

MAY 1938

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Editor, Howard Myers; Managing Editor, Ruth Goodhue; Associates, George Nelson, Cameron Mackenzie, Paul Grotz, Madelaine Kroll Thatcher, Henry N. Wright, John Beinert, Barbara Hunt, Nadia Williams, Joseph C. Hazen, Jr., Walter Sanders.

THE ARCHITECTURAL FORUM is published by Time Inc., Henry R. Luce, President; Ralph McA. Ingersoll, Roy E. Larsen, Vice Presidents; Charles L. Stillman, Treasurer; W. W. Commons, Secretary. Publication Office, 160 Maple Street, Jersey City, N. J. Executive, Editorial and Advertising Offices, 135 East 42nd Street, New York. Business Manager H. A. Richter. Advertising Manager, George P. Shutt. Subscription Office, 330 East 22nd Street, Chicago, Illinois. Address all editorial correspondence to 135 East 42nd Street, New York. Yearly subscription, Payable in Advance, U. S. and Possessions, Canada, Cuba, Mexico, South America, \$4.00. Elsewhere \$6.00. Single issues, including Reference Numbers, \$1.00. All copies Mailed Flat. Copyright under International Copyright Convention. All rights reserved under Pan American Copyright Convention. Copyright, 1938, by Time Inc.

VOLUME 68—NUMBER FIVE

THE MONTH IN BUILDING

VOLUME

PERMITS (February) . . . \$ 1 0 0 , 7 4 6 , 5 5 6

Residential	32,868,043
Non-residential	43,534,833
Additions, repairs	24,343,680
January, 1938	174,924,551
February, 1937	128,696,530
Permits from Dept. of Labor	

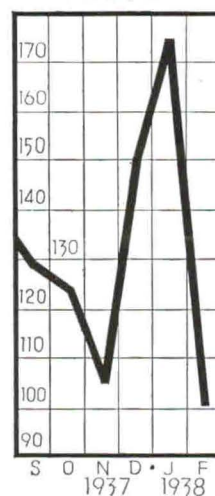
CONTRACTS (March) . . . \$ 2 2 6 , 9 1 8 , 0 0 0

Residential	79,396,000
Non-residential	87,823,000
Heavy engineering	59,699,000
February, 1938	118,945,000
March, 1937	231,246,000
Contracts from F. W. Dodge Corp.	

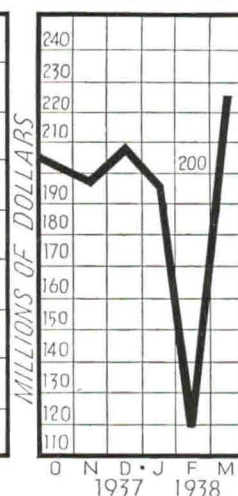
The volume of permits issued during February, 1938, slumped to a twelve-month low from the post-depression peak established in January. Reason for this erratic trend: New York City builders, to take advantage of a more lenient building code than now in effect, swelled the permit totals in December and January, probably applied for many permits which they ordinarily would have sought in February. Largest individual decrease during the month, 67 per cent, occurred in the residential classification. The February total was 42 per cent below that of the preceding month.

Contracts also began a see-saw trend, advanced 91 per cent in March after having dropped 39 per cent in February. The March level was the highest reported since August, was only 2 per cent below that of the corresponding month of last year. Large increases were registered in all classifications; largest: 98 per cent in residential contracts.

PERMITS



CONTRACTS



BUILDING'S BUCKET. To rout Recession through increased national income, consumer demand and employment, President Roosevelt at mid-month petitioned Congress to prime the business pump with three buckets: Building, Credit and Relief.

¶ Biggest bucket was Building's; it held \$1,637,000,000 of the \$3,012,000,000 proposed to be lent and spent by Government. Stating that "... in our encouragement of housing, slum clearance and home ownership ... the electorate of America wants no backward steps taken," the President suggested as a forward step that the United States Housing Authority be permitted to undertake \$300,000,000 of additional projects for immediate construction through an increase in its bonding power. (USHA is already empowered to sell \$500,000,000 of its own bonds to raise funds.)

Also in the Building bucket would be a Federal expenditure of \$450,000,000 and a \$550,000,000 loan for a revived Public Works Administration. With this money PWA would aid municipal bodies in the construction of permanent public improvements with 45 per cent grants and 55 per cent loans (customary procedure) or with 100 per cent interest-free loans (i.e., direct interest subsidy). Thus the States and cities may apply for one billion dollars of loans or for a combination of loans and grants not to exceed one billion dollars. In either case, the President figures, costs to Federal and local governments would be about the same. Anxious that the program get under way in a hurry, the President indicated that no loans or grants should be made for projects which could not be started within six months, completed within a year and a half. For the

Farm Security Administration (under whose program more than 38,000 structures have been built at an expenditure of some \$62,000,000) it was suggested that the Treasury spend \$75,000,000, lend \$100,000,000.

Other drops in the bucket: An additional appropriation of \$100,000,000 for the Bureau of Public Roads, an extra \$37,000,000 for flood control and reclamation works and \$25,000,000 for new Federal buildings—probably for the under-housed Treasury Department.

¶ Second measure was to expand bank credit through desterilization of Treasury gold and reduction of reserve requirements of member banks in the Federal Reserve System. The resultant increase in funds available for loans and investments should subsequently aid Business—and, of course, Building. The presidential proposals are inflationary, and inflation makes for increased investment in real estate.

¶ In the relief category falls an additional appropriation of \$1,250,000,000 for the Works Progress Administration to use during the first seven months of the 1938 fiscal year. Allied to it are the \$75,000,000 for the National Youth Administration and the \$50,000,000 for the Civilian Conservation Corps. The President also considered as a relief measure the proposed assistance to the FSA.

Coupled with FHA stimulation, this new spending-lending spree should brighten Building's future. Only cloud on the horizon is recalcitrant Congress, which is less submissive to presidential prodding than it used to be, may mark down the figures. Since the Congressmen, to use a Roosevelt expression, are more than a little "iffy," outcome is anybody's guess.

RFC. In mid-February the RFC* supplied the necessary capital and personnel for the country's first mortgage discount agency, called it the National Mortgage Association of Washington (ARCH. FORUM, April 1938, p. 340.) Until late March, however, lending institutions were in the dark as to policies of the Association, were therefore hesitant to expand their mortgage business—especially in the new 90 per cent field. At that time the FHA sent to more than 10,000 lending institutions a statement of conditions under which the Washington Association will purchase FHA-insured mortgages and initiate housing loans. Highlights of the statement follow:

¶ Mortgages up to \$16,000 on one- to four-family dwellings insured under Section 203 of the NHA will be purchased by the Association at a price equal to the unpaid principal plus accrued interest, provided that such mortgages cover construction begun after January 1, 1936 and insured after January 1, 1937. If these mortgages bear interest at 5 per cent and if the mortgagor is not required to pay the service charge, servicing is to be handled by the mortgagee who will retain from interest collections an amount equal to $\frac{3}{4}$ of 1 per cent as a fee. If the mortgagor is required to pay the service charge (per FHA regulations in effect prior to February 15, 1938), the mortgagee will be allowed $\frac{1}{2}$

(Continued on page 4)

*Four months ago Chairman Jesse Jones stated that the RFC would henceforth operate only on a limited basis, that in the near future its existence would be unnecessary. Change of mind was subsequently indicated by the establishment of the National Mortgage Association of Washington and the enactment of the recession-fostered bill authorizing the RFC to make \$1,500,000,000 in loans available to industrial borrowers ("little business") and public bodies.

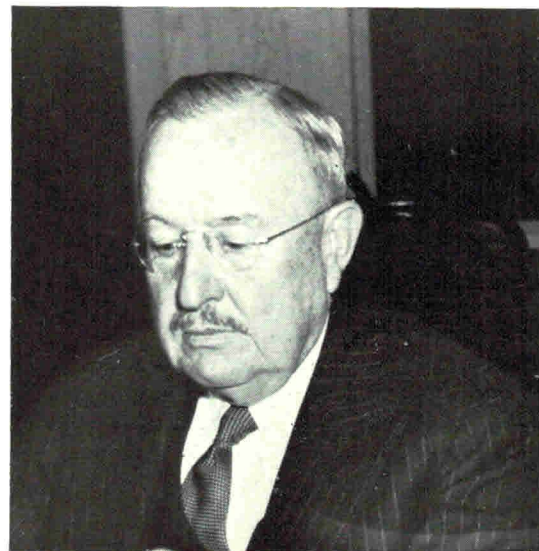
LARGE SCALE HOUSING

comes into its own

via private enterprise as Metropolitan Life lends a hand and fifty million for U. S. project No. 1.

MAN OF THE MONTH

Metropolitan's astute Chairman Frederick Hudson Ecker quietly engineered the project for months before it was announced, sought and got the cooperation of numerous men high in public, private and labor circles.



Harris & Ewing

"... Of prime interest is the disclosure that a rich market for housing exists midway between the ceiling of Government subsidized projects and what has heretofore been regarded as the floor for private enterprise . . ."

Thus, three months ago, THE ARCHITECTURAL FORUM keyed its feature article on Large Scale Housing. Now, with the announcement by Metropolitan Life Insurance Co. of a fifty million dollar low rent project, that prophecy becomes the most significant fact on the U. S. housing horizon.

The Metropolitan has acquired 120 acres in New York's populous Bronx on which it will promptly erect and manage the largest housing group in America. Detailed studies are still to be completed, but certain facts may now be disclosed.

1. In addition to apartment accommodations for approximately 12,000 families, there will be provided stores, a theater, a social center, other community amenities. To visualize the size of Metropolitan's operation, note that the largest government housing project to date accommodates 1,622 families, could comfortably be tucked into one corner of the Metropolitan project. Or think of nearly half the entire PWA housing dollars being spent in one town—The Bronx.

2. The plot is a rolling piece of ground, well wooded, with a drop of 60 ft. from its highest to its lowest point. Approximately 70 per cent of the tract will go to parks, playgrounds, other open areas.

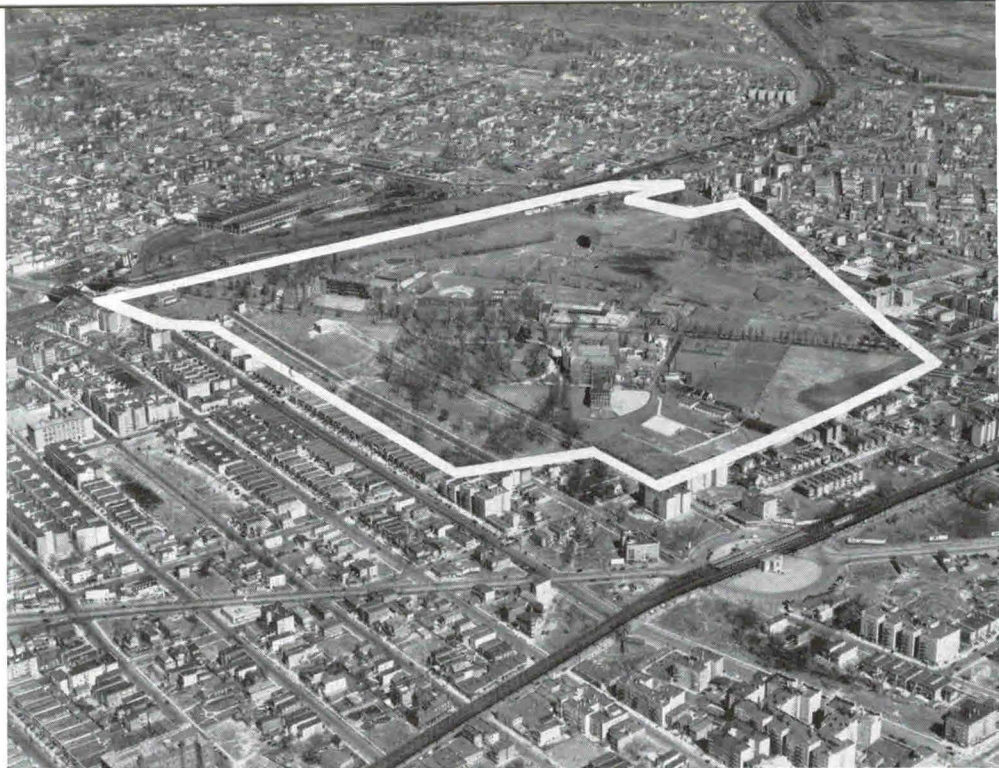
3. The buildings will be of brick, semifire-proof construction, the majority 4-story walk-ups. Design will depend for effect on simplicity, form, and landscaping. If 12,000 families are housed, coverage will not exceed 100 families per acre.

4. The development will be planned by a Board of Design working in collaboration with the insurance company's staff. Thus, Metropolitan will adopt the growing practice of using a group of experts whose qualifications completely surround the problem. The Board, chairmanned by Architect Richmond H. Shreve (Shreve,

Lamb and Harmon), includes a builder, Andrew L. Eken (Starrett Bros. & Eken); an engineer, Henry C. Meyer, (Meyer, Strong and Jones); a town planner, Major Gilmore D. Clarke (Westchester County Parkways); a works manager, Architect Irwin Clavan (Williamsburg Housing and the Empire State Building). The project will be under the general direction of George Gove as manager of housing projects for Metropolitan. For the past ten years Gove has been secretary of the New York State Board of Housing, is recognized as an authority. All decisions by this group will be subject to approval by Metropolitan's Chairman Frederick H. Ecker and his associates. Interest attaches to the fact that each member of the Board of Design will be paid an annual retainer, in turn each may call upon others in his firm who will be paid retainers as their services are required. Drafting and other mechanical work will be handled by a special force in the insurance company's own office.

This method, developed by Architect Shreve for the Empire State Building, recognizes that the group "engaged in such an important operation should constitute a Board of Directors upon which should sit the owner supported by his

Symbolically flanked by tight-packed apartments, this 120 acre Bronx site will presently demonstrate that air, light, grass, trees and modest rentals can pay an economic as well as a social return.



Fairchild Aerial Surveys

bankers and real estate agents, the architect in company with his structural and mechanical engineers, and the builder whose subcontracting and material supply associates from time to time assist in the discussion of special problems.”*

5. The approach to the planning and operation of the development is completely realistic. Without the beneficent hand of Government subsidy or aid in any form, every proper cost saving that can result from large scale production will be demanded. The rent scale will be above that in Government housing but will definitely reach the market where the greatest permanent demand exists. In large urban centers official figures show that the maximum effective demand lies between the ceiling of Government projects and what used to be considered the floor for private enterprise. Every plausible saving which has been claimed for large scale housing will be explored. While the project appears to offer an opportunity to reach an “annual wage agreement” with labor, more likely an arrangement will be sought which will rationalize the work hours per day. Insistence on a six instead of an eight hour day nets labor nothing, adds greatly to the charges against any operation by delaying its completion while interest and

overhead charges increase and rental income is deferred. This purely artificial charge is sufficient to prevent many projects from going ahead. A seven hour day may be a generally acceptable compromise. Nor is it likely that so great a project can be undertaken without assurance that jurisdictional disputes will be settled by arbitration without interruption of work. Similarly, in the purchase of materials and equipment it is assumed that the quantities involved will induce manufacturers to quote their most favorable terms. If these savings materialize and are coupled with the economies implicit in expert planning, the absence of subsidy will be offset in some measure. And rumor persists that factitious Government standards and insistent political patronage demands have deprived subsidized housing of certain economies which a private operation will assuredly gain. Here again, the Metropolitan project will be constantly under the microscope of comparison.

6. Metropolitan’s objectives in undertaking this great project are fourfold and interrelated: Not only is Metropolitan the largest insurance company in the world (insured by it is one out of five individuals in the U. S.), but it long has been the pace-setter in the development of social activities which benefit large groups. Low-rent housing it views as its greatest opportunity to further the well-

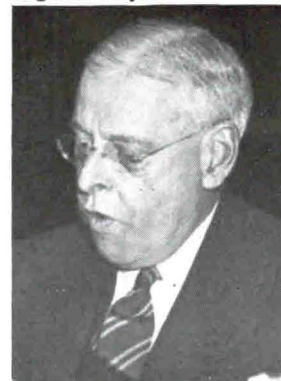
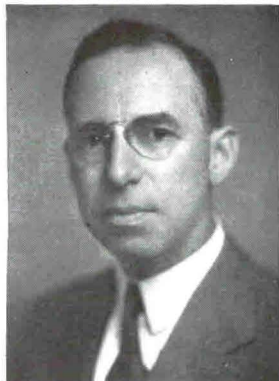
being and health of the nation. That it can combine social objectives with a secure, reasonable return for its fifty million dollar investment (made legally possible by a recent enabling amendment* to the N. Y. State insurance laws) gives special impetus to the program in a period when no other investment legally open to insurance companies presents these qualifications. Again, Metropolitan in its role of No. 1 U. S. Mortgage Lender, believes its project will encourage others to follow, thus stimulate the investment of untold millions seeking but not now finding safe investment, speed up business and, most important, provide employment for thousands.

With this preview of the most dramatic and important Large Scale Housing project by private enterprise, THE FORUM now takes you on a tour of Large Scale Housing by Government, aimed at rent levels still unserved by modern technology and ingenuity without the aid of subsidy. This issue of THE FORUM presents current solutions to our immeasurable housing problem, a start in winning the new frontier which challenges every city, town and village in America.

*The O’Brien-Piper Bill provides that life insurance companies (of New York State) may invest in real property for low rent housing projects up to 10 per cent of their total assets. Investments can only be made in towns over 300,000 population. No investment may be made after Dec. 1, 1943. Signed Feb. 17, 1938.

*Quoted from an article in THE ARCHITECTURAL FORUM, June 1930, pp. 772-773.

Roger Gove Wide World Architect Shreve Blank & Stoller Builder Eken Pirie MacDonald Planner Clarke Blank & Stoller Engineer Meyer Acme Architect Clavan R



PUBLIC HOUSING

5 million people grown to 10 is the tough job facing Government Housers unless costs are whacked way down . . . a bird's-eye view of Housing's evolution and building.

THE Housing show has only just begun. The three-year PWA program was no more than a costly curtain-raiser. In three years it produced 20,000 low-rent units for the five million families who live in slums, the five million who live in near slums. And the rents are too high for two out of five of these slum-bound ten million.

It is eight months now since the curtain fell on the PWA program to rise again for the first act of the big show. Down stage, center, is the U. S. Housing Authority, a body of perpetual duration with the duty of financing low-rent housing. How long it will occupy the center of the stage depends largely on how much it can improve on the PWA program. Certainly it must begin by drastically lowering costs, then rents.

Any analysis of housing must begin with the arithmetic of housing. And if the figures are astronomical, it is only because they measure a problem of immense proportions. Thus: to rehouse ten million families according to the current standards will cost about \$40 billion. And the growth of population combined with obsolescence puts ten million more families into slums every twenty years. This means that we should spend at least \$40 billion every twenty years, or \$2 billion a year for housing. Which is one-third of our current national annual budget. Which is also three times as much as we spent for WPA last year.

Two billion dollars a year is what we should spend. Two hundred million a year is what the USHA is spending. The pressure that will push that \$200,000,000 up toward \$2,000,000,000 is politics. And it is Politics, mounted on Party platforms, that we will presently observe joining the USHA in mid-stage. Even as this issue goes to press, White House rumors predict interest-free loans to

municipalities; loans which would obviate the great difficulty local authorities are experiencing in raising the 10 per cent contribution the USHA requires of them.

So far the USHA has approved five projects with a total cost of \$18,700,000. To bring you up to date in this \$40 billion show, the Editors present in this issue a photo-history of PWA's curtain raiser. It will give you some idea of what is to come—in the show that has only just begun.

On January 18, a Federal Theater Project called “. . . one-third of the nation . . .” opened in New York and today it is still playing to packed houses. The event is not without a certain fortuitous significance, since the star of the piece is neither a baritone nor a blonde but Housing, and Housing has just reached its political majority with the passage of the Wagner-Steagall Housing Act.

This happy marriage between public opinion and national law is the culmination of a struggle as old as our first city. On the one hand was the bald fact that some people in every generation were doomed to live in houses which the rest of the people would not use for pigs. And on the other was the equally bald fact that some people considered it nobody's affair how anybody lived. The history of Housing in the U. S. is the history of the nation's disavowal of this thesis.

FROM CHARITY TO REFORM

The earliest ideology of housing classed it as charity. In 1773 outside of Philadelphia appeared the first poorhouse in the U. S., a straightaway example of the sort of charity which is content to hide but not to cure the sores of the poor. In the nineteenth century industrial expansion and immigration hit new highs and bad housing became intolerable housing on a huge scale. In 1849 a cholera epidemic in New York killed 5,000 people—and the plague houses were not even fumigated for the new tenants who rushed in. In 1871 Chicago blackened to its famous fire. Speculative building touched bottom in the so-called company town shacks. The country was ready for its first wave of real housing reform. It came in the form of more stringent building codes. But these codes were soon ruled to apply only to new buildings, and the poor were left to their rookeries.

At about the same time—the last quarter of the nineteenth century—the ideology of housing underwent a significant change from charity to reform. Jane Addams in Chicago, Lillian Wald and Jacob Riis in New York began life-long careers of agitation as reformers of housing, working in the slums and talking to the country. The immediate results were small: in New York a few private citizens built limited dividend housing for the purpose of demonstrating to other businessmen that good works could be carried on at a profit. But the idea appealed continuously to rich philanthropists through the first quarter of this century, and resulted in a

string of limited dividend projects financed by such men as Phipps, Rosenwald, Field, and Buhl.

Notice that Housing had developed by these examples from a pure reform to a reform sugar-coated with profit. But this very sugar-coating was to be its undoing for two simple reasons: private capital could make only the most minute dent on the slum problem; and private capital saddled with the obligation of making even a limited profit could provide no homes for the very poor.

In 1926 this unhappy fact received its first official recognition. Governor Alfred E. Smith, who had been raised in the slums of New York himself, pushed through his State legislature the first law in which the State assumed an active rather than a regulatory role in Housing. The Act created a five-man housing board to encourage the erection of limited dividend housing. Any project with rentals of \$12.50 a room or less was granted tax exemption on the building proper for 20 years; and the bonds or mortgages which financed it were exempt from all State taxes. Here for the first time was formal recognition that Housing was neither charity nor reform, but an obligation of the State. Between 1927 and 1935 fourteen projects for 6,000 families were built under this Act at a cost of nearly \$30,000,000. But the rents were still too high.

FROM STATE TO NATION

The next step in the evolution of housing was from State to Federal participation, and while it was accomplished in less than a decade from the passage of the New York State Act, it was one of the most bitterly contested of all. First hint of national recognition appeared in the report of President Hoover's Conference on Home Building and Home Ownership in 1931. The Conference's consensus was: "There should be public participation, at least to the extent of the exercise of the power of eminent domain. If the interests of business groups cannot be aroused . . . a further exercise of some form of governmental powers may be necessary."

This report was followed in 1932 by the first Federal legislation, the Emergency Relief and Construction Act under which the RFC was permitted to lend money to limited dividend corporations set up under State Boards. The result was a horrendous fiasco. Eleven States rushed through legislation creating their own Housing Boards. But in each

U.S.H.A PERSONNEL IN REVIEW

To **Administrator Nathan Straus** the housing problem has been more than an avocation. To wit, President, Hillside Housing Corporation; Member, New York City Housing Authority; in 1935 Mayor LaGuardia's Special Commissioner to study housing in Europe. A Princeton graduate (cum laude), and one-time Heidelberg student, Mr. Straus' 49 years have yielded titles which include: Commander-Ensign, U. S. N.; Editor-Publisher, PUCK magazine; New York State Senator, President, Nathan Straus and Sons, Inc. (largest U. S. manufacturer of hotel and restaurant equipment).



Photos by Otto Hagel



Young Leon Keyserling, General Counsel, functions as Administrator when Mr. Straus is away. Graduated from Harvard Law School in 1931, he is a close friend of Rexford Guy Tugwell, was Senator Wagner's one-time secretary.



Catherine Bauer, author of MODERN HOUSING, is **Director of Research and Information**. Winner of a Guggenheim Fellowship, former Advertising Manager for Harcourt, Brace and Co., she worked with Senator Wagner's office on the preparation of the U. S. Housing Act.



Past President of the American City Planning Institute is **Jacob Crane, Director of Project Planning**. Associated with the U. S. Housing Corporation during the war, he has latterly served as consultant for the FHA and Suburban Resettlement.



A. C. Shire, Director of Technical Division, began his government housing career with the PWA. Graduate of Stevens Institute of Technology, he has also served as Chief Engineer of the FHA, and as Technical Editor of THE ARCHITECTURAL FORUM.



Charles J. Maxcy, Comptroller and Finance Officer. Transferred from his post as Director of Accounting for PWA, Mr. Maxcy's previous experience includes the reorganization of New York City's Department of Finance.



Tyrell Krum is Director of Press Relations. Member, Illinois State Bar, Newsman Krum has served as City Editor for the CHICAGO JOURNAL, received Pulitzer Prize Honorable Mention in 1924 for covering Loeb-Leopold case.



Former chief of Research for Suburban Resettlement, **Warren Jay Vinton is Chief of Project Review**. Wartime Scientific Attaché at the American Embassy in Paris, he has also acted as Research Supervisor for the FHA.



Boris Shishkin, Consultant of Labor Policy, is a native Russian educated in England and at Columbia University. Economist for the AFofL since 1933, he has also served on NRA's Labor Advisory Board.



30-year-old Negro, Harvard Ph.D. is **Robert C. Weaver, Special Assistant on Racial Relations**. Fresh from four years of similar service to the Department of the Interior, he formerly taught economics at North Carolina's Agricultural and Technical College.



For forty years **W. V. Price, Director of Labor Relations**, has been affiliated with the AFofL. Former Vice-President of the Bricklayers' International Union, he is credited with the recent promise of New York building tradesmen to stabilize wage rates on pending projects.



Industrial Engineer **Thomas M. Hall is Executive Officer**. His record includes an instructorship at Baylor Military Academy and engineering work for the Ducktown Chemical and Iron Company. Prior to his present appointment, he was in TVA's personnel department.



Partner in the New York building firm Barr and Lane, Inc., is **Charles E. Lane, Special Consultant**. Mr. Lane's record includes supervising the construction of several large buildings for the Chinese Government and four major units of New York City's Rockefeller Center.

Not shown is **Management Consultant Donald Jones**, Vice-President of the New York realty firm Wm. A. White and Sons.

case local lobbyists managed to eliminate any provision for tax exemption such as the New York Act had contained, with the result that the only limited dividend project to avail itself of RFC money was Knickerbocker Village—in New York. And Knickerbocker Village, with \$12.50 rents, had the very poor for neighbors but not for tenants.

Opposition to these local Housing Boards centered its attack on the provision for tax exemption but its objections covered a considerably broader front. That front was roughly the whole theory that bad housing created a social obligation. The more vocal and powerful elements of the national community were simply not ready to accept this thesis, and they led the fight with vigor. In the light of this opposition, it was perhaps less than accidental that the first Federal action for housing was advanced as a method for reducing unemployment in the building trades and stimulating the sale of building materials. The country was not yet ready to accept Housing as Housing. The old sugar-coating of Reform-for-Profit had merely been supplanted by a new sugar-coating of Reform-for-Recovery.

On June 16, 1933, Reform-for-Recovery had another try, this time under the National Industrial Recovery Act which included under the duties of the Administrator "construction, reconstruction, alteration or repair under public regulation or control of low rent housing and slum clearance projects . . ." The over-all purpose of NIRA was, of course, to create employment and ease credit, and it was toward the first of these objectives that the housing program was theoretically aimed. In time it too acquired a sugar-coating—slum clearance. The virtue of slum clearance to the business-in-the-street was that it removed the eyesores from local realty. But the program was never justified in public print as simply a Housing Program.

Under the Act the newly created Housing Division could deal either with State Boards or with limited dividend corporations. Since no State Board existed until September, 1933 (Ohio), the early work of the Division was of necessity concentrated on limited dividend projects. Out of 533 applications it finally accepted seven. By October of that year the Division was despairing of finding any worthwhile projects, decided on the policy of going out and building up its own projects. Accordingly, the Public Works Emergency Housing Corp. was set up to initiate PWA public projects while the old Housing Division continued to wait for more limited dividend projects. But on January 11, 1934, Comptroller General McCarl refused to transfer any funds to the new corporation on the grounds that its duties exceeded those outlined in the NIRA, and the Housing Division was forced to reverse its field; it took back all the duties it had delegated to the new corporation.

HOUSING UNMASKED

But though the corporation had died, a new approach to Housing had been born—from now on the Housing Division was to take the initiative in its own program instead of waiting for the States. This change from reception to aggres-

sion served to bring Housing before the people whether they wanted it or not; it also served to intensify resistance.

The form and nature of this resistance bears some examination, since out of the resulting fight emerged the present program. The whole program, it will be remembered, had been introduced under the guise of stimulating employment and manufacturing. But the resistance was based on grounds which made it quite clear that the opposition saw through this thin disguise and perceived housing for what it was—an attempt to put the poor into good homes at the expense of the public.

First there was the vague and ostrich-like opposition of those who distrusted any social experiment. Newspapers of the day contained such headlines as "CHARGES HOUSING PLAN IS SOCIALISM," "U.S. HOUSING SEEN AS PERIL," and "REALTORS FIND DANGERS IN U.S. HOUSING PLANS." All of these headlines are less than four years old, and the measure of the acceptance of Housing by the people is nowhere better illustrated than by the reflection that not one of these clarion calls to reaction can be spotted in the Press of today. But at the time they mirrored with a fair degree of accuracy the opposition, if not of the "peepul," then at least of the more vocal and influential minority.

But the indictment against Housing was soon to become more specific and more potent. Late in 1934 the Housing Division in the course of assembling some parcels of land for a project in Louisville, Ky., entered condemnation proceedings against one owner. The Division's right to condemnation was presumed to be derived from the "public welfare" clause of the Constitution. Opponents on the contrary maintained that such condemnation proceedings constituted merely an invasion of property rights without due process.

Such was the position taken by the gentleman in Louisville, and such in turn was the position taken in upholding the case against the Government by Kentucky's Judge Dawson in an opinion later sustained by the Circuit Court of Appeals. In the light of the Supreme Court's recently publicized tendency to veer with the social winds, it does not appear that this ruling will go long unreversed, but in its time it made an interesting clinical note on the status and education of public opinion. It also served to hamstring to a serious degree the site assemblage of the Housing program, and to remove its activities largely from the field of slum clearance to that of building on vacant land. While this had its advantages in frequently permitting lower land costs it also served to remove from Housing its final disguise: Housing was now not even "slum clearance," was looking more and more like Housing.

The fight now shifted to the question of tax exemption. Since the Housing Division owned the projects and since it was also an arm of the Government, the States were unable under the law to levy any tax against the projects which were *de facto* Federal property. To get around this situation the Housing Division began arranging to make payments to municipalities in lieu of taxes. The argument then arose as to whether these taxes should be *ad valorem*.

Opponents of Housing, of course, insisted that they should; the Housing Division on its side maintained that there was no reason for penalizing a public improvement by taxing it more heavily.

All this cross-fire was interesting, but it was brought to a close by the Housing Division's old *bête noire*, Comptroller General McCarl who in October 1935 ruled that the Division could pay neither taxes nor money in lieu of taxes. The whole controversy then waited on the passage of the George-Healy Act the following June under which payments in lieu of taxes were authorized.

The George-Healy Act made another significant change in powers of the Housing Division. Under the original Act it had been able to make capital grants of 30 per cent and loans up to 70 per cent at 4 per cent interest, to projects. The George-Healy Act changed this ratio to a 45 per cent grant and a 55 per cent loan. Slowly but surely Housing was coming of age.

The PWA housing program came to an end officially in September, 1937, after four years and three months of hectic and badgered existence. Its final form was shaped not so much by its original design as by the unforeseen problems and opposition the program encountered. This was nowhere better illustrated than in the evolution of its administrative set-up. The Housing Division had started as a highly centralized body to promote and finance low-rent housing. When it could find no local housing boards with whom to operate, it was forced to go out into the States itself to do the promotion. And when it was denied the right to condemn land, it shifted even more of its responsibility onto local shoulders.

The final judgment of the PWA Housing Division cannot rest on the number of units which it built; the 20,000 families which it housed in four years are of small account. Recently, it has described itself as a "demonstration program," which is generally conceded to be a polite aphorism for a trial-by-error program. In this field, certainly, it did invaluable work, clearing out the legal underbrush, improving construction methods, building up a large body of experience in the planning and operation of large scale projects. It did not succeed in housing large numbers of people or in producing adequate housing at low cost.

Most significant value of this housing is its value as propaganda. It is there that it really shines, and the claim can be made on this pragmatic basis: in four years it was able to silence all critics of "socialism" and "Government-in-Business" and at the same time to prepare the country to approve the current housing program.

HOUSING BECOMES HOUSING

And for this country to approve the Wagner-Steagall Housing Act a mere four years after the creation of the PWA housing program is no mean feat. Because the Wagner-Steagall Housing Act approaches housing not as an employment nor a Recovery measure but as Housing.

The PWA Housing Division died and the U. S. Housing Authority was born last September with the signing of the Wagner-Steagall Housing Act. The death of the Housing Division occurred not so much because Congress was dissatisfied with its accomplishments as because Congress had been educated to accept a new approach to Housing which the Division was not legally able to follow. That approach was and is that the provision of good housing for the poor is a *perpetual social obligation*.

This evolution in the approach to Housing meant several basic changes in the national law as incorporated in the new Act. The most spectacular change was signalized by the fact that the executive body created by the Act, the USHA, was specified as a body of perpetual duration. Which was to say that the Government was in the Housing business to stay. Another change of considerable theoretical significance was in the liberalization of the extent to which the U. S. would extend financial aid to housing projects. The old system of a 45 per cent capital grant and a 55 per cent loan was changed to one using a 90 per cent loan and a 3½ per cent annual grant running for 60 years. This had two effects. First, it put it up to the local housing authority to raise 10 per cent of the total by itself, a manoeuvre not required at all under the old set-up. Second, the combination of the 90 per cent loan and the annual grants for 60 years operated to provide what is in effect an outright grant of 90 per cent—since the annual grants are great enough to meet both the interest and amortization on the 90 per cent loan. Thus, in effect, the USHA system doubled the old PWA grant.

In its operative set-up the new legislation simply continued the trend of decentralization which experience has taught the old PWA Housing Division is a practical necessity. Under the USHA local housing authorities themselves initiate, build, and manage all projects, while the Government in the corporate person of the USHA simply helps to finance the operation. Such decentralization has the obvious advantages of putting responsibility for land acquisition, tax exemptions, and the resistance of local grab-all where it can best be dealt with—on local shoulders.

The effort here has been to assay Housing in the ideology of successive periods in U.S. history. The evolution has gone from self-indulgent charity to the assumption of a social obligation, from poorhouses to Housing. It may now prove instructive to assay Housing in terms of the current problem as a means of determining something about its further evolution.

The problem is most baldly stated as the need to rehouse five million families. At its present rate, the USHA will provide about 150,000 units over the next three years, or about 1,000,000 in the next 20 years. And in the normal course of obsolescence, population growth, fire and demolition, the number of families needing new low rent homes will have grown in that period from five to ten million.

Meanwhile, if present standards of USHA housing continue, approximately four million of the needy ten million families will not be able to afford the minimum rents unless subsidies go way up or costs way down.

GOVERNMENT HOUSING IN THE U.S.A.

DARK GRAY: States having laws which authorize the formation of local housing authorities, and which permit these authorities to construct, operate, and issue bonds for government housing projects.

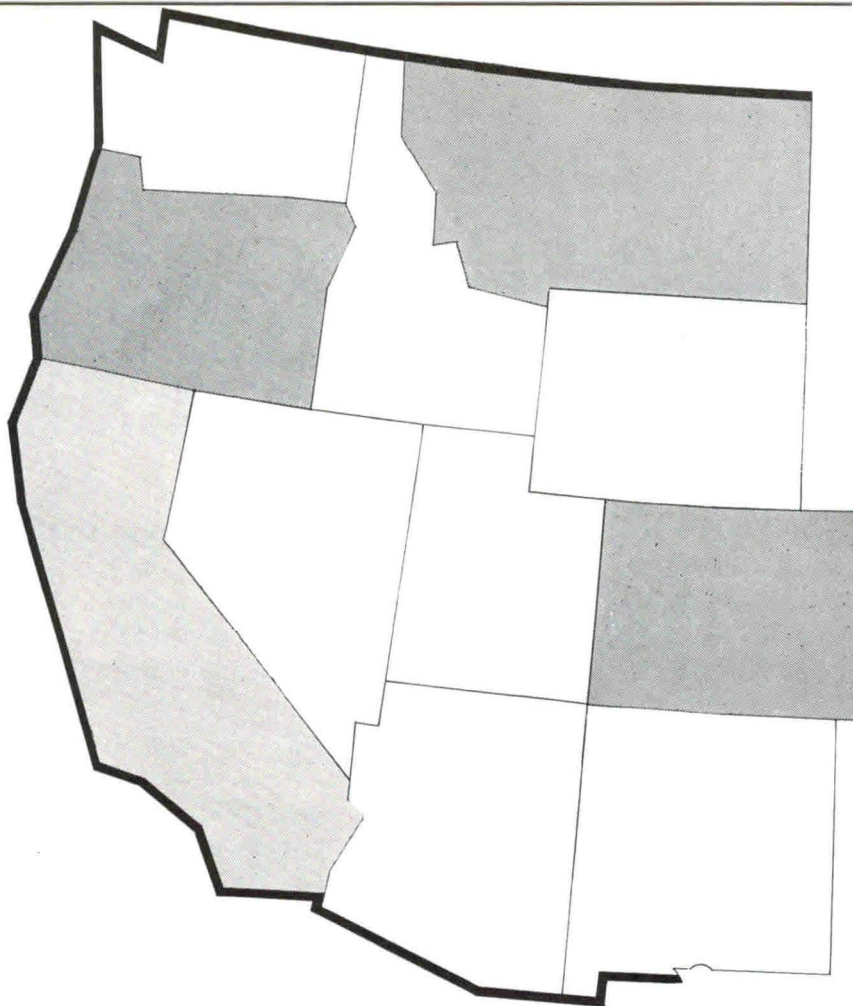
LIGHT GRAY: States which have, in addition to the above legislation, laws enabling localities to grant municipal housing authorities certain forms of subsidy such as tax exemption, land grants, or free utilities.

BLACK CIRCLES: Active USHA (formerly PWA) Housing Projects.

WHITE CIRCLES: New USHA earmarkings.

WHITE SQUARES: FSA "Greenbelt" Towns.

DATA AS OF APRIL 15, 1938.



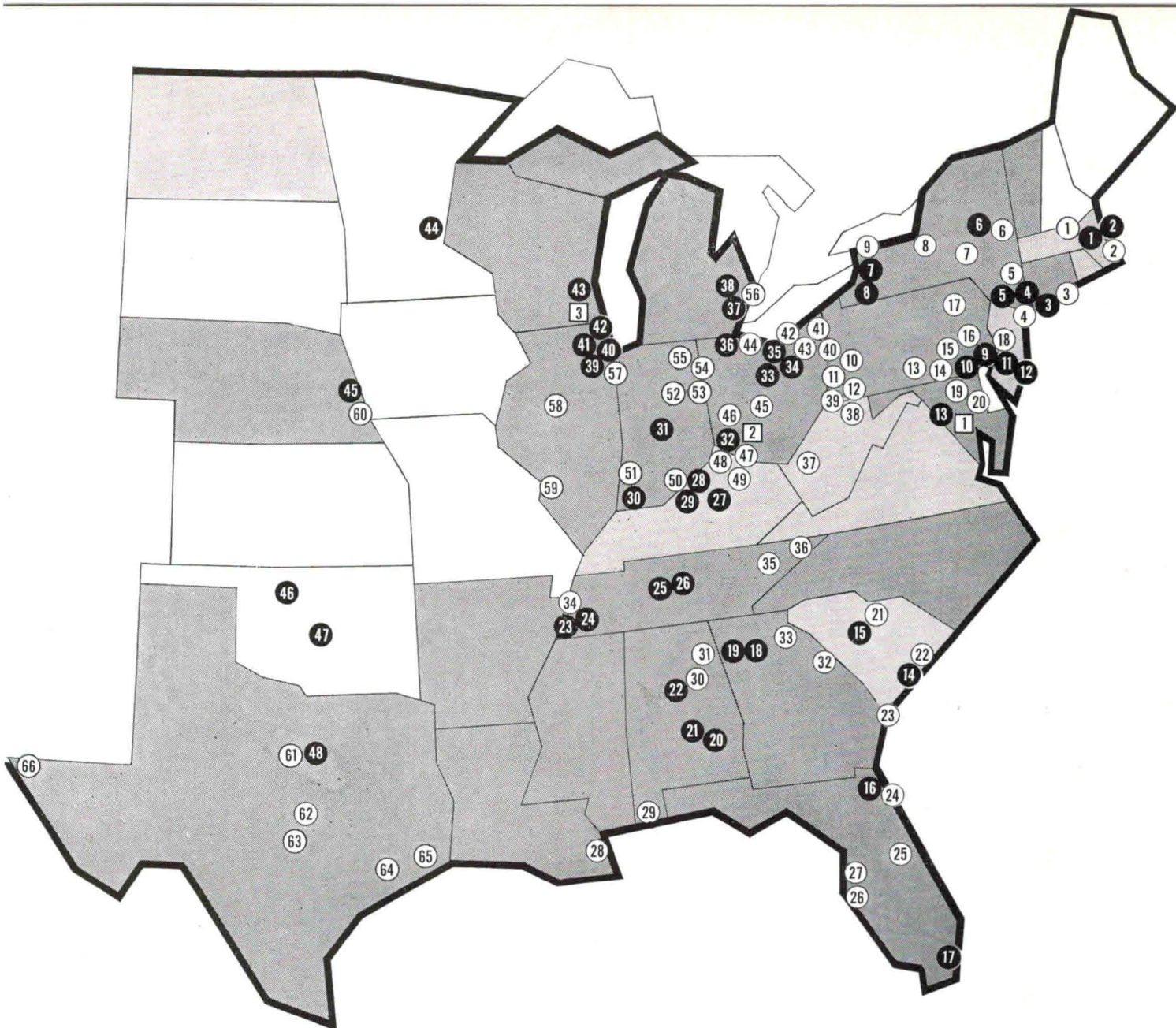
USHA (FORMERLY PWA) ACTIVE HOUSING PROJECTS

LOCATION	PROJECT
MASSACHUSETTS	
1. Cambridge	New Towne Court
2. Boston	Old Harbor Village
CONNECTICUT	
3. Stamford	Fairfield Court
NEW YORK	
4. New York	Williamsburg Houses
5. New York	Harlem River Houses
6. Schenectady	Schonowee Village
7. Buffalo	Kenfield
8. Lackawanna	Baker Homes
PENNSYLVANIA	
9. Philadelphia	Hill Creek
10. Wayne	Highland Homes
NEW JERSEY	
11. Camden	Westfield Acres
12. Atlantic City	Stanley S. Holmes Village
DISTRICT OF COLUMBIA	
13. Washington	Langston
SOUTH CAROLINA	
14. Charleston	Meeting Street Manor-Cooper River Court
15. Columbia	University Terrace
FLORIDA	
16. Jacksonville	Durkeeville
17. Miami	Liberty Square
GEORGIA	
18. Atlanta	Techwood Homes
19. Atlanta	University Homes
ALABAMA	
20. Montgomery	Riverside Heights
21. Montgomery	Wm. B. Paterson Courts
22. Birmingham	Smithfield Court
TENNESSEE	
23. Memphis	Dixie Homes

LOCATION	PROJECT
24. Memphis	Lauderdale Courts
25. Nashville	Cheatham Place
26. Nashville	Andrew Jackson Courts
KENTUCKY	
27. Lexington	Blue Grass Park
28. Louisville	LaSalle Place
29. Louisville	College Court
INDIANA	
30. Evansville	Lincoln Gardens
31. Indianapolis	Lockefield Garden Apartments
OHIO	
32. Cincinnati	Laurel Homes
33. Cleveland	Cedar Central Apartments
34. Cleveland	Outhwaite Homes
35. Cleveland	Lakeview Terrace
36. Toledo	Brand Whitlock Homes
MICHIGAN	
37. Detroit	Brewster
38. Detroit	Parkside
ILLINOIS	
39. Chicago	Jane Addams Houses
40. Chicago	Jane Addams Houses
41. Chicago	Julia C. Lathrop Homes
42. Chicago	Trumbull Park Homes
WISCONSIN	
43. Milwaukee	Parklawn
MINNESOTA	
44. Minneapolis	Summer Field Homes
NEBRASKA	
45. Omaha	Logan Fontenelle Homes
OKLAHOMA	
46. Enid	Cherokee Terrace
47. Oklahoma City	Will Rogers Courts
TEXAS	
48. Dallas	Cedar Springs Place

FARM SECURITY ADMINISTRATION (FORMERLY RESETTLEMENT ADMINISTRATION) "GREENBELT" TOWNS.

1. Greenbelt, Berwyn, Maryland.
2. Greenhills, Cincinnati, Ohio.
3. Greendale, Milwaukee, Wisconsin.



TOTAL USHA COMMITMENTS TO DATE, APRIL 15, 1938.

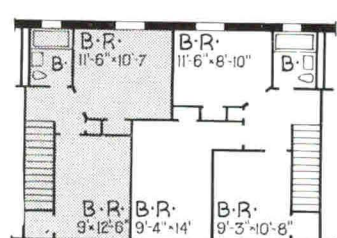
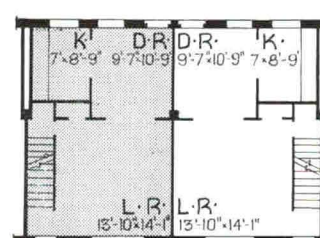
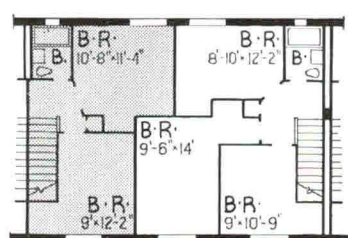
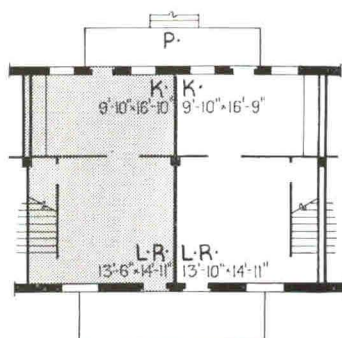
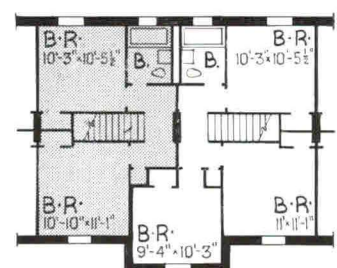
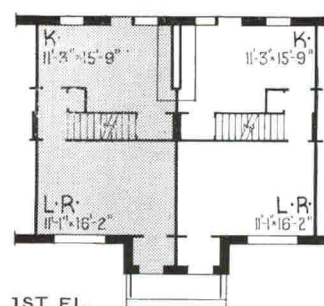
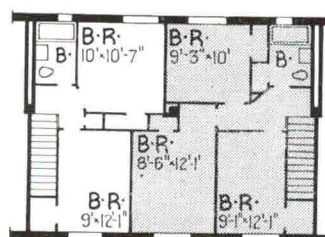
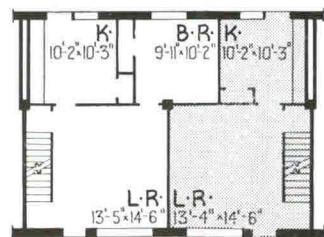
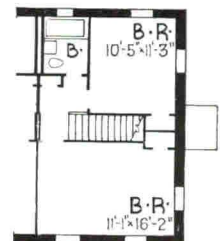
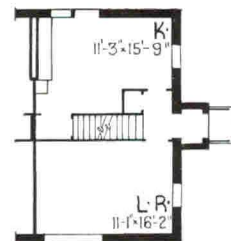
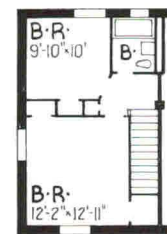
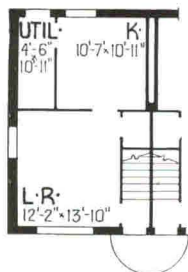
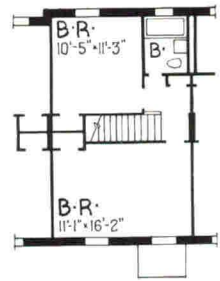
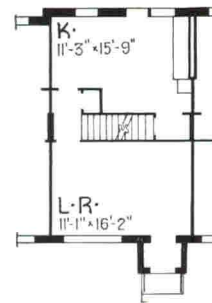
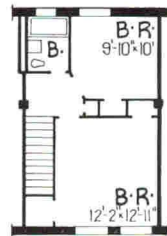
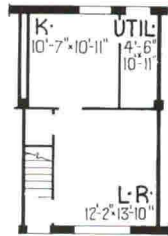
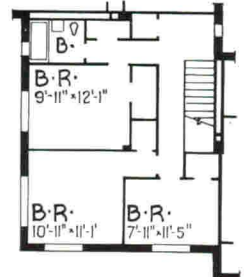
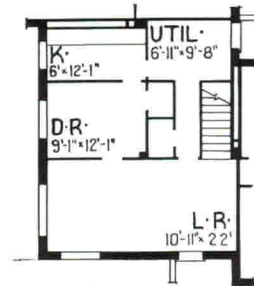
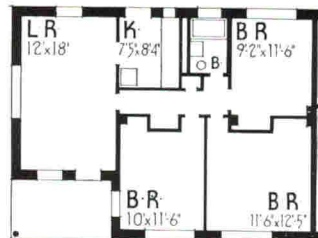
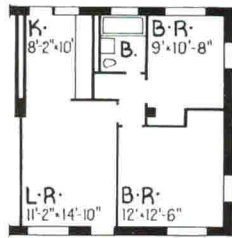
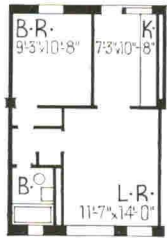
LOCATION	EARMARKINGS OUTSTANDING
MASSACHUSETTS	
1. Lowell	\$ 2,700,000
2. Boston	9,000,000
CONNECTICUT	
3. Bridgeport	3,600,000
NEW YORK	
4. New York City	30,000,000
5. Yonkers	2,200,000
6. Schenectady	1,400,000
7. Utica	900,000
8. Syracuse	3,930,000*
9. Buffalo	4,900,000
PENNSYLVANIA	
10. Allegheny County	1,800,000
11. Pittsburgh	13,500,000
12. McKeesport	900,000
13. Harrisburg	1,500,000
14. Chester	1,250,000
15. Reading	1,500,000
16. Allentown	1,350,000
17. Scranton	1,000,000
18. Philadelphia	22,000,000
MARYLAND	
19. Baltimore	15,000,000
20. Annapolis	400,000
SOUTH CAROLINA	
21. Columbia	800,000
22. Charleston	1,017,000*
GEORGIA	
23. Savannah	2,700,000

LOCATION	EARMARKINGS OUTSTANDING
FLORIDA	
24. Jacksonville	\$ 1,000,000
25. Orlando	450,000
26. St. Petersburg	900,000
27. Tampa	1,500,000
LOUISIANA	
28. New Orleans	8,411,000*
ALABAMA	
29. Mobile	1,400,000
30. Birmingham	4,500,000
31. Gadsden	900,000
GEORGIA	
32. Augusta	1,125,000
33. Athens	270,000
TENNESSEE	
34. Memphis	1,000,000
35. Knoxville	1,800,000
36. Johnson City	300,000
WEST VIRGINIA	
37. Charleston	1,200,000
38. Morgantown	270,000
39. Wheeling	1,350,000
OHIO	
40. Youngstown	765,000
Youngstown	2,835,000*
41. Warren	1,000,000
42. Cleveland	18,000,000
43. Akron	1,800,000
44. Toledo	1,800,000
45. Columbus	1,500,000

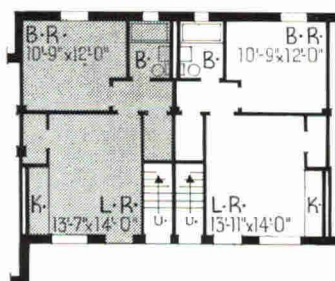
LOCATION	EARMARKINGS OUTSTANDING
46. Dayton	\$ 3,000,000
47. Cincinnati	8,000,000
KENTUCKY	
48. Covington	1,400,000
49. Frankfort	450,000
50. Louisville	4,000,000
INDIANA	
51. Vincennes	270,000
52. Muncie	900,000
53. Delaware County	400,000
54. Decatur	50,000
55. Fort Wayne	1,500,000
MICHIGAN	
56. Detroit	25,000,000
ILLINOIS	
57. Chicago	16,000,000
58. Peoria	1,500,000
59. East St. Louis	1,500,000
NEBRASKA	
60. Omaha	2,100,000
TEXAS	
61. Fort Worth	2,000,000
62. Temple	180,000
63. Austin	643,000*
64. San Antonio	3,600,000
65. Houston	2,250,000
66. El Paso	900,000
TOTAL	\$255,466,000

* Loan Contracts Signed

ROW HOUSES

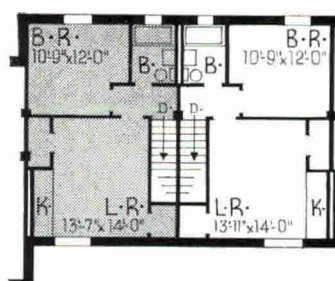


FLATS

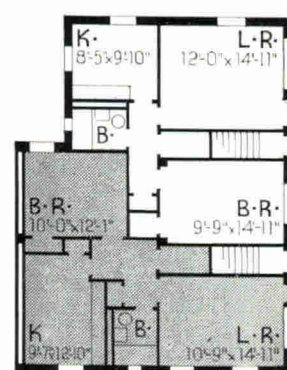


1ST FLOOR

2 ROOMS. BRAND WHITLOCK HOMES (P. 388)



2ND FLOOR



3 ROOMS, CORNER.

LANGSTON (P. 378-379)

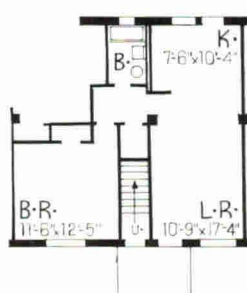


1ST FLOOR

4 ROOMS, CORNER. JULIA C. LATHROP HOMES (P. 390-391)

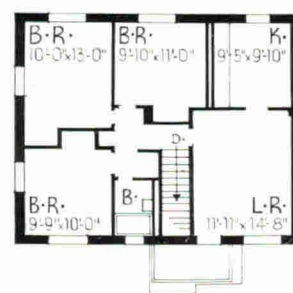


2ND FLOOR



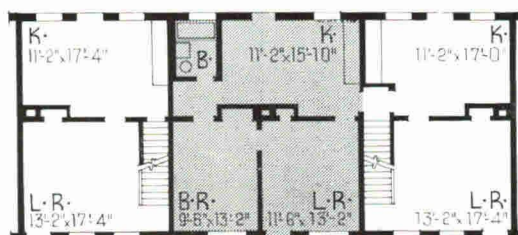
3 ROOMS, OFFSET.

STANLEY S. HOLMES VILLAGE (P. 370-371)



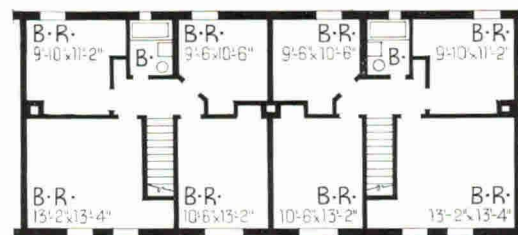
5 ROOMS, END.

CEDAR SPRINGS PLACE (P. 397)



1ST FLOOR

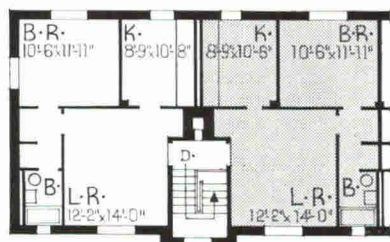
5 ROOM DUPLEX, 3 ROOM FLAT, 5 ROOM DUPLEX.



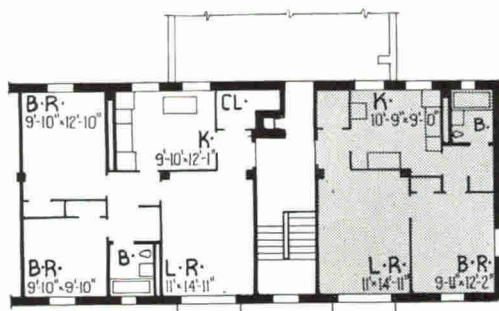
2ND FLOOR

BAKER HOMES (P. 360-361)

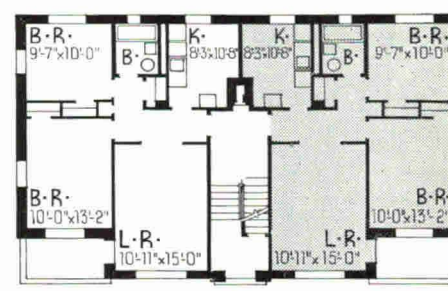
APARTMENTS



3 ROOMS, 3 ROOMS, STRAIGHT.
CEDAR SPRINGS PLACE (P. 397)

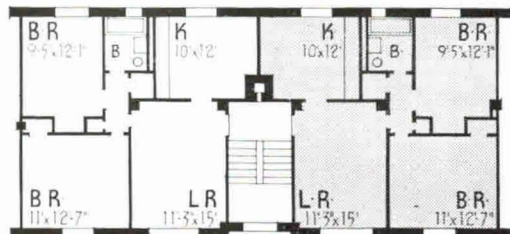


4 ROOMS, 3 ROOMS, STRAIGHT, END.
LAUREL HOMES, CINCINNATI, OHIO

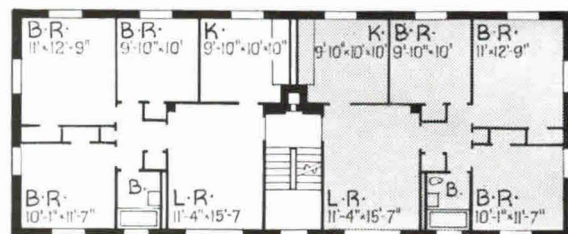


4 ROOMS, 4 ROOMS, STRAIGHT, END.
UNIVERSITY TERRACE, COLUMBIA, S. C.

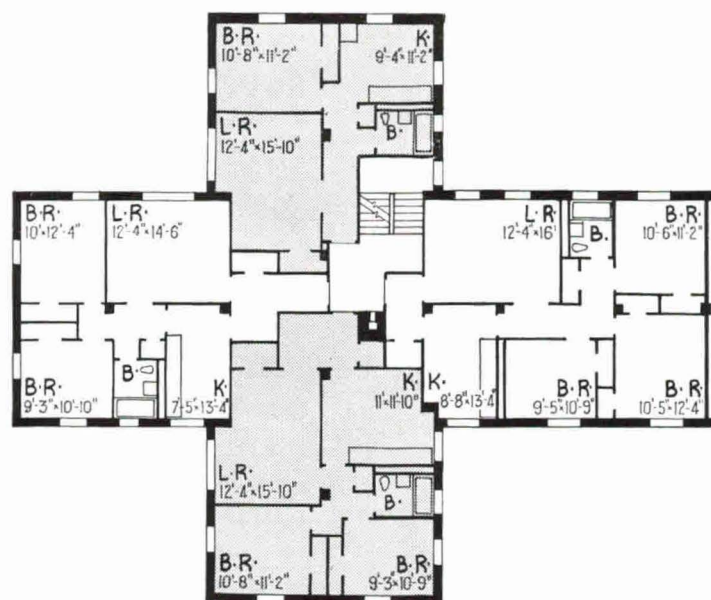
APARTMENTS



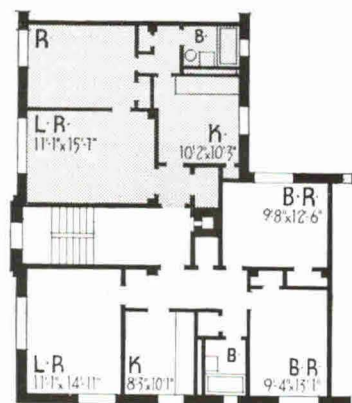
4 ROOMS, 4 ROOMS, STRAIGHT.
JANE ADDAMS HOUSES (P. 394-396)



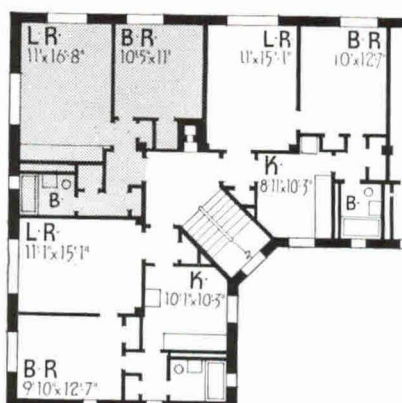
5 ROOMS, 5 ROOMS, STRAIGHT, END.
NEW TOWNE COURT (P. 365)



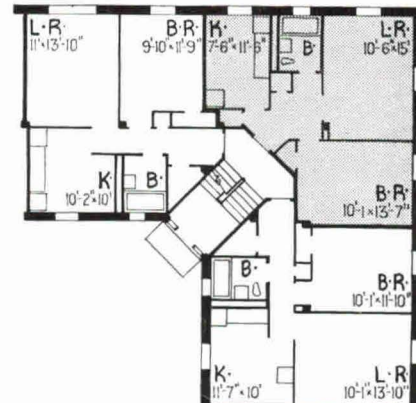
4 ROOMS, 3 ROOMS, 5 ROOMS, 4 ROOMS, CROSS.
JULIA C. LATHROP HOMES (P. 390-391)



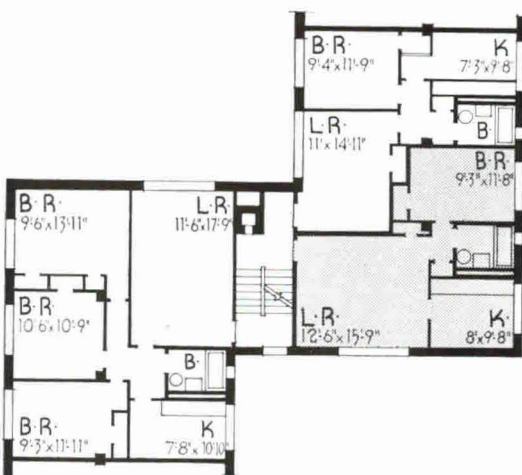
3 ROOMS, 4 ROOMS, CORNER.
FAIRFIELD COURT (P. 368-369)



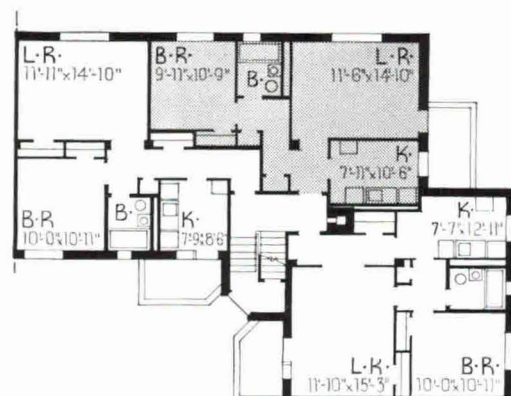
3 ROOMS, 2 ROOMS, 3 ROOMS, CORNER.
FAIRFIELD COURT



3 ROOMS, 3 ROOMS, 3 ROOMS, CORNER.
PARKLAWN (P. 400-401)

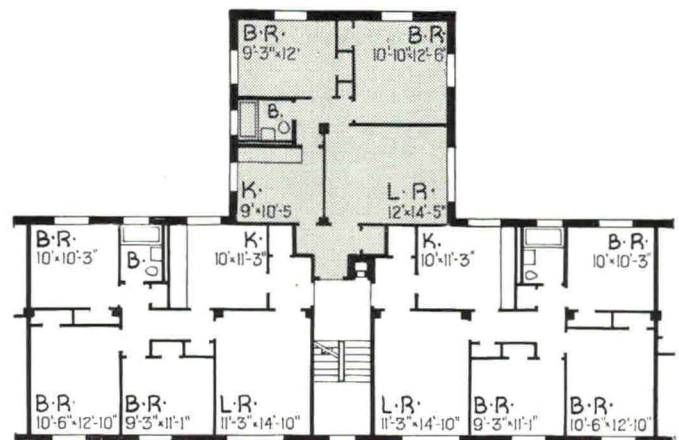
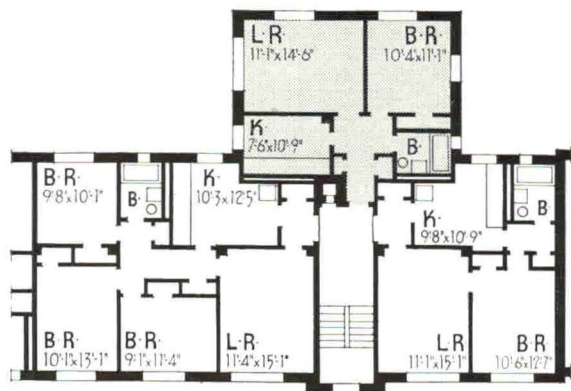
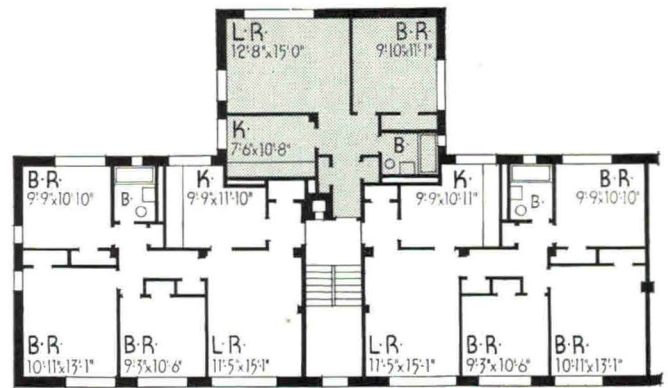
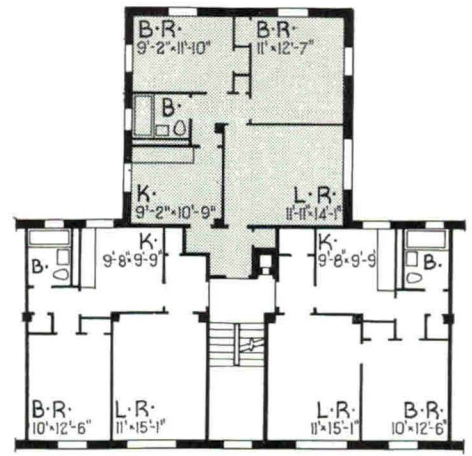
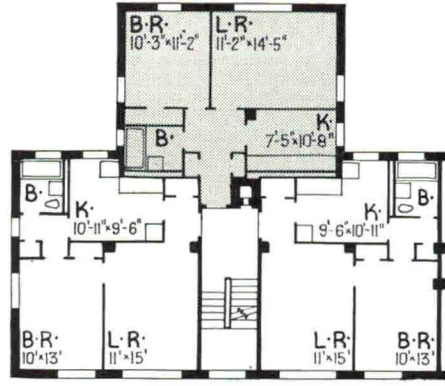
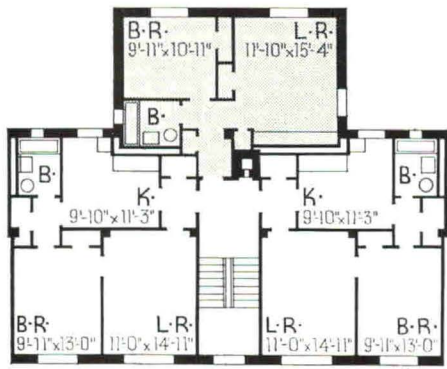


5 ROOMS, 3 ROOMS, 3 ROOMS, OFFSET.
WESTFIELD ACRES (P. 372-375)



3 ROOMS, 3 ROOMS, 3 ROOMS, OFFSET.
UNIVERSITY TERRACE, COLUMBIA, S. C.

APARTMENTS



NEW YORK WILLIAMSBURG HOUSES, BROOKLYN



ARCHITECTS: Chief, Richmond H. Shreve; Associates, James F. Bly, Matthew W. Del Gaudio, Arthur C. Holden, William Lescaze, Samuel Gardstein, Paul Trapani, G. Harmon Gurney, Harry Leslie Walker, John W. Ingle, Jr.; Office Manager, Irwin Clavan.

SITE: Slum; 25 acres.

BUILDING TYPE: 4-story walk-up apartments.

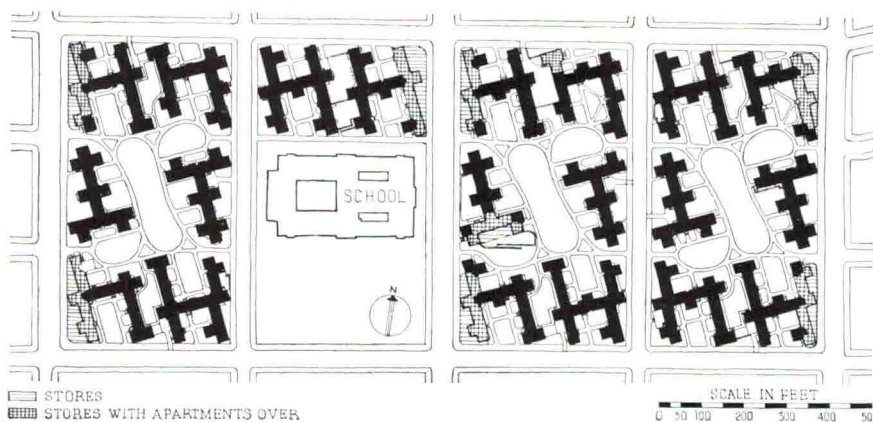
SIZE: 1,622 living units. 49 2-room; 769 3-room; 737 4-room; 67 5-room.

SITE COVERAGE: 30 per cent.

COST: Total \$12,483,193
 Land 3,945,875
 Construction 8,490,885
 Landscaping 46,433
 Construction cost per room (including Landscaping) 1,500.84

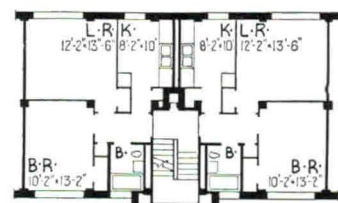
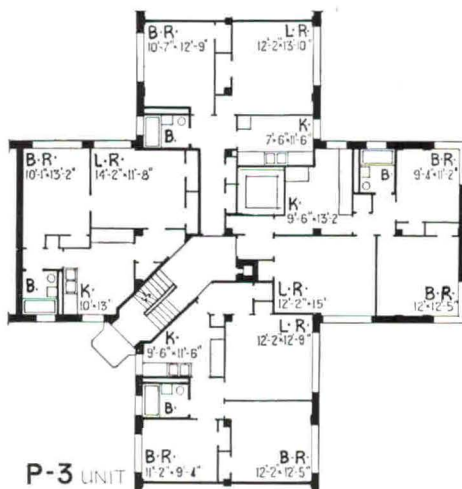
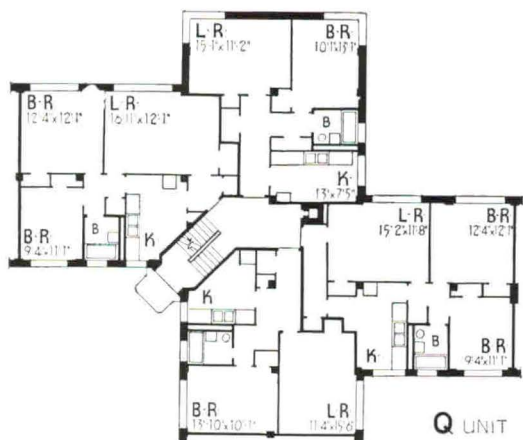
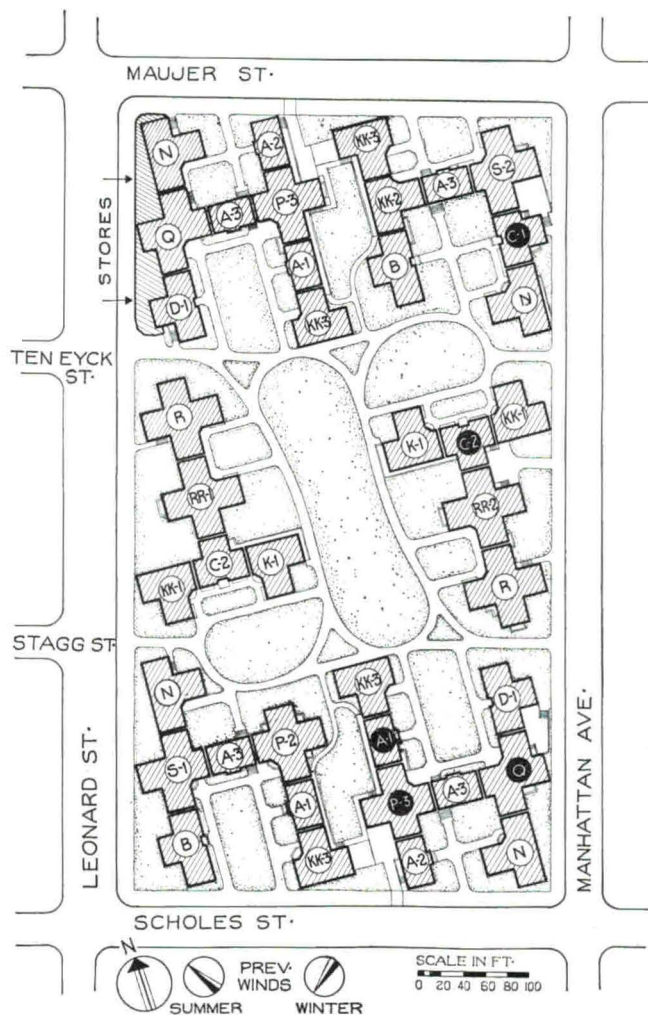
RENT: Average per room per month excluding service charge: \$7.12
 including heat, hot water, light, refrigeration and cooking: \$8.52

Ref: ARCH. FORUM, Dec. 1937, p. 495

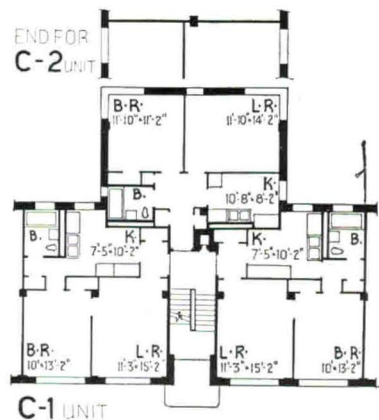




Nyholm



A-1 UNIT



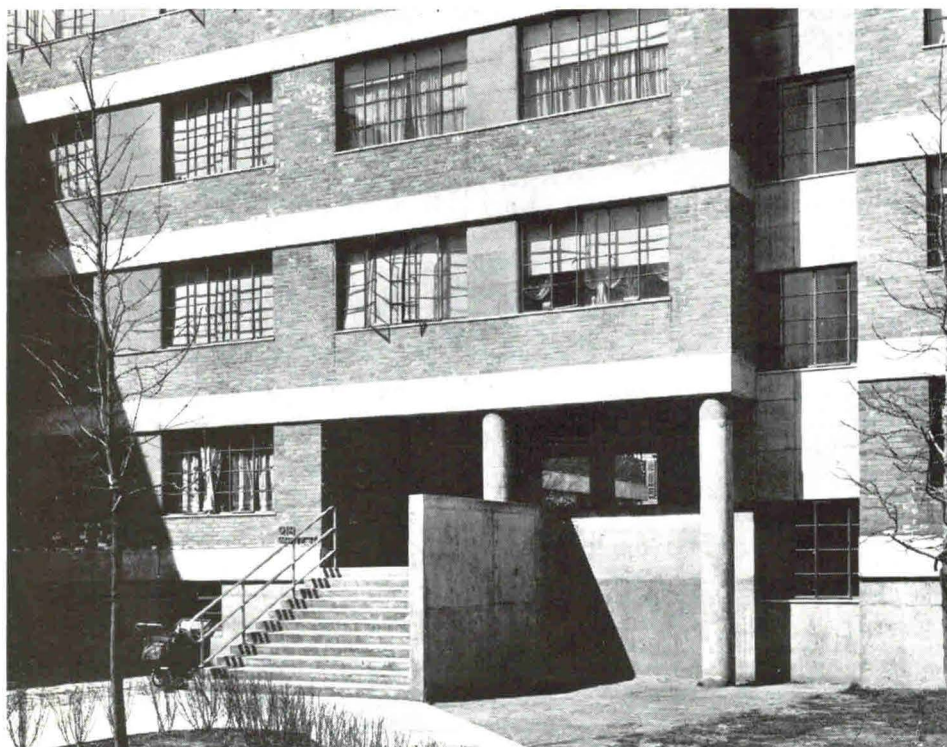
C-1 UNIT



WILLIAMSBURG HOUSES, BROOKLYN, N. Y.



Nyholm Photos





Nyholm

CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete, continuous spread footings. Floors—concrete slab, mesh reinforced, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer, clay tile curtain wall, exposed concrete spandrel beams; backup tile, National Fireproof Co.; mortar, Hi-Test Cement Co. Waterproofing—asphalt on tile. Stone trim—Dextone Co. Wood base and plaster walls. Aluminum sills, C. E. Halback Co. Interior partitions—2 in. solid plaster with 3 or 4 in. around baths, stairhalls and between units. Stairhall tile, National Fireproofing Co. Floor construction—solid concrete girderless slab skeleton. Ceilings—painted.

ROOF: Same as for floor, covered with 5-ply composition slag roof.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Celotex Corp. Weatherstripping—Cosmopolitan Weather Strip Co. **WINDOWS:** Steel sash casement type, De-

troit Steel Products Co. Glass: Store fronts polished plate, Pittsburgh Plate Glass Co. Glass brick—Corning Glass Works.

STAIRS: Pan type, cement fill, cast iron safety treads, C. E. Halback Co.

FLOORS: Living rooms, bedrooms and halls—wood laid in mastic on concrete. Kitchen—linoleum. Bathrooms—ceramic tile, Trent Tile Co.

WALL COVERINGS: Living rooms, bedrooms and halls—plaster, U. S. Gypsum Co. Kitchen and bathrooms—Keene's cement, Best Bros. Keene's Cement Co.

WOODWORK: Wood doors, Weisberg-Baer Co.

HARDWARE: Interior and exterior—P. & F. Corbin Co.

PAINTING: Interior walls, trim and sash—lead and oil. Ceilings—concrete paint. Exterior sash—lead and oil.

ELECTRICAL INSTALLATION: Rigid steel conduit, General Electric Co. Wire, Circle Wire & Cable Co. Fixtures, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Stove—electric, Edison General Electric Co. Refrigerator—

electric, Westinghouse Electric & Mfg. Co. Sink—Standard Sanitary Mfg. Co. Cabinet—wood, Weisberg-Baer Co.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—Philip Carey Co.

PLUMBING: Pipes: Cast iron—U. S. Pipe & Foundry Co. and Central Foundry Co. Wrought iron—Reading Iron Co., A. M. Byers Co. Steel—National Tube Co. Brass—Bridgeport Brass Co.

HEATING: Central steam type system. Boiler—portable steel, L. P. firebox, Farrar & Trefts, Inc. Fuel—oil, rotating cup burner, ray and preferred; semi-automatic combination control, preferred. Radiators—cast iron tubular, H. W. pattern, National Radiator Corp. and American Radiator Co. Radiator valves and traps—C. A. Dunham Co. Automatic heat control, C. A. Dunham Co. Generators—H. W., Patterson-Kelley.

SPECIAL EQUIPMENT: Incinerators—Pyronel—J. C. Rochester Co., Inc.

NEW YORK BAKER HOMES, LACKAWANNA



ARCHITECTS: Chief, Harry F. Hudson; Associates, Paul H. Hudson, James W. Kidney.

SITE: Vacant; 12 acres.

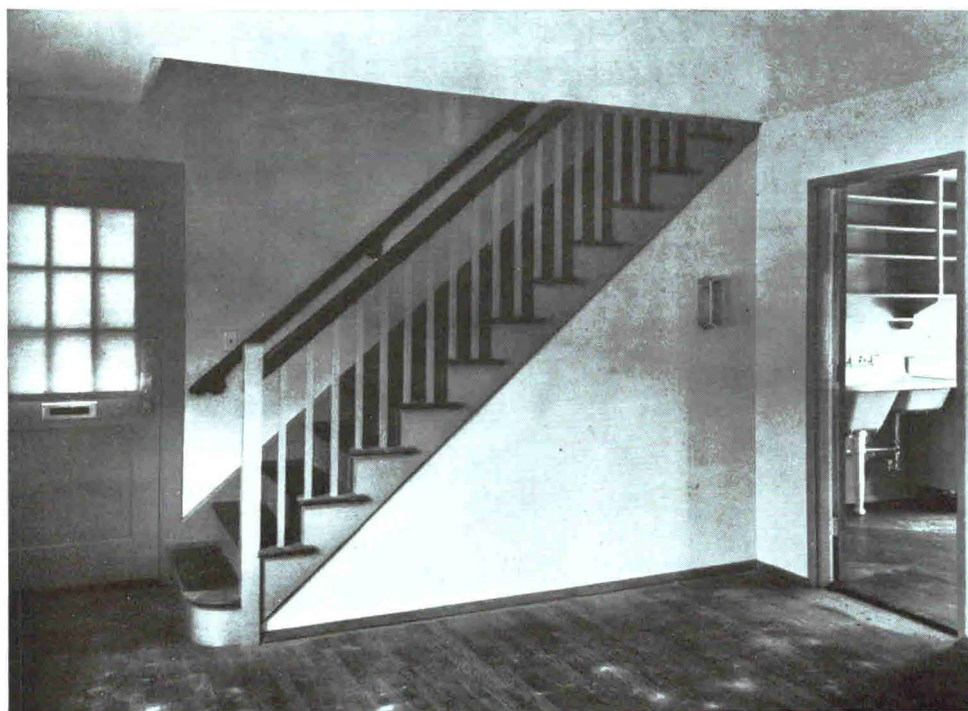
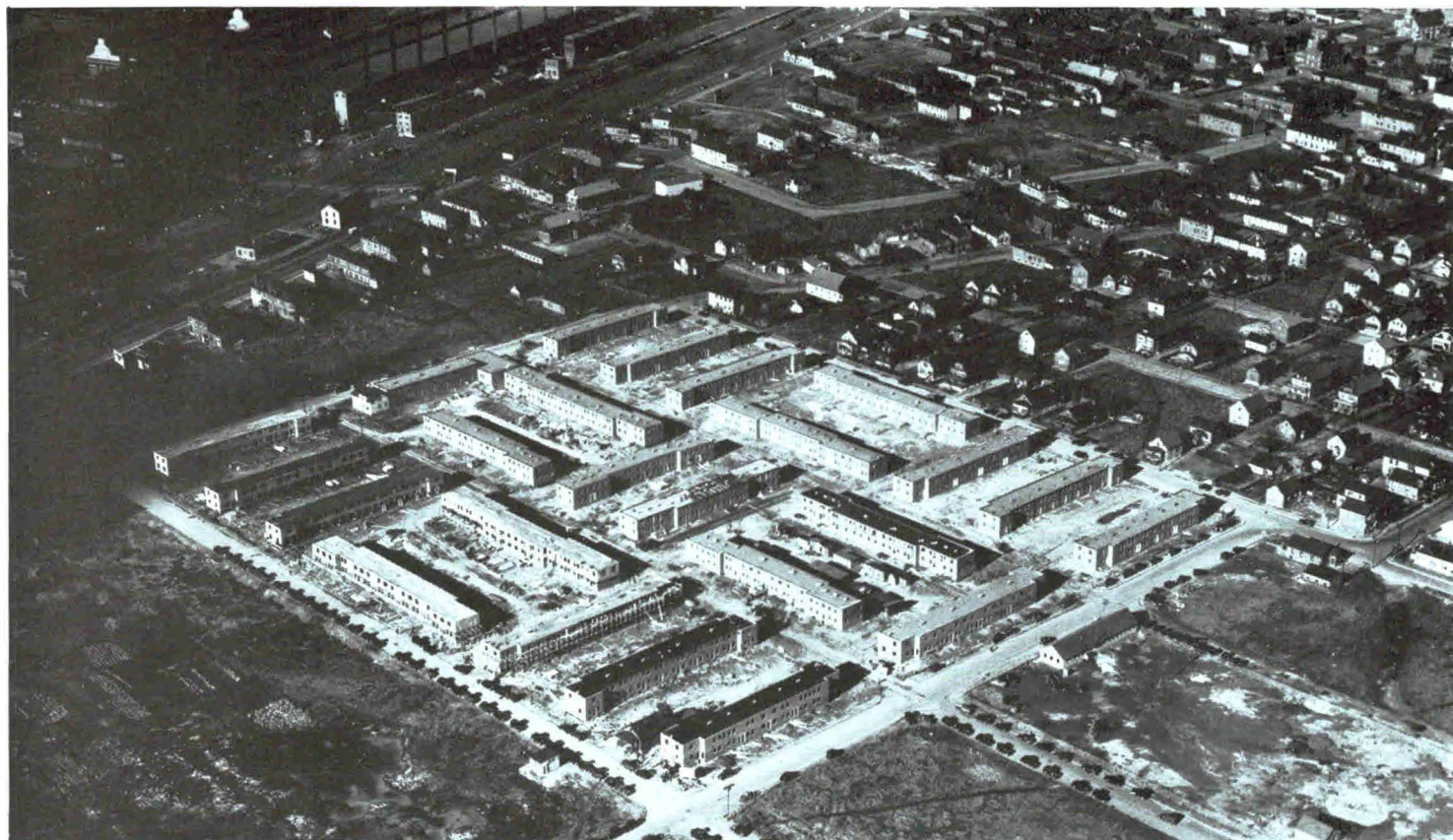
BUILDING TYPES: 2-story row houses and 2-story flats.

SIZE: 271 living units. 66 3-room; 125 4-room; 68 5-room; 12 6-room.

COST: Total \$1,428,367
 Land 76,256
 Construction 1,329,000
 Landscaping 23,111
 Construction cost per room
 (including Landscaping): 1,218.11

RENT: Not yet fixed. Construction incomplete.

See page 353 for unit plans.



Appleton Studio

CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick veneer on $\frac{3}{4}$ in. sheathing covered with building paper on 2×4 in. studs; inside gypsum lath and plaster. Sills—stone, Woolery Stone Co. Metal copings and flashing, Philip Carey Co. Interior partitions—frame, plastered on gypsum lath and 8 in. terra cotta tile firewalls between units, Central Clay Co. Floor construction—wood joists.

ROOF: Wood rafters covered with $\frac{3}{4}$ in. sheathing, 4-ply asphalt roofing, Philip Carey Co.

INSULATION: Roof—Rocktex bats between roof rafters, Philip Carey Co. Weatherstripping—J. J. Graciano.

WINDOWS: Metal casements and screens, Hopes Windows, Inc. Glass—Libbey-Owens-Ford Glass Co., American Window Glass Co. and Blue Ridge Glass Co.

STAIRS: Wood, Serley Sash & Door Co.

FLOORS: All rooms and porches—wood, Serley Sash & Door Co., except ceramic tile in bathrooms, Sparta Ceramic Tile Co.

WOODWORK: Interior doors—wood, Washington Door Co.

HARDWARE: Lockwood Hardware Mfg. Co. **PAINTING:** Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rigid steel conduit, General Electric Co. Outlet boxes—Sterling Mfg. Co. Rubber insulated wire and flush toggle switches—General Electric Co. Fixtures—Pass & Seymour.

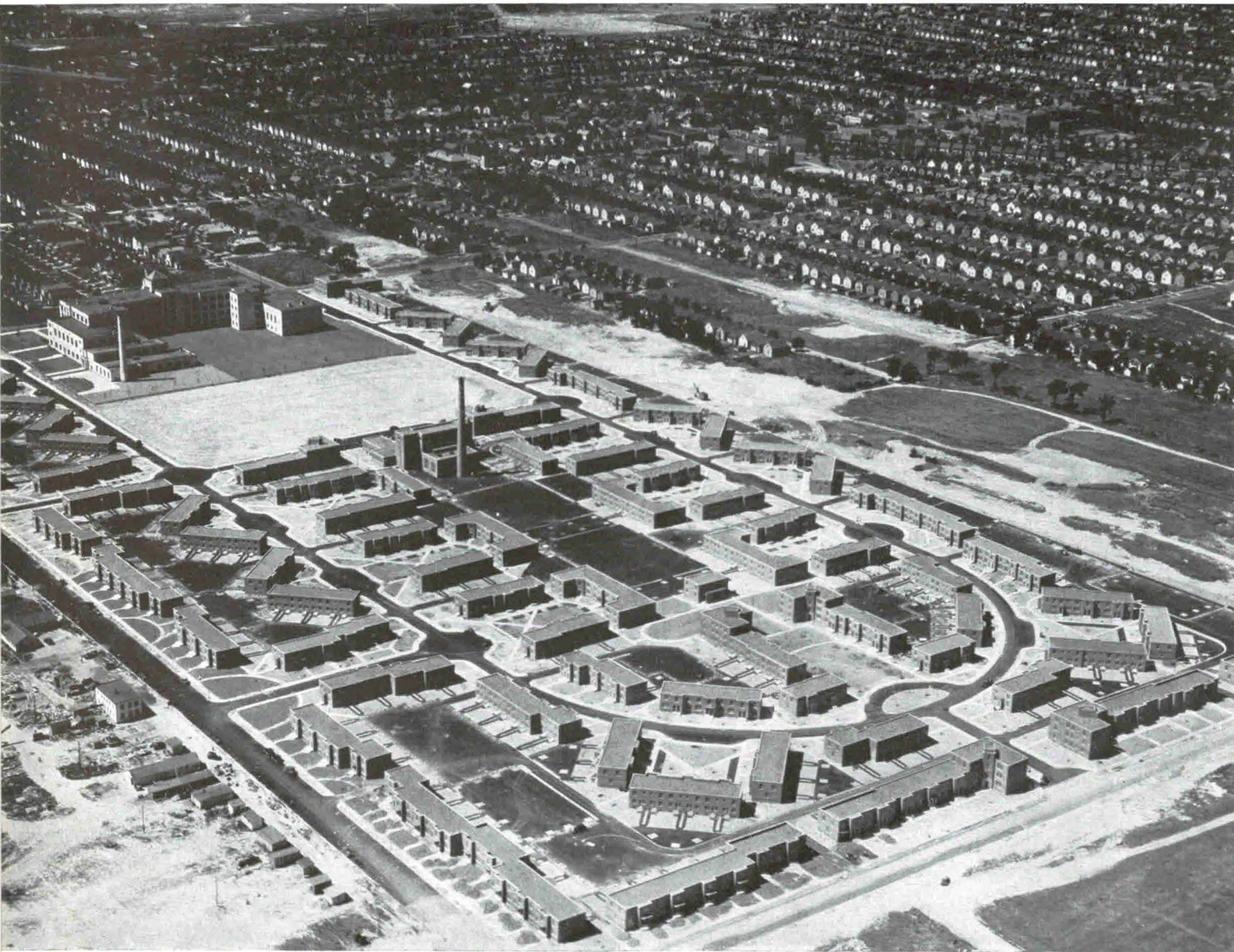
KITCHEN EQUIPMENT: Range—gas, J. Rose & Co., Inc. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—Standard Sanitary Mfg. Co.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes: Cast iron—Buffalo Pipe & Foundry Co. and Medina Iron & Brass Co. Wrought Iron—Cohoes Co. Steel—Bethlehem Steel Corp. Copper tubing—Chase Brass & Copper Co.

HEATING: Individual warm air heaters; coal, hand fired. Combination gas H. W. heater, Hedges, Walsh & Wiedner.

NEW YORK KENFIELD HOUSING, BUFFALO



ARCHITECTS: Chief, Chester Oakley; Associates, Robert North, Mortimer J. Murphy, Paul F. Mann, Fred R. Hopkins, Earl Martin, Louis Greenstein, George J. Dietel, Albert A. Rumschik.

SITE: Vacant; 46 acres.

BUILDING TYPES: 3-story apartments, 2-story row houses, and 2-story flats.

SIZE: 656 living units; 120 3-room; 290 4-room; 246 5-room.

SITE COVERAGE: 25 per cent.

COST: Total	\$4,285,437
Land	286,097
Construction	3,939,722
Landscaping	59,618

Construction cost per room (including Landscaping)	\$1,451.13
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RENT: Average per room per month excluding service charge: \$5.19
including heat, hot water, light, refrigeration and cooking: \$7.00
See page 352 for unit plans.



CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick veneer and hollow tile, Acme Shale Brick Co., asphalt dampproofing on backup walls. Interior partitions—2 in. solid plaster, 3 and 4 in. tile partitions. Stairhalls—4 in. salt glazed tile, National Fireproofing Co. Plaster—Certain-teed Products Corp. and U. S. Gypsum Co. Floor construction—concrete slab and beam. Ceilings—finished concrete, painted.

ROOF: Covered with composition 5-ply.

SHEET METAL WORK: Flashing and gutters—16 oz. copper.

INSULATION: Roof—Celotex Corp. Weatherstripping, Pyramid Metal Co.

WINDOWS: Metal casements and screens, Truscon Steel Co. Glass—double strength,

quality B, Blue Ridge Glass Co. and Libbey-Owens-Ford Glass Co.

STAIRS: Metal pan type, General Bronze Corp. Treads—asphalt tile.

FLOORS: Main rooms—asphalt tile, Thomas Moulding Tile Co. Kitchen—linoleum. Bathrooms—ceramic tile, National Tile Co.

WOODWORK: Shelving and doors—Hyde-Murphy Co.

HARDWARE: Interior and exterior—Lockwood Hardware Mfg. Co.

PAINTING: Interior walls, trim and sash and exterior sash—lead and oil.

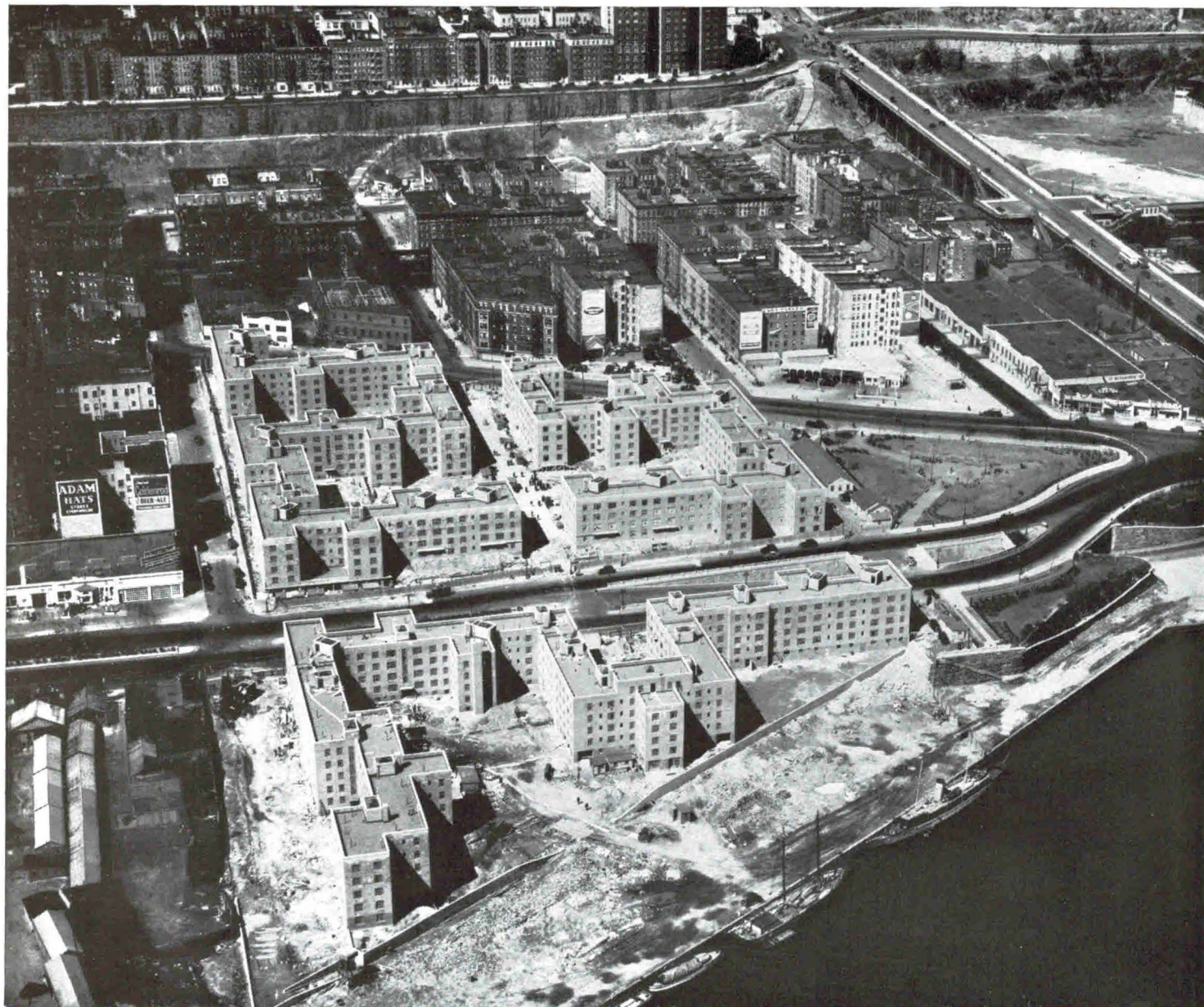
ELECTRICAL INSTALLATION: Rigid steel conduit—National Electric Products Corp. Rubber insulated wire—General Cable Co. Outlet boxes—General Electric Co. Switches—flush toggle, Bryant Electric Co. Fixtures—Pass & Seymour.

KITCHEN EQUIPMENT: Range—electric, Edison, General Electric Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—combination, Crane Co. Cabinet—wood, Hyde-Murphy Co.

BATHROOM EQUIPMENT: All fixtures by Crane Co. Cabinet—metal, Philip Carey Co. **PLUMBING:** Pipes: Cast iron—Buffalo Pipe & Foundry Co. Wrought iron—Republic Steel Co. Steel—Bethlehem Steel Corp. and Republic Steel Co. Brass and copper tubing—Chase Brass & Copper Co.

HEATING: Central steam type. Boiler—bent water tube, Babcock & Wilcox Co. Fuel—coal, automatic combustion control, A. W. Cash; underfeed stoker, Riley. Radiators—cast iron, H. W. pattern, American Radiator Co. Valves and traps and automatic heat control, C. A. Dunham Co. Hot water generators—Ross Heater & Mfg. Co.

NEW YORK HARLEM RIVER HOUSES, NEW YORK



ARCHITECTS: Chief, Archibald Manning Brown; Associates, Horace Ginsbern, Charles F. Fuller, John Louis Wilson, Frank J. Forster, Will Rice Amon, Richard W. Buckley.

SITE: Vacant; 9 acres.

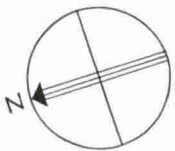
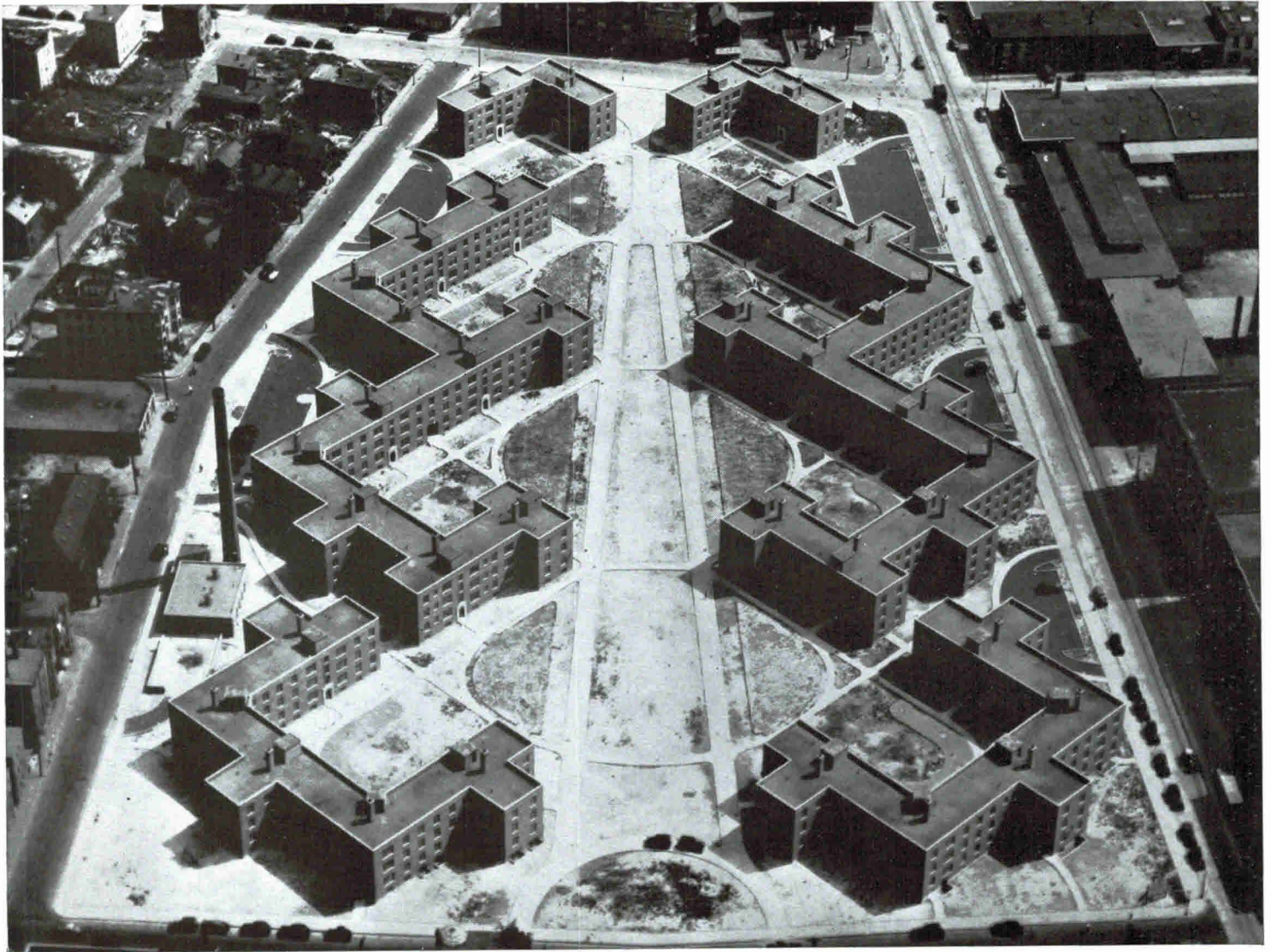
BUILDING TYPES: 4 and 5-story walk-up apartments.

SIZE: 574 living units, 60 2-room; 259 3-room; 232 4-room; 23 5-room.

COST: Total \$3,897,458
 Land 1,128,384
 Construction 2,739,664
 Landscaping 29,410
 Construction cost per room
 (including Landscaping): 1,427.36

RENT: Average per room per month
 excluding service charge: \$7.10
 including heat, hot water, light,
 refrigeration and cooking: \$8.52
 See page 451, for Construction Outline.
 Ref: ARCH. FORUM, Dec. 1937, p. 500-502.

NEW TOWNE COURT, CAMBRIDGE MASSACHUSETTS



ARCHITECTS: Chief, Henry C. Robbins; Associates, Chester Lindsay Churchill, Andrew H. Hepburn, I. Howland Jones, Isidor Richmond, John W. Ames, Jr., Charles R. Greco.

SITE: Slum; 9 acres.

BUILDING TYPE: 3-story apartments.

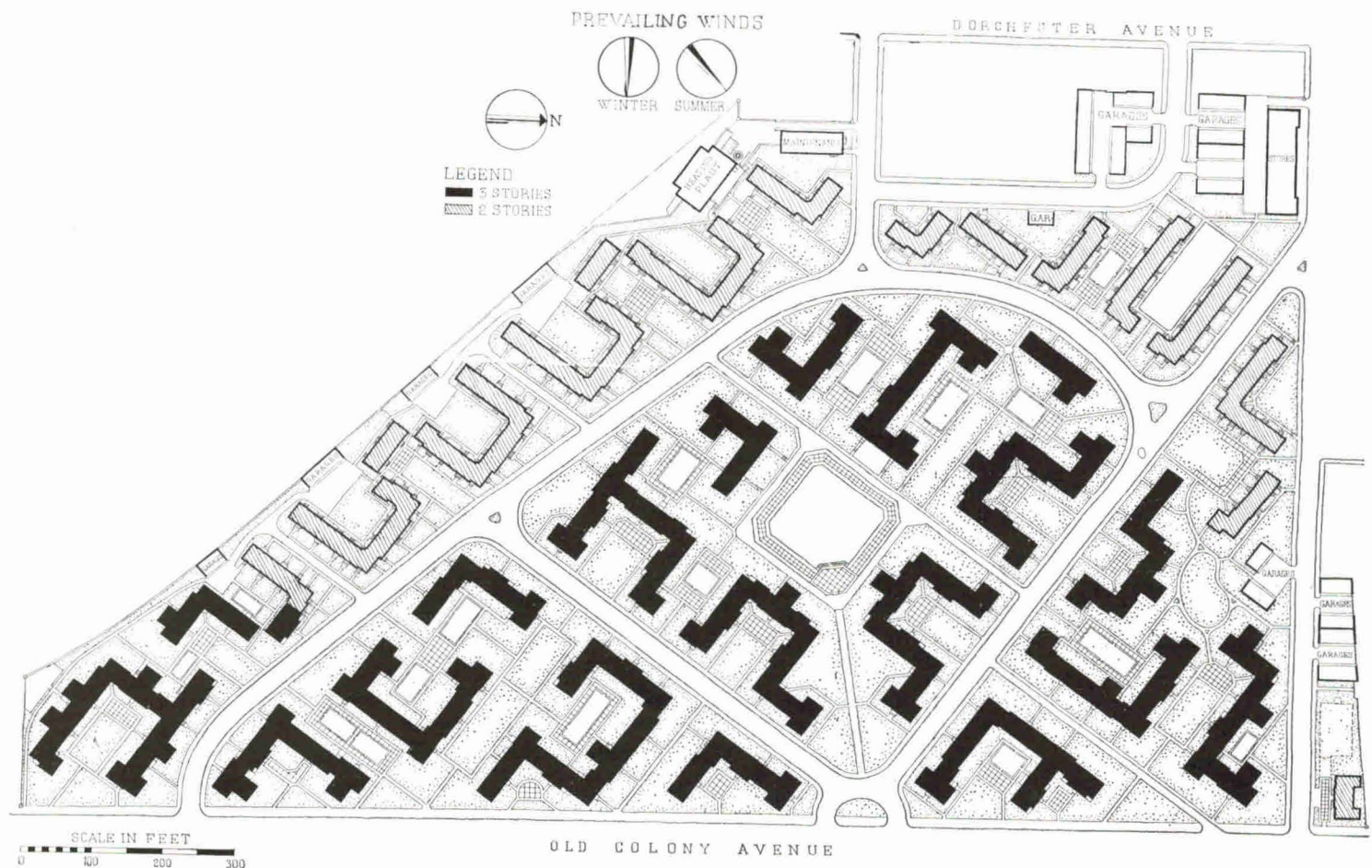
SIZE: 294 living units. 92 3-room; 114 4-room; 88 5-room.

SITE COVERAGE: 20 per cent.

COST: Total	\$2,255,458
Land	853,624
Demolition	32,820
Construction	1,369,014
Landscaping	17,503
Construction cost per room (including Landscaping)	\$1,183.03

RENT: Average per room per month excluding service charge: \$4.64
including heat, hot water, refrigeration and cooking: \$6.75
See pages 354 and 355 for unit plan.
See page 451 for Construction Outline.

MASSACHUSETTS OLD HARBOR VILLAGE, BOSTON





ARCHITECTS: Chief, Joseph D. Leland; Associates, Niels H. Larsen, James Ford Clapp, Davis W. Clark, Jr., Howard T. Clinch, Frank W. Crimp, Maurice Feather, J. Lovell Little, George S. McLaughlin, William Stanley Parker, Charles A. Whittemore, Felix A. Burton, Walter E. Campbell, F. Trevor Hogg, Eleanor Manning O'Connor, Alexander Scholtes.

SITE: Vacant; 31 acres.

BUILDING TYPES: 3-story apartments and 2-story row houses.

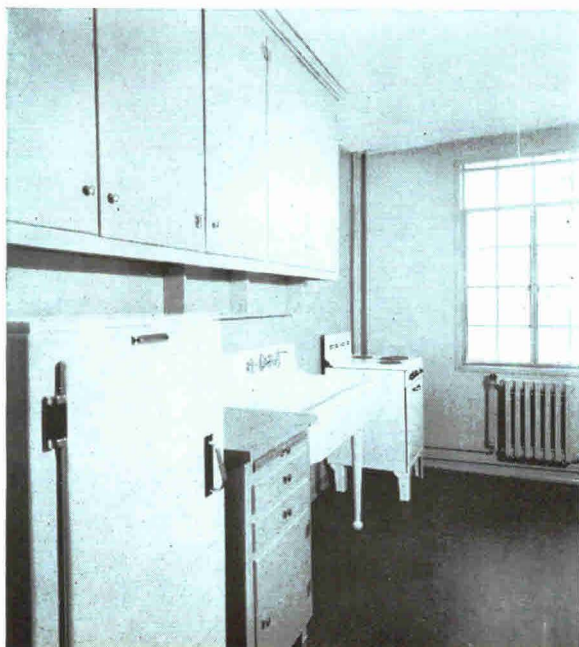
SIZE: 1,016 living units, 413 3-room; 4 3½ room; 442 4-room; 23 4½-room; 134 5-room.

SITE COVERAGE: 20 per cent.

COST: Total	\$5,838,698
Land	520,079
Construction	5,257,919
Landscaping	60,700
Construction cost per room (including Landscaping),	1,377

RENT: Average per room per month
excluding service charge: \$4.93
including heat, hot water, light,
refrigeration and cooking: \$6.75

SPECIAL FEATURES: Available to all tenants are 25 conveniently located laundry rooms equipped with wash tubs, hot plates, ironing boards and drying rooms; and 6 recreation and social rooms. The "½" room referred to is a child's small sleeping room. See pages 352 and 355 for unit plans. See page 451 for Construction Outline.



CONNECTICUT FAIRFIELD COURT, STAMFORD



ARCHITECTS: Chief, William J. Provoost; Associates, David C. Sanford, Jr., Nelson E. Emmons.

SITE: Vacant; 5 acres.

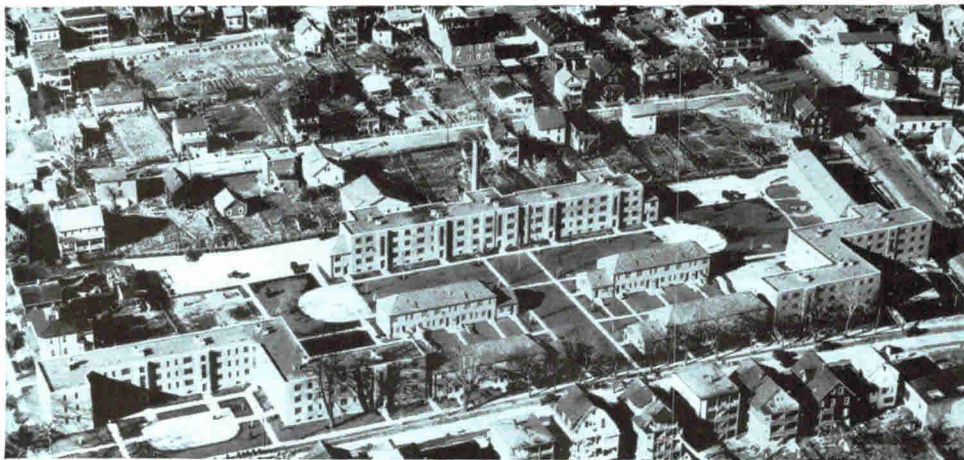
BUILDING TYPES: 3-story apartments and 1 and 2-story row houses.

SIZE: 146 living units; 18 2-room; 72 3-room; 33 4-room; 23 5-room.

COST: Total \$772,195
 Land 67,664
 Construction 690,741
 Landscaping 13,790
 Construction cost per room (including Landscaping): 1,411.88

RENT: Average per room per month excluding service charge: \$5.82
 including heat, hot water, light, refrigeration and cooking: \$8.77

See pages 354 and 355 for unit plans.



CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete to grade, 4 in. brick, 8 in. concrete grade to 1st floor, continuous spread footings. Floor—concrete, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer and clay tile backup, National Fireproofing Co.; asphalt dampproofing on backup walls which are plastered; metal base, Knapp Bros.; aluminum sills, Stillwell Iron; stone door sills and copings. Waterproofing—membrane. Interior partitions—2 in. solid plaster, 3 or 4 in. tile partitions, New Jersey Hollow Tile Co. Apartment stairhall—salt glazed brick, Cambria Clay Products Co. Floor construction—concrete slab and beam. Ceiling—finished concrete, painted; 2nd floor plaster on metal lath and wood joists.

ROOF: Concrete slab and beam covered with composition 5-ply for flat roofs; wood trussed rafters covered with slate for sloping roofs, Rising & Nelson Slate Co.

SHEET METAL WORK: Flashing, gutters, leaders and downspouts—16 oz. copper.

INSULATION: Attic floor and roof—Johns-Manville. Weatherstripping—spring bronze and brass or bronze thresholds.

WINDOWS: Metal casements and screens—J. S. Thorn Co. Glass—double strength, quality A and B, Fourco Glass Co., American Window Plate Co., Pittsburgh Plate Glass Co. and Mississippi Glass Co.

STAIRS: Metal pan type, cement filled treads and platforms, Stillwell Iron Works. Asphalt tile finished treads.

FLOORS: Main rooms—asphalt tile, Armstrong Cork Products Co. Kitchen—linoleum. Bathrooms—ceramic tile, Architectural Tiling Co. Porches—cement.

WALL COVERINGS: All rooms—plaster, U. S. Gypsum Co., except kitchen and bathrooms—Keene's cement, American Cyanamid Chemical Corp.

WOODWORK: Shelving, cabinets and doors—Wood, Brockway, Smith, Hugh Lovell Co.

HARDWARE: Interior and exterior—Yale & Towne Mfg. Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Lighting—1 phase, 3 wire; power—3 phase, 3 wire. Rigid steel conduit—Youngstown Sheet & Tube. Outlet boxes—National Electric Products, Inc. Switches—flush toggle, Bryant Electric Co. Fixtures—porcelain and open glass shade direct, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—electric, Edison General Electric Appliance Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Kohler Co. Cabinet—wood, Farley & Loetscher Mfg. Co.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures by Kohler Co.

PLUMBING: Pipes: Cast iron—Central Foundry Co. Wrought iron—Reading Iron Co. Steel—Spang—Chalfont Co. Brass and copper tubing—American Brass Co.

HEATING: Central steam type. Boiler—straight L. P. water tube, International. Fuel—oil; rotating cup burner and semi-automatic combustion control, Petroleum Heat & Power.

SPECIAL EQUIPMENT: Incinerators—Lambert-Sawyer Co.

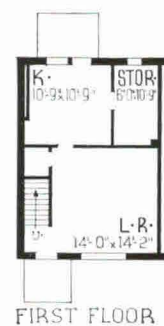
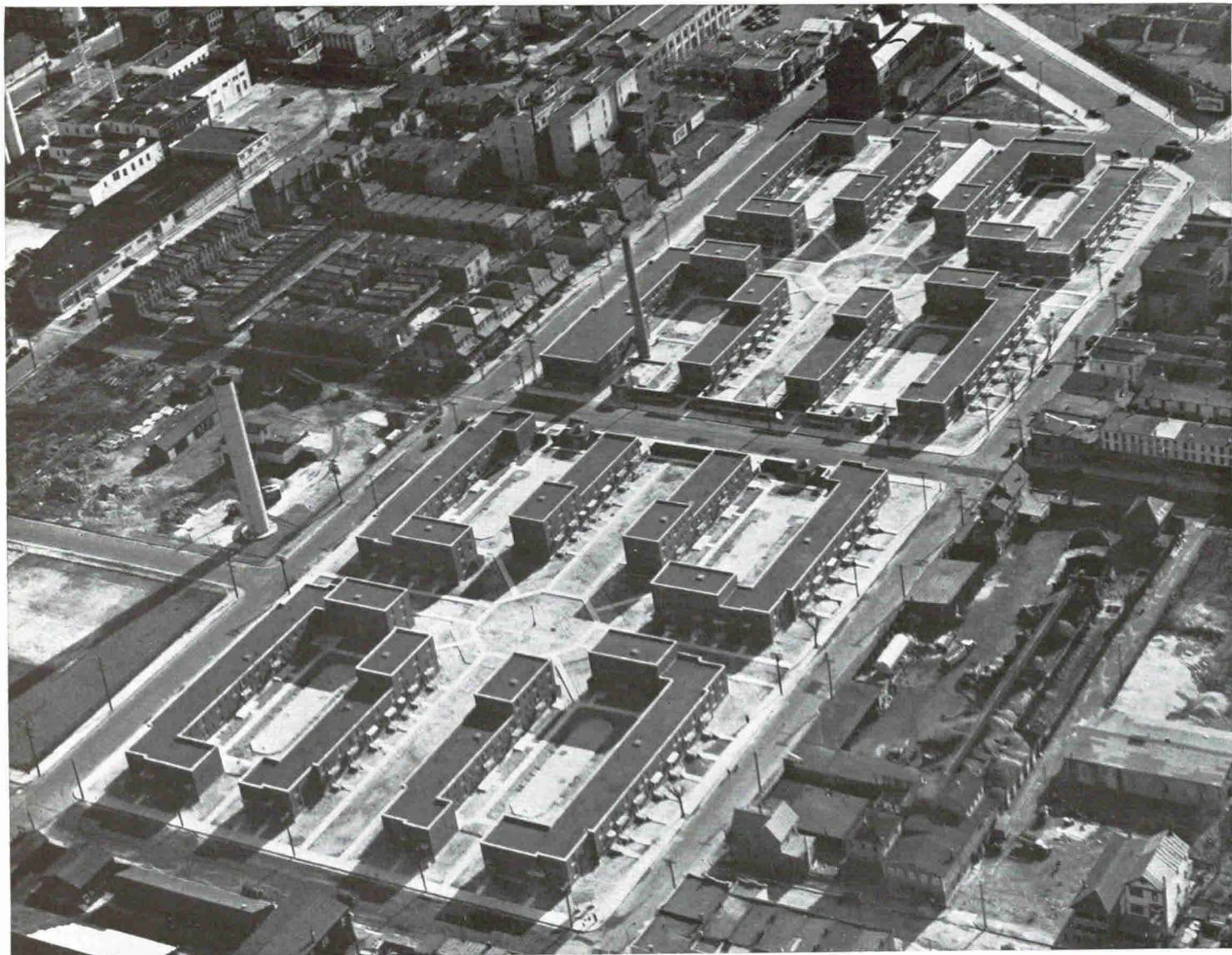


Dayton Snyder

TYPICAL KITCHEN



Dayton Snyder

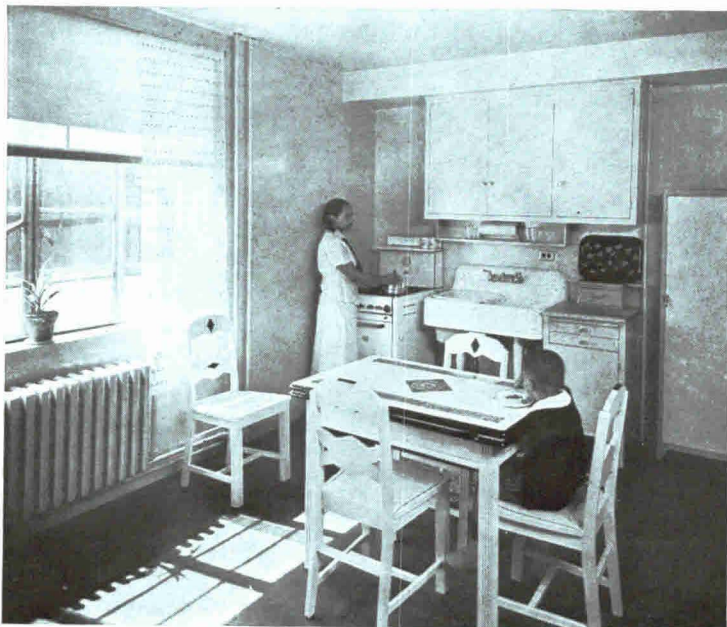


ARCHITECTS: Chief, J. Vaughn Mathis; Associates, Vivian B. Smith, Herman Turon.
SITE: Slum; 8 acres.
BUILDING TYPES: 2- and 3-story row houses and 2- and 3-story flats.
SIZE: 277 living units; 184 3-room; 89 4-room; 4 5-room.

COST: Total
 Land
 Demolition
 Construction
 Landscaping

\$1,396,150
 252,510
 1,350
 1,119,977
 22,313

Construction cost per room
 (including Landscaping) : \$1,230.91
RENT: Average per room per month
 excluding service charge: \$5.51
 including heat, hot water, light,
 refrigeration and cooking: \$8.08
 See page 353 for unit plan.



**TYPICAL
KITCHEN**

CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete, pile footings. Floor—concrete slab, mesh reinforced, 6 in. stone or gravel fill. Waterproofing—metallic type inside wall of meter rooms, exterior of heating plant, floors of meter rooms and boiler plant.

STRUCTURE: Exterior walls—brick veneer and concrete block backup, Concrete Block Corp.; asphalt dampproofing on backup walls. Partitions—2 in. solid plaster, 3 in. concrete block, Concrete Block Corp. Floor construction—concrete slab and beam, reinforced by Concrete Steel Co.

ROOF: Construction—concrete slab and beam, covered with composition 5-ply.

CHIMNEY: Radial brick, Alphons Custodis.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Armstrong Cork Products Co. Weatherstripping—spring bronze and brass or bronze thresholds, Chamberlin Metal Weather Strip Co.

WINDOWS: Metal casements, Truscon Steel Co. Glass—double strength, quality B, Mississippi Glass Co. and Pittsburgh Plate Glass Co.

STAIRS: Metal pan type, metal risers and wall stringers, cement filled treads and intermediate platforms, Cornell Iron Studios.

FLOORS: Main rooms—asphalt tile, Uvalde Rock Asphalt Co. Kitchen—linoleum. Bathrooms—ceramic tile, New Jersey Porcelain Co.

WALL COVERINGS: Main rooms—plaster. Kitchens and bathrooms—Keene's cement plaster.

WOODWORK: Shelving and doors—Somers Lumber Co.

HARDWARE: Interior and exterior—P. & F. Corbin Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Lighting—1 phase, 3 wire; power—3 phase, 3 wire. Rubber insulated wire, Crescent Insulated Wire Co. Outlet boxes, Jefferson Electric Co. Rigid steel conduit, Youngstown Steel & Tube Co. Switches—flush toggle. Fixtures—Porcelain open and enclosed.

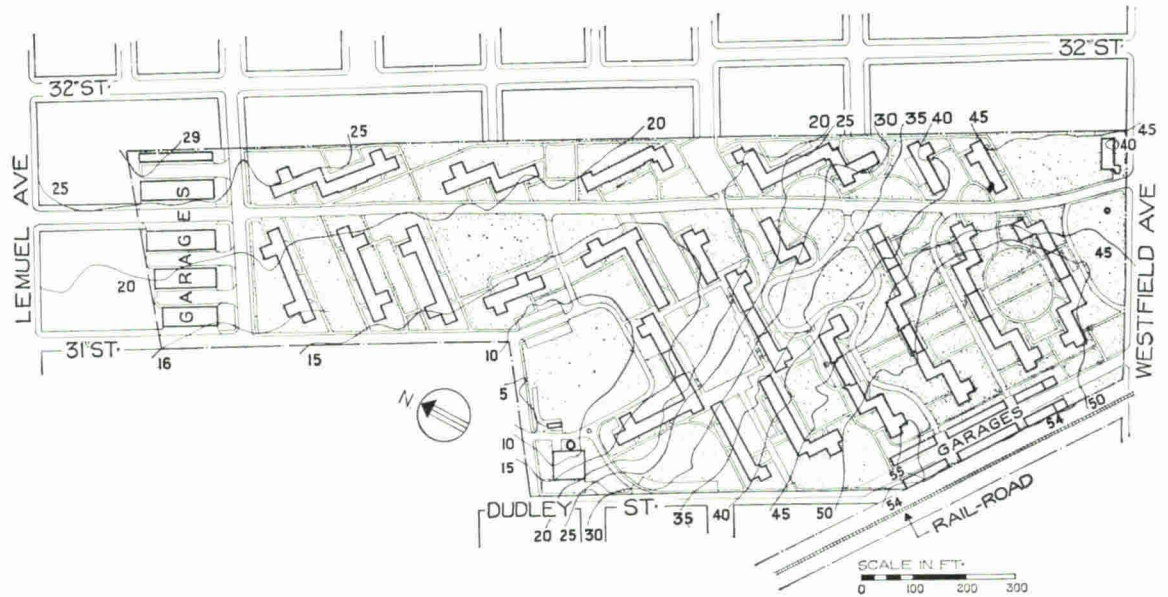
KITCHEN EQUIPMENT: Range—Crown Stove Works. Refrigerator—Westinghouse Electric & Mfg. Co. Sink and laundry tray—combination, Kohler Co. Cabinet—Excel Metal Cabinet Co.

BATHROOM EQUIPMENT: All fixtures—Kohler Co.

HEATING: Central hot water type. Underground Conduit—Ric-Wil. Boiler—horizontal return tubular, Titusville Iron Works Co. Fuel—coal, automatic combustion control; underfeed stoker, Detroit Stoker Co. Radiators—cast iron tubular, H. W. pattern, National Radiator Co. Automatic heat control, Minneapolis-Honeywell Regulator Co. Hot water generators—Quaker City.



WESTFIELD ACRES, CAMDEN NEW JERSEY



ARCHITECTS: Chief, Joseph N. Hettel; Associates, Clarence L. MacNelly, F. Herbert Radey, Arthur B. Gill, Oscar Stonorov, Herbert N. Moffett, Howard E. Hall, Joshua C. Jefferis, George L. J. Neutze.

SITE: Vacant; 25 acres.

BUILDING TYPE: 3-story apartments.

SIZE: 514 living units. 278 3-room; 165 4-room; 71 5-room.

SITE COVERAGE: 15 per cent.

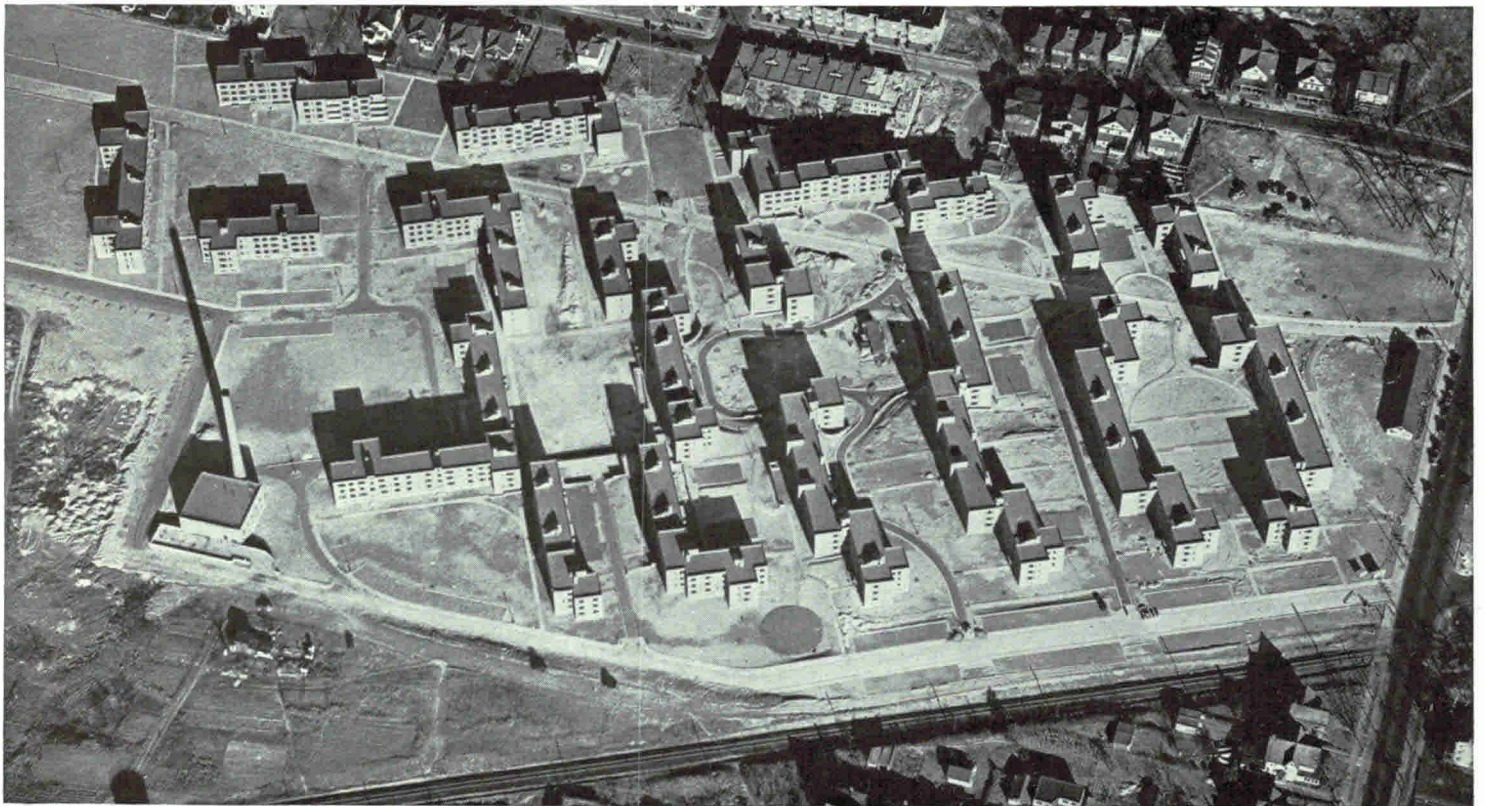
COST: Total \$2,715,033
Land 67,325
Construction 2,603,214

Landscaping \$44,494

Construction cost per room
(including Landscaping): \$1,431.96

RENT: Average per room per month excluding service charge: \$4.89
including heat, hot water, light, and refrigeration: \$7.32

SPECIAL FEATURES: Available to all tenants are ten centralized laundries located in the basements, equipped with tubs, hot plates, drying rooms and ironing boards. See pages 354, 355 and 375 for unit plans.



Opposite, F. S. Lincoln



F. S. Lincoln Photos

CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick veneer and cinder block backup, Joseph Lolli Estate; asphalt dampproofing on backup walls; metal base, Milcor Steel Co.; aluminum sills, General Bronze Corp. Clay tile butt joint coping. Interior partitions—2 in. solid plaster, 3 and 4 in. cinder concrete block, Cinder Concrete Corp. Stairhalls—4 in. face tile, West Virginia Brick Co. Floor construction—concrete slab and beam. Ceiling—finished concrete, painted.

ROOF: Same as floor construction covered with composition 5-ply.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roofs—material by Armstrong Cork Products Corp. Weatherstripping—spring bronze and thresholds, Chamberlin Metal Weather Strip Co.

WINDOWS: Metal casements and screens—Michael Flynn Mfg. Co. Glass— $\frac{1}{4}$ in. polished plate in entrance doors to apartment buildings. Window glass—double strength, quality B, Mississippi Glass Co.

STAIRS: Metal pan type, metal risers and stringers, cement filled treads and intermediate platforms, General Bronze Corp.

FLOORS: Main rooms—asphalt tile, Thomas Moulding Co. Kitchens—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Tile Co.

WOODWORK: Shelving and doors—wood, Hall Bros.

HARDWARE: Interior and exterior—Sargent & Co.

PAINTING: Interior walls, trim and sash, and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Rubber insulated wire, American Steel & Wire Co. Rigid steel conduit, Garland Mfg. Co. Outlet boxes, Allied Metal Stamping Co. Switches—toggle type, Arrow, Hart & Hegeman. Fixtures—Arrow, Hart & Hegeman.

KITCHEN EQUIPMENT: Range—electric, Edison, General Electric Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—combination, Standard Sanitary Mfg. Co.

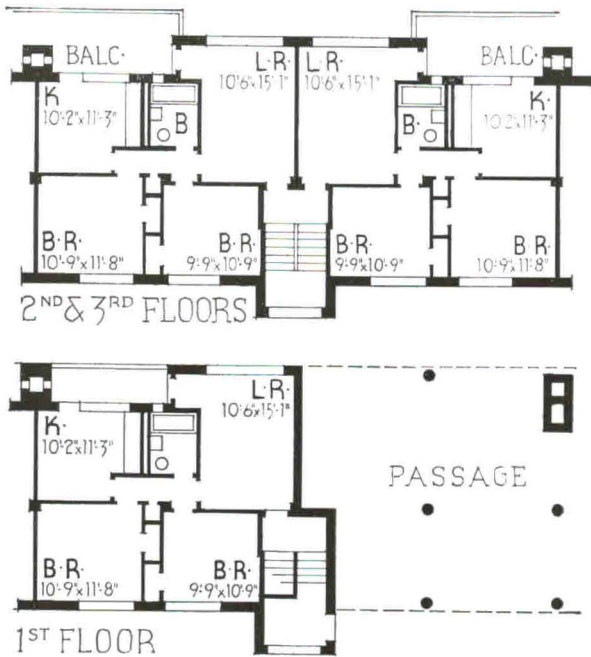
LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.

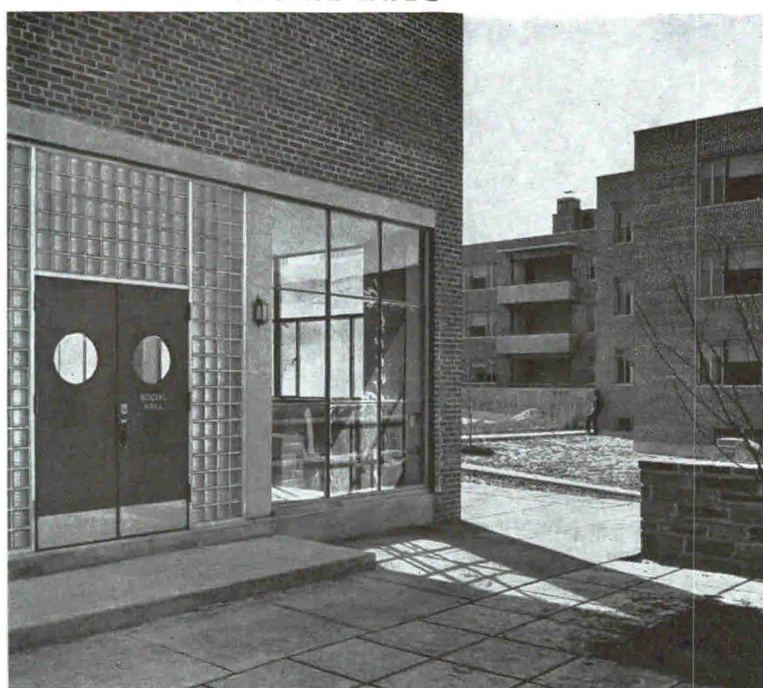
PLUMBING: Pipes: Cast iron—Crane Co. and Alabama Pipe Co. Wrought iron—Reading Iron Co. and South Chester Tube Co. Steel—South Chester Tube Co. Brass and copper tubing—Chase Brass & Copper Co., Inc.

HEATING: Steam: Moderator System, Warren Webster & Co. Underground conduit—Ric-Wil. Boiler—bent water tube, Bigelow; pressure type oil burner, Dahl. Fuel—oil; semi-automatic combustion control, Dahl. Radiators—cast iron tubular, H. W. pattern, National Radiator Co. Valves, thermostatic and drip traps—Warren Webster & Co. Hot water generators—Frank.

SPECIAL EQUIPMENT: Incinerators—Sargent Building Supply Co.

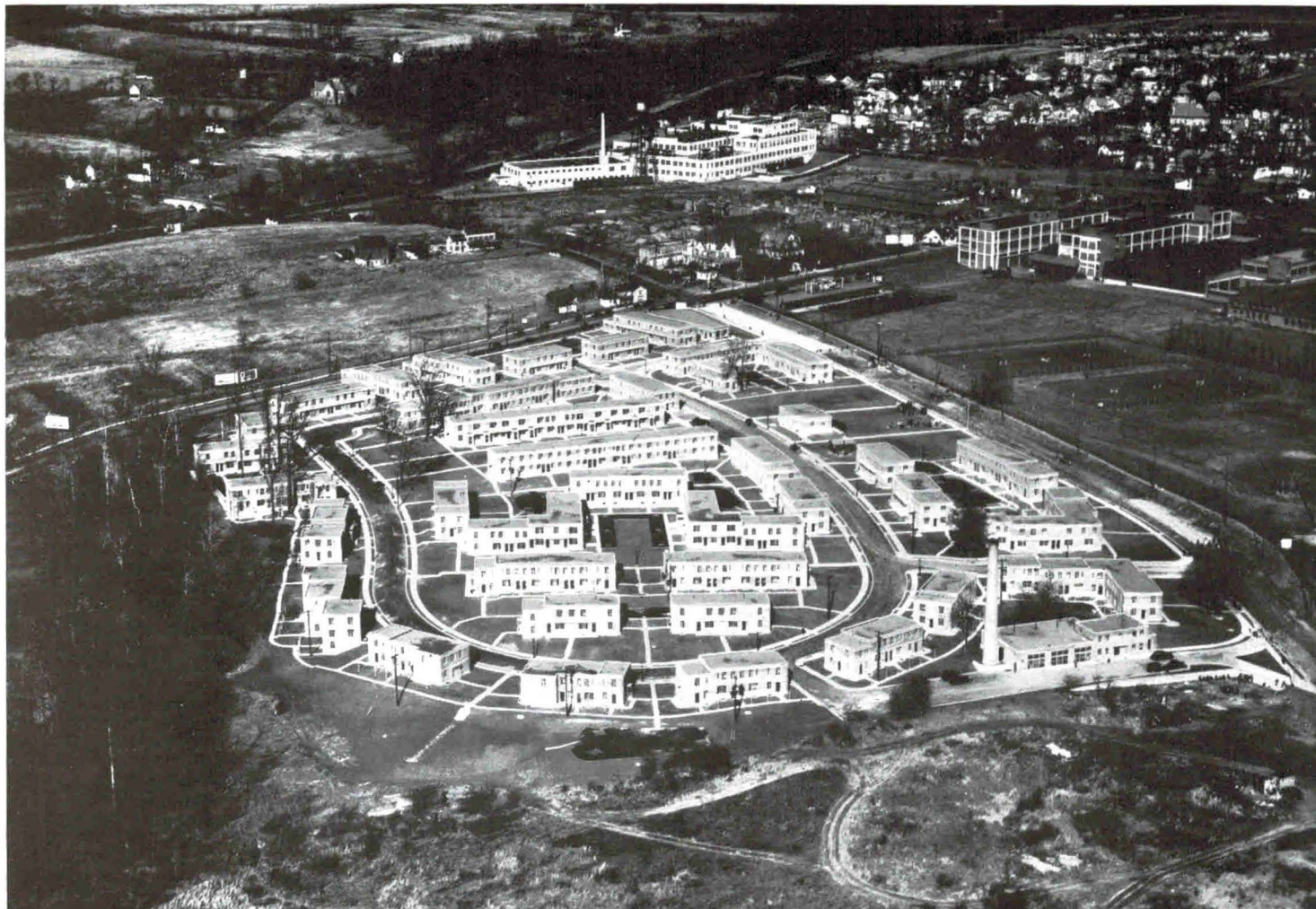


ENTRANCE SOCIAL HALL



F. S. Lincoln Photo

PENNSYLVANIA HILL CREEK, PHILADELPHIA



ARCHITECTS: Chief, Walter H. Thomas; Associates, Robert R. McGoodwin, Edmund B. Gilchrist, Clarence De Armond, Donald Folsom, Walter Antrim, Harold M. Saunders.

SITE: Vacant; 24 acres.

BUILDING TYPES: 1 and 2-story row houses and 2-story flats.

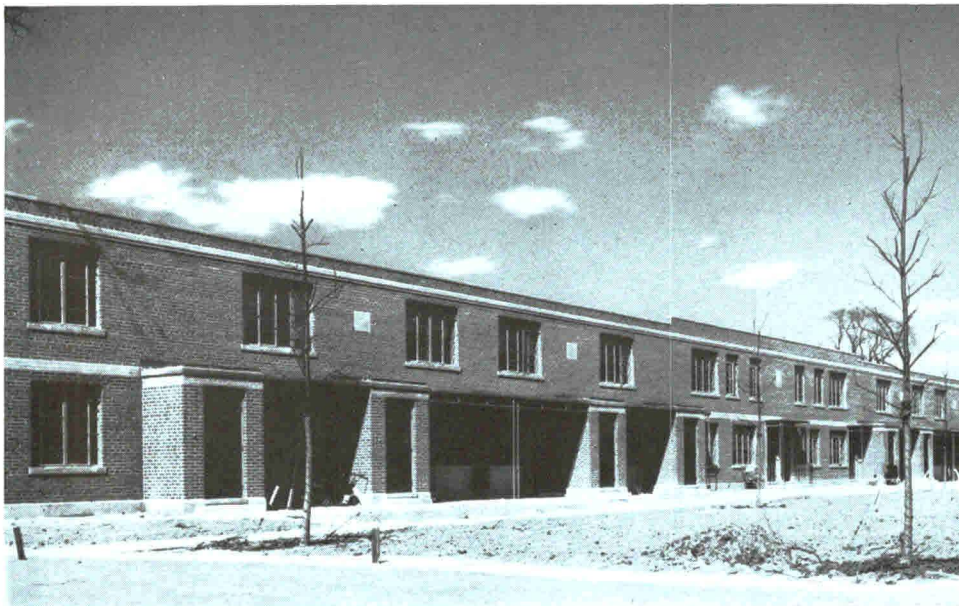
SIZE: 258 living units. 74 3-room; 143 4-room; 41 5-room.

SITE COVERAGE: 12 per cent.

COST: Total	\$1,763,623
Land	101,065
Demolition	1,031
Construction	1,614,227
Landscaping	47,300
Construction cost per room (including Landscaping):	1,663.19

RENT: Average per room per month
excluding service charge: \$5.08
including heat, hot water, light,
refrigeration and cooking: \$7.25

SPECIAL FEATURES: Included in the development are a large social and recreation building, and two completely equipped laundries.



CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick facing backed with terra cotta tile; dampproofed with asphalt. Interior partition—2 in. solid plaster, 3 in. tile. Floors—reinforced concrete. Ceilings—finished concrete, painted. Brick by Philadelphia Brick Co., Beldon Brick Co. and Hydraulic Press Brick Co. Calking compound—Colbar Paint & Varnish Co. and Tremco Mfg. Co.

ROOFS: Flat reinforced concrete slabs covered with 5-ply built-up composition, Philip Carey Co.

INSULATION: Roof—Temlock, Armstrong Cork Co., 2 in. cork board. Weatherstripping—on exterior doors, Chamberlin Metal Weather Strip Co.

WINDOWS: Steel casements, J. S. Thorn Co. Glass—double strength, quality A, Mississippi Glass Co. and Pittsburgh Plate Glass Co. Screens—copper, Michigan Wire Cloth Co. and N. Y. Wire Cloth Co.

STAIRS: Steel, Samuel J. Creswell Iron Works; asphalt tile treads.

FLOOR COVERINGS: All rooms—asphalt tile, David Kennedy, Inc. Kitchens—linoleum. Bathrooms—ceramic tile.

WOODWORK: Trim—metal. Shelving—wood, Biles-Colman Lumber Co. Cabinets—Murphy Door Bed Co. Interior doors—hollow metal, Bethlehem Steel Co. and Aetna Steel Products Co. Exterior doors—wood, Central Door Co.

HARDWARE: P. & F. Corbin Co., National Lock Co. and Reliance Steel Products Co.

ELECTRICAL INSTALLATION: Conduit—rigid steel, electric metallic tubing. Switches—flush toggle. Zinc coated conduit—Garland Mfg. Co. Cable—American Steel & Wire Co. Rubber insulated wire—Okonite Callendar Cable Co.

KITCHEN EQUIPMENT: Range—electric, Edison General Electric Appliance Co. Refrigerators—Westinghouse Electric & Mfg. Co. Sink and trays—Kohler Co. Cabinets—Murphy Door Bed Co.

BATHROOM EQUIPMENT: All fixtures by Kohler Co. Cabinet—Philip Carey Co.

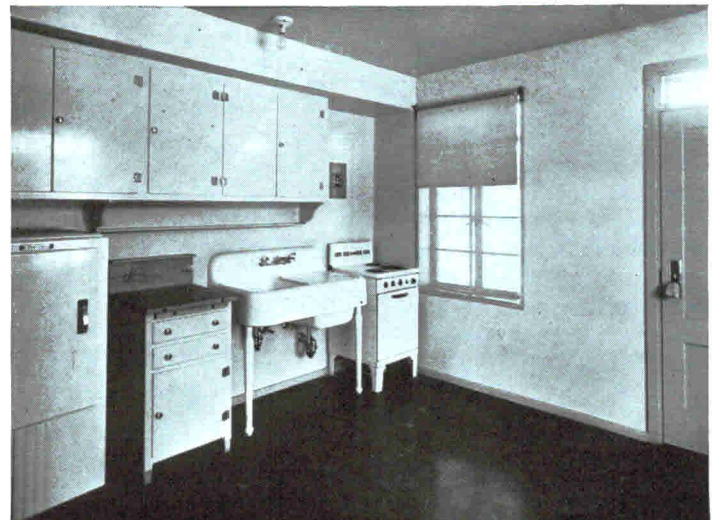
PLUMBING: Pipes: Soil, waste and vent—cast iron. Water supply—brass.

HEATING: Webster Moderator System, Warren Webster & Co. Combination vacuum and direct steam and warm air circulating units. Boiler—horizontal return tubular type, Ames Iron Works. Fuel—coal, fired by automatic stokers, Riley Stoker Corp. Valves—manually operated.

LIVING ROOM

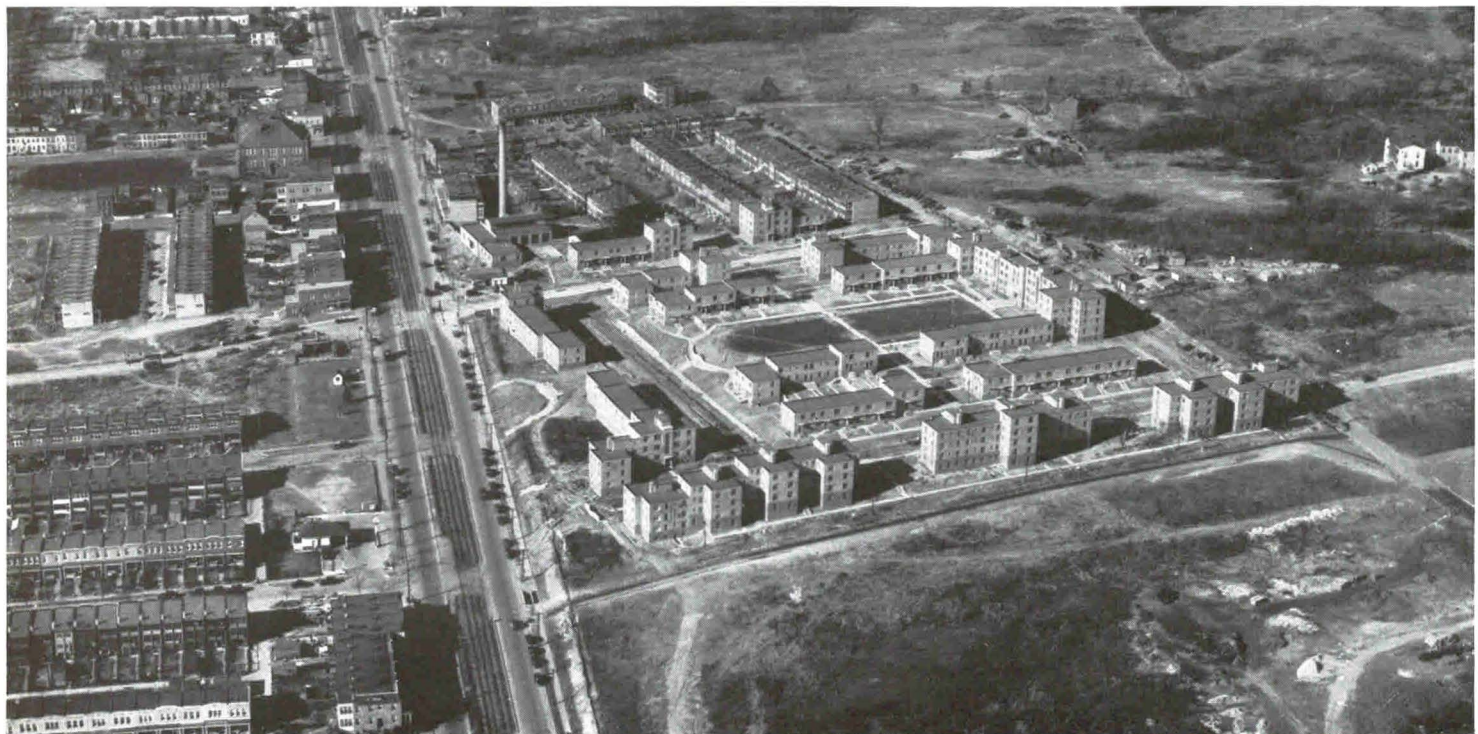
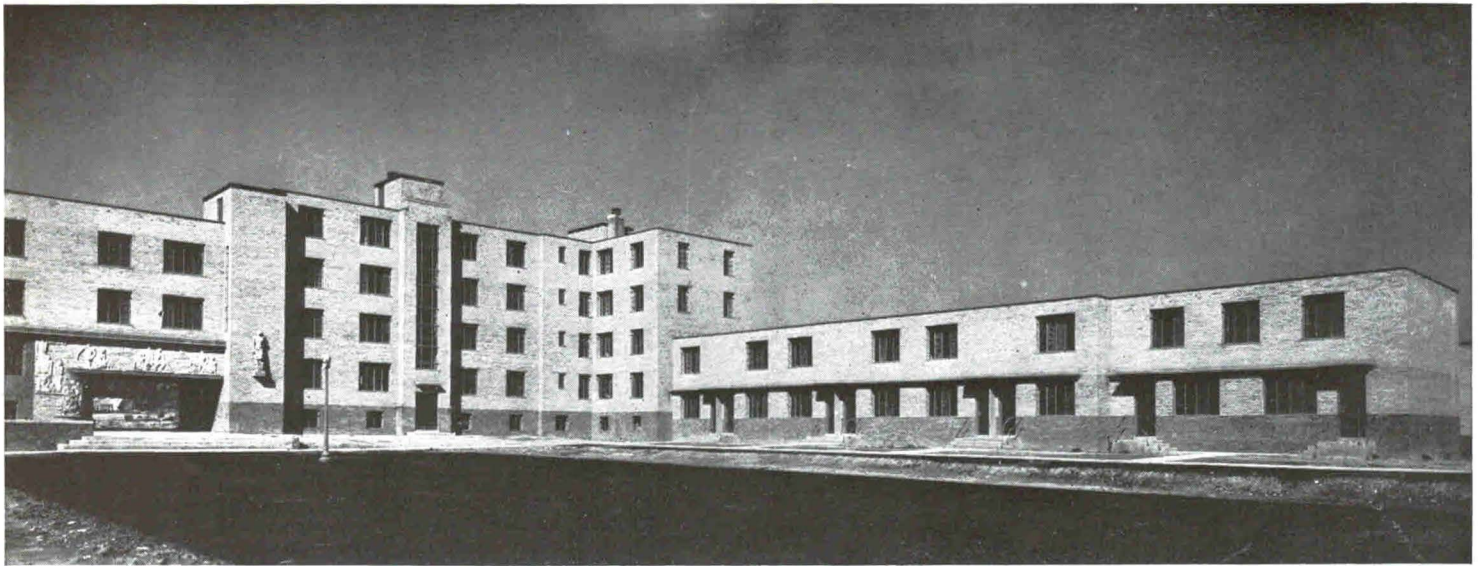


KITCHEN



Richard T. Dooner Photos

WASHINGTON, D. C. LANGSTON HOUSING PROJECT



ARCHITECTS: Chief, Hilyard R. Robinson, Associates, Irwin S. Porter, Paul R. Williams.

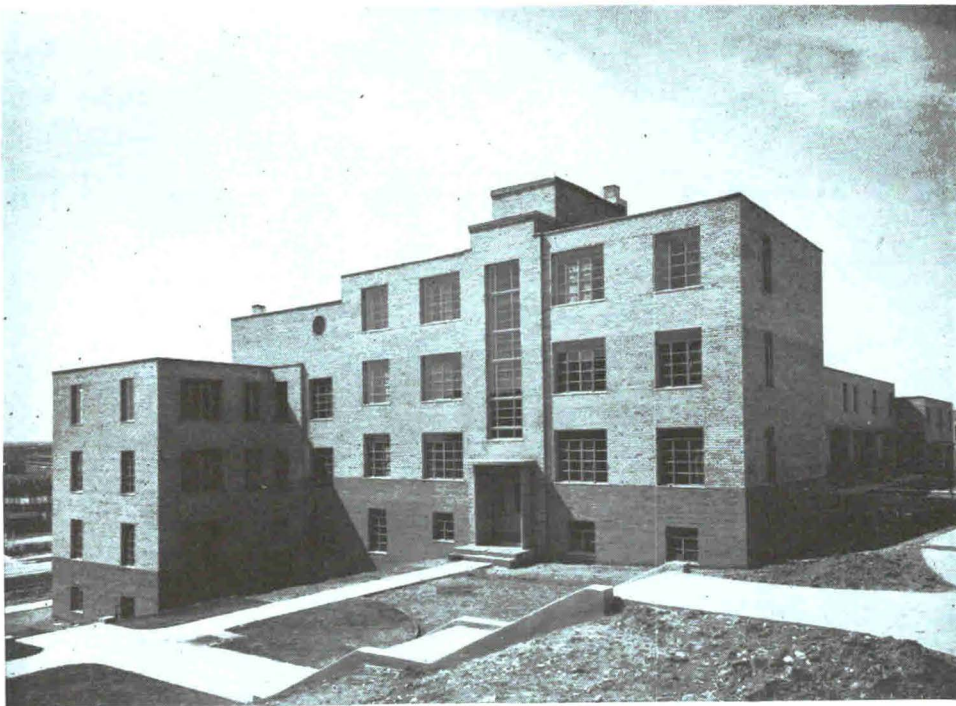
SITE: Vacant; 14 acres.

BUILDING TYPES: 3 and 4-story apartments, 2-story row houses and 2-story flats.

SIZE: 274 living units. 19 2-room; 161 3-room; 88 4-room; 6 5-room.

COST: Total	\$1,553,146
Land	83,707
Construction	1,444,599
Landscaping	24,840
Construction cost per room (including Landscaping):	1,627.28

RENT: Average per room per month
excluding service charge: \$5.40
including heat, hot water, light,
refrigeration and cooking: \$7.45
See pages 353 and 355 for unit plans.



CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete to grade, 4 in. brick and 8 in. concrete grade to first floor, continuous spread footings. Floor—concrete, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer, tile backup, United Clay Products Corp., asphalt dampproofing on backup walls, plasters, metal base, interlocking tile coping; aluminum window sills, General Bronze Corp. Interior partitions—2 in. solid plaster, 3 or 4 in. partition tile, United Clay Products Corp. Stair halls—glazed brick, West Virginia Brick Corp. Floor—concrete slab and beam. Ceiling—finished concrete, painted. Cement by Allentown Portland Cement Co. and Lehigh Portland Cement Co.

ROOF: Concrete slab and beam covered with composition 5-ply.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Celotex Corp. Weatherstripping—spring bronze and brass or bronze thresholds.

WINDOWS: Metal casements and sash—Campbell Metal Window Corp. Glass—double strength, quality B, Mississippi Glass Co. and American Window Glass Co.

STAIRS: Metal pan type, cement filled treads and platforms; asphalt tile finish on house treads; safety treads for apartments, General Bronze.

FLOORS: Main rooms—asphalt tile, Thomas Moulding Co. Kitchens—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Tile Co.

WALL COVERINGS: All rooms—plaster, U. S. Gypsum Co., Bathrooms—Keene's cement, U. S. Gypsum Co.

WOODWORK: Shelving and doors—Hyde-Murphy Co.

HARDWARE: Lockwood Hardware & Mfg. Co.

PAINTING: Interior walls, trim and sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Lighting—3 phase, 4 wire; power—3 phase, 3 wire. Rigid steel wire—Youngstown Sheet & Tube Co. Outlet boxes—Steel City Electric Co. Rubber insulated wire—Crescent Insulated Wire & Cable Co. Switches—flush toggle, Bryant Electric Co. Fixtures—porcelain and enclosed direct, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—electric, Edison General Electric Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Standard Sanitary Mfg. Co. Cabinet—metal, Excel Metal Cabinet Co.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co.

PLUMBING: Pipes: Cast iron—Somerville Iron Works and Krupp Mfg. Co. Wrought iron—Reading Iron Co. Steel—Republic Steel Co. Brass and copper tubing—Chase Brass & Copper Co.

HEATING: Central steam type. Underground Conduit—Ric-Wil. Boiler—H. P. firebox, 2 fire tubes, 1 water tube, International Boiler Works, coal, Keeler Co. oil. Underfeed stoker, Flynn, pressure type oil burner, Todd Dry Dock. Radiators—cast iron tubular, H. W. Pattern, American Radiator Co. Valves, traps and automatic heat control, C. A. Dunham Co.; H. W. generators, Sims Co.

SPECIAL EQUIPMENT: Incinerators, Detroit Incinerator Co.

OHIO LAKEVIEW TERRACE, CLEVELAND



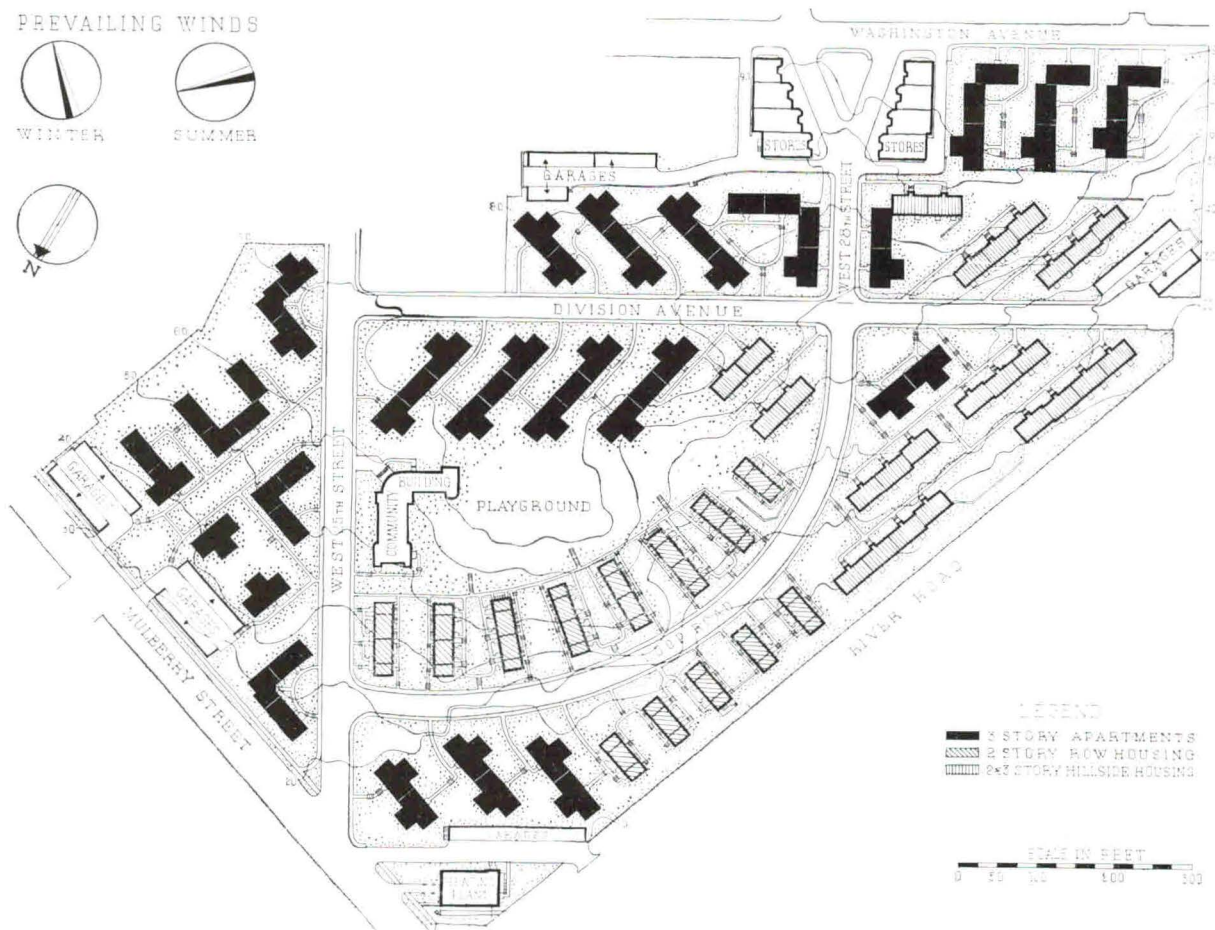
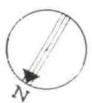
PREVAILING WINDS



WINTER



SUMMER





Ernest Graham



ARCHITECTS: Chief, Joseph L. Weinberg; Associates, William H. Conrad and Wallace G. Teare.

SITE: Slum; 22 acres.

BUILDING TYPES: 2- and 3-story apartments and 2- and 3-story row houses.

SIZE: 620 living units. 272 3-room; 230 4-room; 35 4½ room; 78 5-room; 5 5½-room.

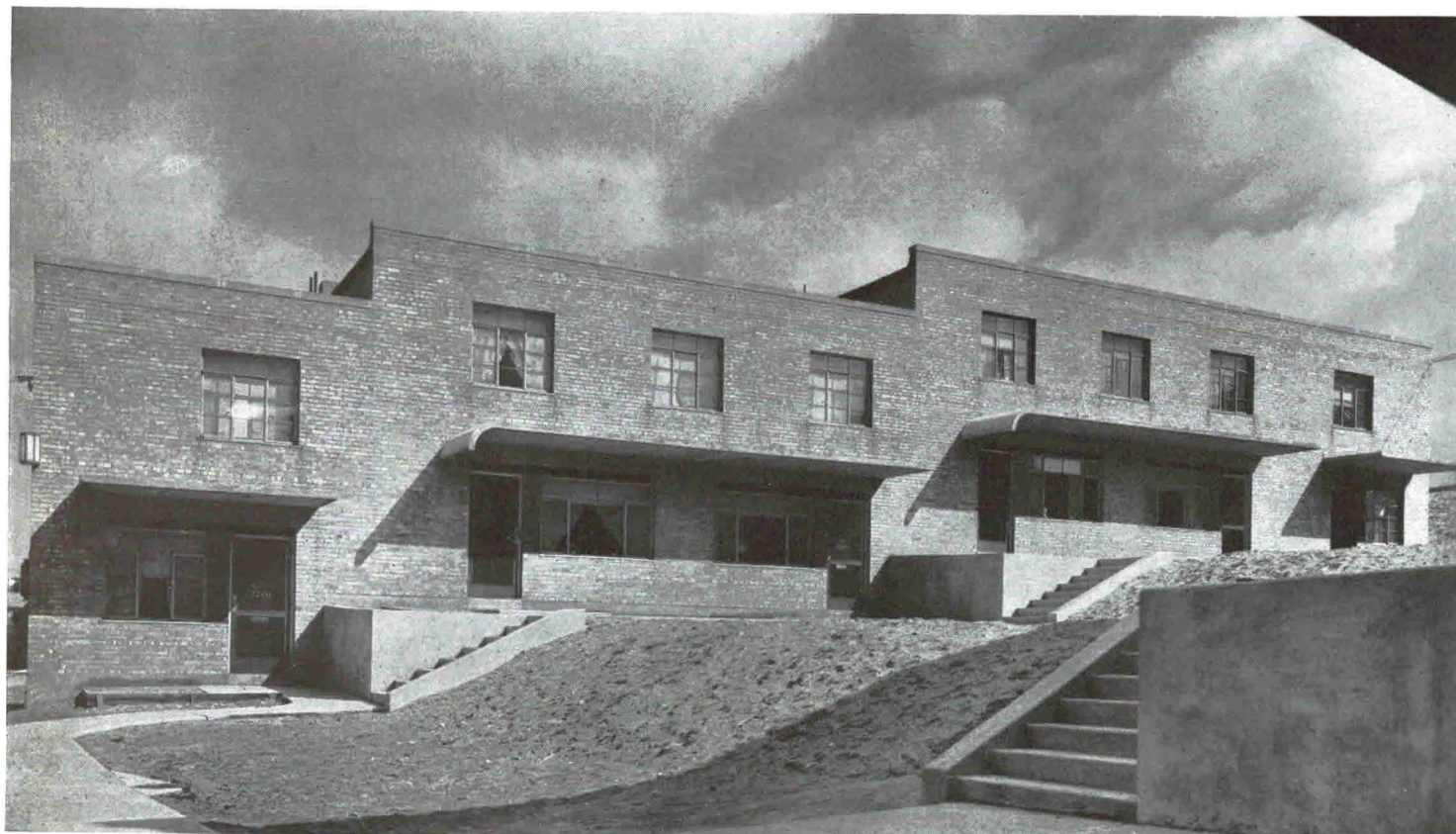
COST: Total	\$3,470,230
Land	543,206
Demolition	2,500
Construction	2,864,750
Landscaping	59,774
Construction cost per room (including Landscaping):	1,265.48

RENT: Average per room per month
excluding service charge: \$5.84
including heat, hot water, light
and refrigeration: \$7.37

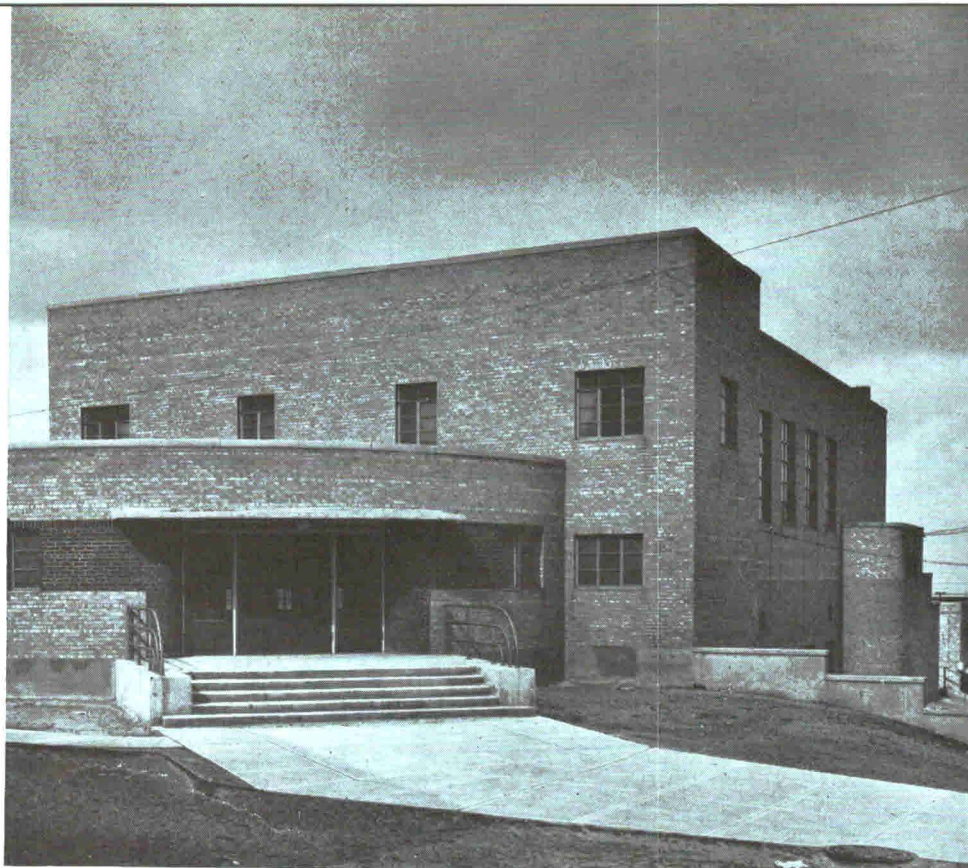
SPECIAL FEATURE: Included in the development is a community house for use of the tenants.

See pages 352 and 355 for unit plans.

LAKEVIEW TERRACE, CLEVELAND, OHIO



Ernest Graham Photos



CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete to grade, 4 in. brick and 8 in. concrete grade to 1st floor, continuous spread footings. Floor—concrete slab, mesh reenforced, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—face brick veneer, Ohio Clay Co., backup tile, National Fireproofing Co., $\frac{3}{4}$ in. plaster, glazed brick, Southern Fireproofing Co., metal base, Knapp Bros., Robinson Clay Co., Stowe Fuller Co. and Cleveland Builders' Supply Co. Damp-proofing—Vortex Mfg. Co. Sills—aluminum, Aluminum Co. of America. Copings—limestone, Indian Hill Stone Co. Interior partitions—3 and 4 in. tile, Cleveland Builders' Supply Co., 2 in. plaster, U. S. Gypsum Co. and Certain-teed Co. Floor construction—concrete slab and beam. Ceiling—finished concrete, painted.

ROOF: Construction—concrete slab and beam covered with insulation and 5-ply composition roofing.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Temlock, Armstrong Cork Products Co. and Masonite, Masonite Corp. Weatherstripping—spring bronze and extruded bronze or brass thresholds, Chamberlin Metal Weather Strip Co.

WINDOWS: Metal casements and screens, Truscon Steel Co. Glass—double strength, quality B for windows; plate for stores, Rolland Glass Co. Screens—metal, Truscon Steel.

STAIRS: Metal pan type, General Bronze Corp. Metal risers and stringers, cement filled treads and landings, cast iron safety treads for apartment stairs.

FLOORS: Main rooms—wood. Kitchen—linoleum. Bathrooms—ceramic tile, Mosaic Tile Co.

WOODWORK: Interior doors—Davis Plywood, Anderson Workworking Co. and Harbor Plywood Corp. Exterior doors—wood, Teachout. Garage doors—Overhead Door Co. Screen doors—wood, Federal Screen Mfg. Co.

HARDWARE: Beaton & Corbin.

PAINTING: Interior walls, trim and sash, and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rigid steel conduit, Fretz-Moon Tube Co. Outlet boxes, flush toggle type switches and rubber insulated wire—General Electric Co. Fixtures—porcelain direct and enclosed direct, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Standard Sanitary Mfg. Co. Cabinet—wood, Grand Rapids Store Equipment.

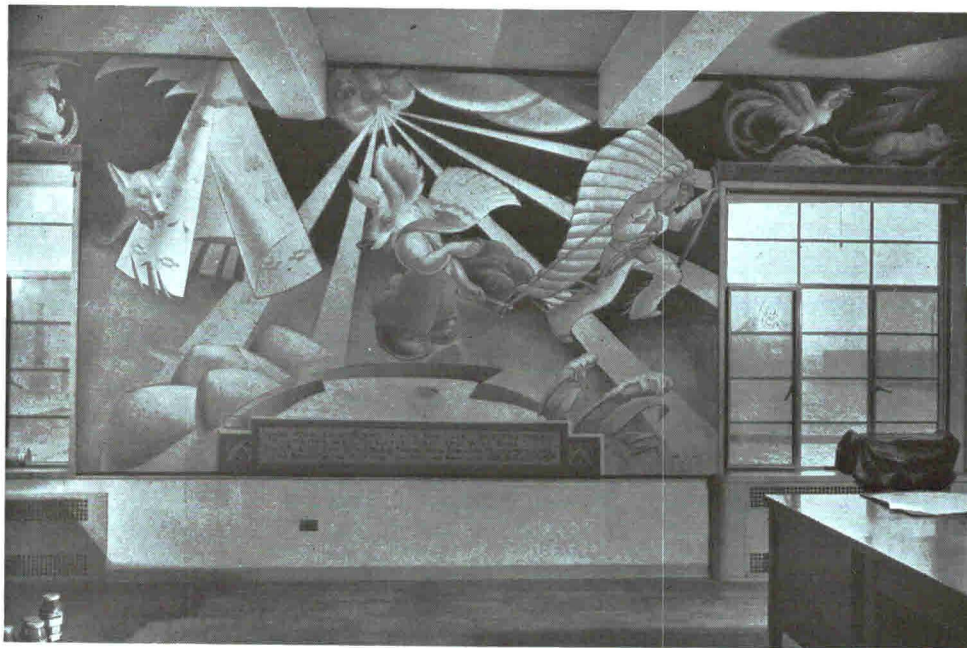
LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes: Cast iron—Somerville Iron Works. Wrought iron—A. M. Byers Co. Steel—Jones & Laughlin Steel Corp. Brass and copper tubing—Bridgeport Brass Co.

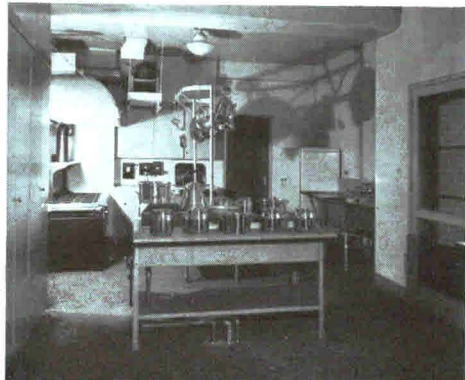
HEATING: Central steam type. Underground Conduit—Ric-Wil. Boiler—straight water tube, Union Iron Works. Fuel—coal; spreader stoker and automatic combustion control, Detroit Stoker Co. Radiators—cast iron, H. W. pattern and convector type, American Radiator Co. Radiator valves and thermostatic traps—Warren Webster & Co.; H. W. generators—Simms Co.

SPECIAL EQUIPMENT: Incinerators—Sargeant Building Supply Co.



COMMUNITY BUILDING AND NURSERY

COMMUNITY KITCHEN



TYPICAL KITCHEN



OHIO OUTHWAITE HOMES, CLEVELAND



Ernest Graham Photos

ARCHITECTS: Edward J. Maier, Travis G. Walsh, Leo J. Barrett.

SITE: Slum; 21 acres.

BUILDING TYPES: 3-story apartments, 2-story row houses and 2-story flats.

SIZE: 579 living units. 46 2-room; 162 3-room; 301 4-room; 36 5-room; 34 6-room.

SITE COVERAGE: 25 per cent.

COST: Total \$3,211,727
 Land 742,492
 Construction 2,420,335
 Landscaping 48,900
 Construction cost per room
 (including Landscaping): 1,139.95

RENT: Average per room per month
 excluding service charge: \$4.78
 including heat, hot water, light
 and refrigeration: \$6.58
 See page 352 for unit plans.



CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick veneer and tile backup, Cleveland Builders' Supply Co., asphalt dampproofing on backup walls, plaster; metal base, Knapp Bros.; aluminum sills, Aluminum Co. of America; stone copings, Indiana Limestone Corp. Interior partitions—2 in. solid plaster, 3 or 4 in. partition tile, Cleveland Builders' Supply Co.; salt-glazed brick, Stork Buck Co. Floor construction—concrete slab and beam. Mortar-proofing—Master Builders.

ROOF: Covered with composition 5-ply.

SHEET METAL WORK: Flashing—16 oz. copper, American Brass Co.

INSULATION: Roof—Celotex Corp. Weatherstripping—Master Metal Strip Service Co.

WINDOWS: Metal casements and metal screens—Detroit Steel Products Co. Glass—double strength, quality A and B, Pittsburgh Plate Glass Co. and American Glass Co. Screens—copper, Johnson Metal Products Co.; bronze—Chase Brass & Copper Co.

STAIRS: Metal pan type.

FLOORS: Main rooms—wood, Wood Tile Corp. Kitchen—linoleum. Bathrooms—ceramic, Mosaic Tile Co.

WOODWORK: Shelving and doors—wood, Hyde-Murphy Co. Garage doors—Overhead Door Co.

HARDWARE: Norwalk Lock Co. Mail boxes—Auth Electric Supply Co.

ELECTRICAL INSTALLATION: Rigid steel conduit—General Electric Co. Outlet boxes—Steel City Electric Co. Rubber insulated wire—General Cable Co. Switches—flush toggle, Bryant Electric Co. Fixtures—porcelain and enclosed direct, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Kohler Co. Cabinet—wood, Grand Rapids Store Equipment Corp.

BATHROOM EQUIPMENT: All fixtures by Kohler Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes—cast iron—Central Foundry Co. Wrought iron—A. M. Byers Co. Steel—National Tube Co. Brass—American Brass. Copper tubing—Mueller Mfg. Co.

HEATING: Central steam type. Underground Conduit—Ric-Wil, Boiler—portable ret. tubular firebox, Kewanee Boiler Corp. Fuel—coal; underfeed stoker, Iron Fireman Mfg. Co., automatic combustion control, Teeple. Radiators—cast iron tubular, H. W. pattern, American Radiator Co. Radiator Valves and thermostatic traps—Warren Webster & Co. Hot water generators—Patterson-Kelley Co. Incinerators—Sargeant Building Supply Co.

OHIO CEDAR CENTRAL APARTMENTS, CLEVELAND



ARCHITECT: Walter R. McCornack.

SITE: Slum; 18 acres.

BUILDING TYPES: 3-story apartments.

SIZE: 650 living units. 8 2-room; 354 3-room; 222 4-room; 66 5-room.

SITE COVERAGE: 25 per cent.

COST: Total	\$3,023,176
Land	603,372
Construction	2,359,167
Landscaping	60,637
Construction cost per room (including Landscaping):	1,053.92

RENT: Average per room per month
excluding service charge: \$5.71
including heat, hot water, light
and refrigeration: \$7.35
Ref: ARCH. FORUM, Dec. 1937, p. 498-499.



TYPICAL
LIVING ROOM
AND KITCHEN

Ernest Graham Photos

CONSTRUCTION OUTLINE

STRUCTURE: Walls—Brick veneer and tile backup, National Fireproofing Co.; aluminum sills, Aluminum Co. of America; metal base, Sanymetal Products Co.; limestone coping, Indiana Limestone Co. Interior partitions—2 in. solid plaster, 3 or 4 in. tile dividing partitions. Stairhalls—salt-glazed brick, National Fireproofing Co. Ceiling—concrete painted.

ROOF: 5-ply composition; felt, Philip Carey Co.

SHEET METAL WORK: Flashing, gutters, leaders and downspouts—16 oz. copper, American Brass Co. Miscellaneous Ironwork—General Bronze Corp.

INSULATION: Roof—Celotex Corp. Weatherstripping—spring bronze or bronze, General Bronze Corp.

WINDOWS: Steel casements and screens, Truscon Steel Co. Glass—Pittsburgh Plate Glass Co.

STAIRS: Metal pan type, cement filled treads and platforms, General Bronze Corp.

FLOORS: Main rooms—wood. Kitchen—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Co.

WOODWORK: Trim, shelving, cabinets and doors—wood, Hyde-Murphy Co. Interior metal bucks and doors—Sanymetal Products Co.

HARDWARE: Norwalk Lock Co.

PAINTING: Lead and oil throughout.

ELECTRICAL INSTALLATION: Wiring system: Rigid steel conduit, flush toggle switches and rubber insulated wire, General Electric Co. Outlet boxes—General Electric Co. and National Electric Products Corp. Fixtures—porcelain and enclosed direct, Pass & Seymour, Inc.

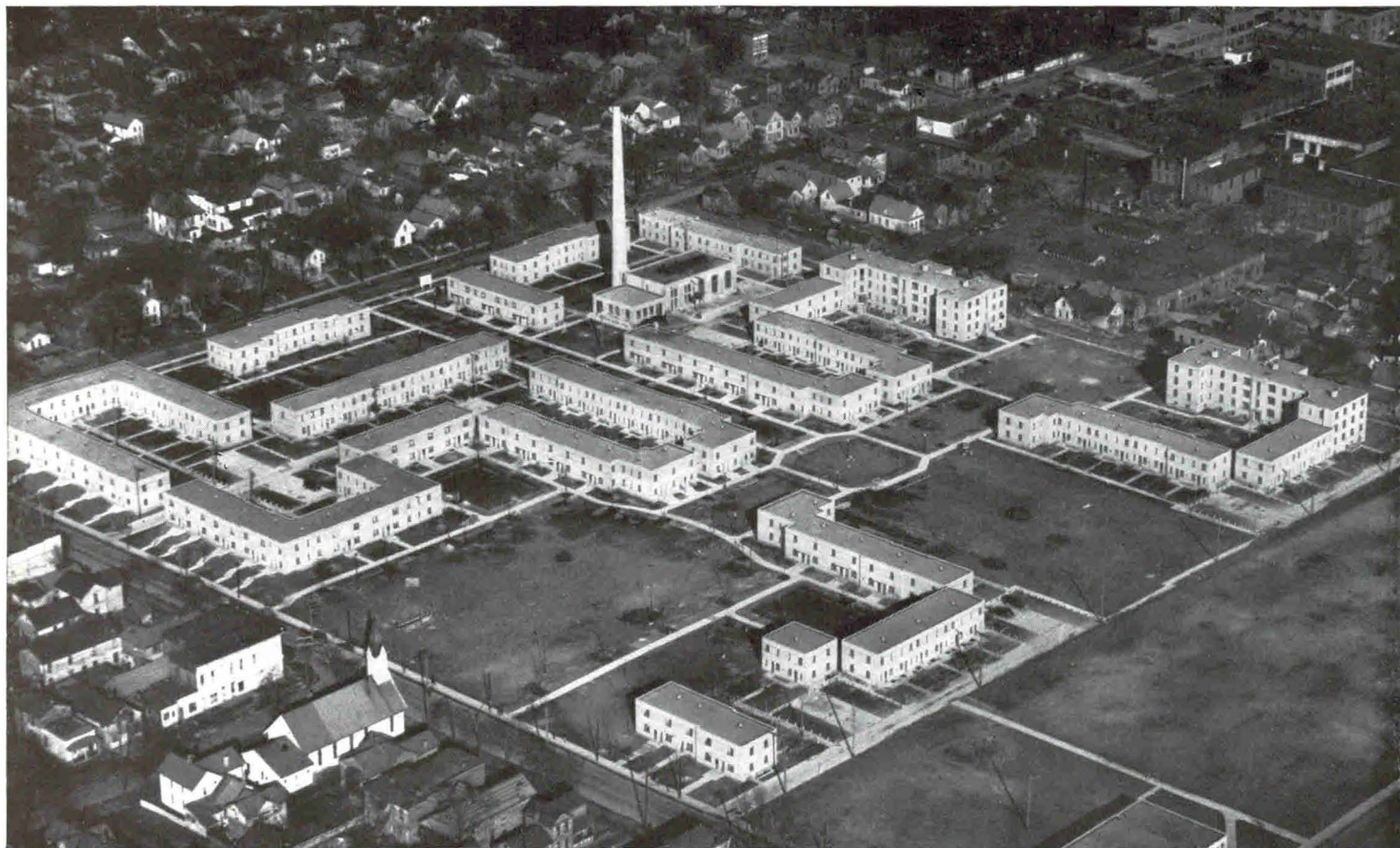
KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Standard Sanitary Mfg. Co. Cabinet—Berger Mfg. Co. **BATHROOM EQUIPMENT:** All fixtures by Standard Sanitary Mfg. Co. Cabinet—Philip Carey Co.

PLUMBING: Steam pipe—Jones & Laughlin Steel Co.; fittings—Grabler Mfg. Co. Cast iron soil—Central Foundry Co. Galvanized wrought iron—A. M. Byers Co. Copper tube hot water—Mueller Brass Co.

HEATING: Fuel—coal, E. Keeler Co.; stokers, Hoffman Combustion Engineering Co.; feed water heater, Croll Reynolds Engineering Co.; control equipment, Forboro Co.; radiator valves and traps, Sarco Co.; radiators, National Radiator Co.; unit heaters, Perfe Radiator Co.

SPECIAL EQUIPMENT: Incinerator—Kerner Incinerator Co.

OHIO BRAND WHITLOCK HOMES, TOLEDO



ARCHITECTS: Chief, Harold H. Munger; Associates, Charles A. Langdon, Carl C. Britsch, Otto H. Hohly, Thomas D. Best, Karl B. Hoke, John J. Hayes, Frank Lange.

SITE: Slum; 16 acres.

BUILDING TYPES: 3-story apartments, 2-story row houses and 2-story flats.

SIZE: 264 living units; 20 2-room; 116 3-room; 121 4-room; 7 5-room.

SITE COVERAGE: 20 per cent.

COST:

Total	\$1,714,951
Land	346,888
Demolition	2,418
Construction	1,336,615
Landscaping	28,130
Construction cost per room (including Landscaping):	1,504.67

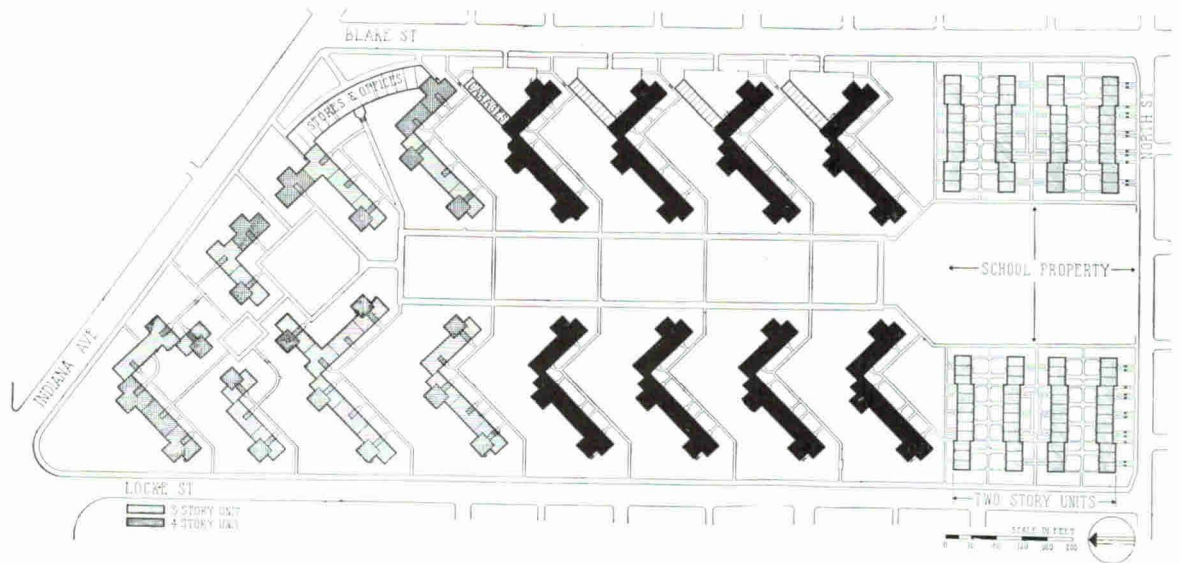
RENT: Average per room per month
excluding service charge: \$5.03
including heat, hot water, light
and refrigeration: \$7.14

SPECIAL FEATURES: Included in the development is a day nursery and kindergarten for care of children whose mothers are employed.

See page 353 for unit plan.

See page 451 for Construction Outline.

LOCKEFIELD GARDEN APARTMENTS, INDIANAPOLIS INDIANA



ARCHITECTS: William Earl Russ, Merritt Harrison.

SITE: Slum; 22 acres.

BUILDING TYPES: 3 and 4-story apartments, 2-story row houses.

SIZE: 748 living units; 456 3-room; 290 4-room; 2 5-room.

SITE COVERAGE: 20 per cent.

COST:

Total	\$2,709,766
Land	376,540
Construction	2,282,393
Landscaping	50,833

Construction cost per room (including Landscaping): \$919.31

RENT: Average per room per month excluding service charge: \$4.43

including heat, hot water, light, refrigeration, and cooking: \$6.55

See page 452 for Construction Outline.

Ref: ARCH. FORUM, Dec. 1937, p. 496-497.

ILLINOIS JULIA C. LATHROP HOMES, CHICAGO



Chicago Aerial

ARCHITECTS: Chief, Robert S. DeGolyer; Associates, Everett F. Quinn, Thomas E. Tallmadge, Charles E. White, Jr., Hubert Burnham, Roy T. Christiansen, Vernon S. Watson, Bertram A. Weber, Hugh M. G. Garden, Max L. Lowenberg, Ernest Mayo, E. E. Roberts, Edwin H. Clark, Israel S. Loewenberg, Peter Mayo, Elmer C. Roberts; Mechanical Engineer, Martin Schwab.

SITE: Vacant; 35 acres.

BUILDING TYPES: 3-story apartments, 2-story row houses, and 2-story flats.

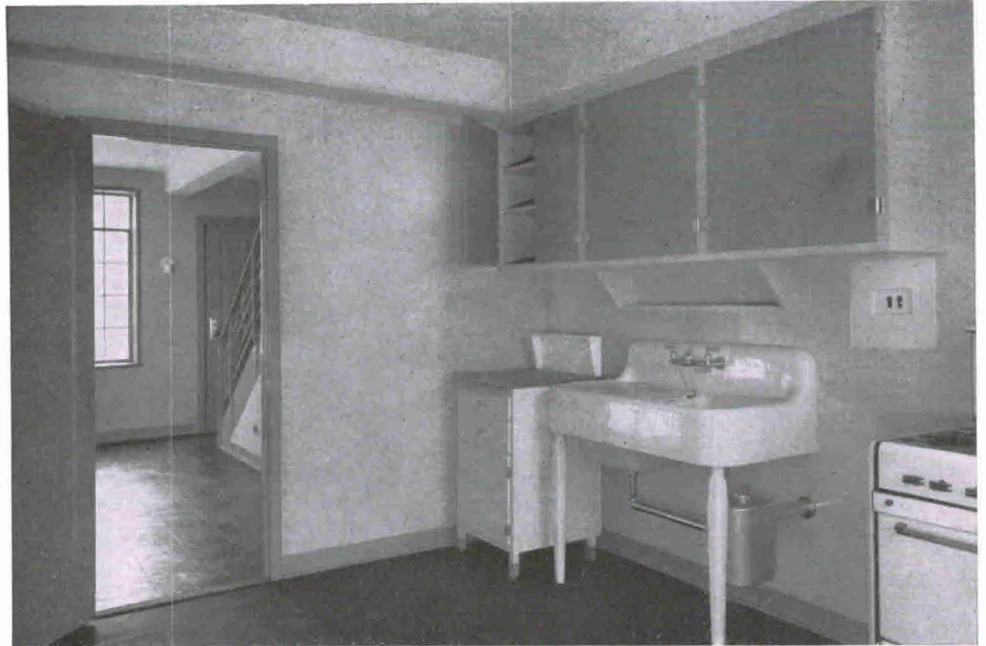
SIZE: 925 living units; 42 2-room; 428 3-room; 389 4-room; 66 5-room.

SITE COVERAGE: 25 per cent.

COST: Total	\$5,187,972
Land	602,109
Construction	4,499,863
Landscaping	86,000

Construction cost per room
(including Landscaping): \$1,409.30

RENT: Average per room per month, excluding service charge: \$5.43
including heat, hot water, light, refrigeration, and cooking: \$7.30
See pages 353 and 354 for unit plans.



KITCHEN

CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete to grade, 4 in. brick and 8 in. concrete grade to 1st floor, continuous spread footings. Floor—concrete slab, mesh reinforced, 6 in. stone or gravel fill. Waterproofing—metallic type.

STRUCTURE: Exterior walls—brick veneer, hollow tile, National Fireproofing Co.; metal base, Milcor Steel Co. and Knapp Bros. Stone by Ingalls Stone Co. Asphalt dampproofing on tile backup which is plastered. Interior partitions—2 in. solid plaster, 3 or 4 in. tile dividing partitions, St. Anne Brick & Tile and C. C. Whitaker F. P. Co. Stairhalls—glazed tile, Brazil Clay Co. and Ayer-McCarel Regam Clay Co. Floor construction—concrete slab and beam.

ROOF: Construction—concrete slab and beam, covered with 5-ply composition.

SHEET METAL WORK: Flashing—16 oz. Copper.

INSULATION: Roof—U. S. Gypsum Co., Flintkote Co., Celotex Corp., Fir-Tex Insulating Board Co. Weatherstripping—Chamberlin Metal Weather Strip Co.

WINDOWS: Steel casements and screens—Campbell Metal Window Co. Glass—Mississippi Glass Co., Libbey-Owens-Ford Glass Co., Fourco Glass Co.

STAIRS: Steel, pan type, Central American Iron Works.

FLOORS: Main rooms—asphalt tile, Thomas Moulding Co. Kitchen—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Co.

WALL COVERINGS: Main rooms—plaster, Cardiff Gypsum Co. Kitchen and bathrooms—Keene's cement, Best Bros. Keene's Cement Co.

WOODWORK: Shelving and doors—wood, Austin Millwork.

HARDWARE: Interior and exterior—P. & F. Corbin and Russell & Erwin Mfg. Co. **PAINTING:** Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Lighting—single phase, 3 wire; power—3 phase, 3 wire. Conduit—Appleton Electric Co. Wire—Crescent Insulated Wire Co. Switches—Arrow, Hart & Hegeman Co. Fixtures—Pass & Seymour.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—combination, Crane Co. Cabinet—wood, Austin Millwork.

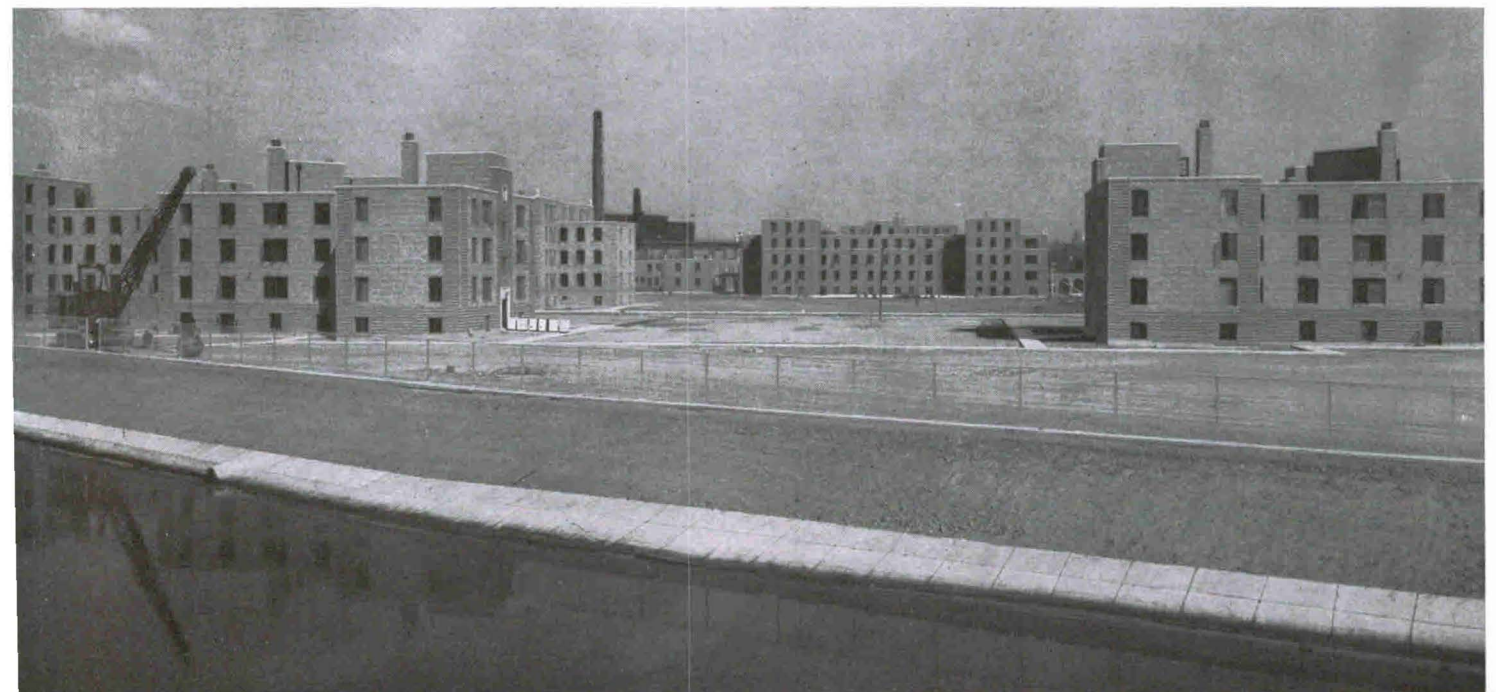
LAUNDRY EQUIPMENT: Sink—cement, Crane Co.

BATHROOM EQUIPMENT: All fixtures by Crane Co.

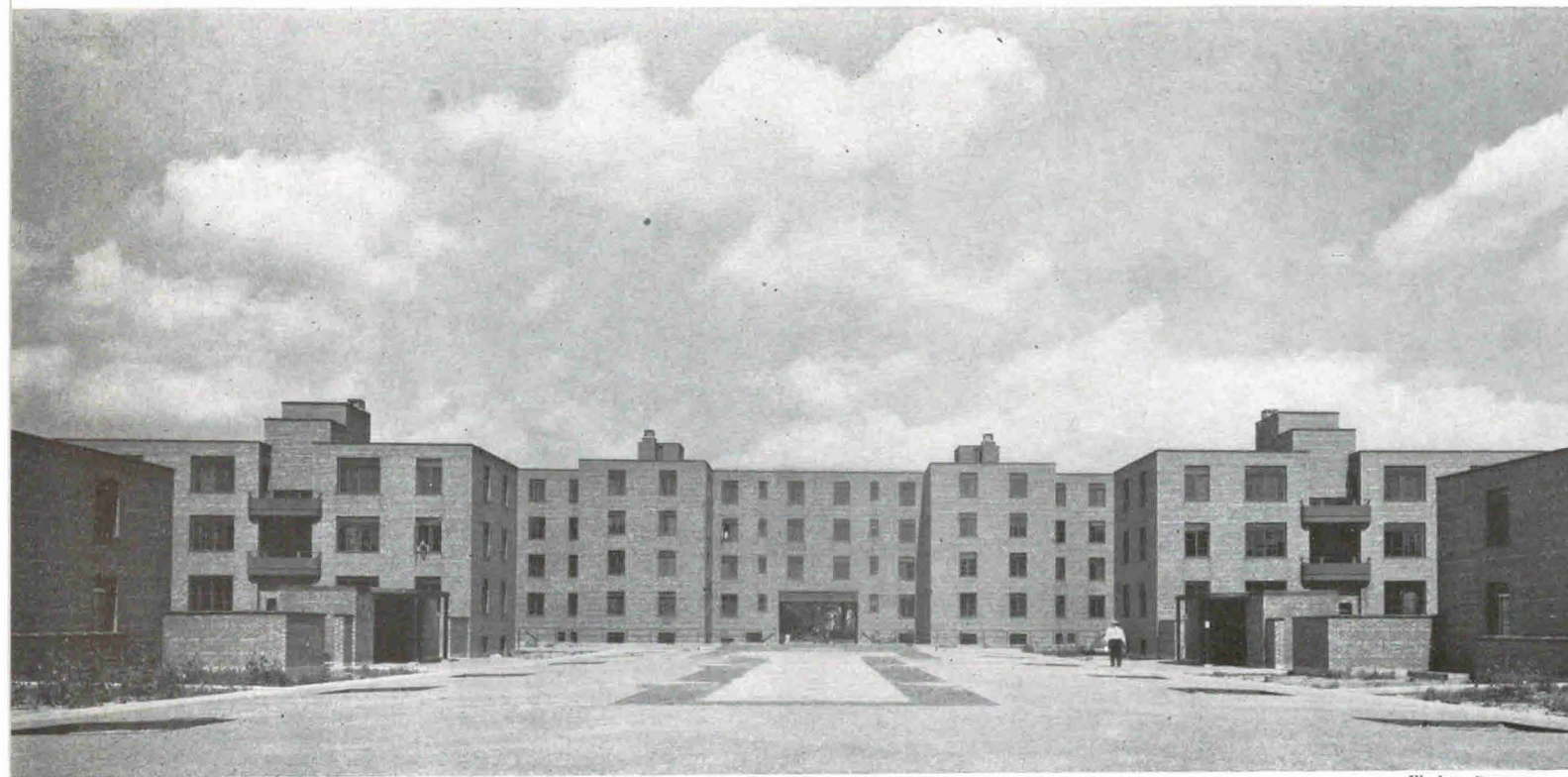
PLUMBING: Pipes: Cast iron—Clow & Sons and Alabama Pipe Co. Wrought iron—Reading Iron Co. and A. M. Byers Co. Steel—Youngstown Sheet & Tube Co., National Tube Co. and Jones & Laughlin Steel Corp. Brass—Revere Copper & Brass Co. Copper tubing—Chase Brass & Copper Co.

HEATING: Central steam type. Underground Conduit—Ric-Wil. Boiler—bent water tube, Lasker. Fuel—coal; automatic combustion control, Hayan Corp.; chain grate, Johnson & Jennings. Radiators—convactor type, Trane Co. Valves, traps and automatic heat control—C. A. Dunham Co. H. W. generators—Ross Heating & Mfg. Co.

SPECIAL EQUIPMENT: Incinerators—Robinson.

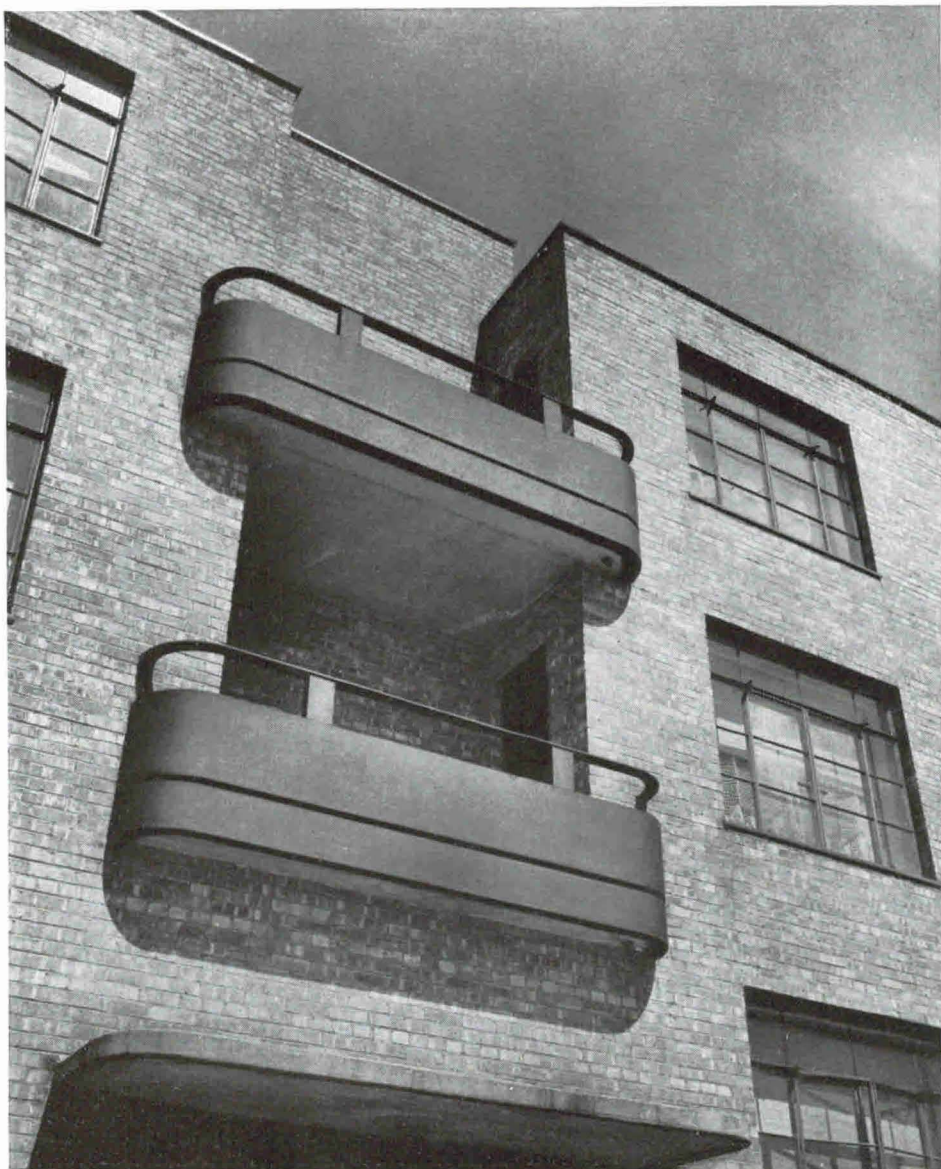


ILLINOIS JANE ADDAMS HOUSES, CHICAGO



Wesley Bowman

BALCONY DETAIL



Hedrich-Blessing

ARCHITECTS: Chief, John A. Holabird; Associates, J. A. Armstrong, Elmer C. Jensen, Philip B. Maher, Ernest A. Grunsfeld, Jr., Melville Clarke Chatten, John O. Merrill, Chester H. Walcott, Ralph D. Huszagh, Frederick M. Hodgdon; Mechanical Engineer, Samuel G. Neiler.

SITE: Slum, 17 acres; vacant, 6 acres.

BUILDING TYPE: 3-story apartments.

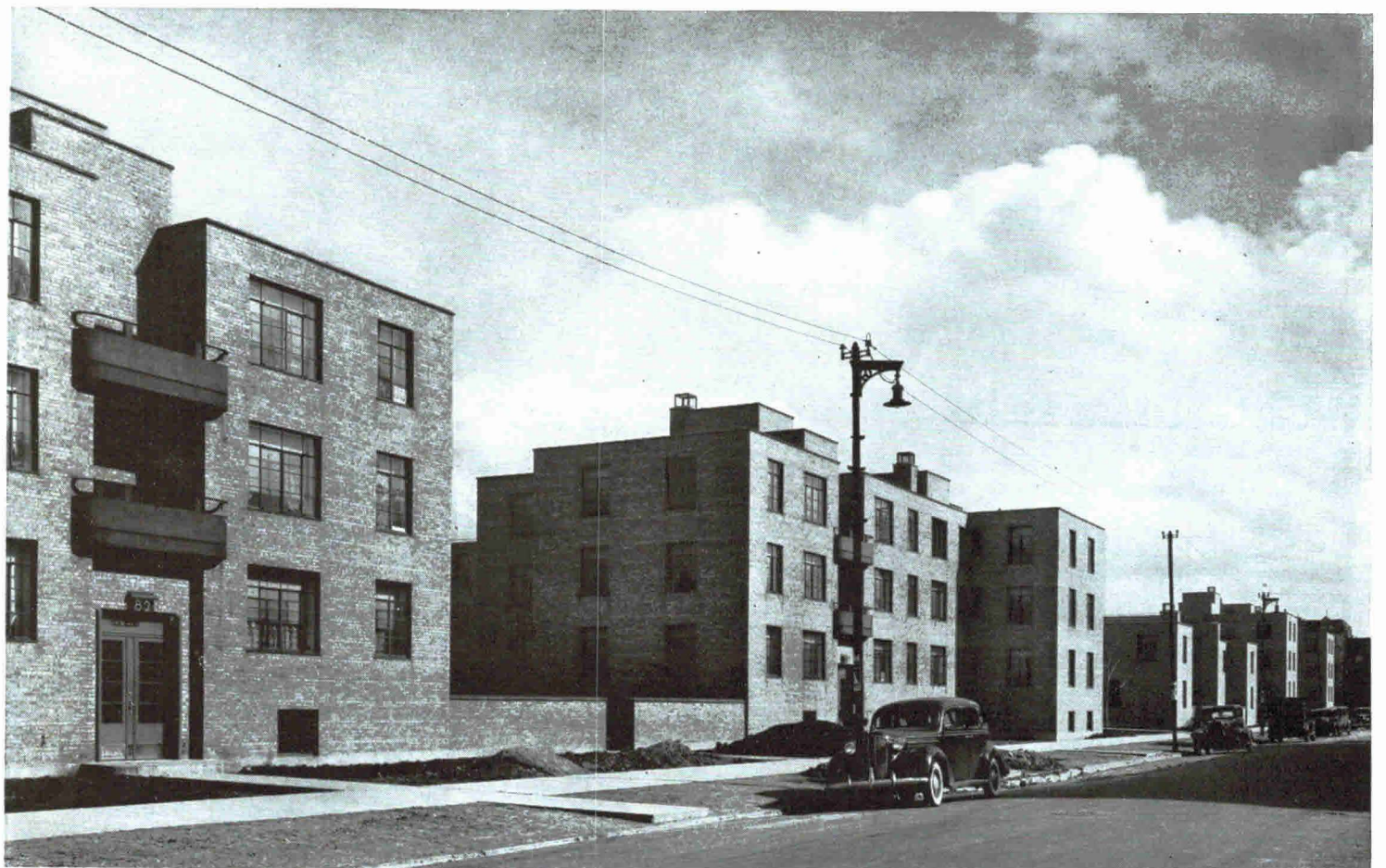
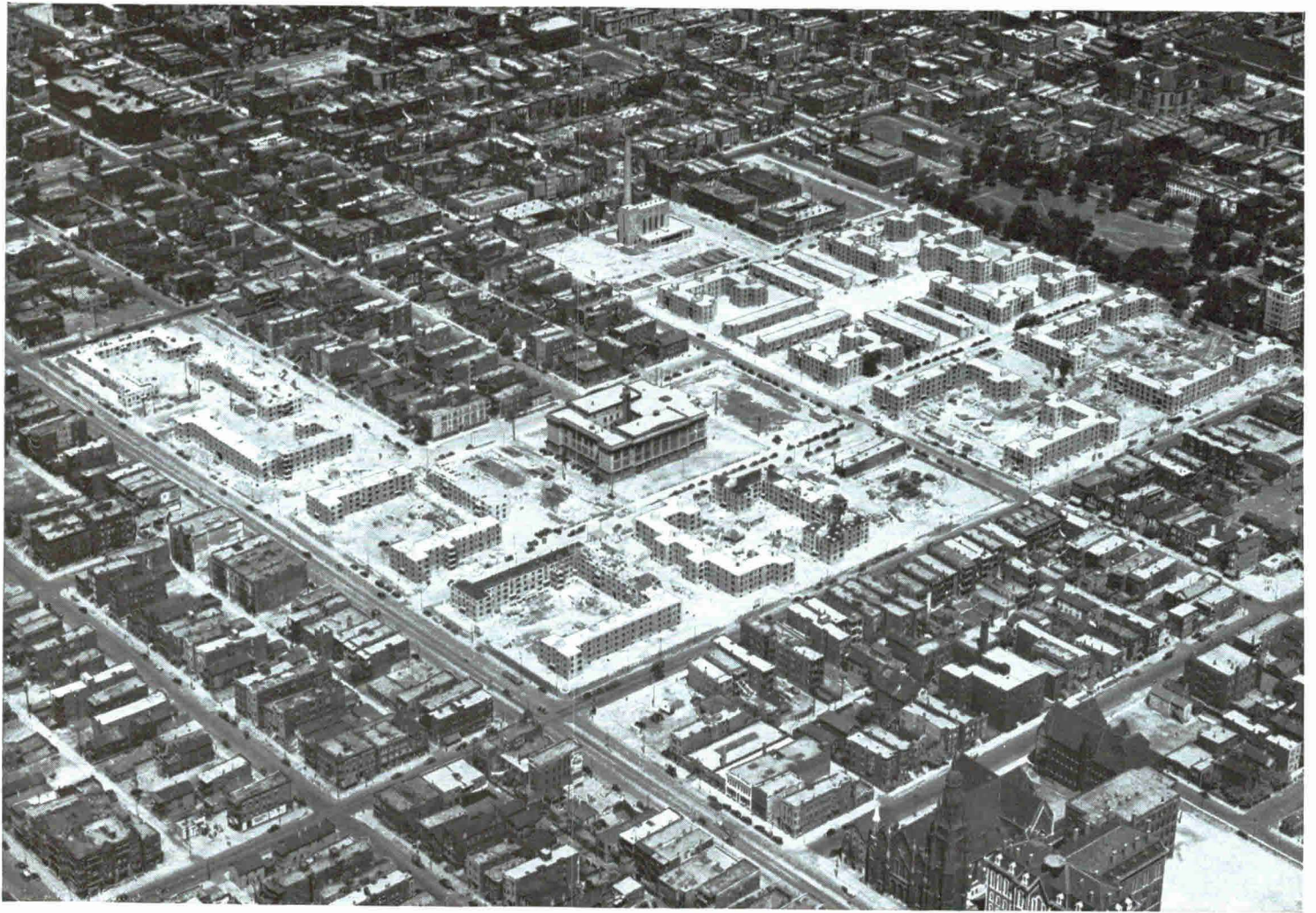
SIZE: 1,027 living units; 4 2-room; 618 3-room; 316 4-room; 89 5-room.

SITE COVERAGE: 25 per cent.

COST: Total \$6,408,306
Land 1,464,623
Demolition (slum section) 1,475
Construction 4,942,208
Construction cost per room (excluding Landscaping): 1,383.98

RENT: Average per room per month
excluding service charge: 5.43
including heat, hot water, light, refrigeration and cooking: 7.30

See page 354 for unit plan.



Hedrich-Blessing



Wesley Borman

CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete to grade, 12 in. solid brick grade to first floor, continuous spread footings. Floor—concrete slab, mesh reenforced, 6 in. stone or gravel fill. Waterproofing—metallic type on floors and inside face of concrete walls.

STRUCTURE: Exterior walls—brick veneer and tile backup, National Fireproofing Co., asphalt dampproofing, metal base, Milcor Steel Co., cast iron sills, New City Iron Works, stone copings. Interior partitions—2 in. solid plaster, 3 and 4 in. tile partitions, National Fireproofing Co., plastered, Cardiff Gypsum Co. Stairhalls—4 in. vitrified facing tile, Clar-bar-duc. Floor construction—concrete slab and beam. Ceiling—finished concrete, painted.

ROOF: Concrete slab and beam covered with composition 5-ply.

MISCELLANEOUS IRON WORK: General Bronze Corp.

INSULATION: Weatherstripping—spring bronze and extruded brass or bronze thresholds, Absoproof Weatherstripping Co.

WINDOWS: Metal casements and screens, Truscon Steel Co. Glass—double strength, quality B for windows, Adamston Glass Co., plate glass, Libbey-Owens-Ford Glass Co.

STAIRS: Metal pan type, metal risers and stringers, cement filled treads and intermediate platforms, cast iron safety treads, General Bronze Corp.

FLOORS: Main rooms—asphalt tile, Thos. Moulding Co. Kitchen—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Tile Co.

WOODWORK: Trim, shelving and doors—Harbor Plywood Corp.

HARDWARE: Interior and exterior—Yale & Towne Mfg. Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rigid steel conduit—Fretz-Moon Co. Outlet boxes—Applenton Electric Co. Rubber insulated wire—

U. S. Rubber Co. Switches—flush toggle, Bryant Electric Co. Fixtures—porcelain and enclosed direct, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—combination, Standard Sanitary Mfg. Co. Cabinet—wood, Ringwald.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, Miller Supply Co.

PLUMBING: Pipes: Cast iron—Clow & Sons and Alabama Pipe Co. Wrought iron—A. M. Byers Co. and Reading Iron Co. Steel—Youngstown Sheet & Tube Co. Brass—Revere Copper & Brass Co.

HEATING: Central steam type. Underground Conduit—Ric-Wil. Boiler—bent water tube, Lasker. Fuel—coal; automatic combustion control, Ess; chain grate, Illinois. Radiators—convactor type, Trane Co. Valves, traps and automatic heat control—C. A. Dunham Co. Hot water generators—Sims Co.

SPECIAL EQUIPMENT: Incinerators—Kerner.

CEDAR SPRINGS PLACE, DALLAS TEXAS



KITCHEN-LIVING ROOM



ARCHITECTS: Chief, Walter C. Sharp; Associates, Roscoe P. DeWitt, Ralph Bryan, Lester N. Flint, Anton F. Korn, Grayson Gill, Herbert M. Tatum, Arthur E. Thomas.

SITE: Vacant; 15 acres.

BUILDING TYPES: 2-story apartments, 1-story row houses, and 2-story flats.

SIZE: 181 living units. 24 2-room; 92 3-room; 51 4-room; 14 5-room.

SITE COVERAGE: 10 per cent.

COST: Total	\$872,977
Land	69,360
Construction	779,931
Landscaping	23,686

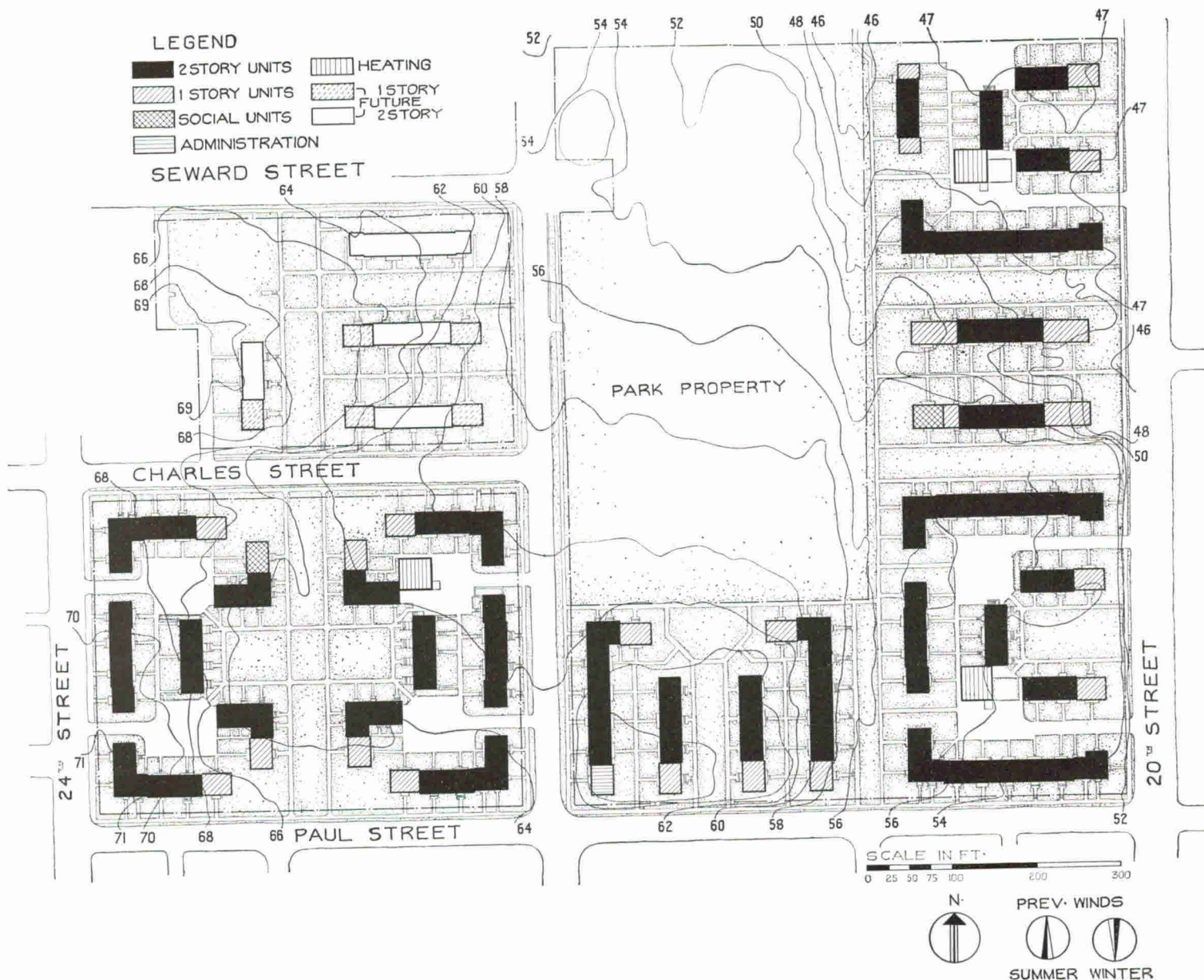
Construction cost per room (including Landscaping): \$1,343.84

RENT: Average per room per month excluding service charge: \$6.34
including heat, hot water, light, refrigeration, and cooking: \$7.92

See page 353 for unit plans.

See page 452 for Construction Outline.

NEBRASKA LOGAN FONTENELLE HOMES, OMAHA



ARCHITECTS: Chief, William L. Steele; Associates, George B. Prinz, Noel S. Wallace, Harry Lawrie, J. M. Nachtigall, F. A. Henninger, Sr.

SITE: Slum; 15 acres.

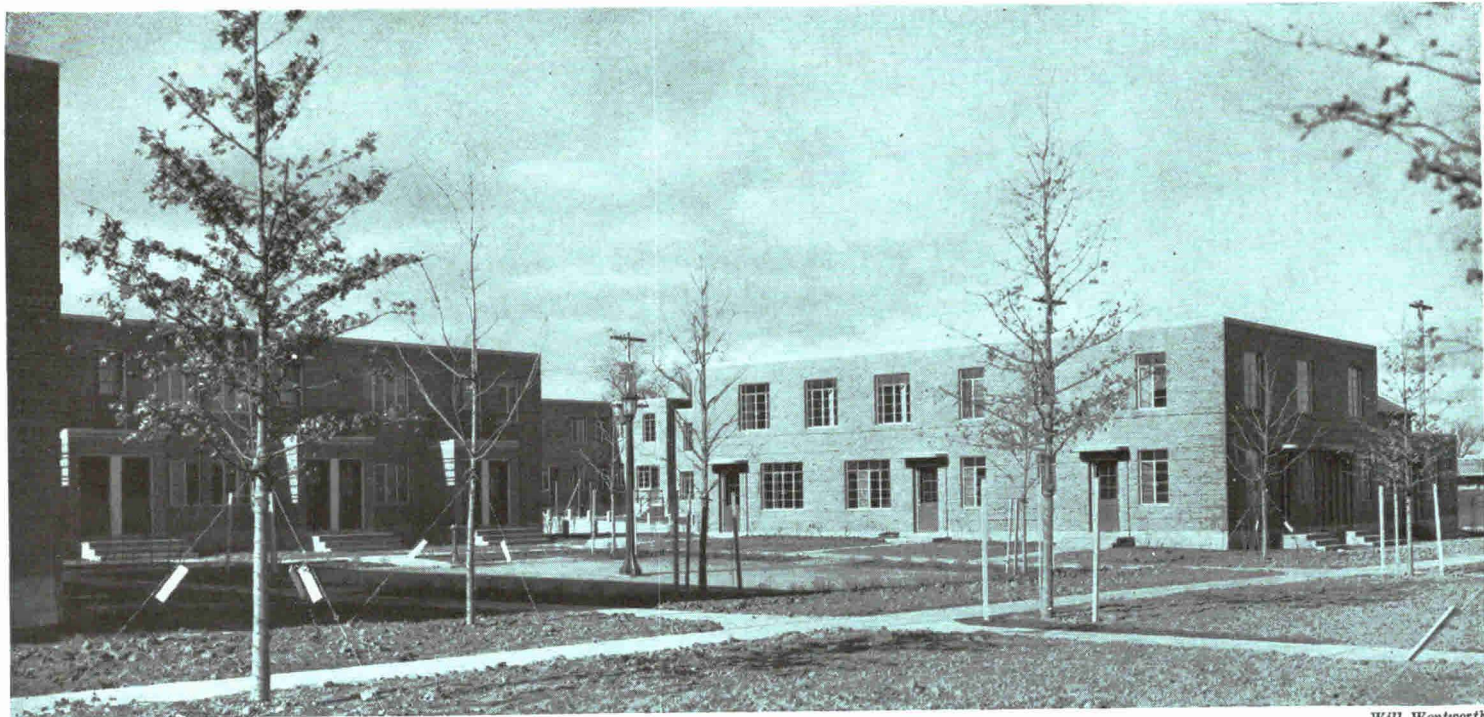
BUILDING TYPES: 1 and 2-story row houses and 2-story flats.

SIZE: 284 living units; 124 3-rooms; 10 4-rooms; 123 4½-rooms; 27 5½-rooms.

SITE COVERAGE: 19 per cent.

COST: Total \$1,647,087
 Land 232,021
 Demolition 865
 Construction 1,387,966
 Landscaping 26,235
 Construction cost per room
 (including Landscaping): 1,269.47

RENT: Average per room per month
 excluding service charge: \$4.66
 including heat, hot water, light,
 refrigeration and cooking: \$6.78
 See page 352 for unit plan.



Will Wentworth



CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick veneer, backup tile, Rockford Brick & Tile Co., asphalt dampproofing on backup walls, metal base, Milcor Steel, stone sills and copings, Albert Foll & Son. Waterproofing—membrane. Interior partitions—2 in. solid plaster, 3 in. tile dividing partitions, plastered, Midland Brick & Tile Co. Floor construction—concrete slab and beams. Ceiling—finished concrete, painted.

ROOF: Covered with 5-ply composition.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—1½ in. Beaverboard, Certain-teed Mfg. Co. Weatherstripping—spring bronze and thresholds, Sager Metal Strip Co.

WINDOWS: Metal casements and screens, Truscon Steel Co. Glass—double strength, quality B, Pittsburgh Plate Glass Co. and Mississippi Glass Co.

STAIRS: Metal pan type, Gate City Iron Works. Treads covered with asphalt tile, Uvalde Rock Asphalt Co.

FLOORS: Main rooms—asphalt tile, Uvalde Rock Asphalt Co. Kitchen—linoleum. Bathrooms—ceramic tile, Sparts Ceramic Co.

WOODWORK: Trim on exterior door frames and shelving—Goodjohn Sash & Door Co. Miscellaneous metal trim—Milcor Steel Co. Doors—Goodjohn Sash & Door Co. and Peter Kiewit Sons.

HARDWARE: Sargent & Co.

PAINTING: Interior walls, trim, and sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rigid steel conduit, Youngstown Sheet & Tube Co. Outlet boxes—Jefferson Electric Co. Rubber insulated wire—Anaconda Wire & Cable Co. Switches—flush toggle, Bryant Electric Co. Fixtures—porcelain and enclosed direct, Pass & Seymour, Inc.

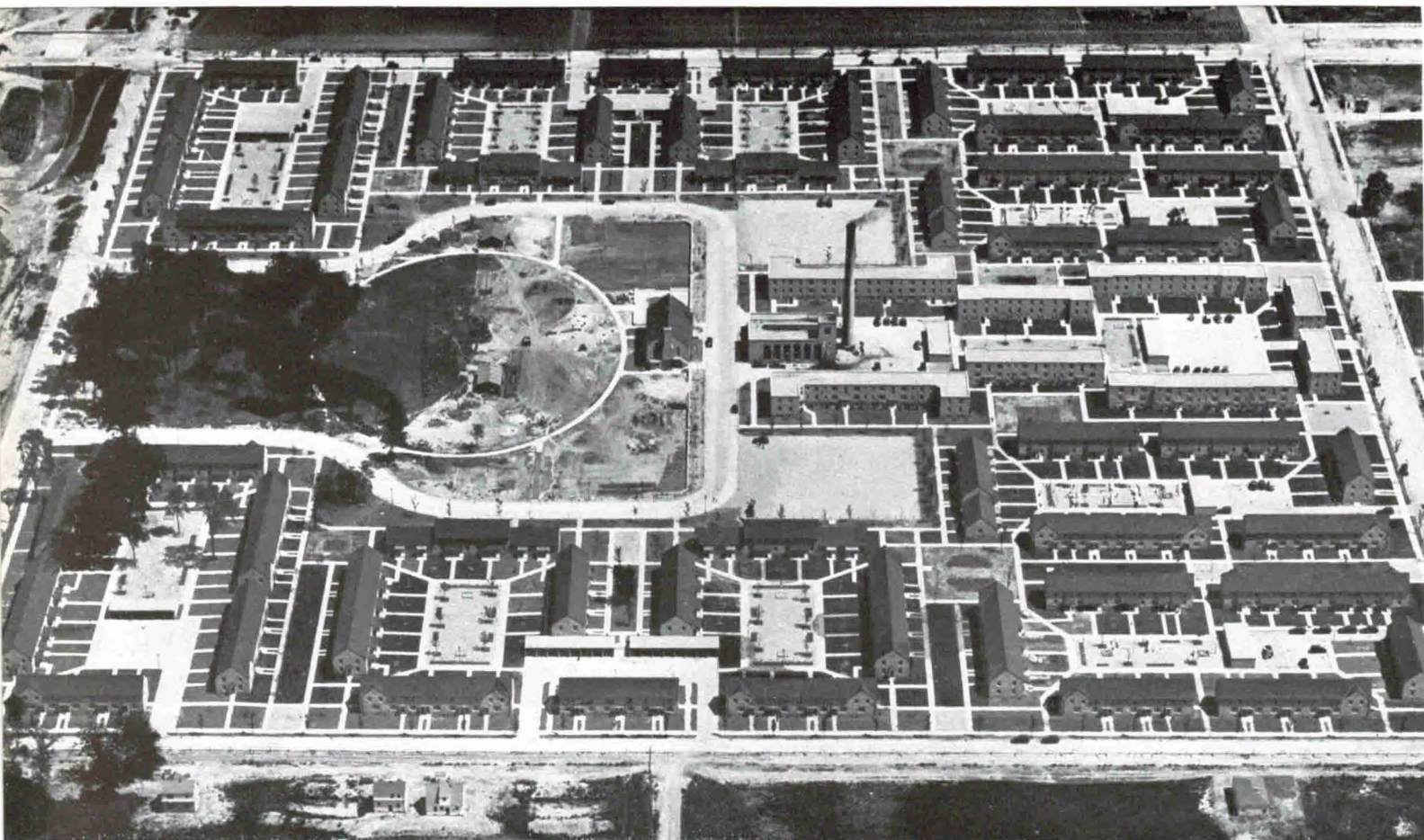
KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Kohler Co. Cabinet—wood, Farley & Loetscher Mfg. Co.

BATHROOM EQUIPMENT: All fixtures—Kohler Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes—Cast iron—Clay & Bailey Co. Wrought iron—A. M. Byers Co. Steel—Youngstown Sheet & Tube Co. Brass—Streamline Pipe & Fittings Co. and Mueller Mfg. Co.

HEATING: Central steam type. Boiler—portable steel, L. P. firebox, Kewanee Boiler Corp. Fuel—coal, underfeed stoker, Detroit, automatic combustion control, Carrick. Radiators—Kohler Co. Valves and traps and automatic heat control, C. A. Dunham Co. Hot water generators—Sims Co.

WISCONSIN PARKLAWN, MILWAUKEE



ARCHITECTS: Chief, Gerrit J. DeGelleke; Associates, Harry Bogner, Peter Brust, A. C. Eschweiler, Jr., Rubens F. Clas, William G. Herbst, Fitzhugh Scott, Herbert Tullgren, Alexander H. Bauer, Leigh Hunt, Richard Phillip, R. A. Messmer, Thomas L. Rose, Bruce Uthers.

SITE: Vacant; 42 acres.

BUILDING TYPES: 2-story apartments and 1 and 2-story row houses.

SIZE: 518 living units; 136 3-room; 300 4-room; 82 5-room.

COST: Total	\$2,242,659
Land	91,406
Construction	2,087,041
Landscaping	64,212

Construction cost per room
(including Landscaping): \$1,066.03

RENT: Average per room per month excluding service charge:	\$5.38
including heat, hot water, light, refrigeration and cooking:	\$7.46

See page 354 for unit plan.



CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick veneer and clay tile backup, Mason City Brick Tile Co. concrete block, Best Bros. Asphalt damp-proofing on backup walls; metal base, Milcor Steel Co.; aluminum sills, A. F. Wagner Iron Works. Interior partitions—2 in. solid plaster, 3 or 4 in. at chases, bathrooms and dividing partitions, Mason City Brick Tile Co. Stair-halls—salt glazed brick. Floor construction—concrete slab and beam in houses; concrete slab in apartments.

ROOF: Construction—concrete slab in apartments; trussed wood rafters in houses; covered with composition 5-ply. Roof tile—Ludowici-Celadon Co.

SHEET METAL WORK: Flashing, gutters and leaders—16 oz. copper.

INSULATION: Attic floors and roofs—Celotex Corp. Weatherstripping—spring bronze and brass or bronze thresholds, Absoproof Weather Strip Co.

WINDOWS: Sash—wood, Austin Millwork Co. Glass—double strength, quality A and B, American Window Glass Co. and Mississippi Glass Co.

STAIRS: Metal pan type, Wagner Iron Works.

FLOORS: Main rooms—wood, laid in mastic. Bathrooms—ceramic tile, Sparta Ceramic Co. and Cambridge Wheatley Co.

WOODWORK: Trim, shelving, cabinets and doors—Austin Millwork Co. Garage doors—Stanley Works.

HARDWARE: Interior and exterior—Stanley Works and Norwalk Lock Co.

PAINTING: Interior walls, trim and sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rubber insulated wire—General Cable Co. Rigid steel conduit—Youngstown Sheet & Tube Co. Outlet boxes—National Electric Products Co. Switches—flush toggle, Bryant Electric Co. Fixtures—Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—electric, Edison General Electric Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and tray—Standard Sanitary Mfg. Co. Cabinet—wood, Austin Millwork Co.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

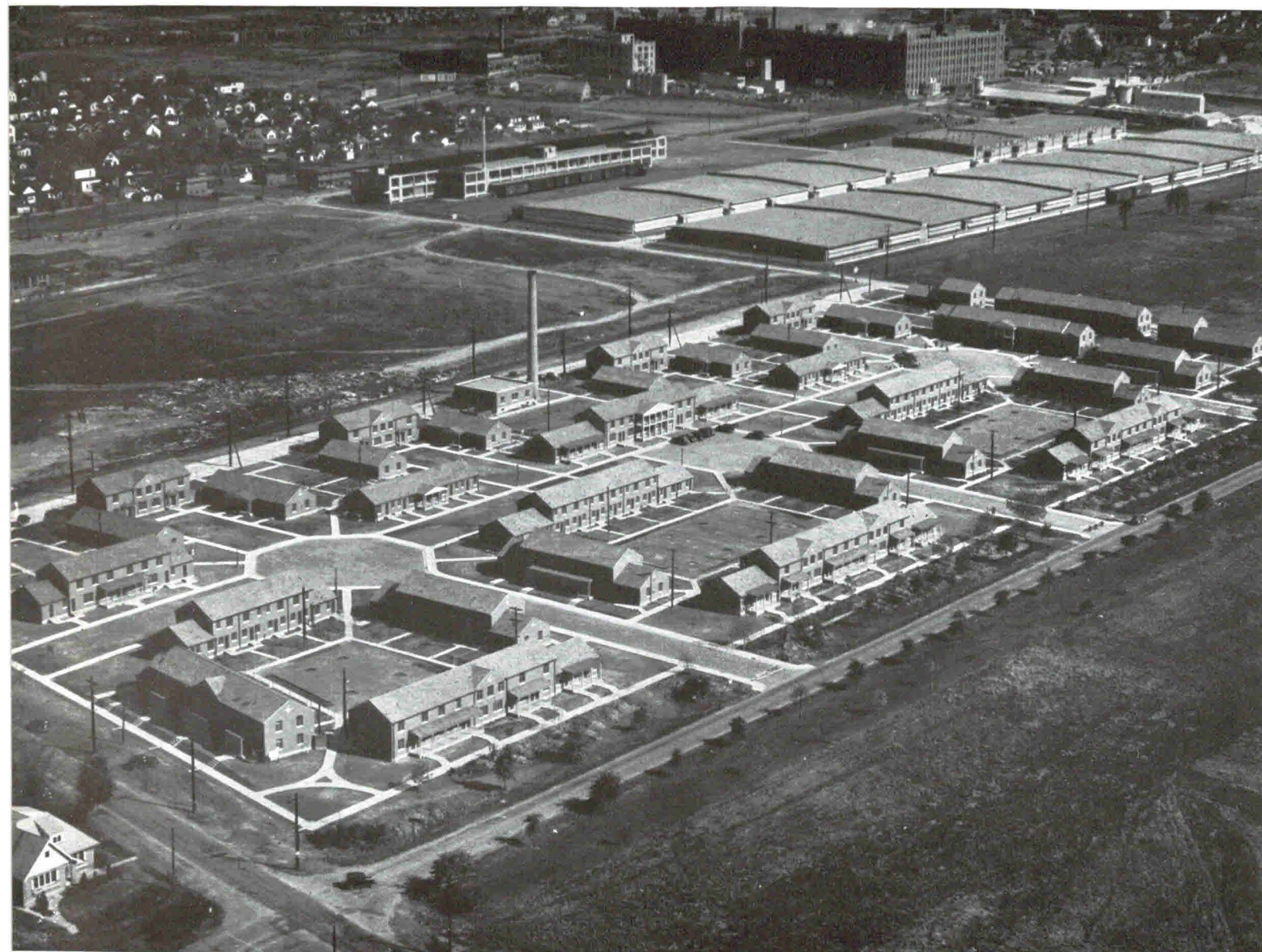
BATHROOM EQUIPMENT: All fixtures—Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes: Cast iron—Somerville Iron Works. Wrought iron—Reading Iron Co. Steel—National Tube Co. Brass—Revere Copper & Brass Co.

HEATING: Central steam type. Underground Conduit—Ric-Wil. Boiler—bent water tube, Kroeschell. Fuel—coal; spreader type stoker, Detroit automatic combustion control. Radiators—cast iron, H. W. pattern, Crane Co. Convector type—U. S. Radiator Co. Valves and traps—J. P. Marsh Corp. Hot water generators—Patterson-Kelley.



KENTUCKY LA SALLE PLACE, LOUISVILLE



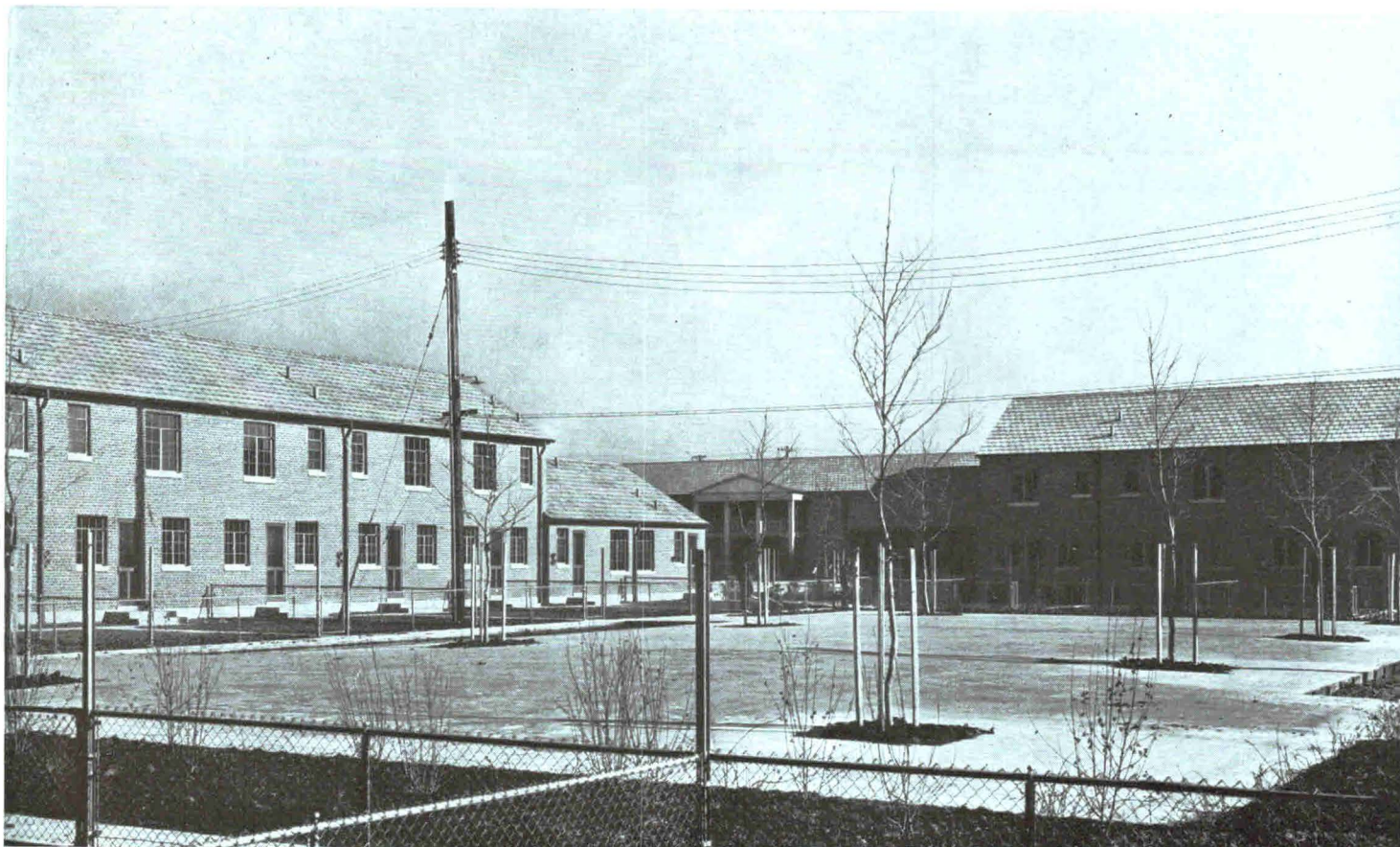
ARCHITECTS: Chief, E. T. Hutchings; Associates, Hermann Wischmeyer, Thomas J. Nolan, Alfred S. Joseph, Arthur G. Tafel, Brinton B. Davis, Alfred E. Weinedel, Stratton O. Hammon, Gaarwood M. Grimes, Fred H. Elswick.

SITE: Vacant; 14 acres.

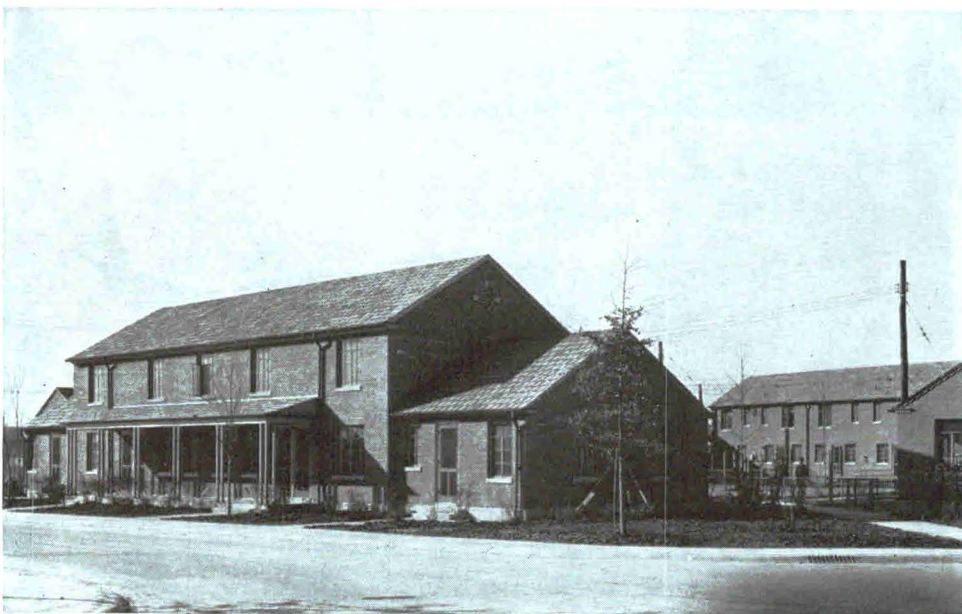
BUILDING TYPES: 1 and 2-story row houses.

SIZE: 210 living units; 85 3-room; 83 4-room; 42 5-room.

COST: Total	\$1,121,120
Land	65,796
Construction	1,031,154
Landscaping	24,170
Construction cost per room (including Landscaping)	\$1,324.12
RENT: Average per room per month excluding service charge:	\$4.70
including heat, hot water, light, refrigeration and cooking:	\$6.26



Royal Photos



CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete, continuous spread footings. Floor—concrete slab, mesh reinforced, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer and clay tile backup, Coral Ridge Brick & Tile Co. Metal base, Milcor Steel; stone sills and copings, Sam Warren & Son Stone Co. Waterproofing—membrane; asphalt damp-proofing. Interior partitions—2 in. solid plaster, 3 or 4 in. partition tile at chases, bathrooms and partitions, Coral Ridge Brick & Tile Co. Floor construction—concrete slab and beam.

ROOF: Concrete slab and beam for flat roofs; trussed wood rafters for pitched roofs. Covered with—asbestos shingle, Philip Carey Co. Ceiling (2nd floor)—plastered.

SHEET METAL WORK: Flashing, gutters and leaders—16 oz. copper.

INSULATION: Outside walls, ground floor and attic floor—Johns-Manville Corp. Roof—3-ply special conditions. Weatherstripping—spring bronze and brass or bronze thresholds, Builders Specialties Co.

WINDOWS: Metal casements and screens, Campbell Metal Window Corp. Glass—double strength, quality B, Libbey-Owens-Ford Glass Co. and Mississippi Glass Co.; $\frac{1}{2}$ in. plate for doors, Pittsburgh Plate Glass Co.

STAIRS: Metal pan type, cement filled and asphalt tile treads, Hawkins Ornamental Iron Co.

FLOORS: Living room, bedrooms and halls—asphalt tile, Uvalde Rock Asphalt Co. Kitch-

ens—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Co. and American Mosaic Tile Co. Porches—cement.

WALL COVERINGS: U. S. Gypsum Co. plaster throughout, except U. S. Gypsum Co.'s Keene's cement in bathrooms.

WOODWORK: Shelving and doors—Kentucky Millwork Co.

HARDWARE: Interior and exterior—Norwalk Lock Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Lighting—1 phase, 3 wire; power—3 phase, 3 wire. Rubber insulated wire—General Cable Corp. Rigid steel conduit—Youngstown Sheet & Tube. Outlet boxes—Jefferson Electric Co. Switches—flush toggle, Bryant Electric Co. Fixtures—porcelain direct and enclosed direct, Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—gas, Servel, Inc. Sink—Standard Sanitary Mfg. Co. Cabinet—wood, Kitchen Main.

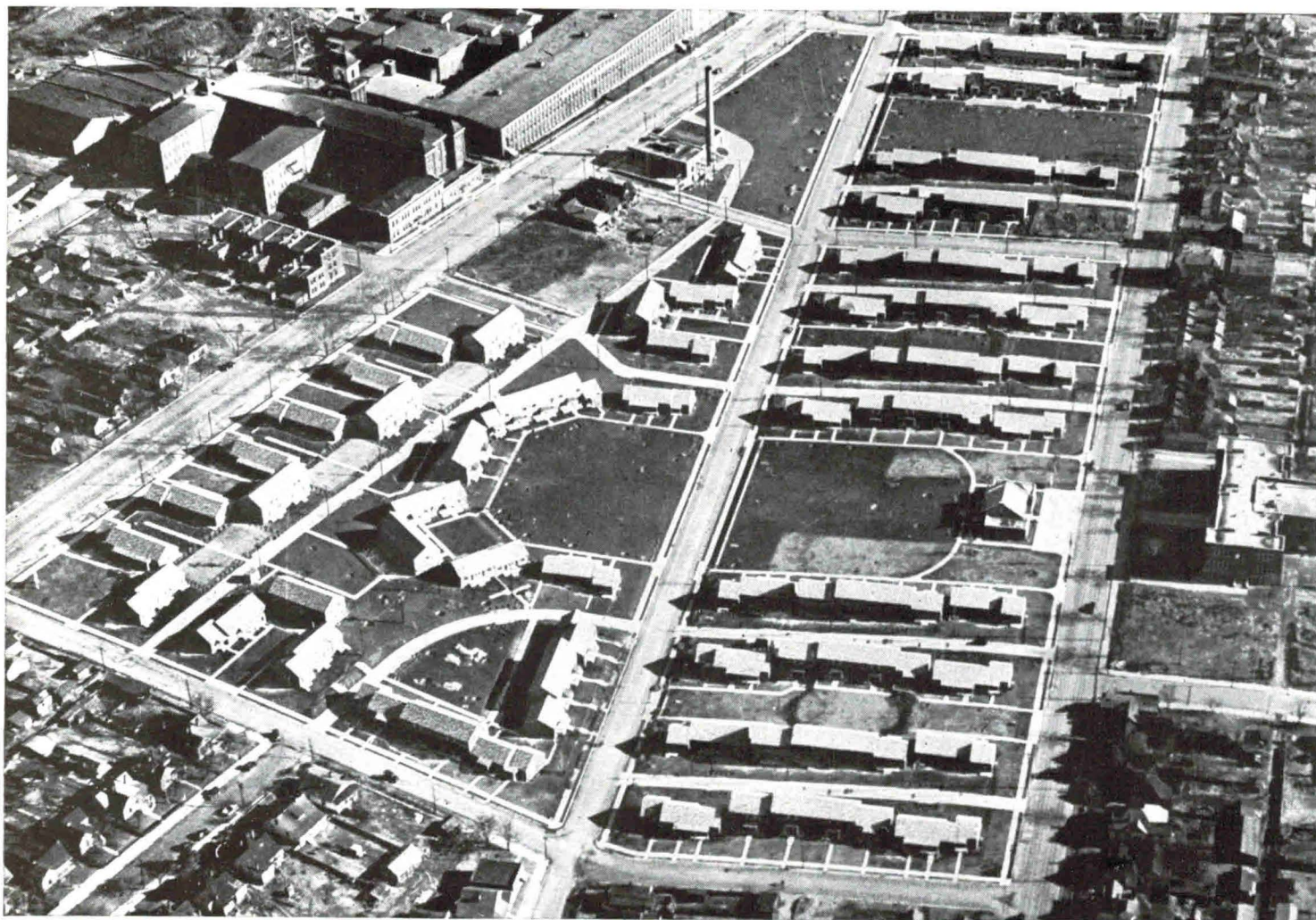
LAUNDRY EQUIPMENT: Sink—cement, Standard Elsmere Granite Co.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, F. H. Lawson Co.

PLUMBING: Pipes: cast iron, Alabama Pipe Co. Wrought iron, A. M. Byers Co. Steel—Jones & Laughlin Steel Corp. Brass—Bridgeport Brass Co.

HEATING: Steam: Moderator System, Warren Webster & Co. Underground Conduit—Ric-Wil. Boiler—portable steel L. P. firebox, Kewanee Boiler Corp. Fuel—coal; underfeed stoker and automatic combustion control, Detroit Stoker Co. Radiators—cast iron tubular, H. W. pattern, American Radiator Co. Valves, thermostatic and drip traps, Warren Webster & Co. Hot water generators—Patterson-Kelley Co.

TENNESSEE CHEATHAM PLACE, NASHVILLE



ARCHITECTS: Chief, Richard R. Clark; Associates, Henry C. Hibbs, Emmons H. Woolwine, Francis B. Warfield, Eli M. Tisdale.

SITE: Slum; 22 acres.

BUILDING TYPES: 1 and 2-story row houses.

SIZE: 314 living units. 51 2-room; 149 3-room; 74 4-room; 40 5-room.

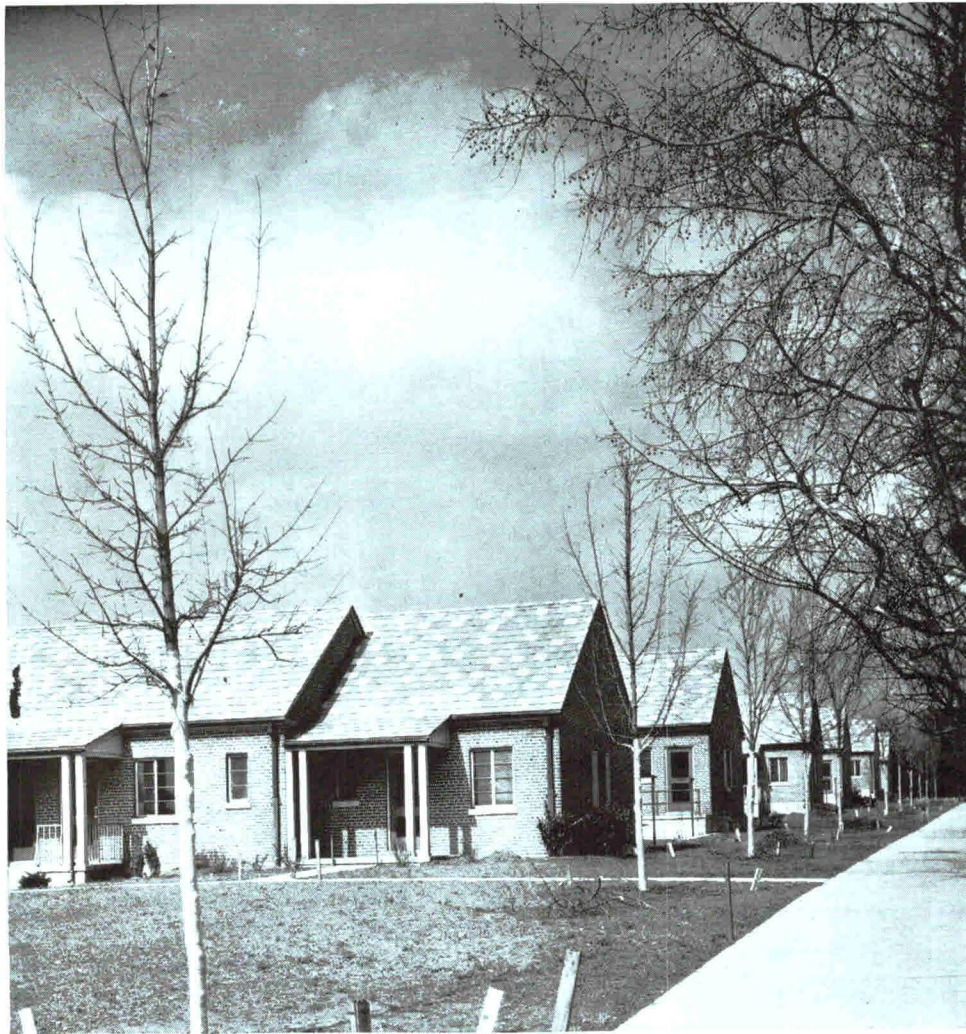
SITE COVERAGE: 20 per cent.

COST: Total	\$1,755,536
Land	240,410
Demolition	3,350
Construction	1,468,759
Landscaping	43,017
Construction cost per room (including Landscaping):	1,447.63

RENT: Average per room per month
excluding service charge: \$5.06
including heat, hot water, light,
refrigeration and cooking: \$6.79

SPECIAL FEATURE: Community House.

See page 352 for unit plan.



CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete, continuous spread footing. Floor—4 in. reinforced concrete slab on fill.

STRUCTURE: Exterior walls—brick veneer and backup tile, asphalt dampproofing on backup walls, Herty-Turpentine Cup Co. Wood base and cornice, Enochs Lumber & Mfg. Co. Stone copings and sills, Russellville Cut Stone Co. Interior partitions—2 in. solid plaster; 3 and 4 in. tile partitions, W. G. Bush & Co., plastered at bathrooms, chases and dividing partitions. Floor construction—concrete slab and beam. Ceiling—finished plaster. **ROOF:** Trussed wood rafters covered with wood sheathing and asbestos shingles, Rubberoid Co. Flat roofs—5-ply composition.

SHEET METAL WORK: Flashing, gutters, leaders and metal porch roofs—16 oz. copper.

INSULATION: Attic floor—Thermax between ceiling joists, Celotex Corp. Flat roof of Community Building—1½ in. beaverboard, Certain-teed Mfg. Co. Weatherstripping—spring bronze and extruded brass or bronze thresholds, Builders' Specialties Co.

WINDOWS: Metal casements, Truscon Steel Co. Glass—double strength, quality B, Pittsburgh Plate Glass Co. Screens—metal, Truscon Steel Co.

STAIRS: Metal pan type, Decatur Iron & Steel. Treads—covered with asphalt tile, Thomas Moulding Co.

FLOORS: Main rooms—asphalt tile on concrete slab, Thomas Moulding Co. Kitchen—linoleum. Bathrooms—ceramic tile, Foster & Creighton Co.

WALL COVERINGS: All rooms plaster, U. S. Gypsum Co., except bathrooms—Keene's cement, U. S. Gypsum Co.

WOODWORK: Exterior door bucks, trim and shelving, Enochs Lumber & Mfg. Co. Doors and screen doors, Southern Mfg. Co. Garage doors—Overhead Door Corp.

HARDWARE: Interior and exterior—Lockwood Hardware Mfg Co.

ELECTRICAL INSTALLATION: Wiring system: Lighting—3-phase, 4-wire. Power—3-phase, 3-wire. Rigid steel conduit, General Electric Co. Outlet boxes—American Circular Loom Co. Rubber insulation wire—General Electric Co. Switches—flush toggle type, Bryant Electric Co. Fixtures—porcelain and enclosed direct, Pass & Seymour, Inc.

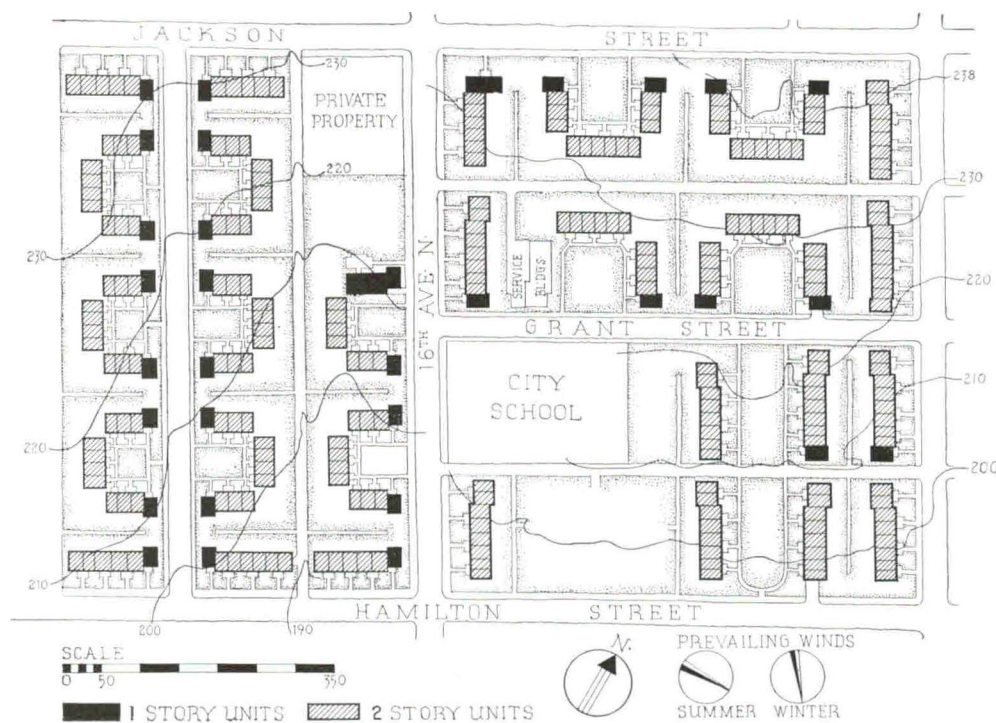
KITCHEN EQUIPMENT: Stove—electric, Edison General Electric Co. Refrigerator—electric, Westinghouse Electric Co. Sink—Kohler Co.

BATHROOM EQUIPMENT: All fixtures by Kohler Co. Cabinet—metal, F. H. Lawson Co.

PLUMBING: Pipes—Cast iron—Alabama Pipe Co. Wrought iron—Reading Iron Co. and A. M. Byers Co. Steel—Youngstown Sheet & Tube Co. Brass—Chase Brass & Copper Co., Inc. Copper tubing—American Brass Co.

HEATING: Central hot water type. Boiler—bent water tube, Erie. Fuel—coal; spreader type stoker, Hoffman; automatic combination control, Shallcross. Radiators—cast iron, H. W. pattern, Burnham Boiler Corp. Convector—Trane Co. Radiator valves and traps—Grinnell Co. Hot water generators—Sims Co.

TENNESSEE ANDREW JACKSON COURTS, NASHVILLE



ARCHITECTS: Chief, Richard R. Clark; Associates, Henry C. Hibbs, Emmons H. Woolwine, Francis B. Warfield, Eli M. Tisdale.

SITE: Slum; 21 acres.

BUILDING TYPES: 1 and 2-story row houses and 2-story flats.

SIZE: 398 living units. 48 2-room; 243 3-room; 99 4-room; 8 5-room.

SITE COVERAGE: 25 per cent.

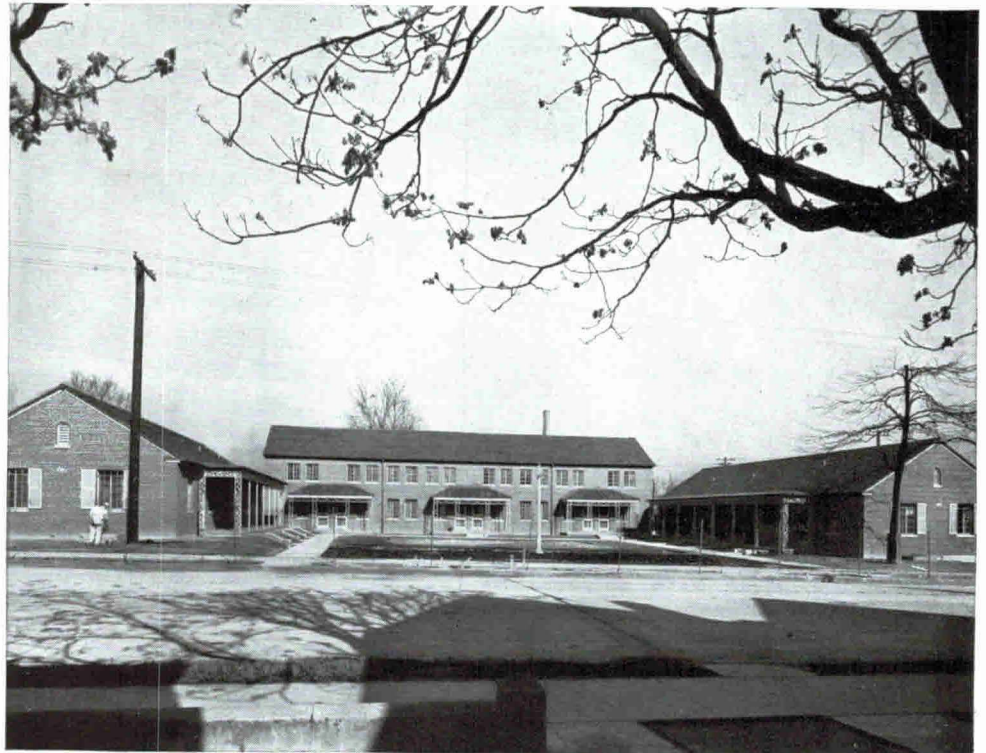
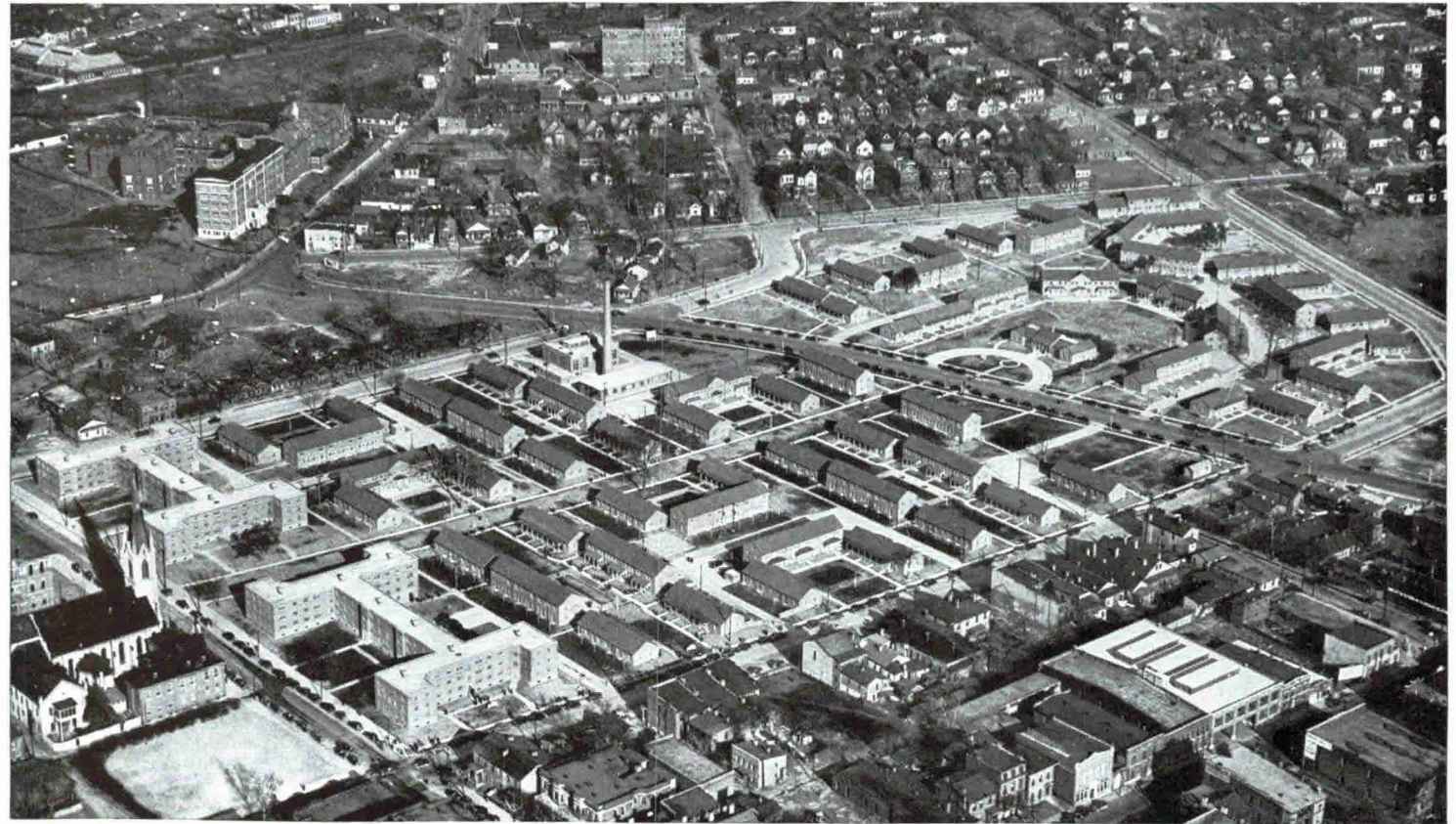
COST: Total	\$1,592,991
Land	196,733
Demolition	3,250
Construction	1,393,008*
Construction cost per room (including Landscaping):	1,104.68

RENT: Average per room per month
excluding service charge: \$5.06
including heat, hot water, light,
refrigeration and cooking: \$6.79

*Includes Landscaping.

See page 452 for Construction Outline.

LAUDERDALE COURTS, MEMPHIS TENNESSEE



ARCHITECTS: Chief, J. Frazer Smith; Associates, Richard J. Regan, Everett Woods, Walk C. Jones, Edwin B. Phillips, William J. Hanker, George Awsumb, W. C. Lester.

SITE: Slum; 26 acres.

BUILDING TYPES: 3-story apartments, 1 and 2-story row houses.

SIZE: 449 living units; 24 2-room; 208 3-room; 183 4-room; 34 5-room.

COST: Total \$2,868,123

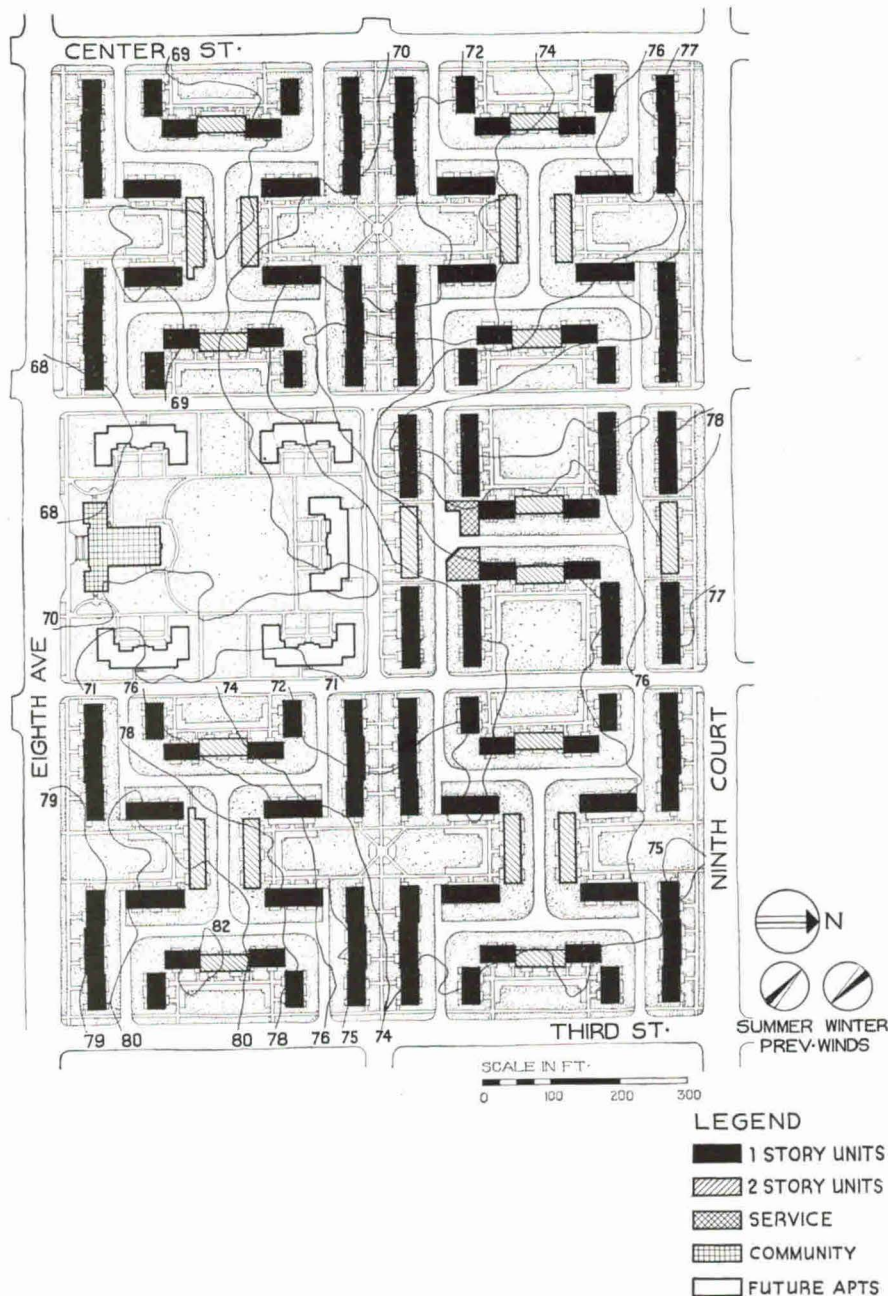
Land	\$509,854
Demolition	3,210
Construction	2,307,209
Landscaping	47,850

Construction cost per room (including Landscaping) \$1,496.22

RENT: Average per room per month excluding service charge: \$4.61
including heat, hot water, light, refrigeration and cooking: \$5.78

See page 452 for Construction Outline.

ALABAMA SMITHFIELD COURT, BIRMINGHAM



ARCHITECTS: Chief, D. O. Whilldin; Associates, Eugene H. Knight, Jack B. Smith, Ben Price, Harry B. Wheelock, George P. Turner, James L. Gatling, Edgar W. Stanford, Marshall E. Van Arman, P. S. Mewhinney; Structural Engineer, Edgar B. Van Keuren; Mechanical Engineer, C. P. Lichty.

SITE: Slum; 28 acres.

BUILDING TYPES: 1 and 2-story row houses.

SITE COVERAGE: 25 per cent.

SIZE: 544 living units; 184 2-room; 260 3-room; 60 4-room; 40 5-room.

COST: Total	\$2,238,801
Land	475,079
Construction	1,723,744
Landscaping	39,978

Construction cost per room (including Landscaping): \$1,110.64

RENT: Average per room per month excluding service charge: \$4.50 including light and refrigeration: \$5.00

SPECIAL FEATURE: Community House.

See page 66 for Construction Outline.



Birmingham View Co.

TECHWOOD HOMES, ATLANTA GEORGIA



PLAYGROUND



GARAGES



ARCHITECTS: Flippin D. Burge, Preston S. Stevens.

SITE: Slum; 25 acres.

BUILDING TYPES: 3-story apartments, 3-story dormitory, and 2-story row houses.

SIZE: 604 living units; 397 3-room; 128 4-room; 53 5-room; 26 6-room.

COST: Total \$2,518,548

Land (excluding dormitory site) 461,794

Construction 1,997,424

Landscaping 59,330

Construction cost per room (including Landscaping): \$968.34

RENT: Average per room per month excluding service charge: \$5.52

including heat, hot water, light, cooking, and refrigeration: \$7.33

SPECIAL FEATURES: First PWA housing project to be completed, data are available on Techwood's tenants, based on a year of operation. Significant figures: average income of families housed, \$22.11 per week; average family size, 3 1/4 persons; number of wage-earners per family, 1 1/2.

74 dormitory rooms and 40 3-room suites for faculty and students of adjoining Georgia School of Technology.

See p. 66 for Construction Outline.
Ref: ARCH. FORUM, Oct. 1936, p. 300-301.

GEORGIA UNIVERSITY HOMES, ATLANTA



ARCHITECTS: William A. Edwards, William J. Sayward.

SITE: Slum; 19 acres.

BUILDING TYPES: 2 and 3-story row houses, 2 and 3-story flats.

SITE COVERAGE: 25 per cent.

SIZE: 675 living units; 100 2-room; 248 3-room; 236 4-room; 91 5-room.

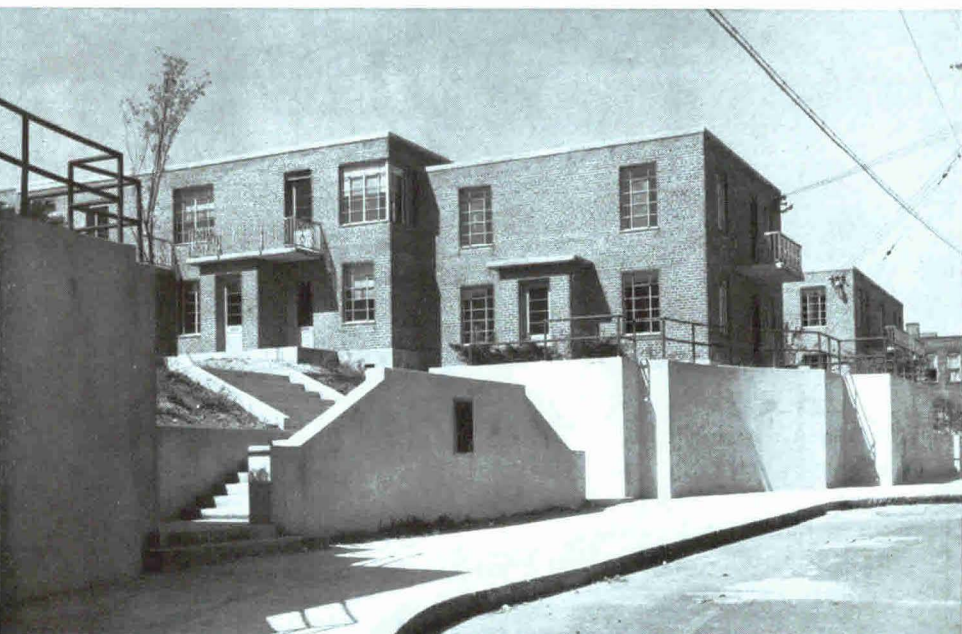
COST: Total	\$2,230,892
Land	316,438
Construction	1,876,765
Landscaping	37,689

Construction cost per room (including Landscaping): \$817.10

RENT: Average per room per month, excluding service charge: \$5.11
including heat, hot water, light, refrigeration, and cooking: \$6.87



R. W. Tebb



R. W. Tebbbs

CONSTRUCTION OUTLINE

FOUNDATION: Walls—12 in. concrete, continuous spread footings. Floor—concrete slab, mesh reinforcement, 6 in. stone or gravel fill. Waterproofing—metallic type on walls of boiler house, pits, basements of apartments, and walls of kindergarten.

STRUCTURE: Exterior walls—brick veneer, tile, asphalt dampproofing. Sills—aluminum, Bohn Aluminum Co. Door sills, trim and copings—limestone, Heltonville Limestone Co. Waterproofing—membrane. Interior partitions—2 in. solid plaster, 3 in. tile dividing partitions, Standard Brick Co. Floor construction—concrete slab and beam, Penn-Dixie Cement Corp.; reinforcement by Truscon Steel Corp. ROOF: Concrete slab, composition 5-ply.

SHEET METAL WORK: Flashing—16 oz. copper, Philip Carey Co.

INSULATION: Roof—Armstrong Cork Products Co.

WINDOWS: Metal casements and screens—Campbell Metal Window Corp. Glass—single strength, quality B, Pittsburgh Plate Glass Co.

STAIRS: Metal pan type, metal risers and wall stringers, cement filled treads, Birmingham Ornamental Iron Works. House stair treads—finished with asphalt tile.

FLOORS: All rooms asphalt tile, Thomas Moulding Floor Co.

WALL COVERINGS: Living room and bedrooms—plaster. Stairhalls, kitchen and bathrooms—Portland cement plaster.

WOODWORK: Shelving, cabinets and interior doors—Puget Sound Mfg. Co. Exterior doors—M. Phillips Mfg. Co. Garage door—Stanley Works.

HARDWARE: Interior and exterior—Norwalk Lock Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Wiring system: Lighting—single phase, 3 wire; power—3 phase, 3 wire. Switches—flush toggle type, Hart & Hegeman. Fixtures—Pass & Seymour Co.; Hart & Hegeman and John C. Virden Co.

KITCHEN EQUIPMENT: Range—electric, Westinghouse Electric & Mfg. Co. Refrigerator—Kelvinator. Sink and laundry tray—combination, Crane Co. Cabinet—Farley & Loetscher Mfg. Co.

BATHROOM EQUIPMENT: All fixtures by Crane Co.

HEATING: Steam: Moderator System, Warren Webster & Co. Underground Conduit—Ric-Wil. Boiler—bent water tube, Titusville Iron. Fuel—coal, automatic combustion control, underfeed stoker, Brownell Co. Radiators—cast iron tubular, H. W. pattern, Crane Co. Valves, thermostatic and drip traps: Warren Webster & Co. Hot water generators—Richmond Engineering Co.



Fairchild Aerial S

ARCHITECTS: Chief, Samuel Lapham, Jr., Associates, David B. Hyer, Henry S. Burden, Stephen Thomas.

SITE: Vacant; 16 acres.

BUILDING TYPES: 1- and 2-story row houses.

SIZE: 212 living units. 54 2-room; 64 3-room; 70 4-room; 24 5-room.

SITE COVERAGE: 25 per cent.

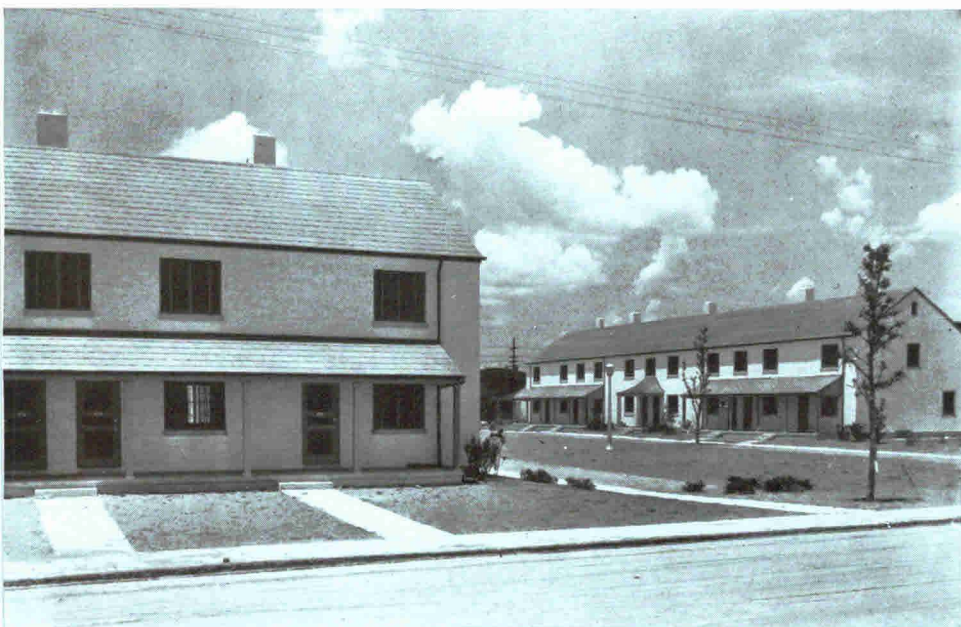
COST: Total	\$1,149,231
Land	40,099
Construction	1,092,959
Landscaping	16,173
Construction cost per room (including Landscaping):	1,584.47

RENT: Average per room per month excluding service charge: \$4.98
including light and refrigeration: \$5.89

SPECIAL FEATURES: Advantage was taken of an abrupt incline running across the site to form a natural division between the section developed for white tenancy and the section developed for Negroes.



Howard R. Jacobs



CONSTRUCTION OUTLINE

FOUNDATIONS: Walls—concrete, pile footings and continuous spread footings. Floor—concrete mesh reinforcement, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer, tile backup, Merry Bros.; metal base; stone sills, Indiana Limestone Co. Asphalt damp-proofing on backup walls. Waterproofing—membrane. Mortar, Louisville Cement Co. and Universal Atlas Portland Cement Co.

INTERIOR PARTITIONS: 2 in. solid plaster, 3 and 4 in. tile dividing partitions.

FLOOR CONSTRUCTION: Concrete slab and beam, Volunteer Portland Cement Co. and Universal Atlas Cement Co.

ROOF CONSTRUCTION: Trussed wood rafters, shingles, Keasbey & Mattison Co.

SHEET METAL WORK: Flashing, gutters and leaders—16 oz. copper.

INSULATION: Attic—Armstrong Products Co.

WINDOWS: Steel casements and screens—Campbell Metal Windows Corp. Glass—Libbey-Owens-Ford Glass Co.

STAIRS: Metal pan type, cement filled treads and platforms, Decatur Iron & Steel Co.

FLOORS: Main rooms—asphalt tile, Thomas Moulding Floor Co. Kitchens—linoleum. Bathrooms—ceramic tile, Olean Tile Co.

WALL COVERINGS: Main rooms—plaster, U. S. Gypsum Co. Kitchens and bathrooms—Keene's cement, U. S. Gypsum Co.

WOODWORK: Trim—wood, Snow Lumber Co. Metal interior bucks—Sanymetal Products Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATIONS: Wiring system: Lighting and power—single phase, 3 wire. Rigid steel conduit and rubber insulated wire—Triangle Cable & Conduit Co. Outlet boxes—National Electric Products Corp. Switches—flush toggle, Hart & Hegeman. Fixtures—porcelain and enclosed direct, Pass & Seymour and J. C. Virden Co.

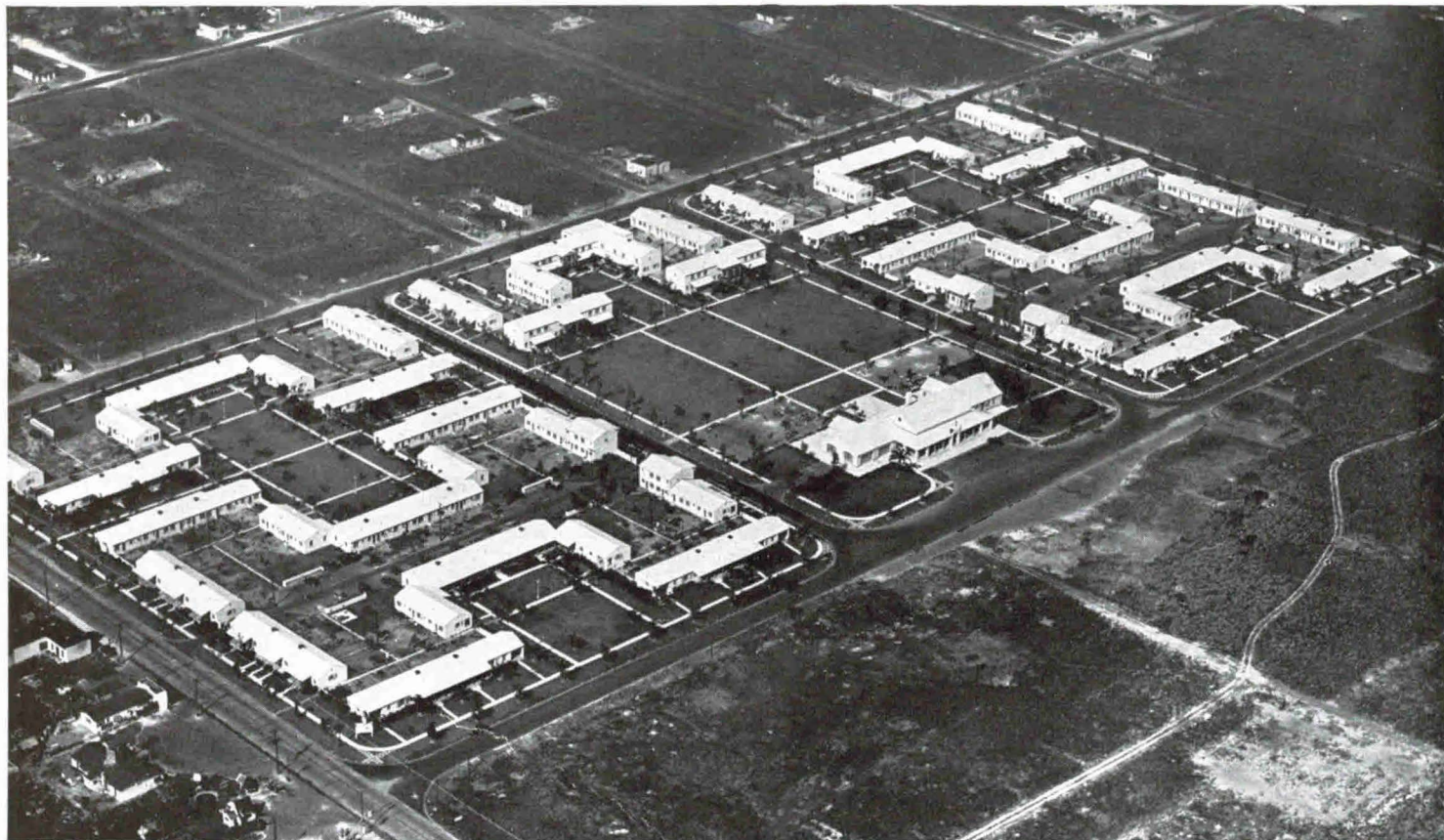
KITCHEN EQUIPMENT: Ranges—coal burning. Refrigerators—electric, Westinghouse Electric & Mfg. Co. Laundry tray and sink—combination, Eljer Co.

BATHROOM EQUIPMENT: All fixtures by Eljer Co.

PLUMBING: Pipes: Cast iron—U. S. Cast Iron Pipe Co. Wrought iron—A. M. Byers Co. Steel—Grinnell Co.

HEATING: Individual stoves.

FLORIDA LIBERTY SQUARE, MIAMI



ARCHITECTS: Chief, P. E. Paist; Associates, H. D. Steward, B. L. Robertson, Walter C. DeCarmo, Vladimir Virrick, C. Sheldon Tucker.

SITE: Vacant; 63 acres.

BUILDING TYPES: 1 and 2-story row houses.

SIZE: 243 living units. 30 2-room; 104 3-room; 57 4-room; 52 5-room.

COST: Total \$852,522
 Land 12,796
 Construction 810,016
 Landscaping 29,710
 Construction cost per room (including Landscaping): 976.41

RENT: Average per room per month including ice boxes and coal ranges: \$4.99

SPECIAL FEATURES: Community building including day nursery. All buildings in the development are of hurricane-proof construction.

See page 68 for Construction Outline.

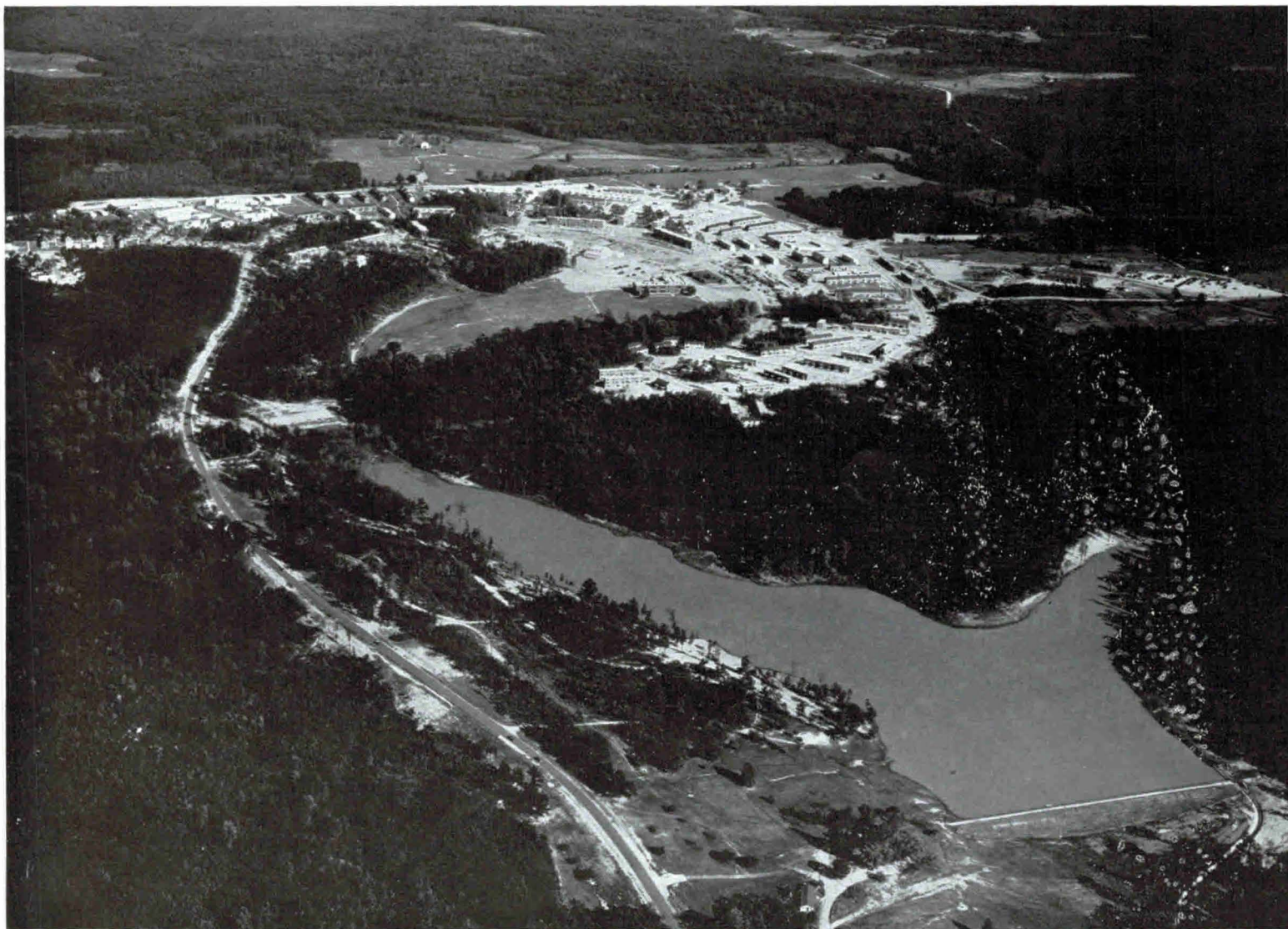
Ref: ARCH. FORUM May, 1937, p. 422-423



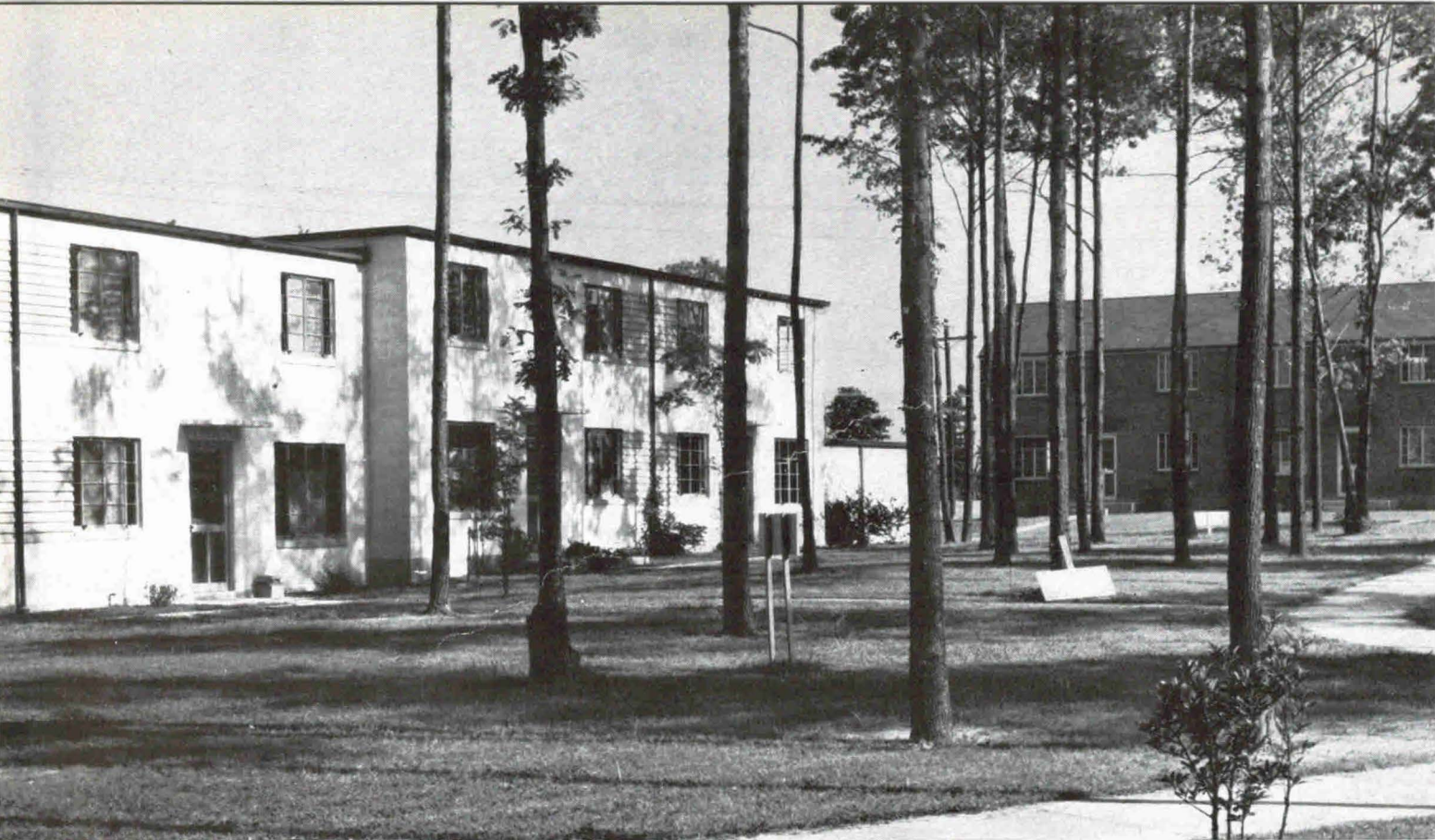
F. S. A. FARM SECURITY ADMINISTRATION

Unlike the urban and suburban projects shown on the preceding pages, aimed to solve the housing problem within the framework of the existing city, the three "Greenbelt" communities shown on the pages following are designed to point the way to better housing through the creation of entirely new and self-contained Satellite Towns. Surrounded by a permanent protecting belt of farmland, each of the projects has its own pre-planned town center, comprising stores, theater, municipal and community building, its own schools, recreational facilities, and town government. Owned and operated by the Farm Security Administration (formerly Resettlement Administration), houses and apartments are rented rather than sold, at rents based not on actual cost but on the ability to pay, with tenant selection on a basis similar to that used by the USHA.

GREENBELT, MARYLAND



Loc



SITE: Town proper, 3,820 acres; surrounding agricultural belt, 8,180 acres.

BUILDING TYPES: 1- and 2-story row houses, detached houses, 2-story apartments.

SIZE: 885 living units; 574 row houses, 4 to 7 rooms; 5 detached houses (experimental); 306 apartments, 1½ to 3 rooms.

COST:* Total \$9,325,000

Land for building purposes, including surveys, clearing, and landscaping 246,000

Roads, walks, and utilities 1,526,000

885 dwelling units 4,799,000

13 farm homes 85,000

Schools 494,000

Commercial buildings 344,000

Lake: land and development 178,000

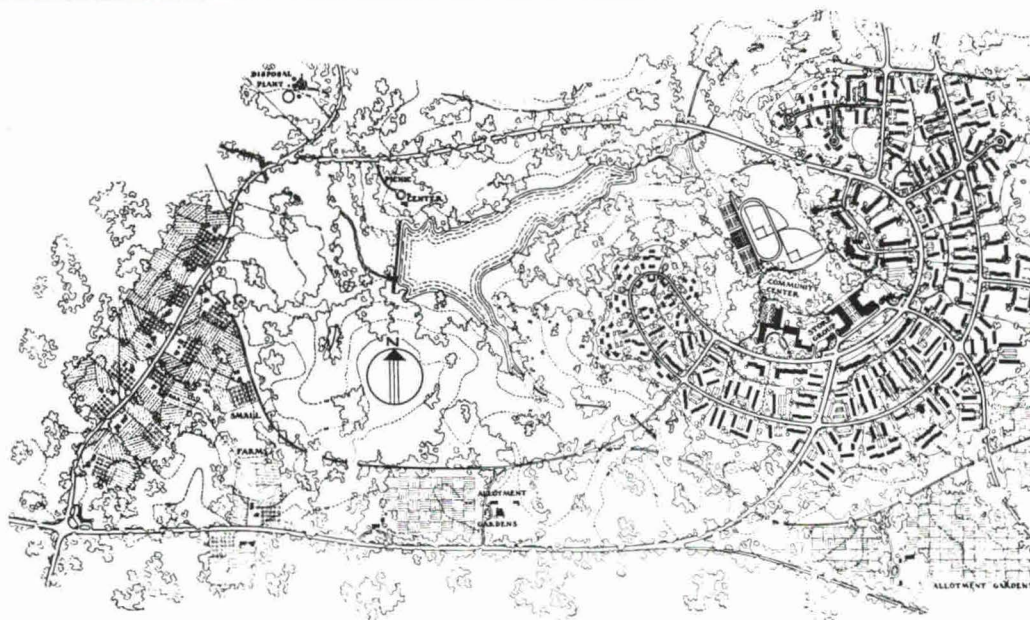
Recreation Center: land and development 112,000

Undeveloped land within town 614,000

Land reserve outside of town 643,000

Recoverables 284,000

Construction cost per dwelling unit (excluding utilities and landscaping): 5,423



RENT: Average per room per month excluding service charge: \$5.90

Monthly dwelling rentals, including heat, hot water, stoves, and refrigerators:

Range \$18 to \$41

Average \$31.23

Water (average monthly charge): 1.21

Electricity (lights, cooking, refrigeration—average monthly charge): 3.18

SPECIAL FEATURES: Schools, shopping center, athletic field, lake for boating, and hiking trails.

*Actual expenditures totaled about \$14,227,000. Of this amount, \$4,902,000 has been deducted since—in the opinion of the Farm Security Administration—this represents the amount expended on account of relief and rehabilitation aspects of the program over and above the costs which would normally be incurred for labor.



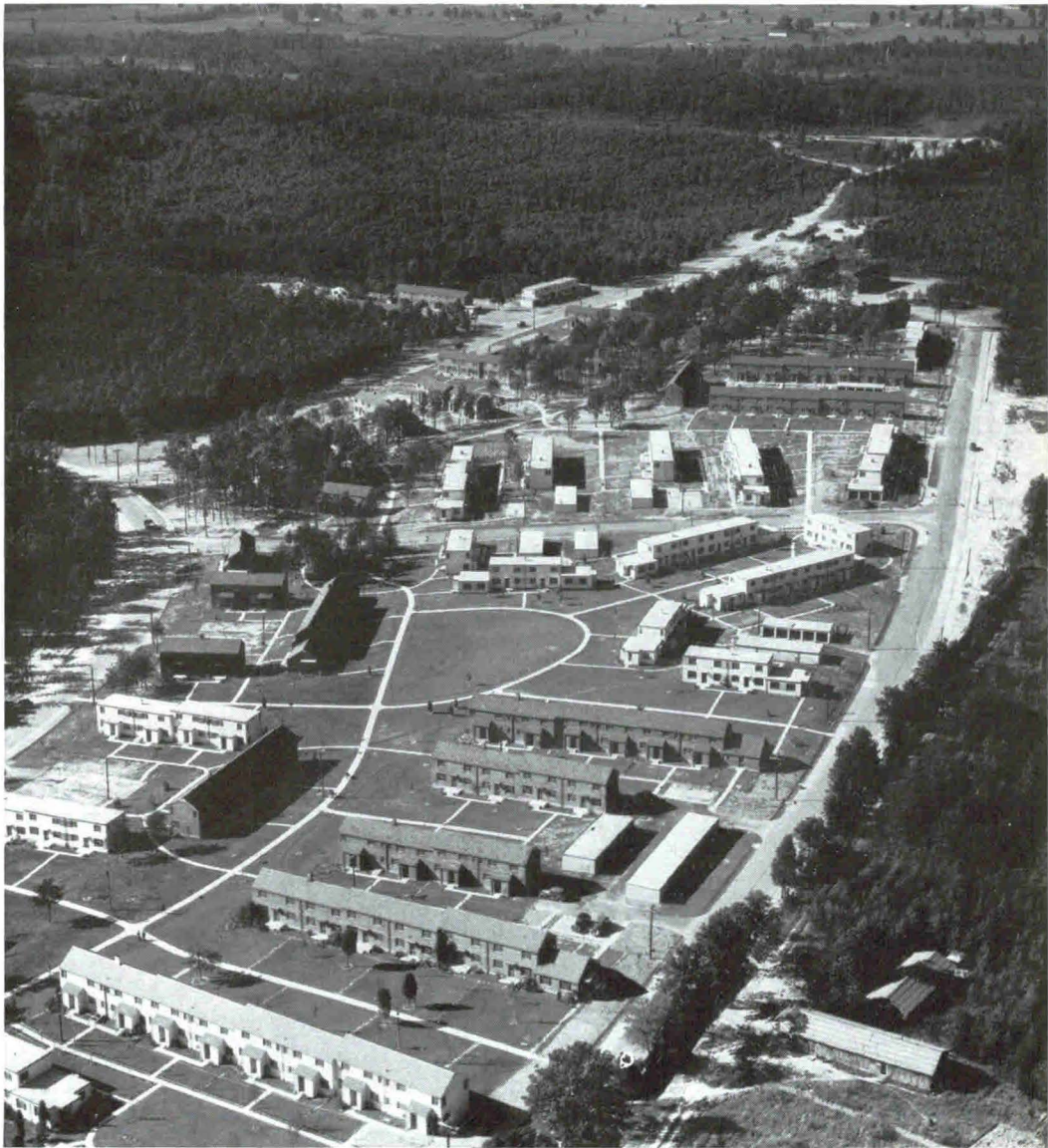
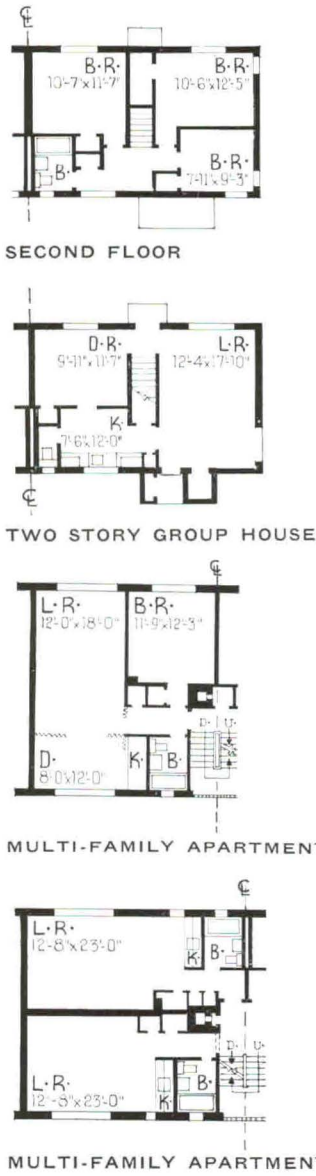
ONE STORY END UNIT

GREENBELT, MARYLAND

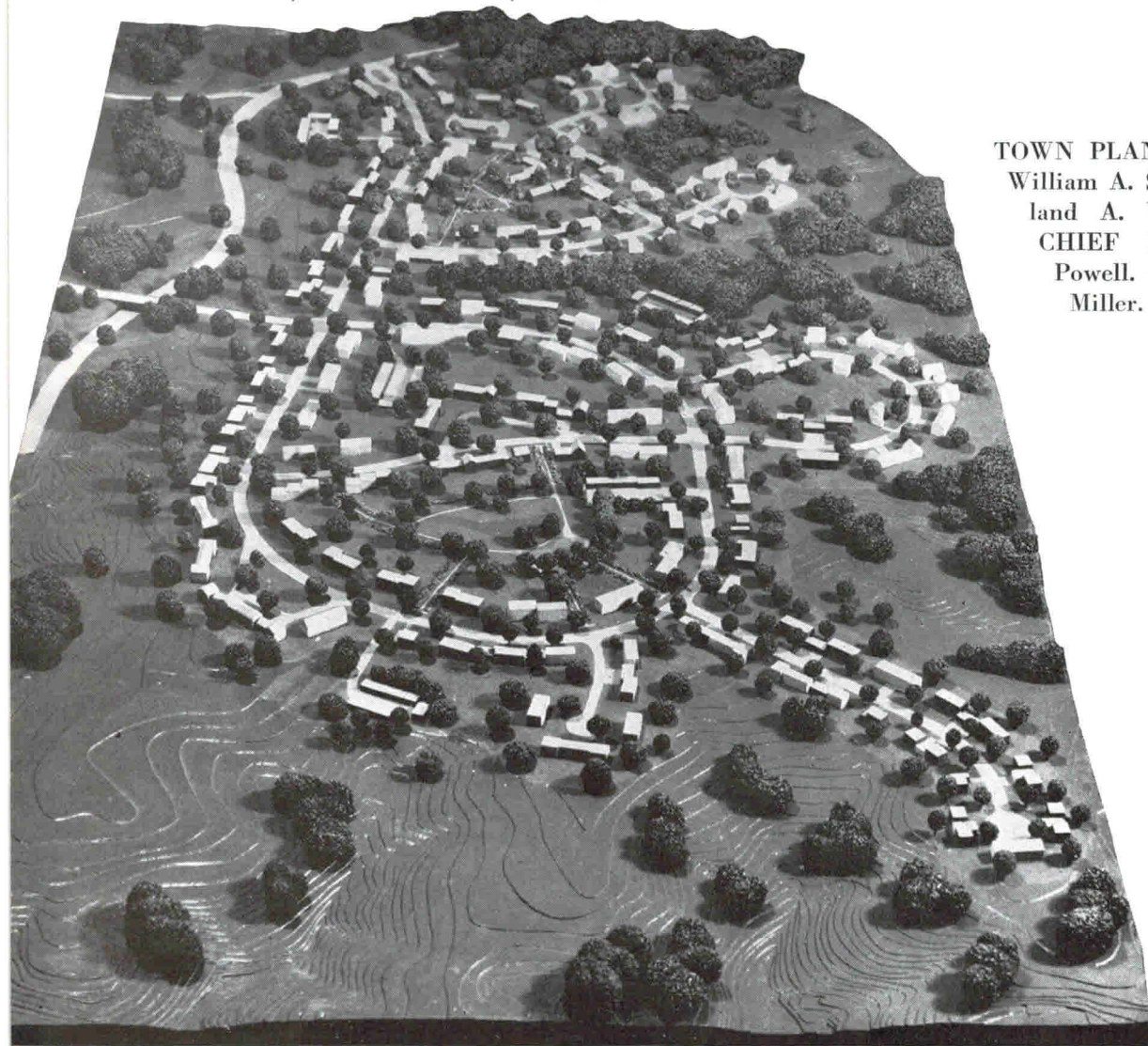


Locke Photos

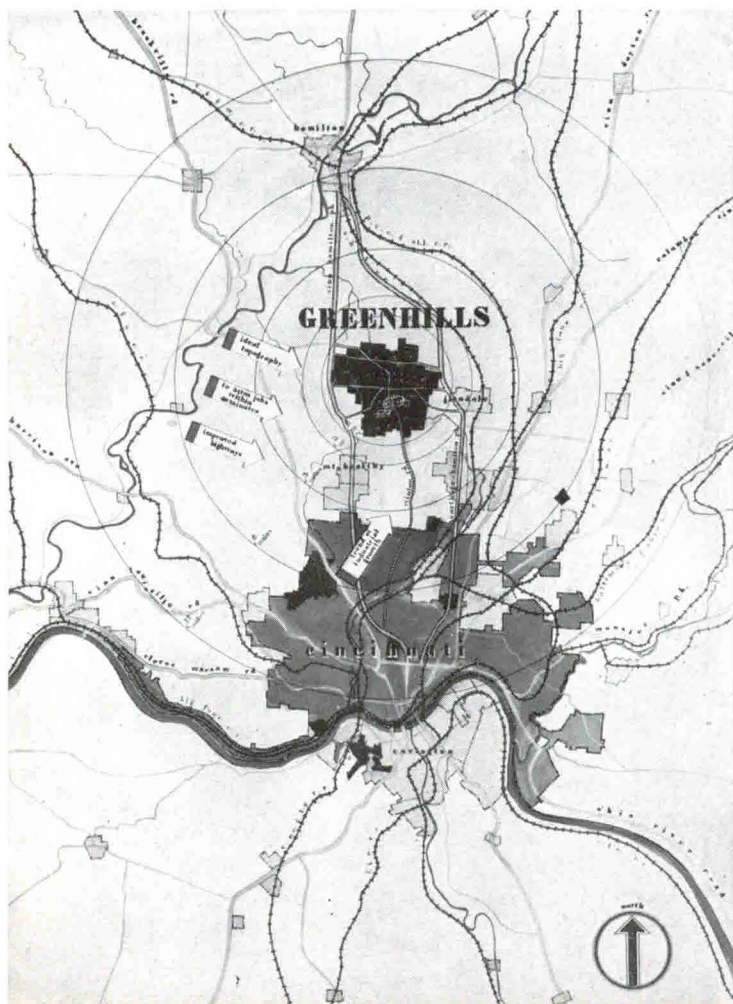
TOWN PLANNER: Hale Walker. ARCHITECTS: Douglas D. Ellington and Reginald J. Wadsworth. ENGINEERING DESIGNER: H. B. Bursley. COORDINATOR: Wallace Richards.



GREENHILLS, CINCINNATI, OHIO



TOWN PLANNERS: Justin R. Hartzog, William A. Strong. **ARCHITECTS:** Roland A. Wank, G. Frank Cordner. **CHIEF ENGINEER:** William G. Powell. **COORDINATOR:** Albert L. Miller.



SITE: 5,930 acres.

BUILDING TYPES: Detached, semi-detached and group houses; apartments.

SIZE: 676 living units; 112 one-bedroom apartments, 40 two-bedroom apartments, 18 single-family detached four-bedroom dwellings, 6 single-family detached three-bedroom dwellings; 260 two-bedroom units, 208 three-bedroom units, and 32 four-bedroom units in group houses.

COST:* Total \$9,917,538

Land (including inspection and planning)	2,443,917
Surveys, clearing, and landscaping	429,572
Roads, walks, and utilities	1,355,439
676 dwelling units	4,585,759
Rural improvements	152,500
Community building and school	500,250
Commercial buildings	201,750
Recreation centers	129,083
Inventories (recoverable):	123,010
Construction cost per dwelling unit (excluding utilities and landscaping):	\$6,780

RENT: Average per room per month: \$5.52

Monthly dwelling rentals:

Range \$18 to \$42

Average \$27.62

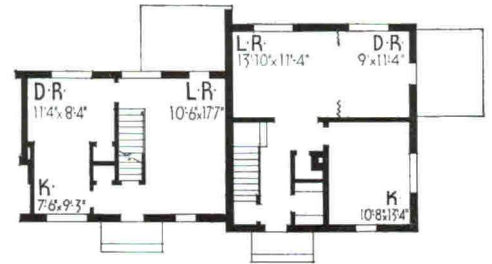
(Rents do not include heat and water.)

SPECIAL FEATURES: School, stores, recreation facilities.

*Actual expenditures totaled about \$11,377,425. Of this amount \$1,459,887 has been deducted since—in the opinion of the Farm Security Administration—this represents the amount expended on account of relief and rehabilitation aspects of the program over and above the cost which would normally be incurred for labor.



HALF OF SECOND FLOOR



HALF OF FIRST FLOOR

GROUP HOUSE FOR 4 FAMILIES



SECOND FLOOR



TYPICAL SINGLE HOUSE



GREENDALE, WISCONSIN



TOWN PLANNERS: Jacob L. Crane, Elbert Peets. ARCHITECTS: Harry H. Bentley, Walter G. Thomas.

COORDINATOR: Fred L. Naumer.

SITE: 3,410 acres.

BUILDING TYPES: Detached, semi-detached, and group houses.

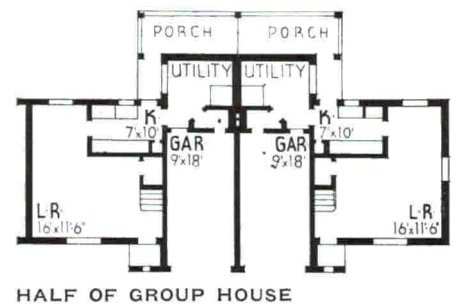
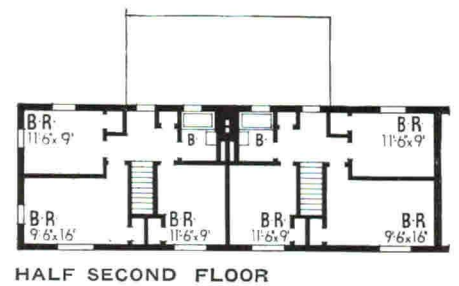
SIZE: 572 dwelling units; 44 two-bedroom detached houses; 230 three-bedroom detached houses; 12 one-bedroom units; 60 two-bedroom units, and 18 four-bedroom units in semi-detached houses; 208 dwelling units in group houses.

COST: * Total	\$8,024,923
Land	\$1,200,852
Surveys, clearing and landscaping	337,313
Roads, walks, and utilities	1,489,946
572 dwelling units	3,733,946
65 farm homes	221,290
Community building and school	403,973
Commercial buildings	422,251
409 garages	125,242
Town yard	31,710
Inventories (recoverable)	58,460
Construction cost per dwelling unit (excluding utilities and landscaping):	\$6,528

RENT: Average per room per month excluding service charge:	\$5.91
Monthly dwelling rentals:	
Range	\$19 to \$36
Average	\$29.16
(Rents do not include heat and water.)	

SPECIAL FEATURES: School, shopping center, recreation facilities.

*Actual expenditures totaled about \$9,374,923. Of this amount, \$1,350,000 has been deducted since—in the opinion of the Farm Security Administration—this represents the amount expended on account of relief and rehabilitation aspects of the program over and above the costs which would normally be incurred for labor.



Vernon J. Kraft Photos



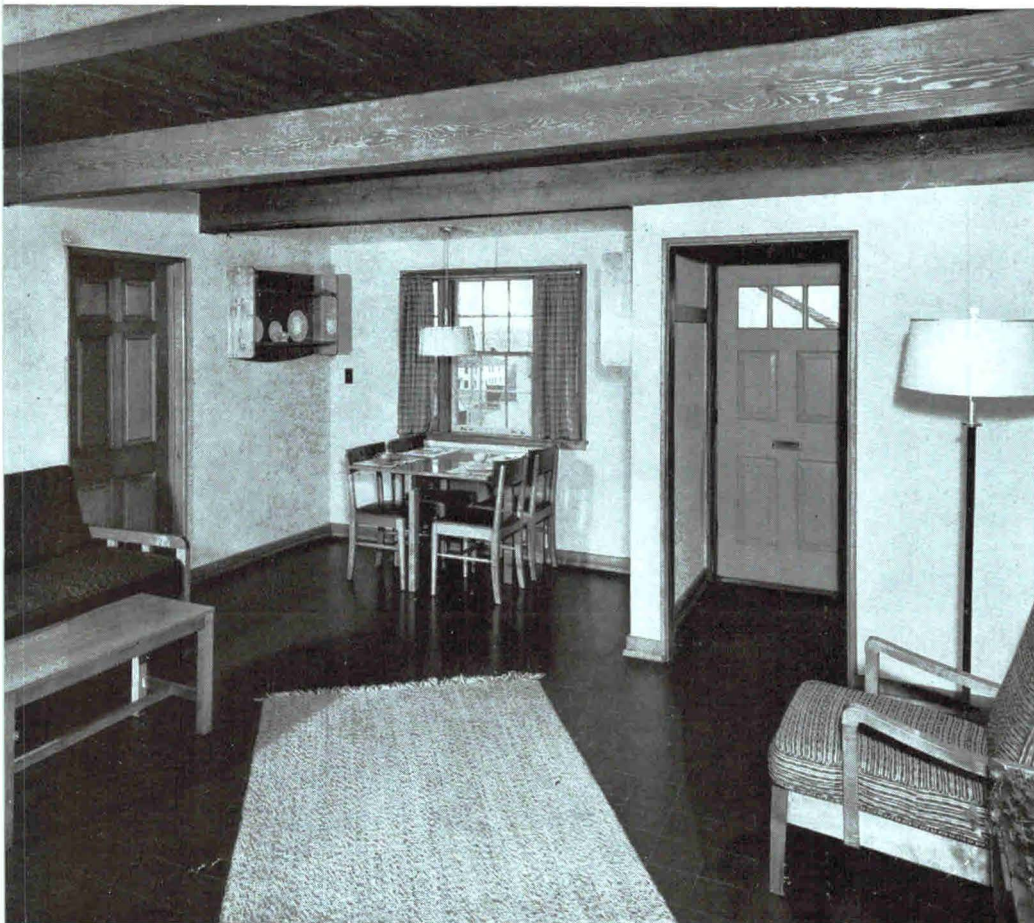
SECOND FLOOR



TYPICAL DETACHED HOUSE

Vernon J. Kraft Photos

LOW-COST FURNITURE



GREENDALE, WISCONSIN

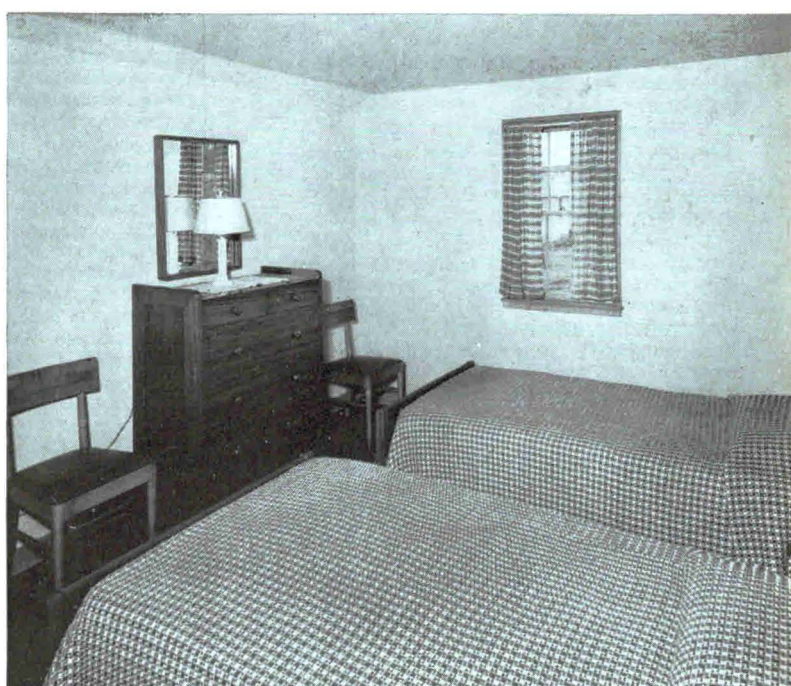
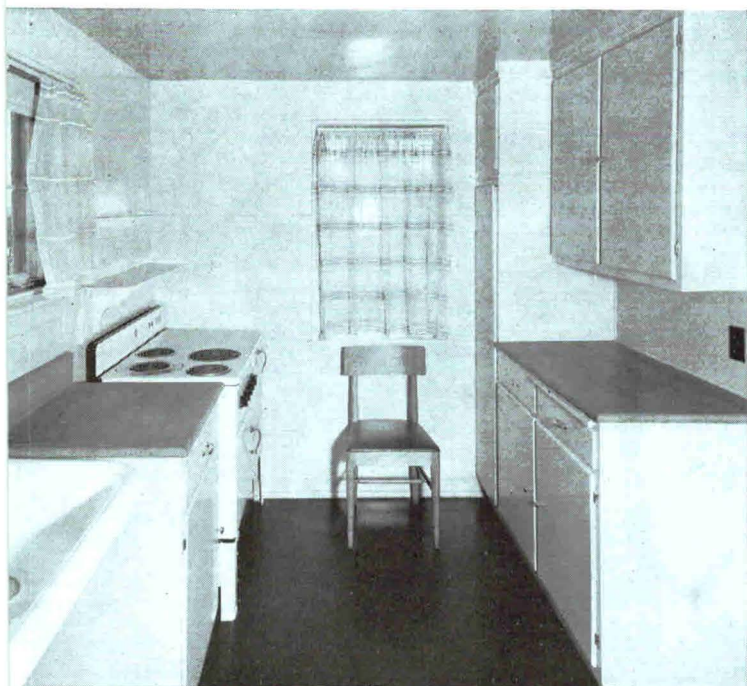
Low-cost furniture for low-rent housing is the special contribution of the Farm Security Administration. Developed and tested by its Special Services Section in collaboration with the Bureau of Standards, Forest Products Laboratory, architects, home economists, and technical experts of the furniture industry, and manufactured by private firms under contracts awarded on the basis of competitive bids, basic furniture for a four-room family unit (excluding stoves and refrigerators) costs about \$300.

GREENDALE, WISCONSIN

GREENBELT, MARYLAND

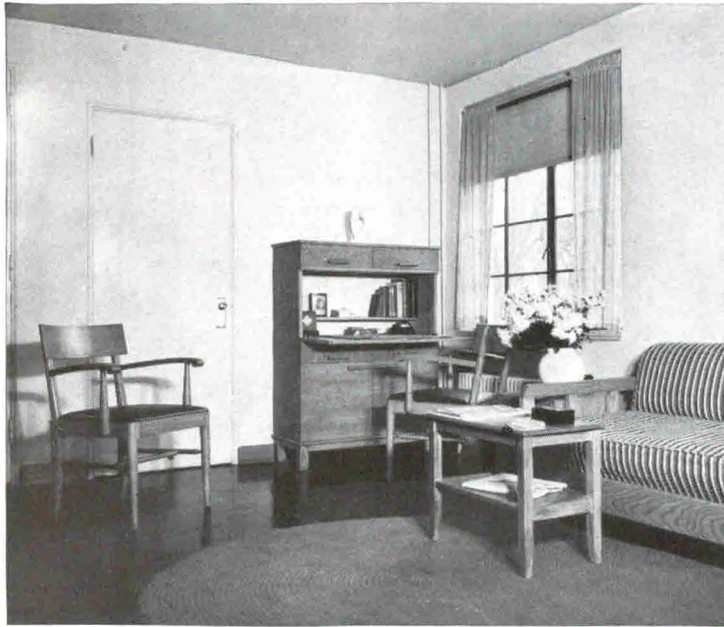


Rothstein



Vernon J. Kraft Photos

GREENBELT, MARYLAND



LIVING ROOM



BEDROOM

Rothstein Photos

CONSTRUCTION OUTLINES

GREENBELT, MD.

STRUCTURE: Veneer buildings—brick veneer, building paper, wood sheathing on wood studs, metal, paper back lath, 3 coat plaster walls. Block buildings—concrete cinder block, 2 coats bitumastic dampproofing, furring strips, 3 coats plaster on aluminum foil backed plaster board. Interior partitions—Cinder block units—gypsum blocks. Brick veneer units—studding, Ecod paper back wire lathing and plastered walls. Floor construction: First—reinforced concrete slabs with asphalt tile laid in mastic. Second—cinder block units same as 1st floor; brick veneer units—hardwood floors on sheathing, subfloor on joists. **ROOF:** Brick veneer units—pitched roofs with sheathing covered with slate. Decks—reinforced concrete, rigid insulation cemented to deck, covered with 4-ply built-up roofing. **SHEET METAL WORK:** Flashing, gutters and leaders—copper.

INSULATION: Outside walls of Veneer buildings and attic floor—rock wool. Roof—insulation board.

WINDOWS: Steel casements. Glass— $\frac{1}{8}$ in. double strength, quality B. Screens—copper. **FLOORS:** Living room, bedrooms, bathrooms and kitchens—composition tile.

WOODWORK: Trim—white pine and redwood. Interior doors—flush gum veneer. Garage doors—roll up, sectional.

HARDWARE: Chromium finished steel and old brass finished steel.

PAINTING: All rooms—casein and enamel. Exterior walls—cement paint. Sash—2 coats lead and oil.

ELECTRICAL INSTALLATION: Switches—enclosed safety type and enclosed circuit breaker panel type.

KITCHEN EQUIPMENT: Range—gas. Refrigerator—electric. Sink—enameled cast iron. Cabinet—steel.

BATHROOM EQUIPMENT: Lavatory—enameled cast iron, wall hung. Tub—enameled cast iron. Toilet—vitreous china syphon action bowl, low tank. Cabinet—recessed steel. **PLUMBING:** Copper throughout.

HEATING: Forced hot water system. Boiler—steel fire tube. Light and heavy fuel oil horizontal pressure type burners with electric ignition system. Hot water heater—indirect coil connected with heating boiler.

GREENHILLS, OHIO

STRUCTURE: Stucco on terra cotta block, 1 in. air space, Sisalkraft paper, Sisalkraft Co., 1 in. wood sheathing, 2 x 4 in. studs, 16 in. o.c., bat type insulation, $\frac{3}{8}$ in. plaster board, National Gypsum Co., plaster and brick air space; asbestos siding, Philip Carey Co. Interior partitions—plaster board on studs and gypsum plaster. Floor construction—wood joists, sub-floor, deadening felt, finished floor. Ceiling—plaster.

ROOF: Pitched—rafters, 1 in. sheathing deadening felt, Flintkote Co., covered with slate. Flat roofs—wood joists, 1 in. sheathing, covered with 5-ply built-up.

SHEET METAL WORK: Copper, Chase Brass & Copper Co., Inc.

INSULATION: Outside walls—bat type mineral wool, 4 in. Attic—3 $\frac{1}{2}$ in. blanket type mineral wool, Ludowici-Celadon Co. Roof—reflective insulation, Reynolds Corp.

WINDOWS: Truscon Steel Co. projected sash, horizontally pivoted. Glass—double strength, quality B. Screens—bronze wire mesh.

FLOOR COVERINGS: Kitchen and bathrooms—asphalt tile, Leitch Mfg Co., and linoleum, balance oak.

WOODWORK: Trim shelving and cabinets—yellow pine. Cabinets—metal, Baxter Steel Equipment Co. Interior doors—built-up white pine core and flush birch veneer. Exterior doors—select Ponderosa, Farley & Loetscher Mfg. Co. Garage doors—Ro-way Overhead type, Rowe Mfg. Co.

HARDWARE: Schlage Lock Co.

ELECTRICAL INSTALLATION: Galvanized steel conduit in concrete floors, armored cable elsewhere, Circle Wire & Cable Co. Switches—Despard, Pass & Seymour. Fixtures—Halcolite Co., Inc., Levolute Co. and Lightolier Co. **KITCHEN EQUIPMENT:** Range—Hot Point, Edison General Electric Co. Refrigerator—Westinghouse Electric & Mfg. Co. Sink—Rundle Corp. Cabinet—Baxter Steel Equipment Co.

BATHROOM EQUIPMENT: Lavatory and tub, Rundle Corp. Toilet—Eljer Co. Cabinet—Miami Cabinet Div. and Philip Carey Co.

HEATING: Hot water and one pipe steam; cast iron boilers, National Radiator Co. Radiators—American Radiator Co. Valves—Consolidated Safety Valve Co. Hot water heater—Edison General Electric Co.

GREENDALE, WIS.

STRUCTURE: Exterior walls—cinder concrete block, Economy Block Co., 1 x 2 in. furring, $\frac{1}{2}$ in. insulation board, plaster. Interior partitions—cinder concrete blocks; plaster direct and wood studs; rock lath and plaster, American Gypsum Co. and National Gypsum Co. Floors: First—precast concrete joists and 2 $\frac{1}{2}$ in. concrete slabs. Second—exposed beams, 2 x 6 in. sub-floor and maple finish flooring over living room.

ROOF: Frame construction covered with clay tile, Ludovici Celadon Co. and asbestos shingles, Johns-Manville Corp. Decks—covered with built-up tar and gravel.

INSULATION: Attic floor—2 in. rock wool.

WINDOWS: Double hung, except kitchens and utility room, Ponderosa pine; Silentite, Curtis Companies Service Bureau and Farlo, Farley & Loetscher Mfg. Co. Glass—single strength, quality B, Pennvernion, Pittsburgh Plate Glass Co. and American Glass Co.

FLOORS: Living rooms—asphalt tile, Tile Tex Co. Bedrooms and halls—maple, Wisconsin Maple Floor Co. and White Lake Lumber Co. Kitchen—asphalt tile and linoleum. **HARDWARE:** Interior—Russell & Erwin Mfg. Co., Stanley Works and McKinney Mfg. Co. Exterior—Schlage Lock Co. and McKinney Mfg. Co.

PAINTING: Walls and ceilings—casein. Kitchen, bathrooms and sash—lead and oil, Eagle-Picher Sales Co. and Austin Co. Floor and trim—Minwax. Exterior: Walls—waterproof cement paint, E. D. Coddington Mfg. Co. **ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—Pass & Seymour, Inc. Fixtures—Shapiro & Aronson, Moe Bros. and Lightolier Co.

KITCHEN EQUIPMENT: Range and refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—roll rim, Kohler Co. Cabinet—metal, Baxter Steel Equipment Co. and Art Metal.

BATHROOM EQUIPMENT: All fixtures by Kohler Co.

HEATING: Central heating plant for non-residential buildings. Dwelling units—individual heating system, warm air forced circulation, manual operated coal fuel; furnace and blower fan, L. J. Mueller Furnace Co., also hot water system with oil burner. Boilers—American Radiator Co. Oil burner—Michigan Oil Burner Co.



A R C H I T E C T U R A L L E A G U E

This year's Architectural League Exhibition represents a departure from custom. So that the public as well as those in the profession might have an opportunity to appraise contemporary architecture and the allied arts in the different sections of the United States, those in charge of the Exhibition invited Committees of prominent architects, artists and designers to select examples of the best work from their section. The pages which follow are not only representative but offer convincing testimony that architecture and the allied arts are moving forward.

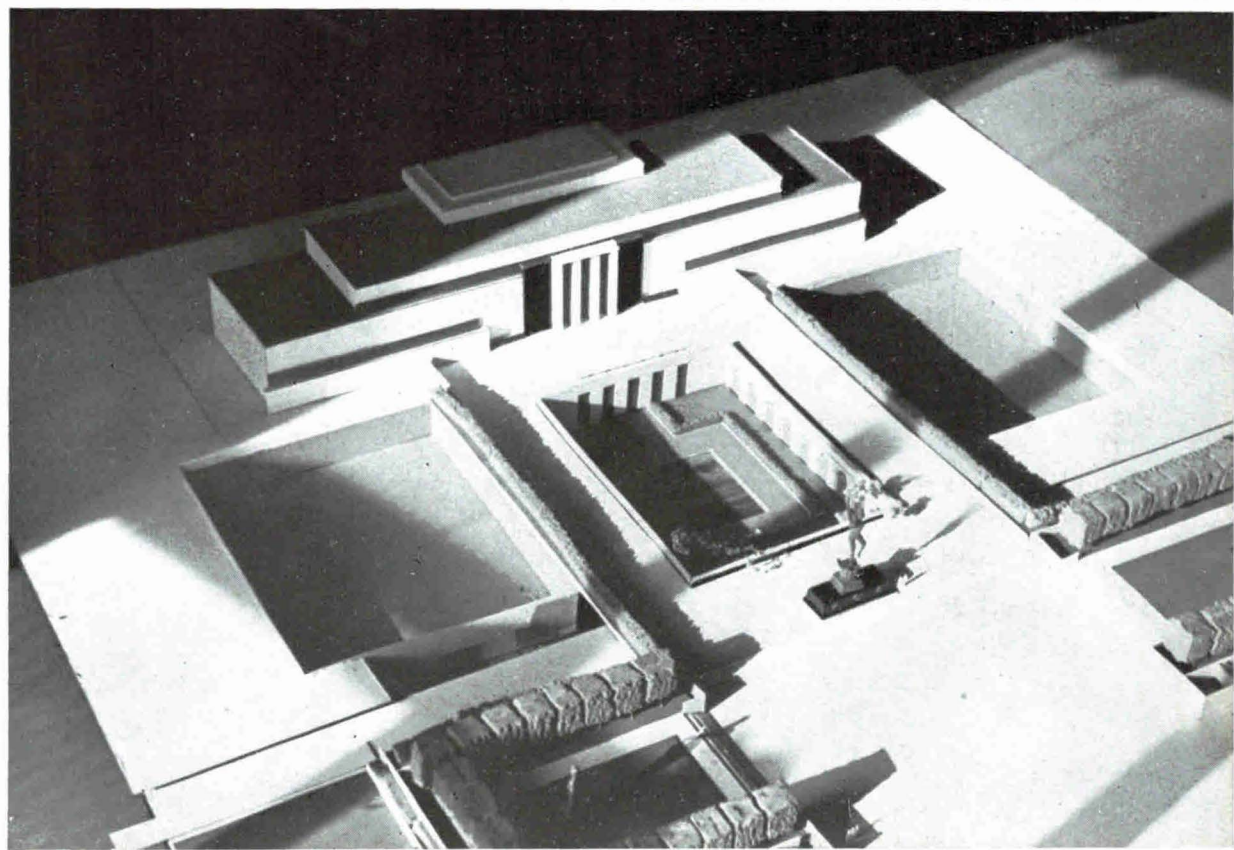
PAUL P. CRET, ARCHITECT, FACADE ON CONSTITUTION AVENUE, FEDERAL RESERVE BOARD BUILDING, WASHINGTON, D. C.

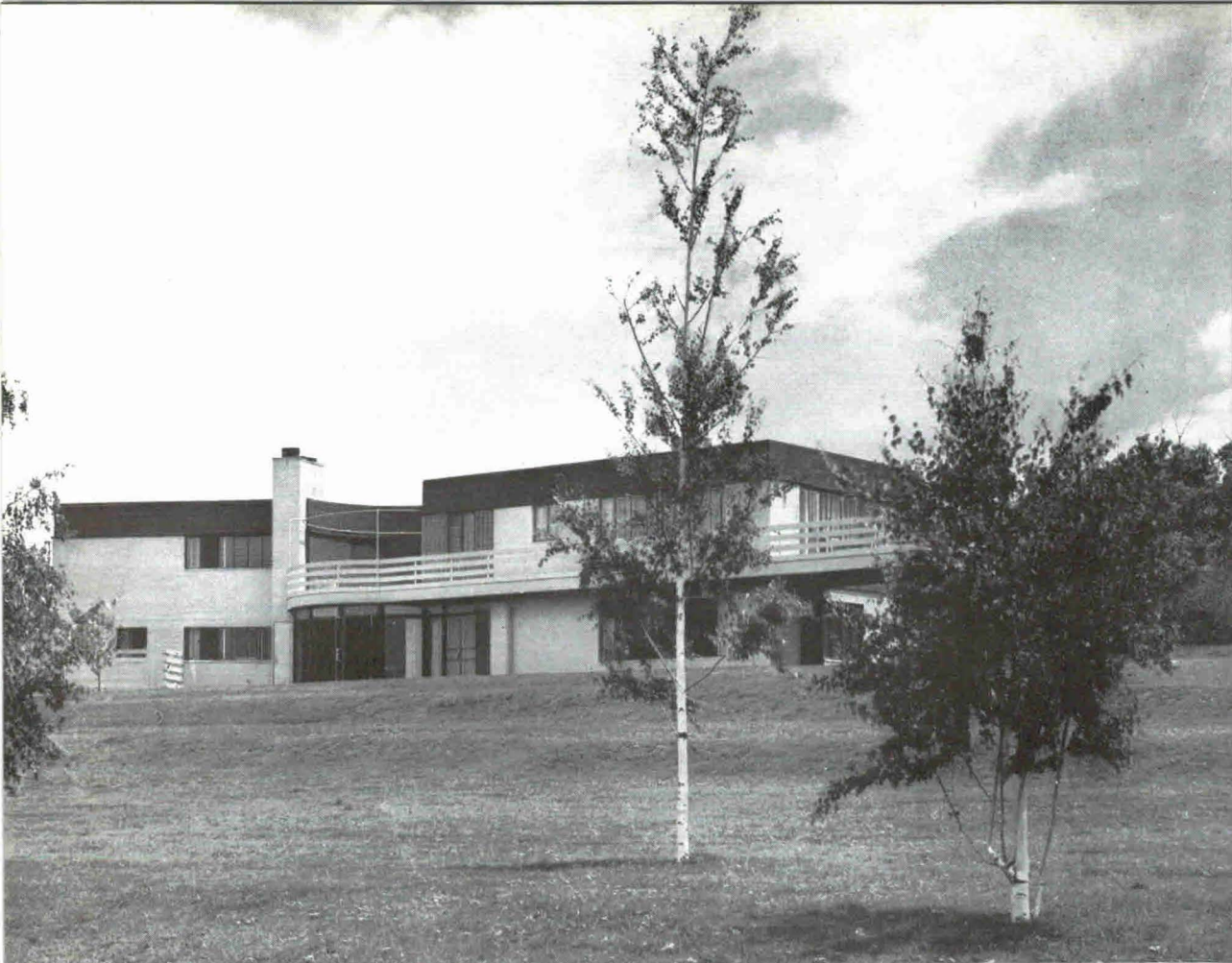




ENZO H. GENTRY, VOSKAMP & NEVILLE, INC., HOIT, PRICE & BARNES, ASSOCIATED ARCHITECTS, MUNICIPAL AUDITORIUM, KANSAS CITY, MO.

HOLABIRD & ROOT, ARCHITECTS, STUDY OF UNIT "A" PROPOSED ADDITION TO THE ART INSTITUTE OF CHICAGO

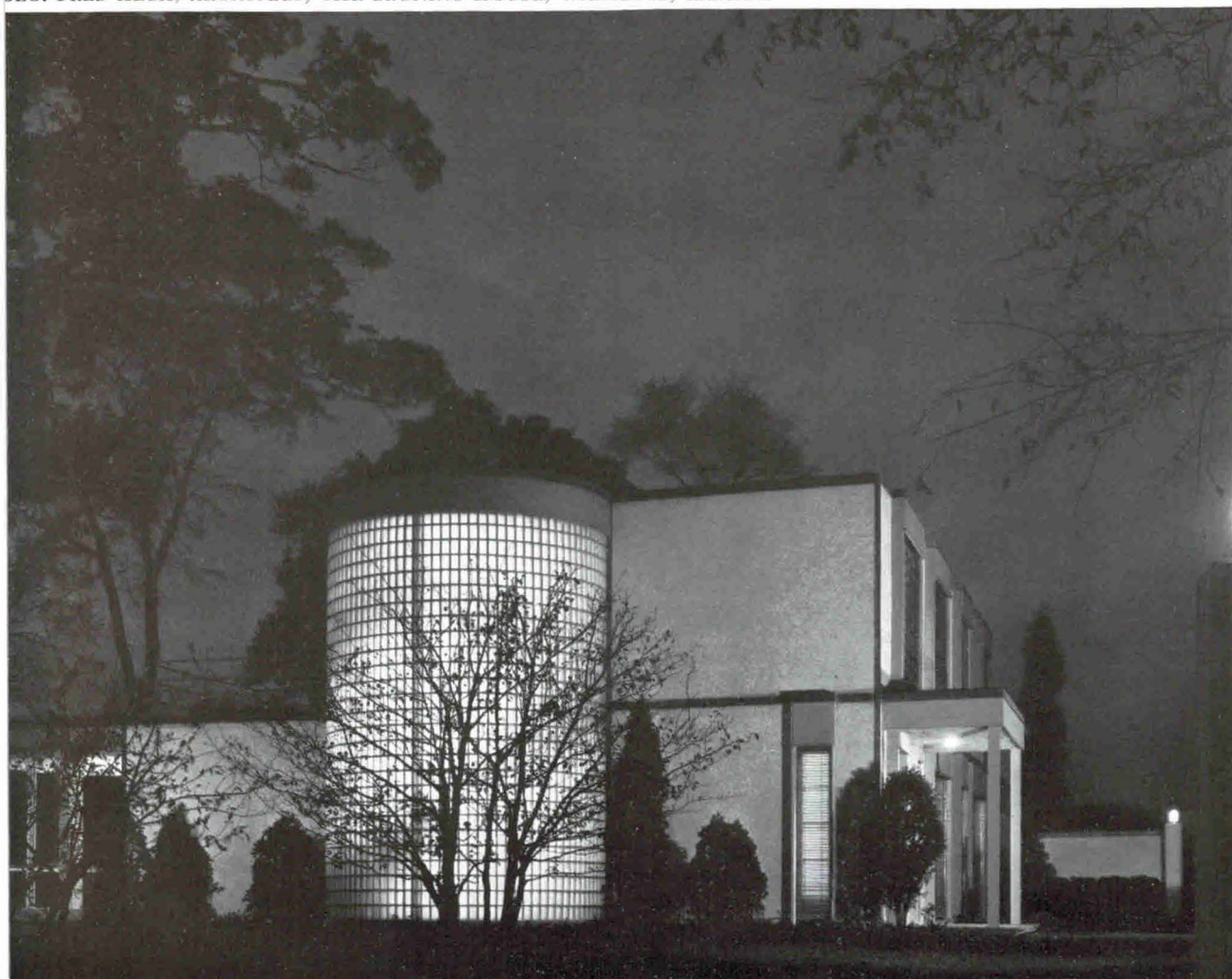




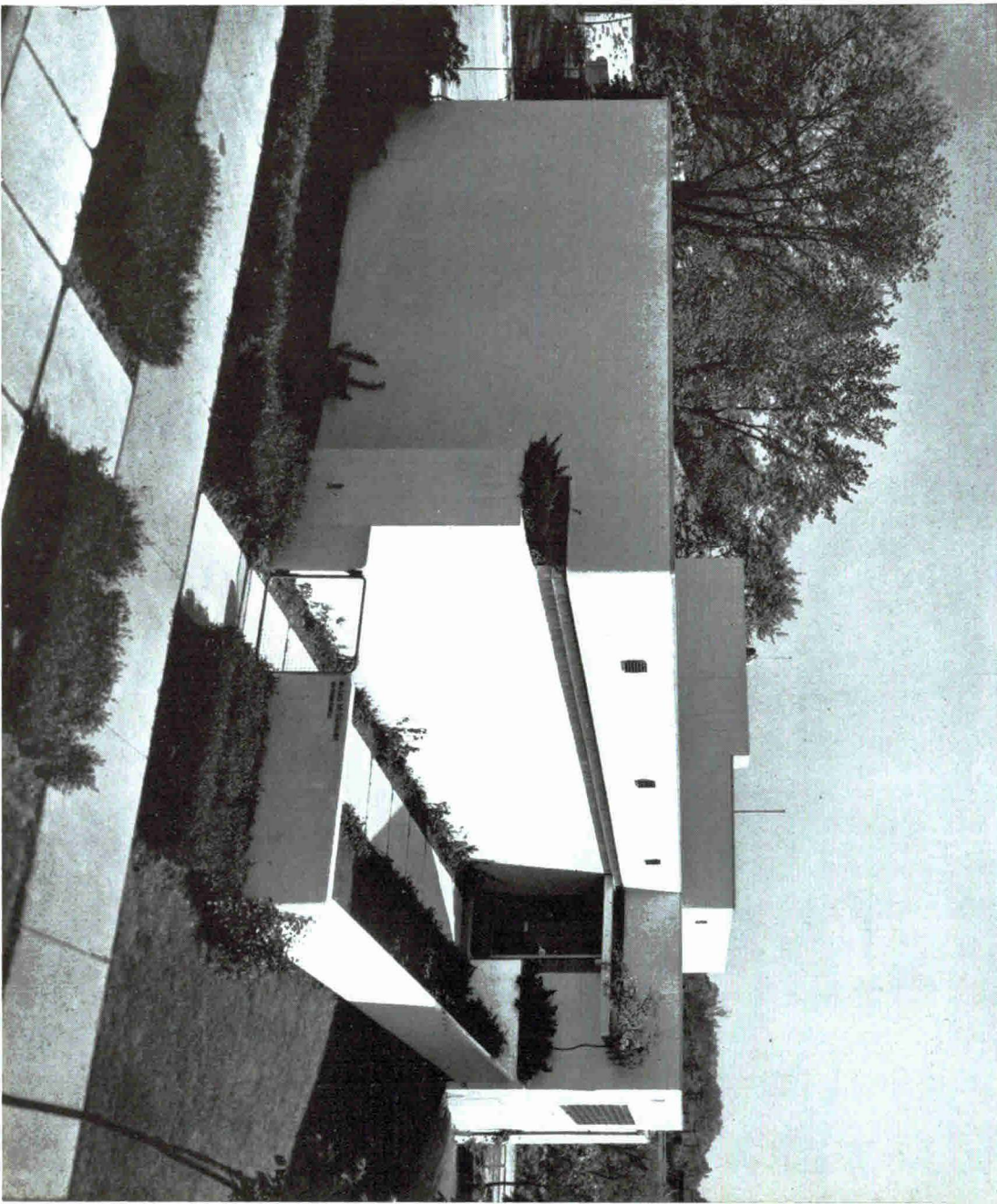
O. Rorch

BURNHAM HOYT, ARCHITECT, BROMFIELD RESIDENCE, DENVER, COLORADO

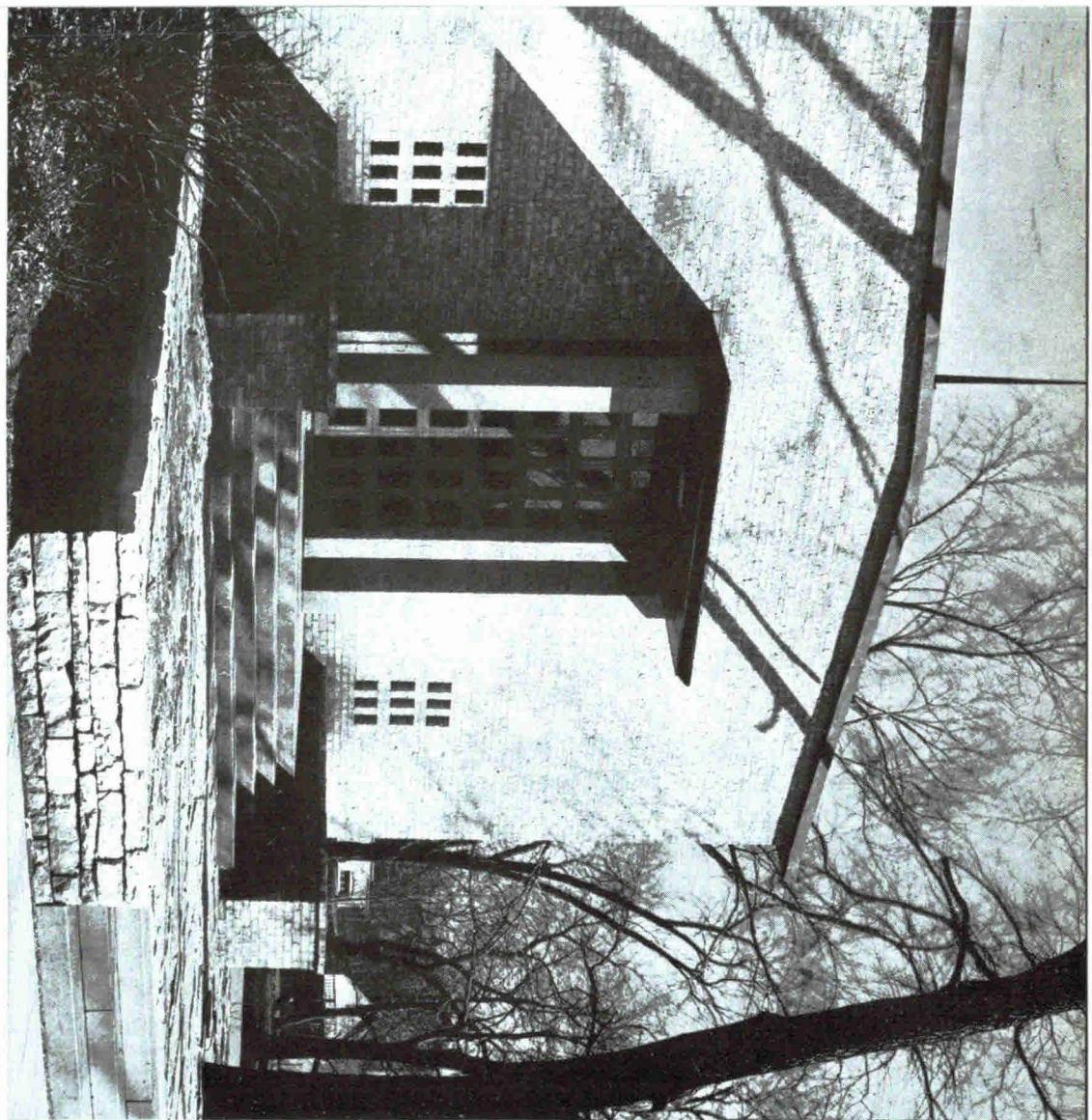
GEO. FRED KECK, ARCHITECT, THE BRUNING HOUSE, WILMETTE, ILLINOIS



HARRIS ARMSTRONG, ARCHITECT, OFFICE OF DR. LEO M. SHANLEY, CLAYTON, MO.

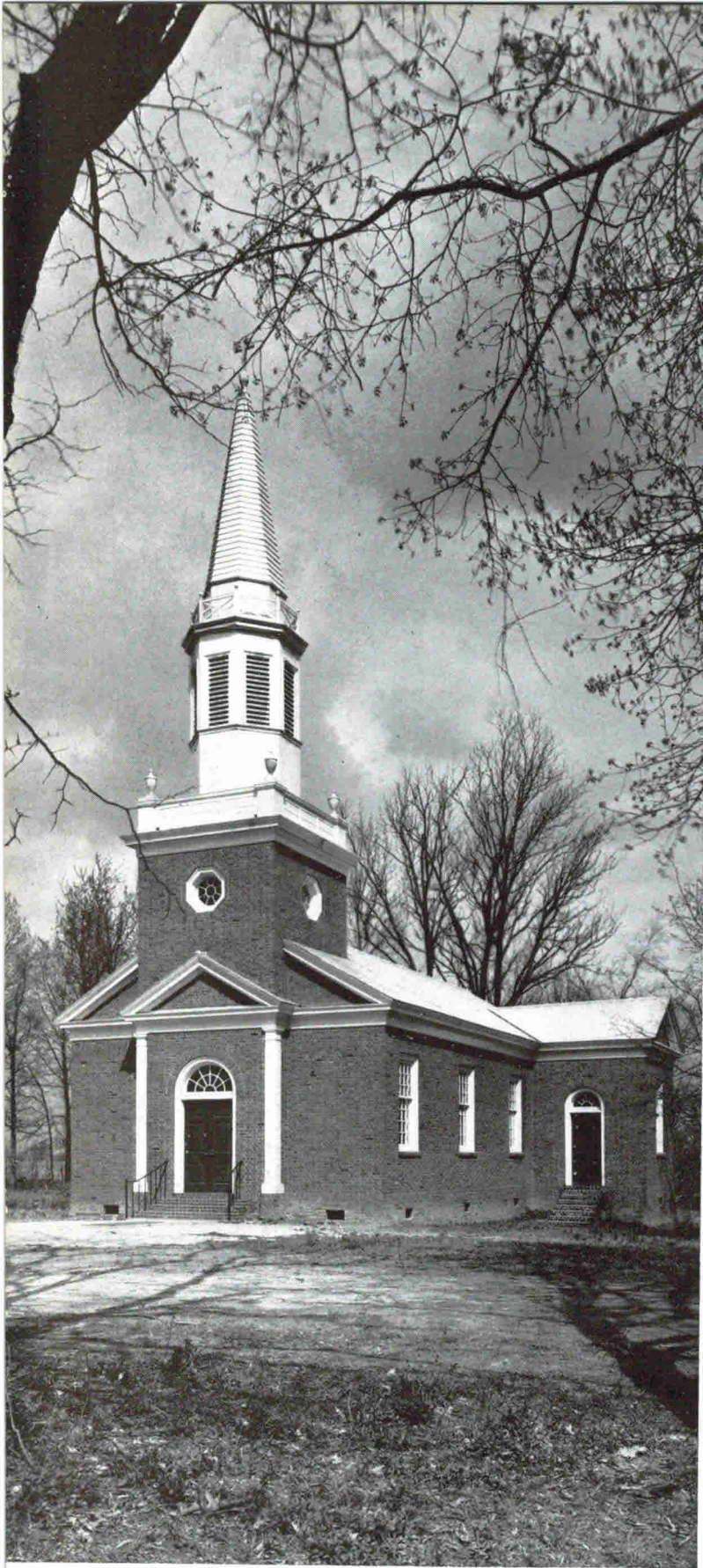


A. Piquet



Hedrich-Blessing

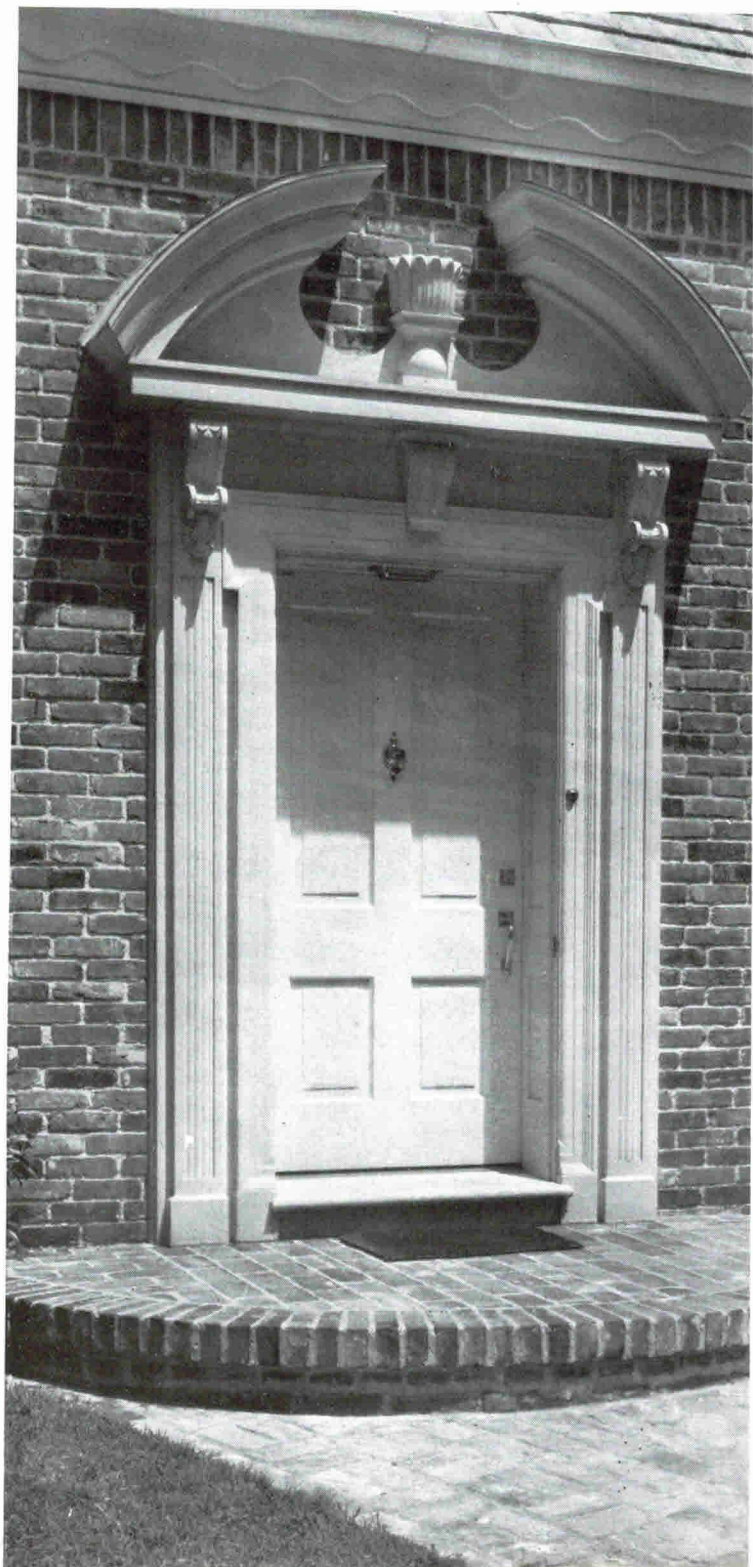
PAUL SCHWEIKHER, INC., ARCHITECTS, THIRD UNITARIAN CHURCH



LUCIAN M. DENT, ARCHITECT, MINOR MEMORIAL M. E. CHURCH,
SOUTH DE SOTO COUNTY, MISS.

Hitchings

FURBRINGER & EHRMAN, ARCHITECTS, RESIDENCE FOR C. E. ATKI

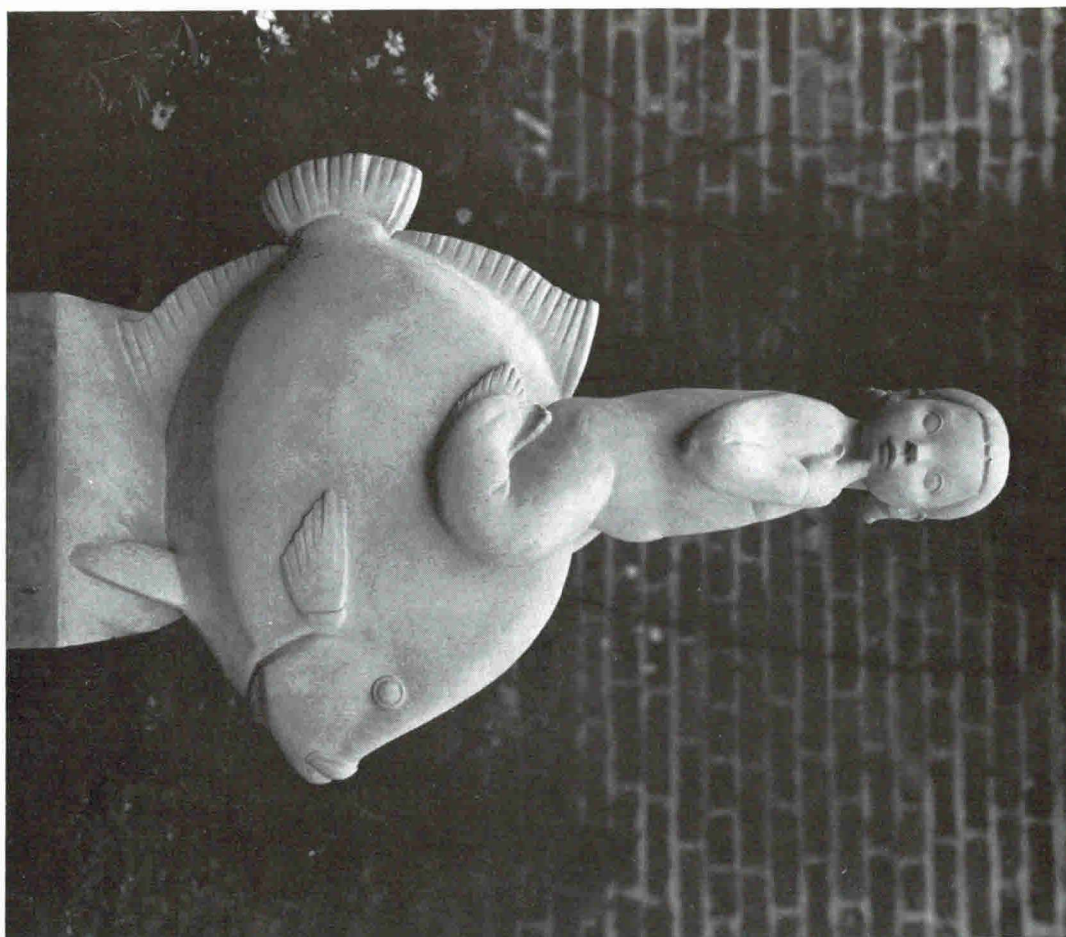


ERARD A. MATTHIESSEN, ARCHITECT, PUBLIC LIBRARY, CORNWALL-ON-HUDSON, N. Y.

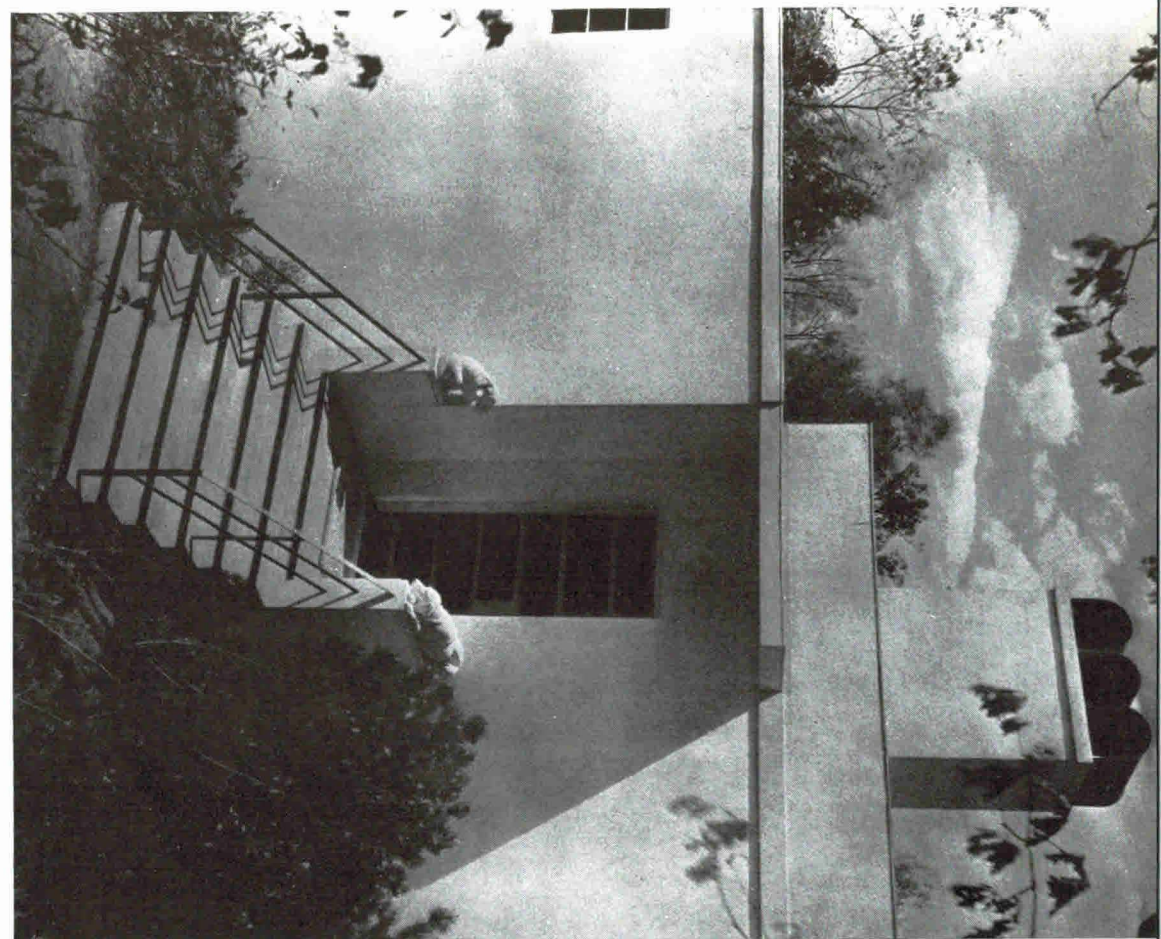


PERRY, SHAW & HEPBURN, ARCHITECTS, "WILLIAMSBURG INN," WILLIAMSBURG, VA.

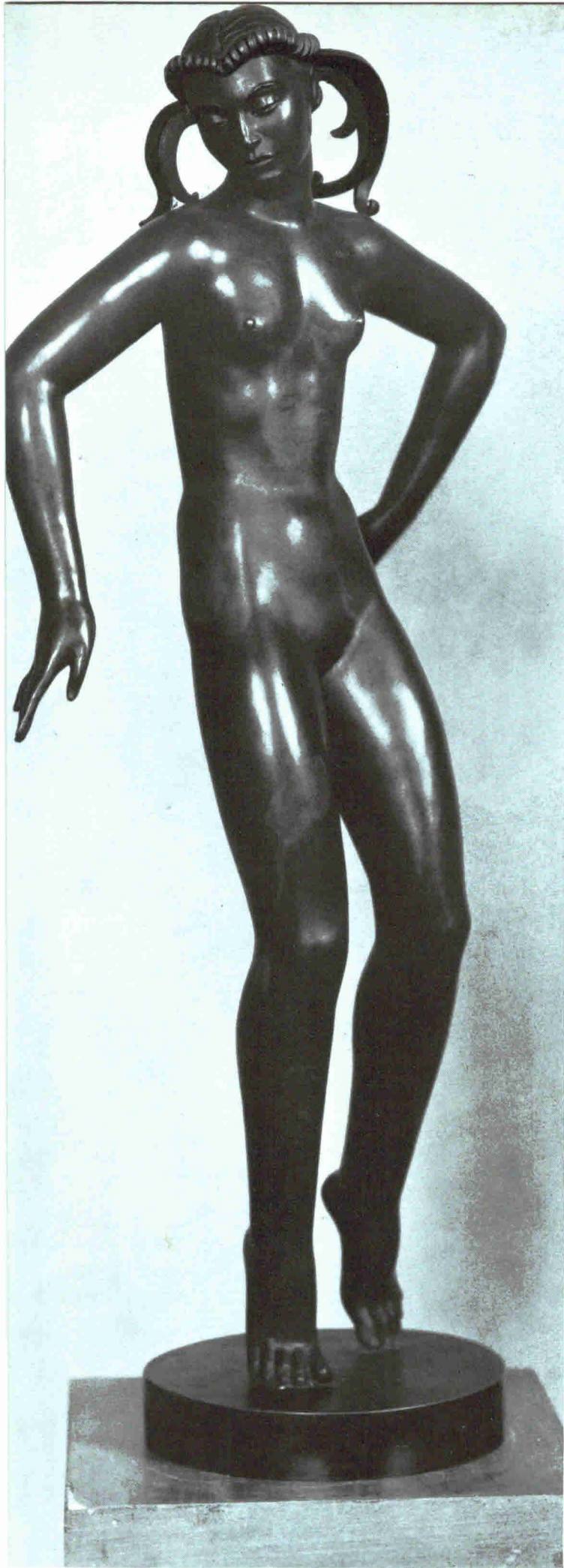




PERNA KRICK, SCULPTOR, "YOUNG SIREN," CAST STONE



ELEANOR RAYMOND, ARCHITECT, "A SCULPTOR'S STUDIO," DOVER, MASS.



ELIZABETH SEAYER, SCULPTOR, "ADAGIO,"
CLEVELAND MUSEUM OF ART

BRENTS CARLTON, SCULPTOR: MOTHER AND CHILD IN TENNESSEE MARBLE



DWIGHT JAMES BAUM, ARCHITECT, ENTRANCE TO HOUSE NO. 9, RIVERDALE HEIGHTS, NEW YORK CITY



THOMAS D. CHURCH, LANDSCAPE ARCHITECT, GARDEN FOR MR. HENRY V. COLBY, BERKELEY, CALIF.

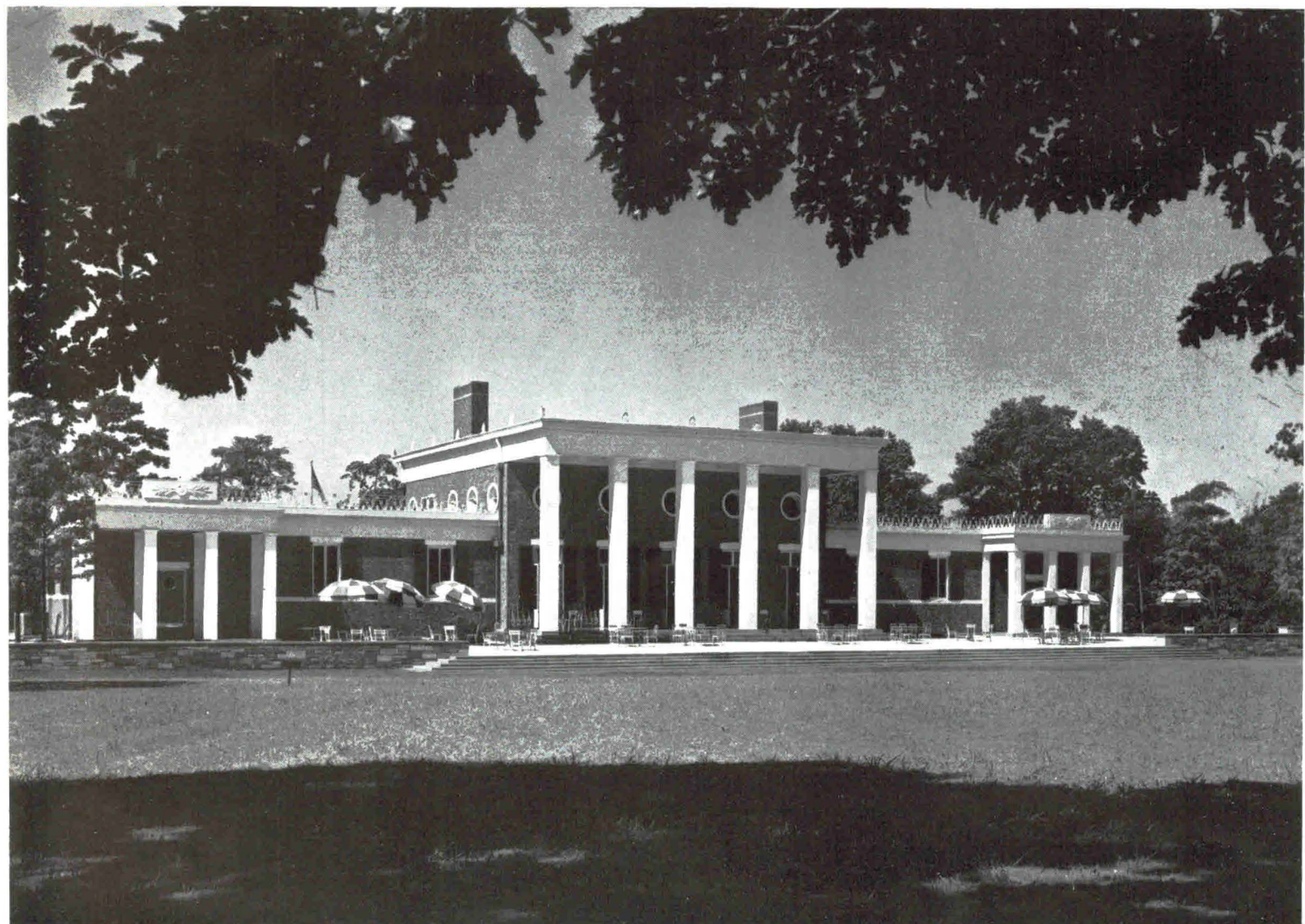


GARDNER A. DAILEY, ARCHITECT, RESIDENCE OF W. LOWE, SR., WOODSIDE, CALIF.

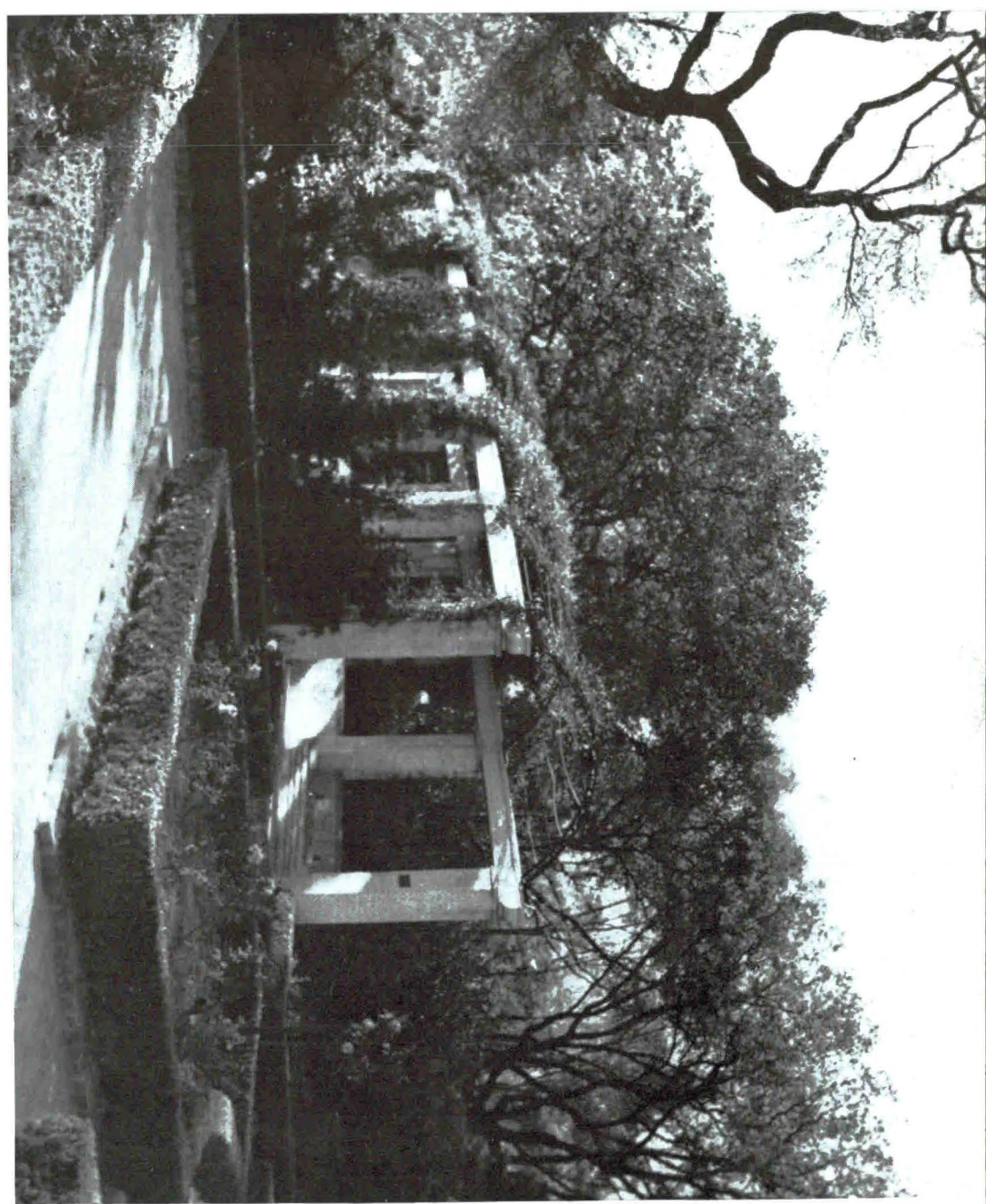
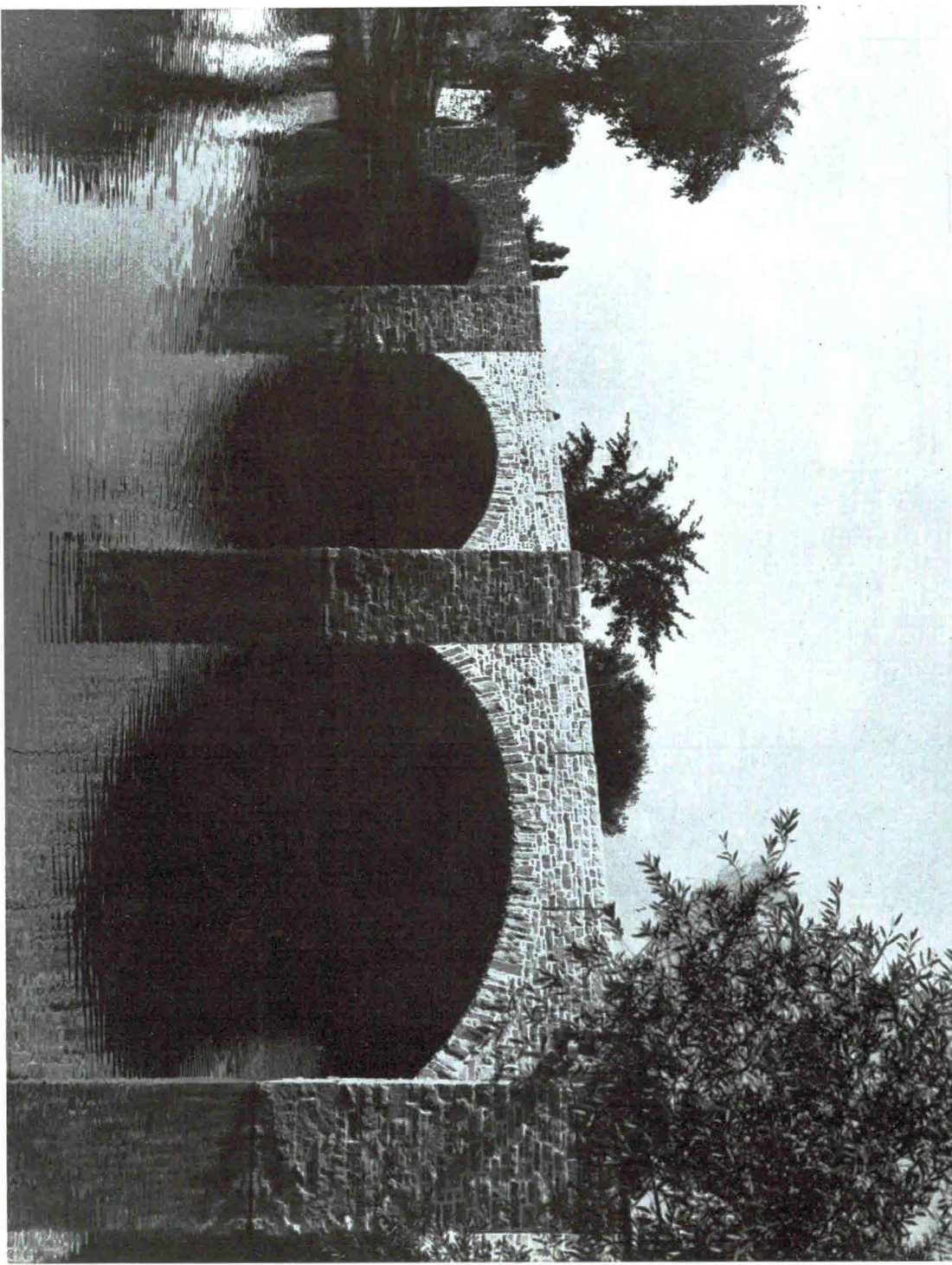
ARMSTRONG & KOCH, ARCHITECTS, COTTAGE OF MR. J. W. REILY, BAYOU LIBERTY, LA.



S. H. Gottscho



HARRY BOGNER, ARCHITECT, MILWAUKEE RIVER BRIDGE, RIVER HILLS, WIS.



RICHARD KOCH, WEISS, DREYFOUS & SEIFERTH, ASSOCIATED ARCHITECTS, WM. S. WIEDORN, LANDSCAPE ARCHITECT, NEW ORLEANS CITY PARK

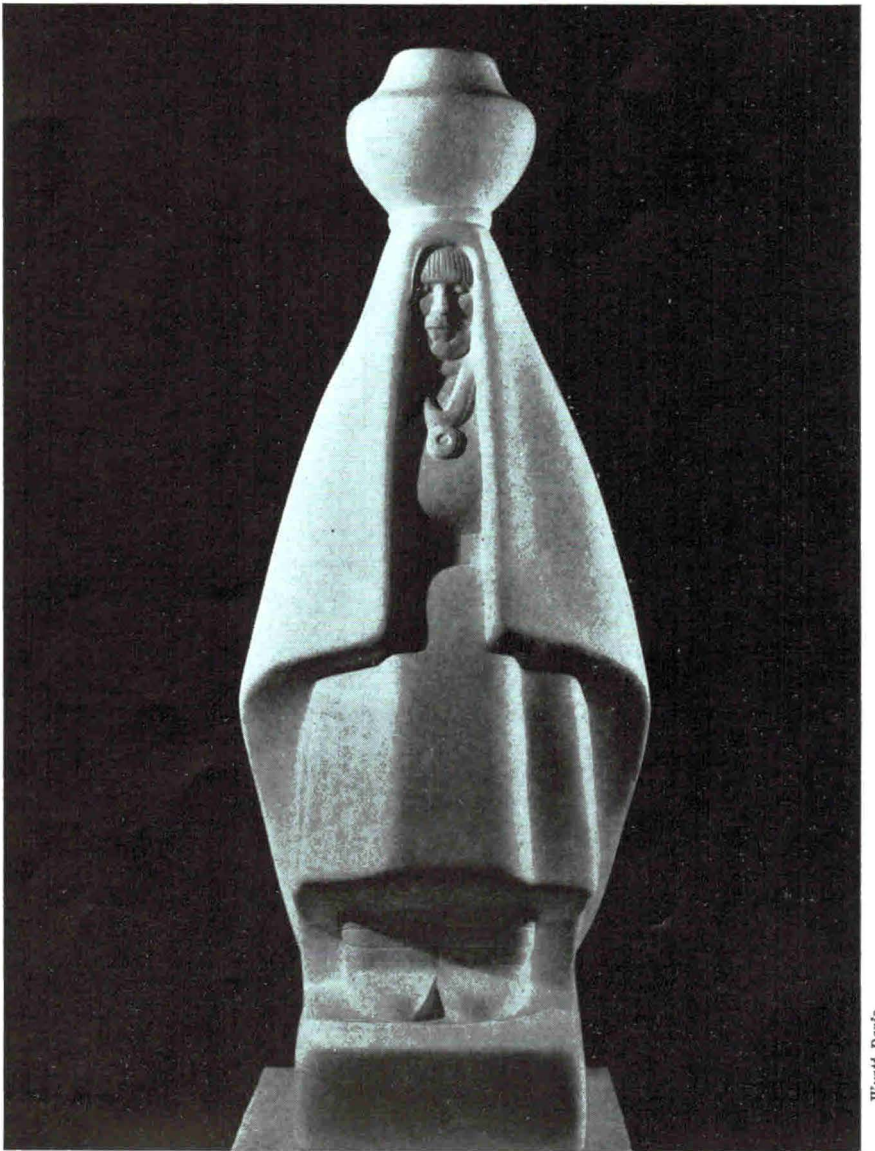
CARL MILLES, SCULPTOR, ELLERBE & CO., ARCHITECTS, HOLABIRD & ROOT, ASSOCIATED ARCHITECTS, PEACE MEMORIAL,
RAMSEY COUNTY COURT HOUSE AND ST. PAUL CITY HALL



Benediction

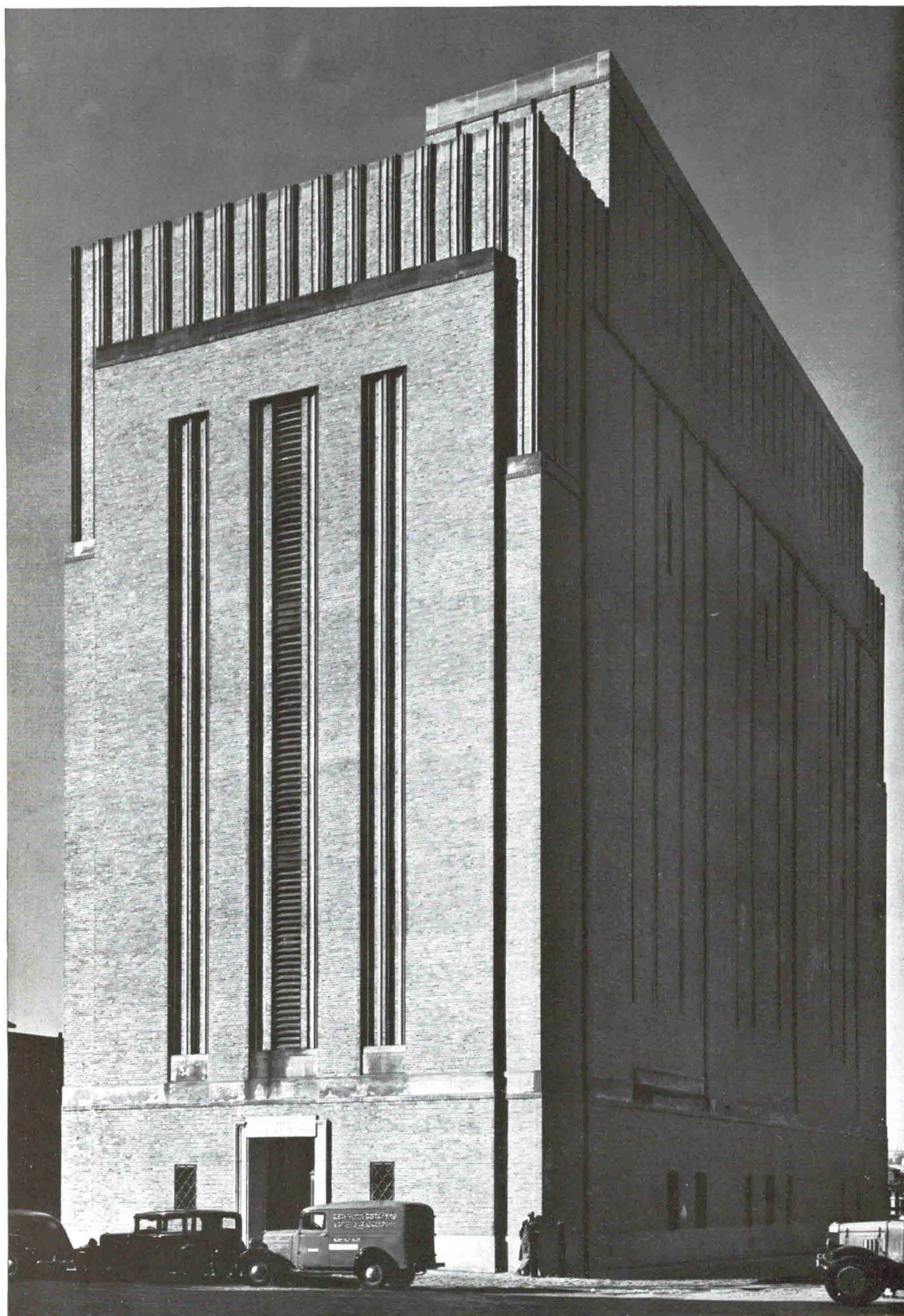


WILLIAM P. HENDERSON, DESIGNER, "THE NAVAJO
HOUSE OF RELIGION," SANTA FE, NEW MEXICO

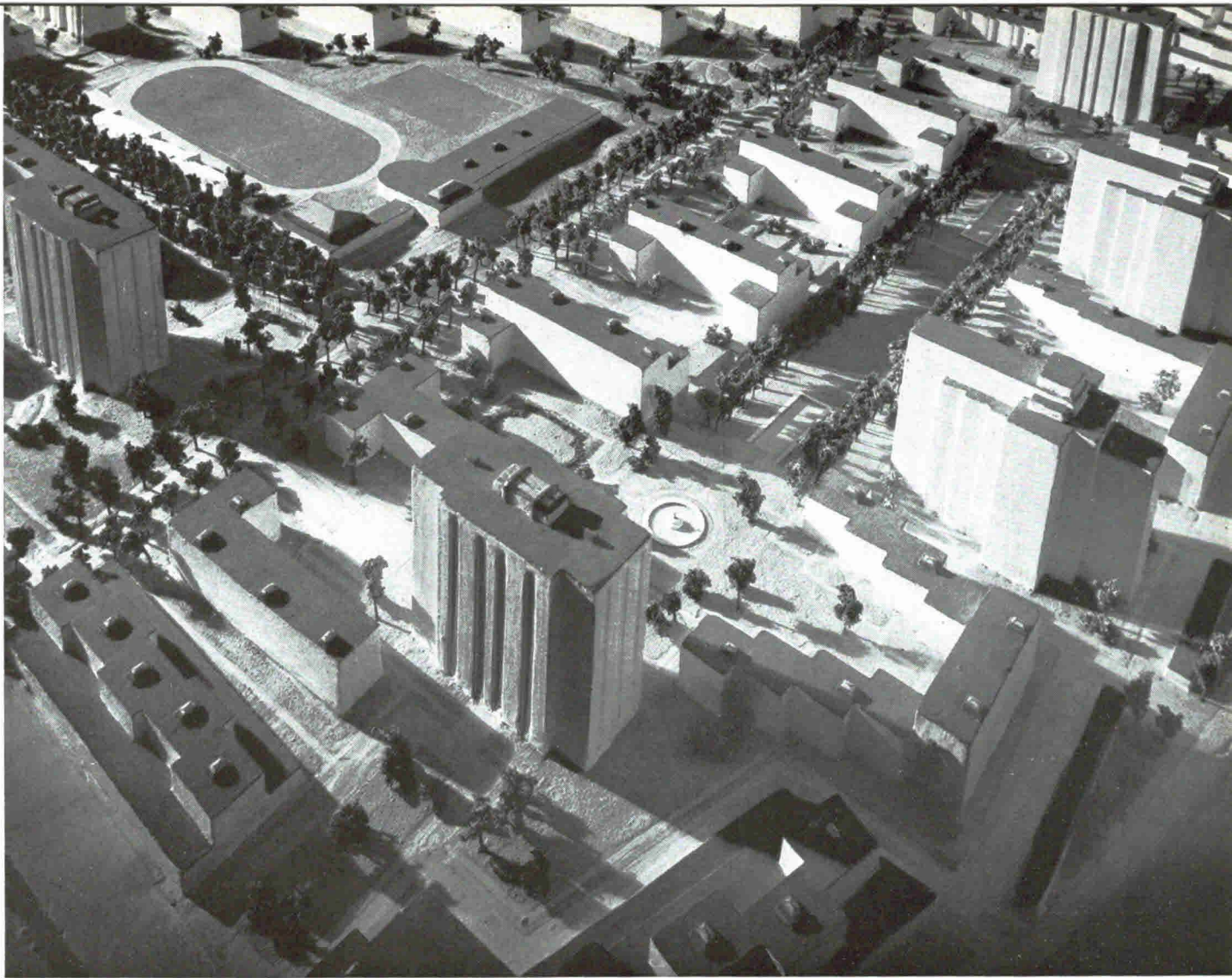


EUGENIE F. SHONNARD, SCULPTOR,
"PUEBLO INDIAN WOMAN WITH BOWL"

AYMAR EMBURY, II, ARCHITECT, PORT OF NEW YORK AUTHORITY, O. H. AMMANN, CHIEF ENGINEER, RALPH SMILLIE, ENGINEER OF DESIGN, LINCOLN TUNNEL, VENTILATION BUILDING



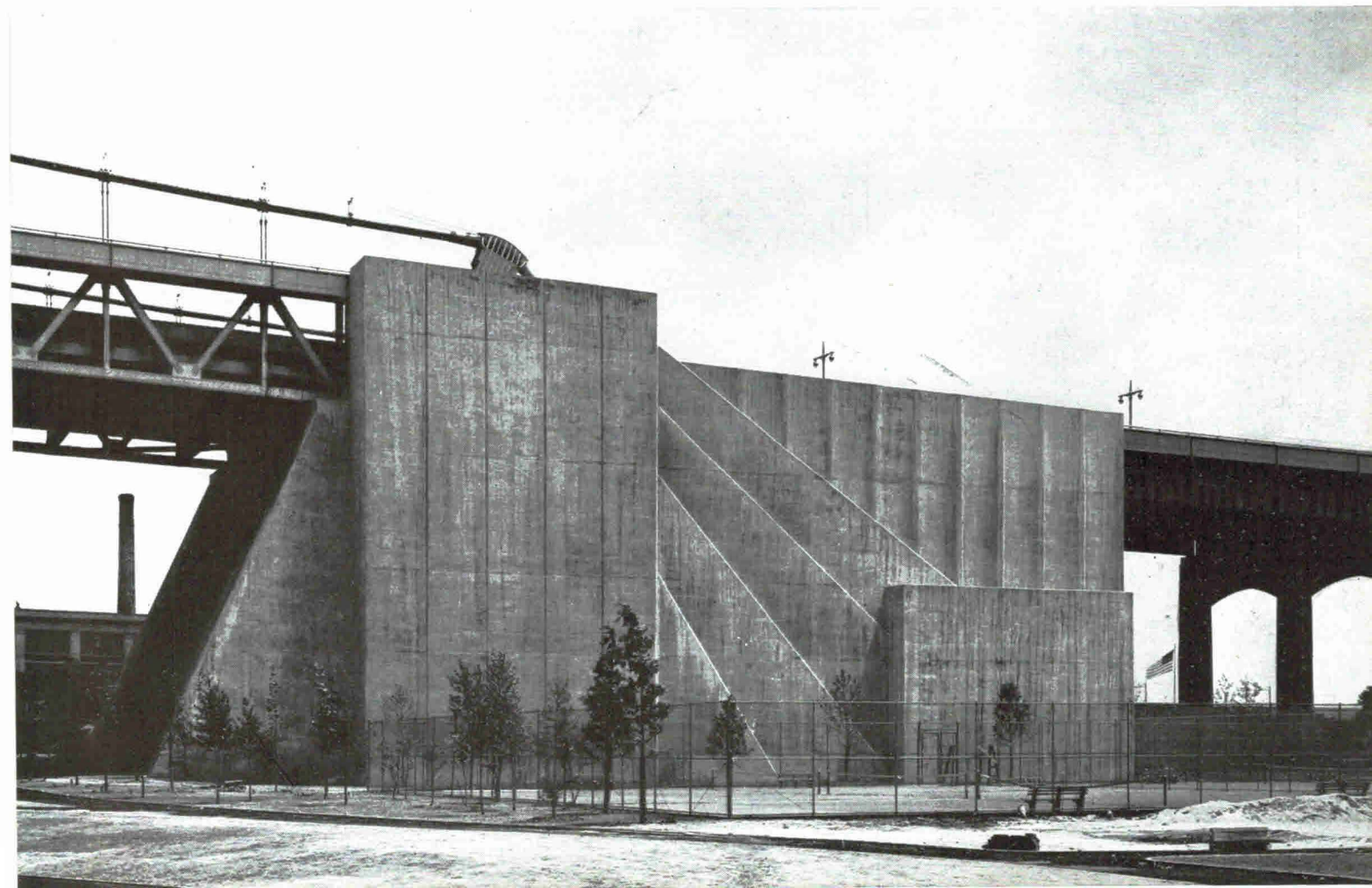
EDW. JAMES MATHEWS, ARCHITECT, MEDIUM COST HOUSING FOR FOREST HILLS, LONG ISLAND, N. Y.



AYMAR EMBURY, II, ARCHITECT, O. H. AMMANN, CHIEF ENGINEER, ALLSTON DANA, ENGINEER OF DESIGN, TRIBOROUGH BRIDGE—ANCHORAGE

R. Garrison

R. A. Smith



WEISS, DREYFOUS & SEIFERTIL, ARCHITECTS, MEDICAL CENTER, NEW ORLEANS, LOUISIANA

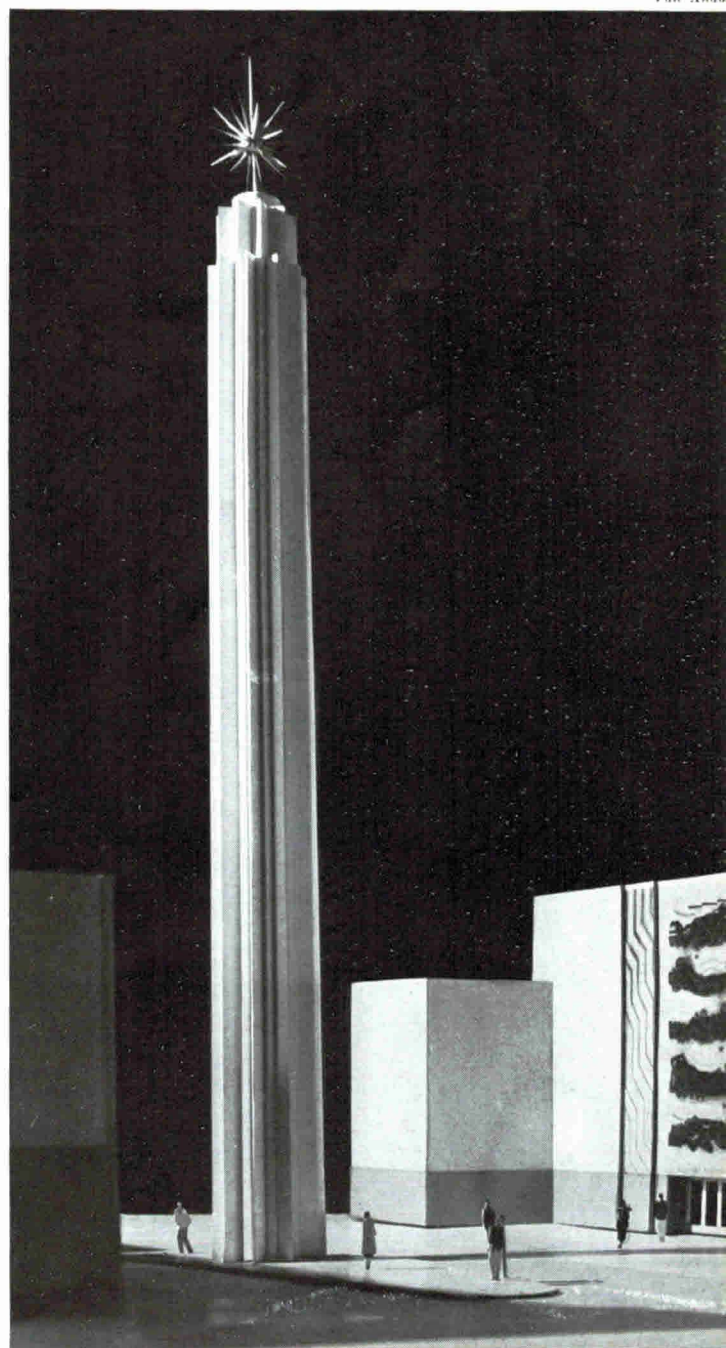




S. H. Gottscho

VILLIAM & GEOFFREY PLATT, ARCHITECTS, JOHN M. GATES, ASSOCIATE,
CORNING BUILDING, NEW YORK

Van Ande



FRANCIS KEALLY AND LEONARD DEAN, ASSOCIATED ARCHITECTS, WOODEN
TYLON, COMMUNICATIONS BUILDING, NEW YORK WORLD'S FAIR

MORRIS & O'CONNOR, ARCHITECTS, ELLEN CRANE MEMORIAL ROOM, BERKSHIRE MUSEUM, PITTSFIELD, MASS.





DAVID FREDENTHAL, MURALIST, MURAL, "SAILORS SONG," DETROIT NAVAL ARMORY

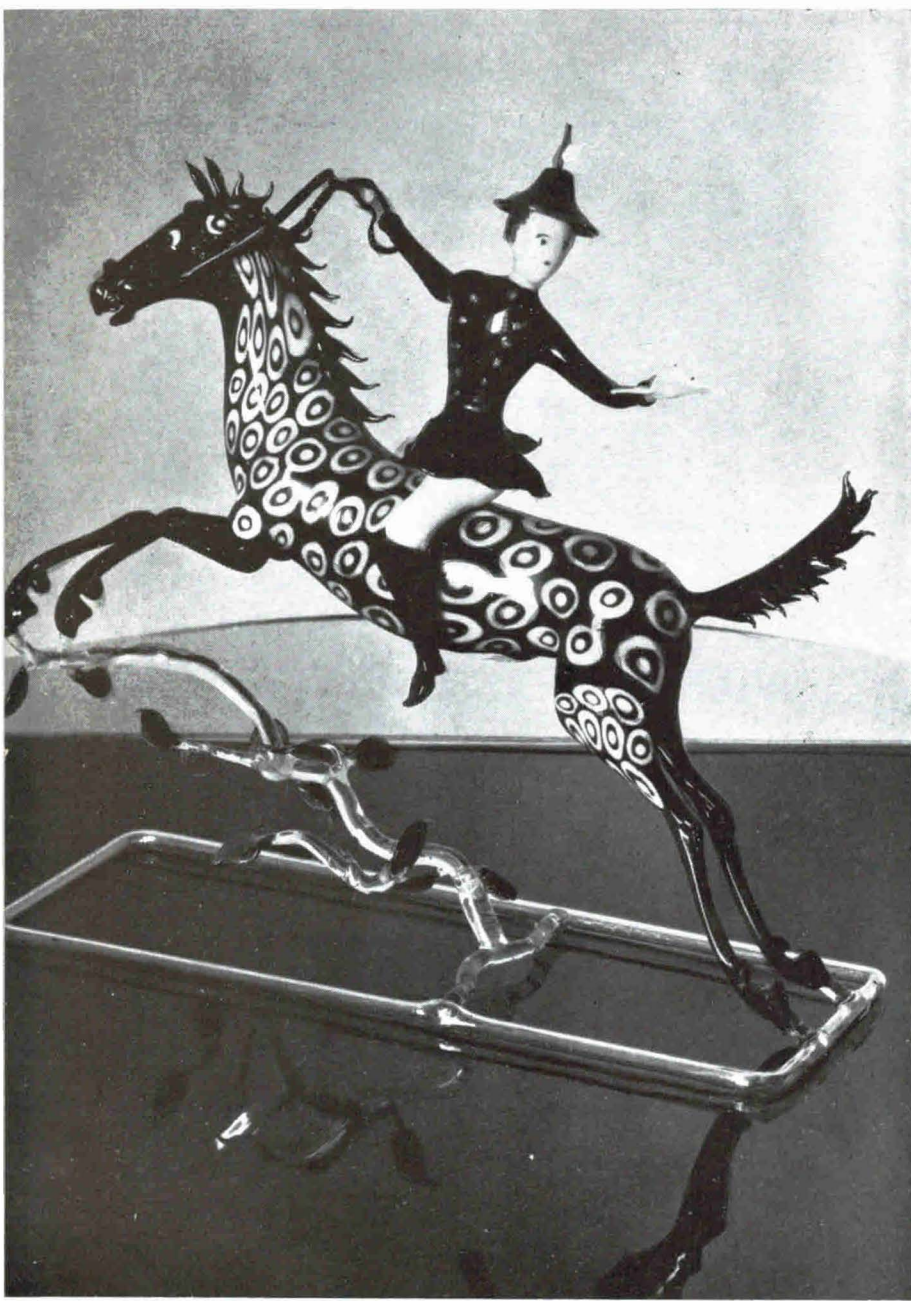
DAVID GRANAHAN, ARTIST, MINNEAPOLIS, MINN., GRANITE INDUSTRY IN POST OFFICE, ST. CLOUD, MINN





A-1

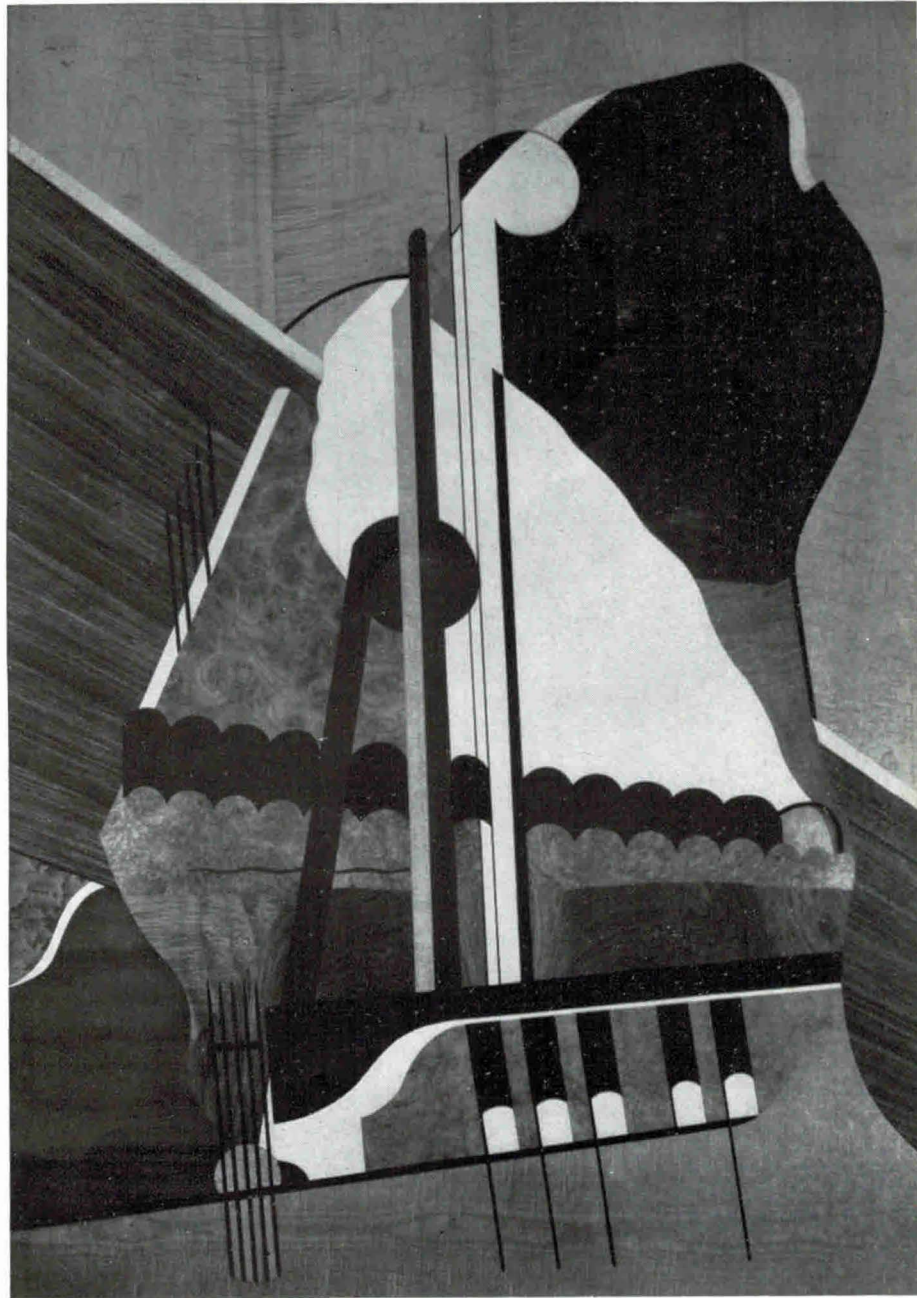
RUTH GIKOW, ARTIST, "CHILDREN'S RECREATION IN CITY AND COUNTRY" FOR BRONX HOSPITAL, N. Y., WPA FEDERAL ARTS PROJECT



BLOWN GLASS BY MARIANNE VON ALLESCH, "BLACK AND WHITE RIDER"

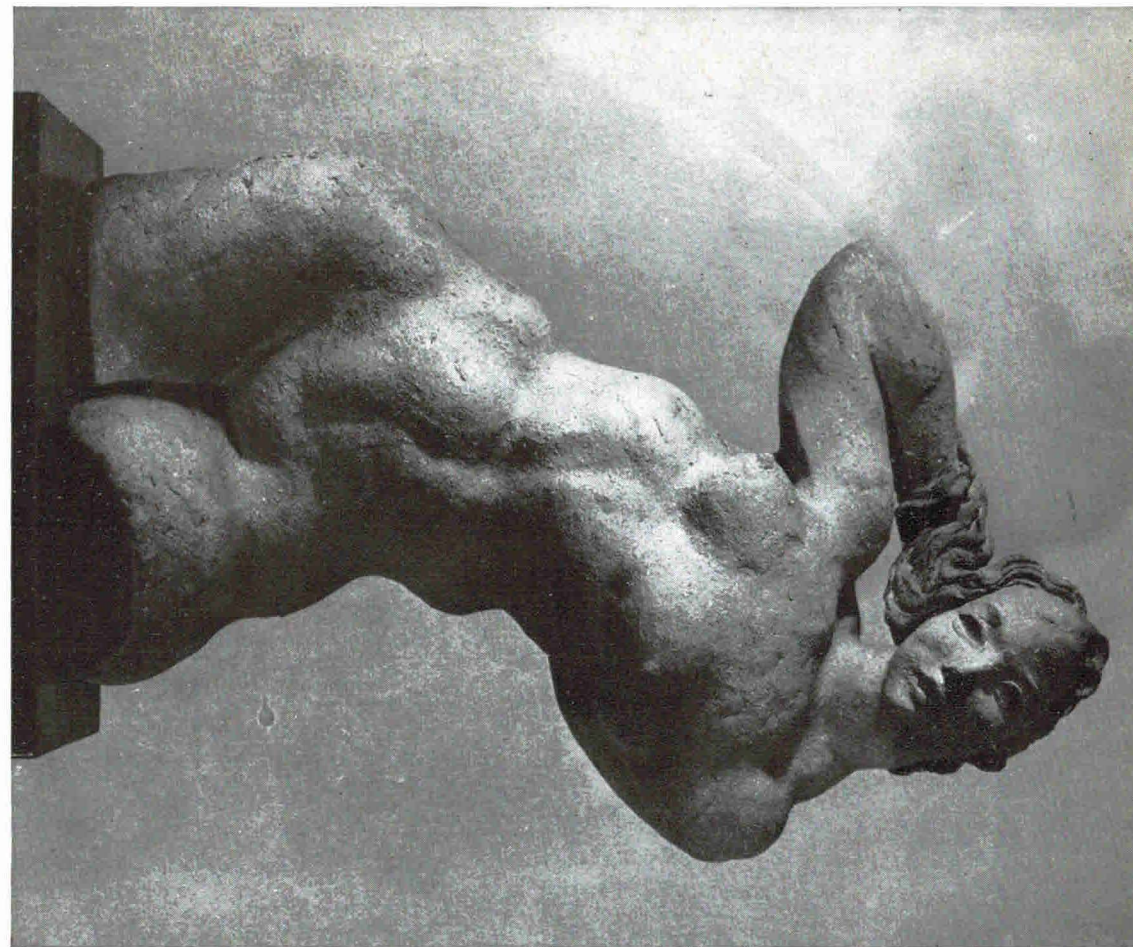


MICHAEL NEWELL, ARTIST, WOOD VENEER INLAY FOR A MUSIC ROOM





GUSTAV JENSEN, DESIGNER, GLASS TABLE, EXECUTED BY HARRITON CARVED GLASS, N. Y.



WAYLANDE GREGORY, SCULPTOR, "WOMAN"—TERRA COTTA

Monroe Carrington, Inc.



EDMOND AMATEIS, SCULPTOR, "PAUL BUNYAN," FOR WORLD'S FAIR OF NEW YORK

COOLIDGE, SHEPLEY, BULFINCH & ABBOTT, ARCHITECTS. FITCHBURG HIGH SCHOOL, FITCHBURG, MASS.



**HARLEM RIVER HOUSES, NEW YORK, N. Y.
PAGE 364**

FOUNDATION: Walls—concrete to grade, solid brick to 1st floor. Footings—steel shell, concrete filled piles to rock; spread footings. Floor—concrete slab, mesh reinforced, stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer, I. L. Stiles & Son Brick Co. and Denning Point Brick Works, tile backup, New Jersey Hollow Tile Corp.; asphalt dampproofing; metal base; aluminum sills. Interior partitions—2 in. solid plaster; 3 or 4 in. tile dividing partitions, National Fireproofing Co. Floor—concrete slab and beam. Ceiling—finished concrete, painted.

ROOF: Covered with 5-ply composition.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Insulite Co. Weatherstripping—Apex Partridge Co.

WINDOWS: Steel casements and screens, Campbell Metal Windows Corp. Glass—double hung, quality A and B, and 1/4 in. plate.

STAIRS: Metal pan type, Wonder Iron Works.

FLOORS: Main rooms—asphalt tile, Leitch Mfg. Co. Kitchen—linoleum. Bathrooms—ceramic tile, Wenczel Tile Co.

WOODWORK: Trim and doors—wood, Sloan & Moller Co.; metal—Superior Fireproofing Door & Sash Co.

HARDWARE: Yale & Towne Mfg. Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rigid steel conduit—General Electric Co. Outlet boxes—J. B. Knight Co. Rubber insulated wire—Circle Wire & Cable Co. Fixtures—Pass & Seymour, Inc. and Graybar Electric Co. Switches—flush toggle, Bryant Electric Co.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Kohler Co.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Co.

BATHROOM EQUIPMENT: All fixtures—Kohler Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes: cast iron—Central Foundry Co. Wrought iron—Reading Iron Co. and A. M. Byers Co. Steel—National Tube Co. Brass—Phelps Dodge Co. and Bridgeport Brass Co.

HEATING: Central steam. Underground conduit—Ric-Wil. Boiler—Kewanee Boiler Corp. Oil burner; rotating cup, Petroleum Heat & Power Co. Radiators—cast iron tubular, American Radiator Co. Automatic heat control and valves, C. A. Dunham Co.

INCINERATORS: Pyroneel, J. C. Rochester & Co.

**NEW TOWNE COURT, CAMBRIDGE, MASS.
PAGE 365**

FOUNDATION: Walls—8 and 12 in. concrete with 4 in. brick veneer, continuous spread footings. Floor—concrete slab, mesh reinforced, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer and tile or cinder concrete block backup tile, National Fireproofing Co. Cinder concrete blocks—Cinder Concrete Units, Inc. Interior partitions—2 in. solid plaster, 3 and 4 in. cinder concrete block, plaster, National Gypsum Co. and U. S. Gypsum Co. Stairhalls—4 in. De-Alred Tile—Block, Humphrey Brick & Tile Co. Floor construction—concrete slab and beam. Ceilings—finished concrete, painted.

ROOF: Covered with composition 5-ply.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Dant Russell Mfg. Co. Weatherstripping—Chamberlin Metal Weather Strip Co.

WINDOWS: Metal casements, Hope's Win-

dows, Inc. Glass—double strength, quality B, Southwestern Sheet Glass Co. and Libbey-Owens-Ford Glass Co.

STAIRS: Metal pan type, Groisser & Shlager Iron Works.

FLOORS: Living room, bedrooms and halls—hardwood floor laid in mastic. Kitchen—Linoleum. Bathrooms—ceramic tile, Sparta Ceramic Co.

WOODWORK: Shelving, cabinets and doors—Brockway, Smith, Hugh, Lowell Co.

HARDWARE: Interior and exterior—Norwalk Lock Co.

PAINTING: Interior walls, trim, and sash—lead and oil.

ELECTRICAL INSTALLATION: Rigid steel conduit and rubber insulated wire, Triangle Conduit & Cable Co. Outlet boxes—National Electric Products Corp. Switches—flush toggle.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—gas, Servel, Inc. Sink and Laundry tray—combination, Standard Sanitary Mfg. Co. Cabinet—wood, Farley & Loetscher.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures—Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes: Cast iron—Central Foundry Co. Wrought iron—Reading Iron Co. Steel—Wheeling Steel Corp. Brass and copper tubing—American Brass Co.

HEATING: Central steam type system. Boiler—L. P. straight water tube, International; automatic combustion control, A. W. Cash. Fuel—coal; underfeed stoker, Riley.

Radiators—cast iron tubular, H. W. pattern, U. S. Radiator Co. Valves, traps and automatic heat control, C. A. Dunham Co. Hot water generators—Sims Co.

INCINERATORS: Lambert-Sawyer Co.

**OLD HARBOR VILLAGE, BOSTON, MASS.
PAGES 366-367**

FOUNDATION: Walls—12 in. concrete, belled caissons. Floor—concrete slab, mesh reinforcement, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer, cinder block with asphalt dampproofing, Cinder Concrete Units Corp.; metal base, Knapp Bros.; aluminum sills, General Bronze Corp. Interior partitions—2, 3 and 4 in. solid plaster; partition tile, National Fireproofing Co.; 4 in. brick tile for stairhalls, Sani Cote Brick Co. Floor construction—concrete slab and beam. Ceilings—concrete, painted. Ceilings of second floor—metal lath on wood joists, plaster.

ROOF: Concrete slab and beam for flat roofs. Wood trussed rafters for pitched; apartments covered with composition 5-ply; houses covered with 3/16 in. slate, Parson Bros. Slate Co.

SHEET METAL WORK: Flashing, gutters and leaders—16 oz. copper.

INSULATION: Roof—Fir-tex Insulating Board Co. Weatherstripping—Chamberlin Metal Weather Strip Co.

WINDOWS: Metal casements and screens, Detroit Steel Products Co. Glass—Pittsburgh Plate Glass Co., Mississippi Glass Co., American Window Glass Co., Libbey-Owens-Ford Glass Co.

STAIRS: Metal pan type, General Bronze Corp. Treads finished with asphalt tile.

FLOORS: Living rooms, bedrooms and halls—asphalt tile, Leitch Mfg. Co. Kitchen—linoleum. Bathrooms—ceramic tile, Crescent Tile Co.

WALL COVERINGS: Living room, bedrooms and halls—plaster, Certain-teed Products Co. and U. S. Gypsum Co. Kitchen and bathrooms—Keene's cement plaster, Certain-teed Products Co.

WOODWORK: Shelving and wood doors—Brockway, Smith, Haigh & Lovell Co.

HARDWARE: Lockwood Hardware Mfg. Co.

PAINTING: Interior walls, trim and sash—lead and oil. Ceilings—concrete paint. Exterior walls and sash—lead and oil.

ELECTRICAL INSTALLATION: Switches—flush toggle type. Rigid steel conduit, Walker Bros. Outlet boxes, National Electric Products Corp. Cable—Simplex Wire & Cable . . . Rubber insulated wire, American Steel & Wire Co.

KITCHEN EQUIPMENT: Stove—electric, Edison General Electric Appliance Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Combination sink and laundry tray—Standard Sanitary Mfg. Co. Cabinet—wood, Farley & Loetscher Mfg. Co. Laundry Sink—Alberene Stone Corp.

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.

PLUMBING: Pipes: Cast iron, Warren Foundry Co. and Somerville Iron Works. Wrought iron—A. M. Byers Co. and Reading Iron Co. Steel—National Tube Co. and Spang-Chalfont Co. Brass—Bridgeport Brass Co. and American Brass Co. Copper tubing—Reading Iron Co.

HEATING: Central steam type system. Underground conduit—Ric-Wil. Boiler—bent water tube, Titusville Iron Works Co. Fuel—coal; underfeed stoker, Riley; automatic combustion control, Carrie. Radiators—cast iron tubular, H. W. pattern, National Radiator Co. Radiator valves and traps, C. A. Dunham Co. Hot water generators—Patterson Kelly.

INCINERATORS: Lambert-Sawyer Co.

**BRAND WHITLOCK HOMES, TOLEDO, OHIO
PAGE 388**

FOUNDATION: Walls—12 in. concrete, continuous spread footings. Floor—concrete, wire mesh reinforced, 6 in. stone or gravel fill.

STRUCTURE: Exterior walls—brick veneer and cinder concrete block backup, Columbia Concrete Block & Supply Co. Asphalt dampproofing on backup walls, plaster; metal base, Milcor Steel Co. Cast iron window sills, C. W. Olsen Mfg. Co. Stone door sills and copings, Acme Cut Stone Co. Interior partitions—2 in. solid plaster, U. S. Gypsum Co. 3 or 4 in. tile partitions, St. Anne Brick & Tile Co. Stairhalls—tile, W. Virginia Brick Co. Floor construction—concrete slab and beam. Ceilings—finished concrete.

ROOF: Concrete slab and beam covered with 5-ply composition.

SHEET METAL WORK: Flashing—16 oz. copper.

INSULATION: Roof—Fir-tex Insulating Board Co. Weatherstripping—Absoproof Weather Strip Co.

WINDOWS: Metal casements and screens—Campbell Metal Window Corp. Glass—double strength, quality A and B, Pittsburgh Plate Glass Co. and Mississippi Glass Co.

STAIRS: Metal pan type, asphalt tile treads, C. W. Olsen Mfg. Co.

FLOORS: Main rooms—asphalt tile, Thomas Moulding Co. Kitchen—linoleum. Bathrooms—ceramic tile, Mosaic Tile Co.

WOODWORK: Shelving, cabinets and doors—Consolidated Sash & Door Co.

HARDWARE: Norwalk Lock Co.

PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint.

ELECTRICAL INSTALLATION: Rigid steel conduit—M. B. Austin Co. Outlet boxes—Steel City Wire & Cable Co. Rubber insulated wire—Paramite Wire & Cable Co. Switches—flush toggle, Arrow, Hart & Hege-man. Fixtures—Pass & Seymour, Inc.

KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink—Standard Sanitary Mfg. Co.

LAUNDRY EQUIPMENT: Sink—Alberene Stone Corp.

(Continued from page 451)

BATHROOM EQUIPMENT: All fixtures by Standard Sanitary Mfg. Co. Cabinet—metal, Philip Carey Co.
PLUMBING: Pipes: Cast iron—Clow & Sons, Alabama Pipe Co. and American Radiator Co. Wrought iron—Reading Iron Co. Steel—Youngstown Sheet & Tube Co. Brass and copper tubing—Bridgeport Brass Co.
HEATING: Central steam type. Underground Conduit—Ric-Wil. Boiler—straight H. P. water tube, Titusville Iron Works. Fuel—coal; Riley underfeed stoker. Radiators—cast iron tubular, H. W. pattern, American Radiator Co. Valves, traps and automatic heat control, C. A. Dunham Co. Hot water generators—Richmond Engineering Co.
INCINERATORS:—Detroit Incinerator Co.

LOCKEFIELD GARDENS, INDIANAPOLIS, IND. PAGE 389

FOUNDATION: Walls—concrete to grade. Floor—concrete slab, reinforced, 6 in. stone or gravel fill.
STRUCTURE: Brick veneer and Haydite block backup, wood base, interior walls, plaster, Cardiff-Gypsum Co. Interior partitions—2 in. solid plaster, 4 in. clay tile dividing partitions. Floor—concrete slab and beam. Ceiling—finished concrete, painted.
ROOF: Concrete slab and beam covered with 5-ply composition, Acme Roofing Co.
SHEET METAL WORK: Counter flashing and downspouts—16 oz. copper.
INSULATION: Roof—Celotex Corp.
WINDOWS: Metal casements and screens—Detroit Products Co. Glass—Pittsburgh Plate Glass Co.
STAIRS: Metal pan type, General Bronze Corp. Walls—glazed brick, Ayer, McCarl & Reagan Co.
FLOORS: Living room and bedrooms—wood, laid in mastic, Wood Tile Corp. Bathrooms—ceramic tile, U. S. Tile Corp.
WOODWORK: Interior metal door trim, Aetna Steel Products Co. Shelving and cabinets—Berger Mfg. Co. Metal doors—Niedringhaus, Inc. Wood doors—Farley & Loetscher Mfg. Co. Garage doors—Stanley Co.
HARDWARE: Russell & Erwin Mfg. Co.
PAINTING: Lead and oil throughout.
ELECTRICAL INSTALLATION: Conduit—National Electric Products Co. Switches—flush toggle, Bryant Electric Co. Fixtures—Pass & Seymour, Inc.
KITCHEN EQUIPMENT: Range—electric, Edison, General Electric Co. Refrigerator—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—Kohler Co. Cabinet—steel, Art Metal Construction Co.
LAUNDRY EQUIPMENT: Sink—Alberene Stone Co.
BATHROOM EQUIPMENT: All fixtures by Kohler Co. Cabinet—Art Metal Construction Co.
HEATING: Steam, purchased. Underground conduit—Ric-Wil.
SPECIAL EQUIPMENT: Incinerators—Kerner Incinerator Co.

CEDAR SPRINGS PLACE, DALLAS, TEXAS PAGE 397

FOUNDATION: Walls—12 in. concrete, spread footings. Floor—concrete slab, mesh reinforcement, 6 in. stone or gravel fill.
STRUCTURE: Exterior walls—12 in. clay tile walls, stucco outside, plaster inside. Hollow concrete block, Nolan Browne Co. Tile, Reliance Clay Products Co. Sills and copings—cast stone, Dallas Architectural Decorating Co. Interior partitions—2 in. solid plaster, 3 or 4 in. plastered tile dividing partitions, Reliance Clay Products Co. Stairhalls—glazed tile. Floor construction—concrete slab and beam. ROOF: Covered with composition 5-ply. SHEET METAL WORK: Flashing—16 oz. copper. INSULATION: Roof—Celotex Corp. Weatherstripping—Ceco Weather Strip & Screen Co. WINDOWS: Metal casements and screens—Campbell Metal Window Corp. Glass—double strength, quality B for windows; ¼ in. polished plate for doors, Southwestern Sheet Glass Co. and Libbey-Owens-Ford Glass Co. STAIRS: Metal pan type, A. J. Bayer Co. FLOORS: Main rooms—asphalt tile, Thomas Moulding Co. Kitchens—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Tile Co. WOODWORK: Shelving and wood doors—Huttig Sash & Door Co. Metal doors—Neidgringhaus, Inc. HARDWARE: Russell & Erwin. PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. ELECTRICAL INSTALLATION: Rubber insulated wire, Triangle Conduit & Cable Co. Outlet boxes—Appleton Electric Co. Switches—flush toggle, Arrow, Hart & Hegeman. Fixtures—Pass & Seymour. KITCHEN EQUIPMENT: Refrigerator—electric, Westinghouse Electric & Mfg. Co. Combination sink and laundry tray—Crane Co. Cabinet—wood, Huttig Sash and Door Co. Laundry sink—Alberene Stone Corp. BATHROOM EQUIPMENT: All fixtures—Crane Co. Cabinet—metal, F. H. Lawson Co. PLUMBING: Pipes—cast iron, Alabama Pipe Co. Wrought iron, A. M. Byers Co. Steel, National Tube Co. Brass and copper tubing, Revere Copper & Brass Co. HEATING: Central steam type. Boiler—H. P. portable, steel firebox, Brownell Co. Fuel and method of firing—Gas burner, King; Automatic combustion control, Gilfillan. Radiators—convector type, Young Radiator Co. Radiator valves and traps—C. A. Dunham Co. Automatic heat control—C. A. Dunham Co. Hot water generators—Sims Co.

ANDREW JACKSON COURTS, NASHVILLE, TENN. PAGE 406

FOUNDATION: Walls—12 in. concrete, continuous spread footings. Floor—concrete slab, 6 in. stone or gravel fill.
STRUCTURE: Exterior walls—brick veneer and frame construction. Interior partitions—frame, gypsum lath, plastered, plaster—National Gypsum Co., 8 in. tile firewalls, W. G. Bush & Co. Floor construction—wood joist. ROOF: Covered with composition 4-ply. SHEET METAL WORK: Flashing, gutters, leaders and downspouts—16 oz. copper, Dependence Flashing Co. INSULATION: Roof—Masonite Corp. WINDOWS: Sash and screens—wood, Southern Mfg. Co. Glass—double and single strength, quality B, Libbey-Owens-Ford Glass Co. and Blue Ridge Glass Co. STAIRS: Wood, Southern Mfg. Co. FLOORS: Main rooms—wood. Bathrooms—ceramic tile, Sparta Ceramic Tile Co. Porches—cement WOODWORK: Trim, shelving, cabinets and doors—wood, Southern Mfg. Co. HARDWARE: Sargent Co. PAINTING: Interior walls, trim, sash and exterior sash—lead and oil. Ceilings—concrete paint. ELECTRICAL INSTALLATION: Rigid steel conduit—General Electric Co. Outlet boxes—National Electric Products Corp. Rubber insulated wire—Paranite Wire & Cable Corp. Switches—flush toggle, Bryant Electric Co. Fixtures—Pass & Seymour, Inc. KITCHEN EQUIPMENT: Range—electric, Edison, General Electric Appliance Co. Refrigerators—electric, Westinghouse Electric & Mfg. Co. Sink and laundry tray—combination

tion, Crane Co. Cabinet—wood, Southern Mfg. Co.
BATHROOM EQUIPMENT: All fixtures by Crane Co. Cabinet—metal, F. H. Lawson Co.
PLUMBING: Pipes: Cast iron—Alabama Pipe Co. Wrought iron—A. M. Byers Co. Steel—Clayton Mark & Co.
HEATING: Central steam type. Boiler—portable steel, L. P. firebox, Pacific Fuel—coal; underfeed stoker, Iron Fireman Mfg. Co. Automatic combustion control, Teeple, Radiators—cast iron, H. W. pattern, American Radiator Co.; Convectors type—Wallace. Valves and traps—Trane Co. Hot water generators—Richmond Engineering Co.

LAUDERDALE COURTS, MEMPHIS, TENN. PAGE 407

FOUNDATION: Walls—12 in. concrete, continuous spread footings. Floor—concrete slab, mesh reinforced, 6 in. stone or gravel fill.
STRUCTURE: Exterior walls—brick veneer, backup tile, National Fireproofing Co. Stone sills and copings, D. R. Aitken. Waterproofing—membrane at floors and openings; plaster inside. Interior partitions—2 in. solid plaster; 3 and 4 in. tile, Acme Brick Co., plastered at bathrooms, chases and dividing partitions. Stairhalls—4 in. glazed tile, Acme Brick Co. Plaster—gypsum, Mathieson Alkali Works and Keene's cement, Best Bros., Keene's Cement Co. Floor construction—concrete slab and beam.
ROOF: Flat roofs covered with 5-ply composition roofing over insulation, Johns-Manville Corp. Trussed wood rafters on pitched roofs covered with roofing tile, Ludowici-Celadon Co.
SHEET METAL WORK: Flashing, gutters, leaders and porch roofs—16 oz. copper.
WINDOWS: Metal casements and screens, Campbell Metal Window Co. Glass—double strength, quality B, Pittsburgh Plate Glass Co.
STAIRS: Metal pan type, Hawkins Ornamental Iron Co.; cast iron safety treads in apartments; asphalt tile on treads of row house, Uvalde Rock Asphalt Co.
FLOORS: Living room and bedrooms—wood, laid in mastic on slab. Halls in 2nd floor halls of row houses—asphalt tile, Uvalde Rock Asphalt Co. Kitchens—linoleum. Bathrooms—ceramic tile, Sparta Ceramic Tile Co.
WOODWORK: Shelving, doors and screen doors—Cole Mfg. Co. Garage doors—Overhead Door Corp.
HARDWARE: Norwalk Lock Co.
PAINTING: Interior walls, trim and sash, and exterior sash—lead and oil. Ceilings—concrete paint.
ELECTRICAL INSTALLATION: Outlet boxes, National Electric Products Corp. Rubber insulated wire—Anaconda Wire & Cable Co. Switches—flush toggle type, Arrow, Hart & Hegeman. Fixtures—Miller Co.
KITCHEN EQUIPMENT: Range—gas, Crown Stove Works. Refrigerator—gas, Servel, Inc. Sink—combination, Eljer Co. Cabinet—wood, Cole Mfg. Co.
LAUNDRY EQUIPMENT: Sink—cement, D. D. Wessels & Sons Co.
BATHROOM EQUIPMENT: All fixtures by Eljer Co. Cabinet—metal, Philip Carey Co.
PLUMBING: Pipes: Cast iron, Alabama Pipe Co. Wrought iron, A. M. Byers Co. Steel, Laclede Steel Co. Brass and copper tubing, Chase Brass & Copper Co., Inc.
HEATING: Steam: Moderator System, Warren Webster & Co. Underground conduit—Ric-Wil. Boiler—bent water tube, Kroeschell. Fuel—gas; gravity type gas burner, Maxon; automatic combustion control, Carrick. Radiators—cast iron, tubular, H. W. pattern, U. S. Radiator Co. Radiator valves, thermostatic and drip traps—Warren Webster & Co. Hot water generators—Patterson-Kelley Co.
INCINERATORS: Goder Incinerator Co.

(Continued on page 66)