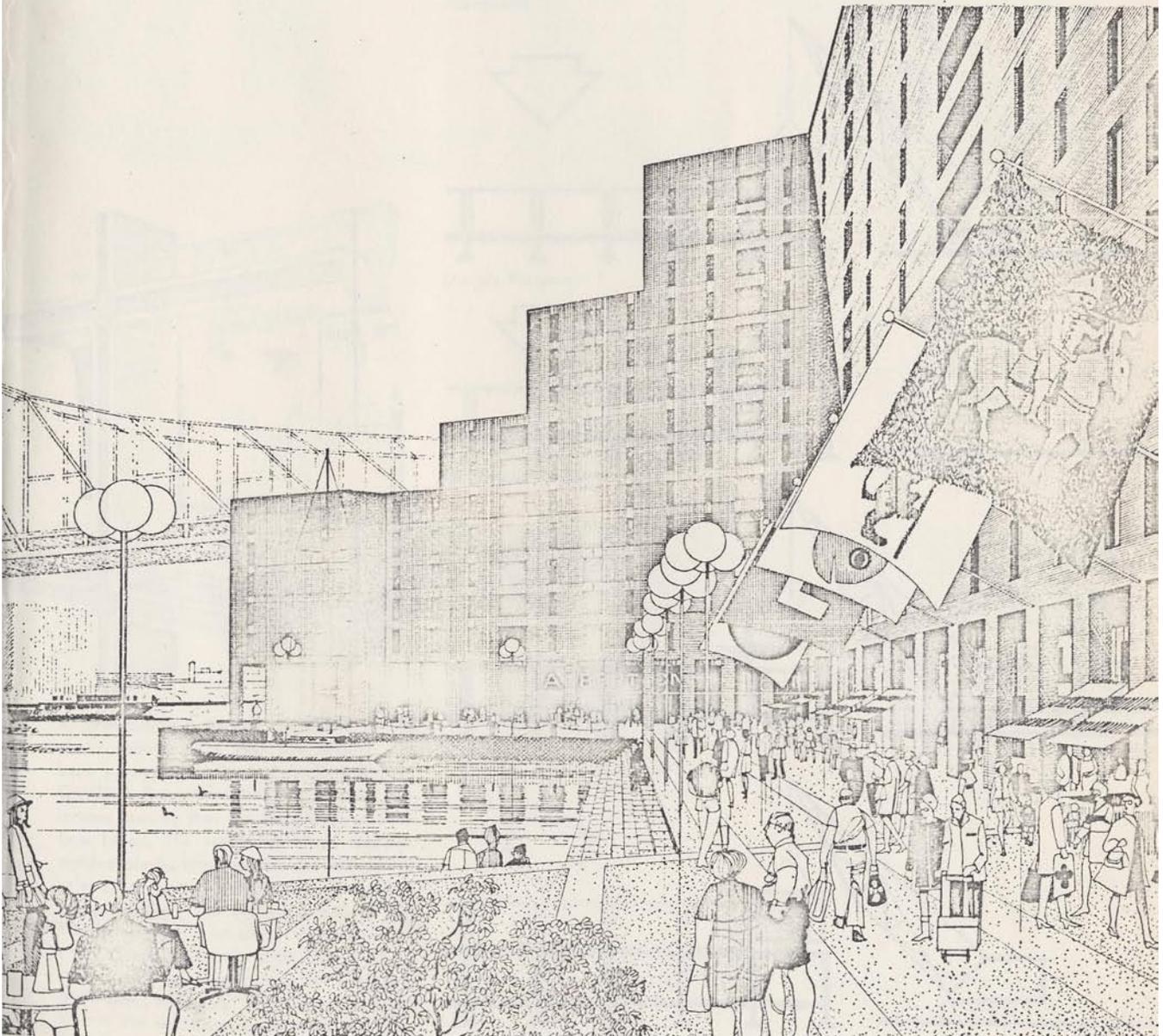
Construction is scheduled to begin on Welfare Island early this summer, and the first occupants are slated to move in sometime in 1973. What will they find when they get there?

A town under construction, for one thing. Some 3,200 units are scheduled for occupancy in 1973. The completion date for the entire island is sometime in 1980. How habitable those 3,200 units will be is another question. Some critics have pointed out that there was little or no psychological or sociological input into the design. The occupants will have to rely on the talents and imaginations of

the design team.

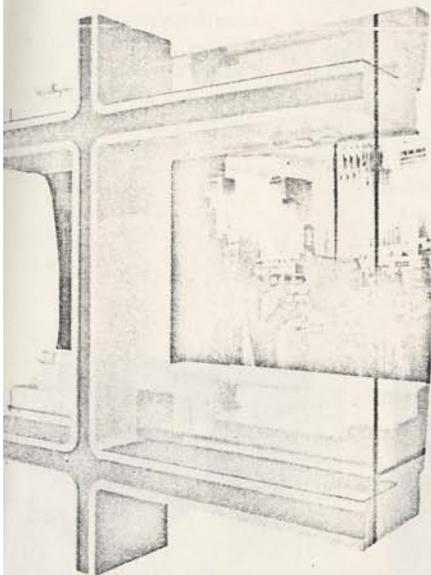
The mix for the island is set at 30 percent low-income housing of which 10 percent will be for the elderly (at a cost of \$18-\$20 per room), 24 percent moderate (\$40-\$45 per room), 20 percent middle (\$80-\$85 per room), and 25 percent conventionally financed (\$150-\$180 per room). The results of this economic and racial mix will be of great interest to those concerned with urban problems.

The development of Welfare Island may end up costing a good deal more than the \$200-250 million anticipated by the UDC, but thanks to the agency's intricate financing powers they should be able to come up with the money, and the town will be built. How the town will function, what will be the quality of the environment on Welfare Island, are questions to be answered, primarily by the 20,000 New Yorkers who will call Welfare Island home.

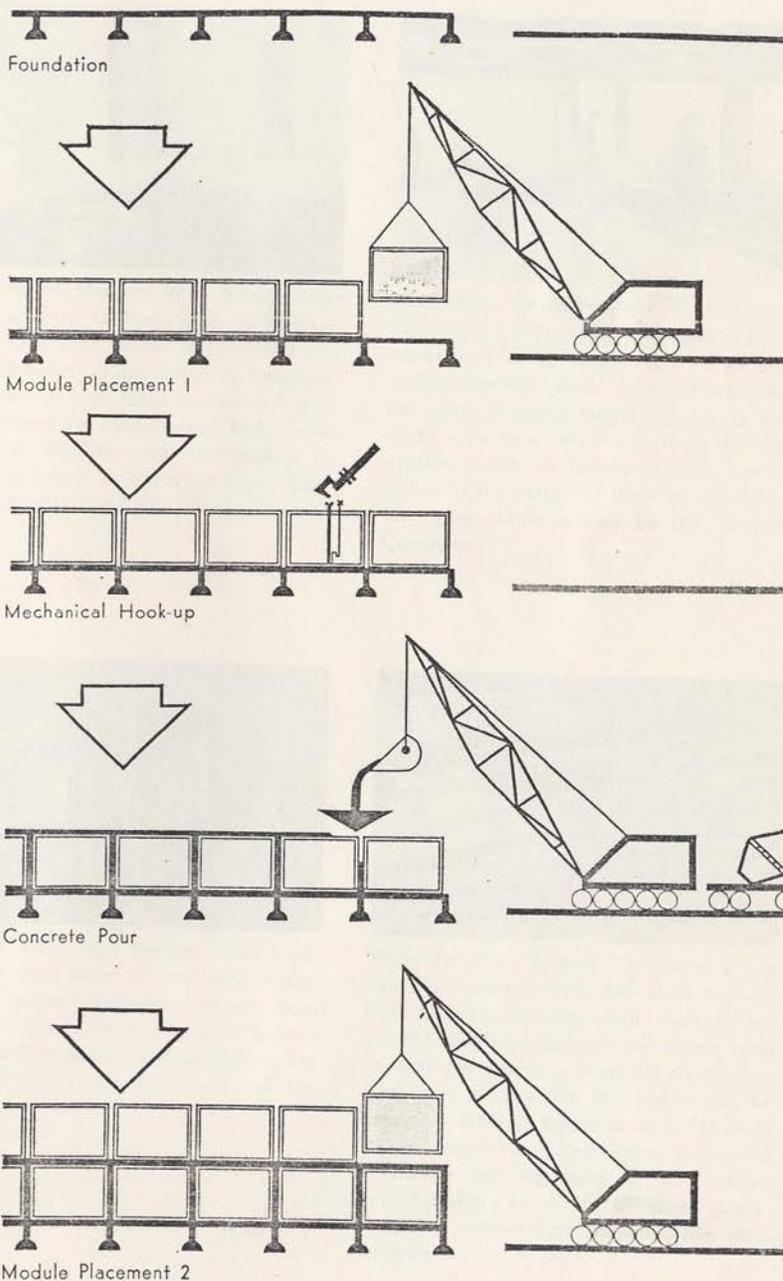


Sketch of Town Square, which is linked to arcade.

The UDC has established a program to examine and evaluate new technology, select workable innovations, and plug them into its building projects whenever possible. "This is an action program," says UDC technology officer David M. Pellish. "If a new, available product—or a total building system—is more economical than a standard one of equal quality, we'll be able to put it to use right away. It can be incorporated into UDC's housing projects, as planning proceeds from drafting board to construction."



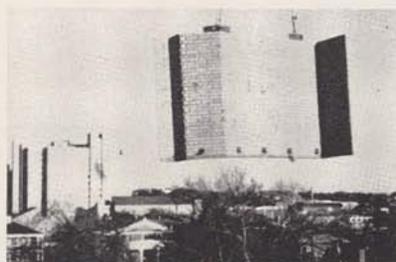
A new building system, described in the photo (above) and drawings (right), has been proposed by the architectural firm of Conklin & Rossant for the 1,000 units of low-income housing they are designing for Welfare Island. The system is based on pre-molded plastic modules and concrete and is referred to by the architects as "poured in place housing." The architects believe that the system can drastically cut construction costs. "Traditionally, up to 80 percent of the cost of using concrete is taken up by building and moving formwork," says Conklin. "In this system, the modular units serve as the formwork."



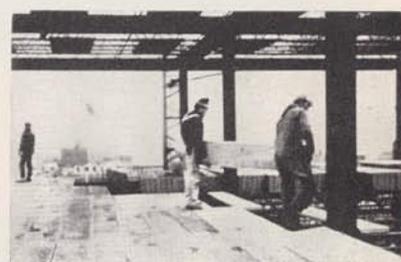
As the program progresses, Pellish envisions the UDC producing a catalogue of innovations available to builders and developers. Six of the innovations already selected by the UDC are shown below.



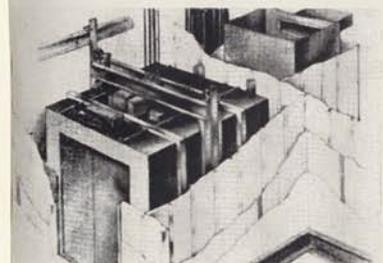
**Ceramic Wall Panels with flexible grouting.** One-inch modular unglazed mosaic ceramic tiles chemically coupled in a flexible urethane matrix, formed in a two-by-two-inch panel that installs with organic adhesive using resilient tile techniques. "TiRamic" manufactured by Monsanto.



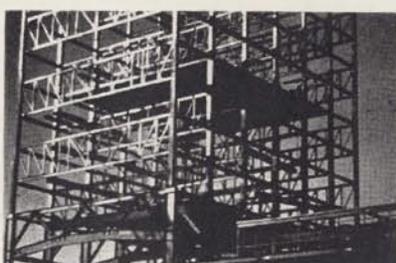
**Single Wythe Masonry Wall System.** Uses a latex additive to Types I or III Portland Cement high bond mortar. When mixed with "A" marble dust or Etu Dolomitic limestone, it produces a high bond mortar with both high compressive strength and high tensile or flexural strength—when considering resistance to lateral or beam loadings. "Sara-bond" manufactured by Dow Chemical Company.



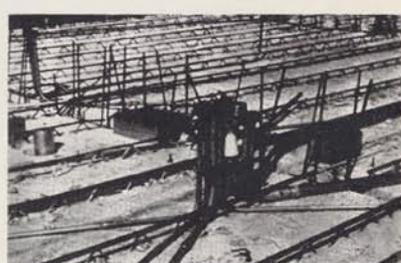
**Metal Edge Gypsum Plank Floor System.** Consists of T & G plank 2 inches thick by 15 inches wide by 10 feet long, installed as a welded-together deck over 24-inch o.c. bar joists. Gypsum mastic topping is provided as a floor leveling material and 5/8" gypsum boards on furring channels are installed at the bottom of joists for a two-hour fire rating. Manufactured by U.S. Gypsum Company.



**Shaft Wall Construction.** Provides two-hour fire protection, resistance to air pressure loads for stairwalls, elevator, vent and chimney shafts, and installs faster than masonry. It consists of two-inch laminated gypsum plank placed into vertical metal "H" flanges and faced with two layers of 1/2-inch standard Gypsum wall board on one side. Manufactured by United States Gypsum Company.



**Staggered Steel Truss System.** Steel framing system uses series of story-high trusses spanning between perimeter column lines. Trusses are placed in a staggered pattern so that the floor system is supported by the bottom flange of one truss and the top flange of the next truss.



**Wide-Slab Floor System.** Consists of a precast 2 1/4" concrete floor slab which contains bottom reinforcing steel and voids (if required). Partially exposed steel trusses serve to bond the slab to a poured-in-place structural concrete topping. The system can be used with framing beams or as a flat plate utilizing special bent reinforcing to provide anchorage and continuity at slab edges. Manufactured by United Filigree Corp. Omnia Franchise Corp. manufactures similar system.

Stretching along the flank of Manhattan, Welfare Island covers about 147 acres. The island is two miles long and about 800 feet across at its widest point. Over the years, several plans have been proposed to utilize the island, among them modeling the island after Copenhagen's celebrated Tivoli Gardens, turning the island into a public park, and covering it with high density housing. Open gatefold to see the plan now being executed.

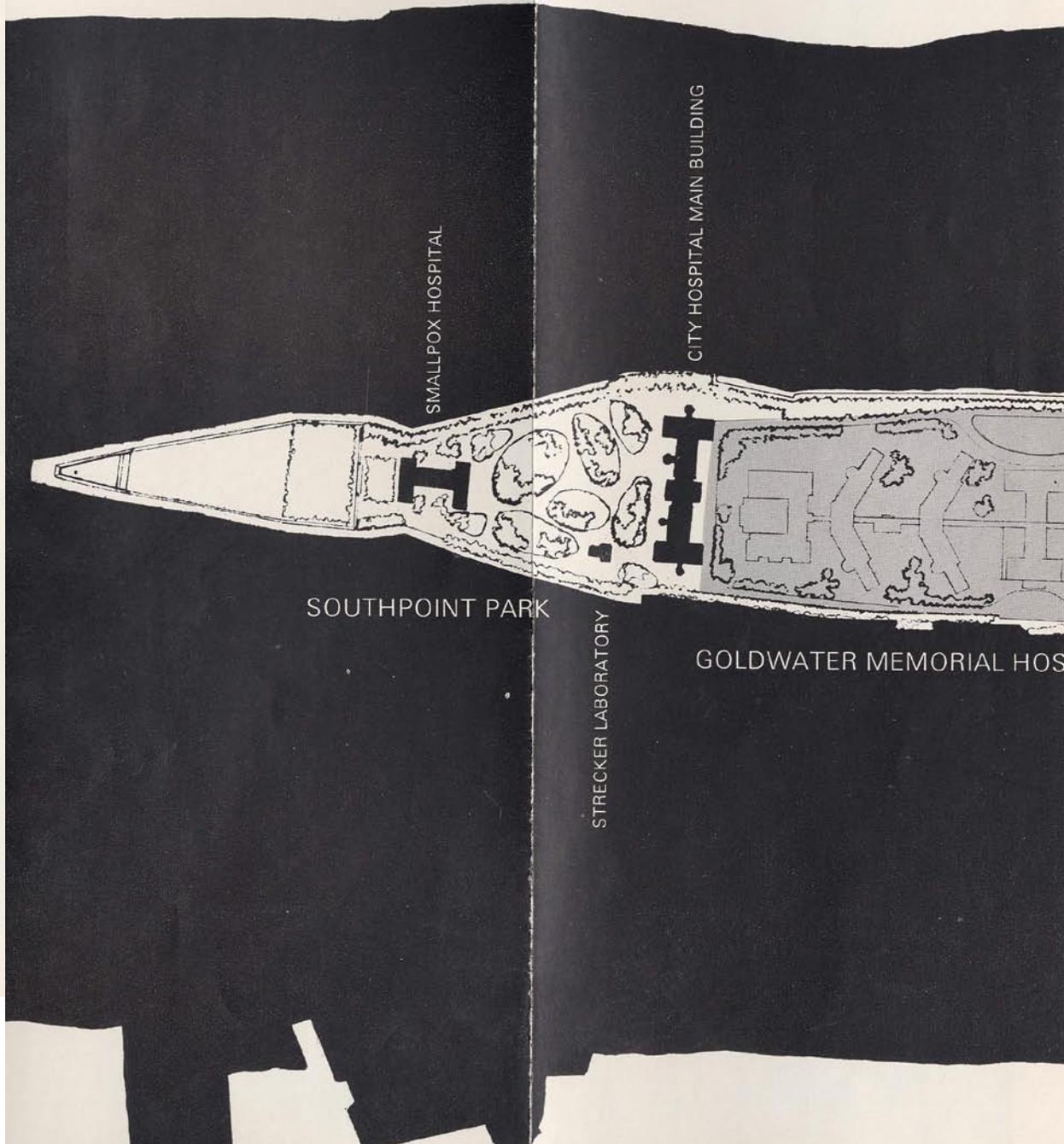
The plan for the development of Welfare Island is the creation of architects Philip Johnson and John Burgee. It calls for 5,000 units of low rise (4-12 story) apartments to house 20,000 people. (The proposed mix is 30 per cent low income housing—including 10 per cent for the elderly, 25 per cent moderate income, 20 per cent middle income, and 25 per cent luxury.) But it is more than a plan for a housing project. Five parks stripe the island alternating between four

clusters of buildings. The island is designed as the nation's first pedestrian town, off limits to the automobile. It is to have school facilities for 2,000 students, day care centers, public playrooms, arts and crafts shops, two indoor pools, a neighborhood family care center, 100,000 square feet of shopping facilities, 100,000 square feet of office space, a 300 room hotel, a fire station, police station and all the other facilities necessary to keep a town of 20,000 functioning.

**Southpoint Park**, a 12-acre preserve containing several restored 19th century buildings, will occupy the southern tip of the island. The view from this park should be spectacular.

**Participating Architects, Engineers and Landscape Architects**

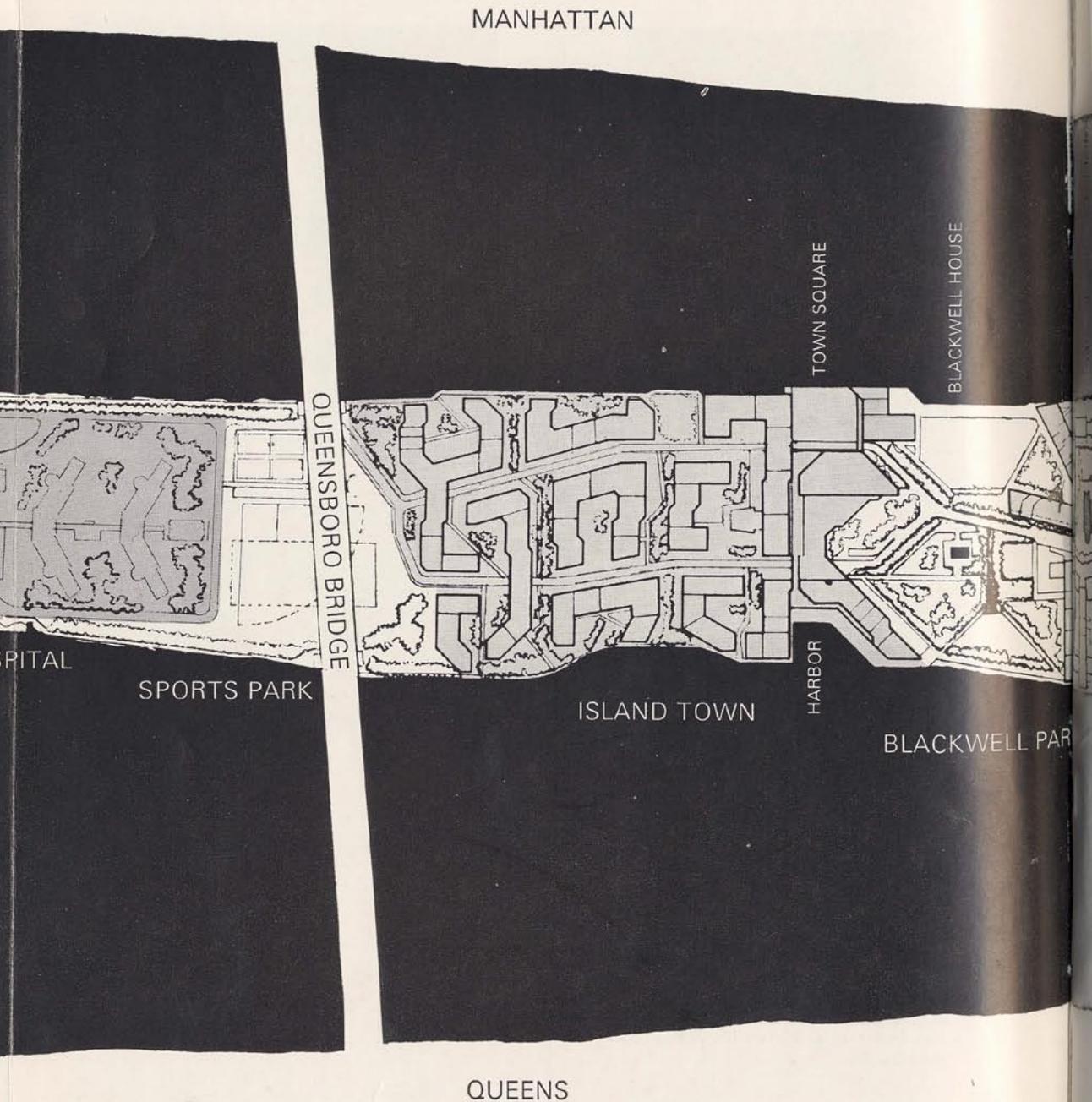
- Giorgio Cavaglieri, F.A.I.A.**, Architect, Octagon Ecological Museum
- Conklin & Rossant, Architects**, 1,000 units of low and moderate income housing for families
- Gibbs & Hill, Inc.**, Engineers, Infrastructure: Transportation
- Gruzen & Partners, Architects**, Systems Analysis
- John M. Johansen, F.A.I.A.**, Architect, 700 units of middle income housing for families
- Philip Johnson & John Burgee, Architects**, The town center, including 250 units of unsubsidized income housing for families
- Kallmann & McKinnell, Architects**, Motor Gate Garage and Plaza
- Dan Kiley & Partners, Landscape Architects**, Blackwell Park and Octagon Park
- Mitchell/Giurgola Associates, Architects**, 300 units of high income housing for families
- Sert, Jackson and Associates, Architects**, 700 units of low and moderate income housing for families, 300 units of low income housing for the elderly
- Zion & Breen, Landscape Architects**, South Point Park, Sports Park, Promenades and Main Street, Lighthouse Park



**Goldwater Memorial Hospital** looks over the old City Hospital Main Building into Southpoint Park.

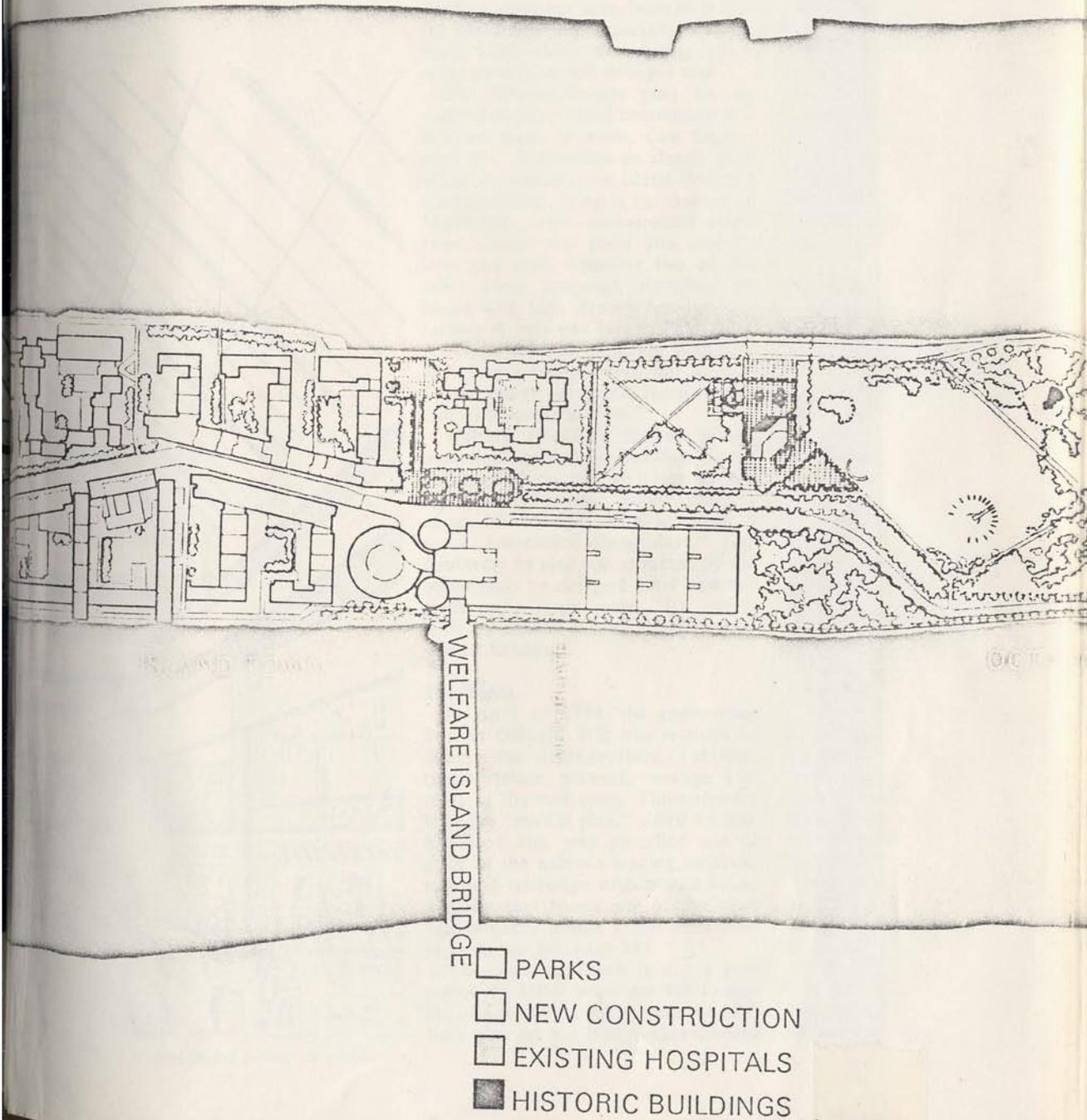
**Sports Park**, stretching beneath the spans of the 59th Street Bridge, will cover about six acres. The park will contain such athletic facilities as baseball diamonds and basketball courts. Other athletic facilities will be scattered over the island.

**The Island Town** is a two-part complex separated by Blackwell Park. The first part of the town, the Town Center, will consist of two large open spaces, the Harbor (see page 35) and the Town Square, connected by a glass-roofed arcade (see page 34). The Harbor faces Queens with steps descending to the river like an Indian ghat. The Town Square faces Manhattan. The arcade, modeled after Milan's Galleria Vittorio Emmanuele, will be lined with shops and restaurants, as will be the Harbor and Town Square.



Blackwell Park will house the reconstructed home of Robert Blackwell, the Blackwell House.

The Island Town north of Blackwell Park will contain housing, commercial space and the Motorgate, a multi-level, 2,000-car, possibly computer-operated, parking garage. Residents and visitors will leave their cars here and switch to the island's public transportation system, possibly based on electric mini-busses. The Motorgate will also house the compaction and transfer station for the island's pneumatic refuse system.



**Octagon Park** will be a 25-acre ecological park where, as the Johnson-Burgee plan states, "will be reconstructed all the innumerable environmental conditions that exist in our part of the country, to enable visitors, young and old, to study the interaction of natural organisms with their man-made surroundings." At the northern end of the park is the restored octagonal tower of the old Lunatic Asylum (see page 24).

**Bird S. Coler Hospital** will remain, but grounds will be re-shaped to make the northern tip of the island accessible to all.

**Lighthouse Park**, with its restored 19th century lighthouse (see page 23) will cap the northern tip of island.

