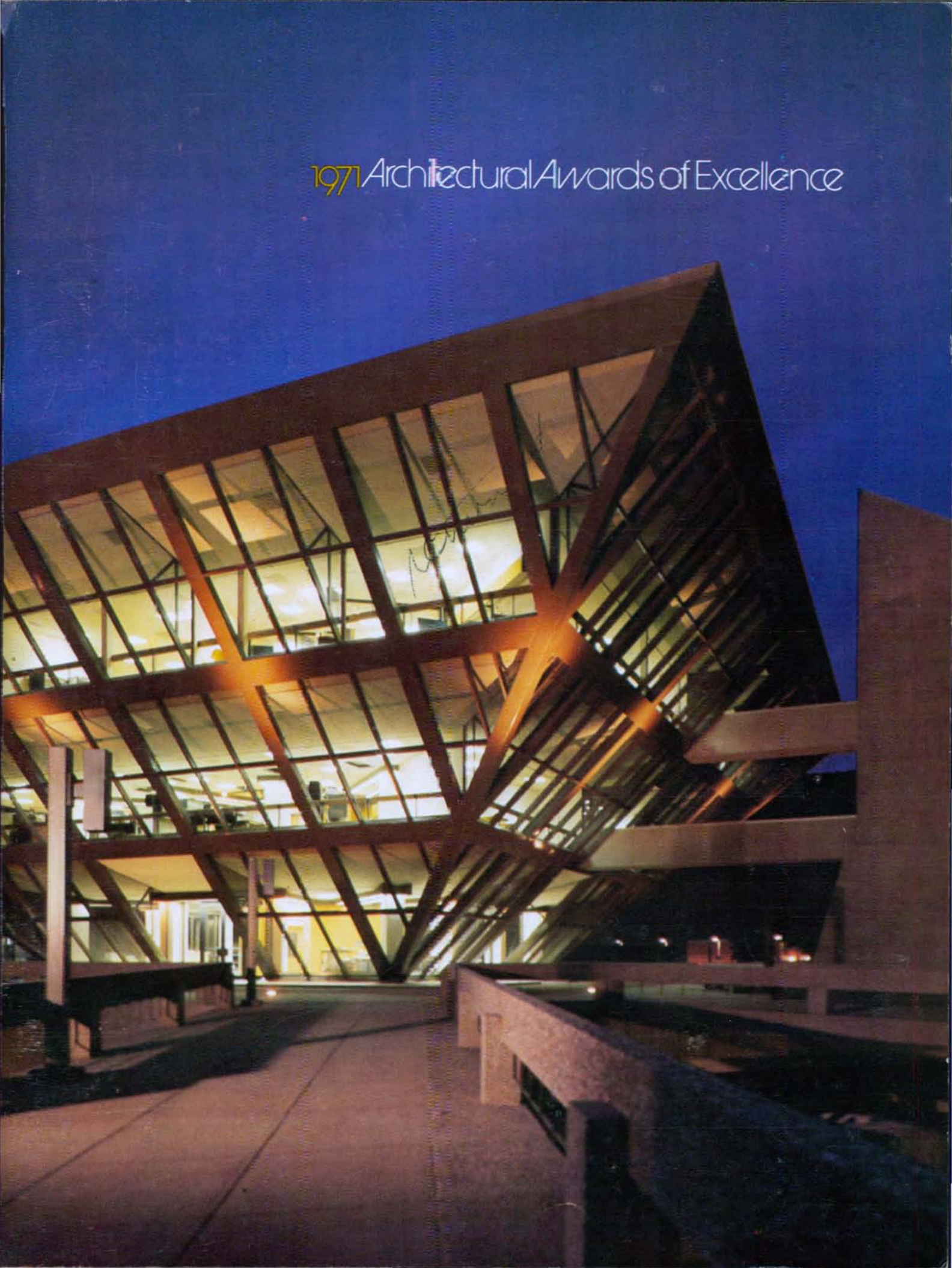
1971 Architectural Awards of Excellence




transparency
returned
with
Carol
Cypress

THE ARCHITECTURAL AWARDS OF EXCELLENCE WERE ESTABLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION IN 1960 TO RECOGNIZE AND HONOR OUTSTANDING ARCHITECTURAL DESIGN IN STRUCTURAL STEEL AND TO ENCOURAGE FURTHER EXPLORATION OF THE MANY AESTHETIC POSSIBILITIES THAT ARE INHERENT IN STEEL CONSTRUCTION. THIS YEAR A DISTINGUISHED JURY NAMED FIFTEEN BUILDINGS FOR ARCHITECTURAL AWARDS OF EXCELLENCE. IN THE OPINION OF THE AISC COMMITTEE ON AWARDS, EACH BUILDING REPRESENTS DESIGN OF THE HIGHEST STANDARDS, AND ALL AWARDS ARE EQUAL IN STATURE. THE AWARD-WINNING ARCHITECTS ARE LISTED ON THE FOLLOWING PAGES WITH PICTURES OF THE BUILDINGS FOR WHICH THEY RECEIVED COMMENDATION.

SPONSORED BY AMERICAN INSTITUTE OF STEEL CONSTRUCTION

Photo Credits

Front Cover: Tempe Municipal Building/Neil Koppes
Inside Front Cover: ALZA Corporate Offices and Medical Research Center/Jeremiah O. Bragstad
Back Cover: Burlington Corporate Headquarters/Gordon H. Schenck, Jr.

Tempe Municipal Building/Charles R. Conley/Bill Irwin and Mal R. Bernstein
United States Steel Building/Ezra Stoller
Richmond Coliseum/Lawrence S. Williams
Northway 10 Executive Park/L. A. Digesare/E. Horvath
ALZA Corporate Offices and Medical Research Center/Jeremiah O. Bragstad
Parker Hannifin Corporation/Wayne Thom
Sears, Roebuck and Co./Wayne Thom
Burlington Corporate Headquarters/Gordon H. Schenck, Jr.
The Service Group, College at Old Westbury/George Cserna
Rapid Transit Stations on Dan Ryan and Kennedy Expressways/Ezra Stoller
John Hancock Center/Ezra Stoller
Superbay Hangar Maintenance Facilities/Morley Baer

1971 Architectural Awards of Excellence

DUKOR ASSOCIATES, AIA
Pierce Street Apartments

MICHAEL & KEMPER GOODWIN LTD.
Tempe Municipal Building

HARRISON & ABRAMOVITZ & ABBE
United States Steel Building

BEN R. JOHNS, JR.
VINCENT G. KLING & PARTNERS
Richmond Coliseum

ROBERT F. LAVERY
Northway 10 Executive Park

McCUE BOONE TOMSICK
ALZA Corporate Offices and Medical Research Center

ALBERT C. MARTIN AND ASSOCIATES
Parker Hannifin Corporation, Irvine Facility

ALBERT C. MARTIN AND ASSOCIATES
Sears, Roebuck and Co., Pacific Coast Administrative Offices

C. F. MURPHY ASSOCIATES
Malcolm X College

ODELL ASSOCIATES INC.
Burlington Corporate Headquarters

JAMES STEWART POLSHEK AND ASSOCIATES
The Service Group, College at Old Westbury

SKIDMORE, OWINGS & MERRILL
Rapid Transit Stations on Dan Ryan and Kennedy Expressways

SKIDMORE, OWINGS & MERRILL
John Hancock Center

TENNESSEE VALLEY AUTHORITY
Paradise Steam Electric Generating Station, Unit 3

LEV ZETLIN ASSOCIATES, INC., CONSULTING ENGINEERS
CONKLIN AND ROSSANT, ARCHITECTS
(A Joint Venture)
Superbay Hangar Maintenance Facilities,
San Francisco International Airport and Los Angeles International Airport

Jury of Awards

JOHN P. EBERHARD, AIA
Dean, School of Architecture and Environmental Design
State University of New York at Buffalo, Buffalo, New York

JAMES H. FINCH, FAIA
Finch Alexander Barnes Rothschild & Paschal
Atlanta, Georgia

DAHLEN K. RITCHEY, FAIA
Deeter Ritchey Sippel Associates
Pittsburgh, Pennsylvania

EDWARD J. TEAL, M.ASCE
Albert C. Martin and Associates
Los Angeles, California

MAX O. URBAHN, FAIA
President-elect AIA
Max O. Urbahn Associates, Inc.
New York, New York

L. to R.: Urbahn, Ritchey, Eberhard, Teal, Finch

Architect
Dukor Associates, AIA, Gilroy, California

Pierce Street Apartments
Gilroy, California

Structural Engineer
Dimitry Vergun, Gilroy, California

General Contractor
Dukor Modular Systems, Inc., Gilroy, California

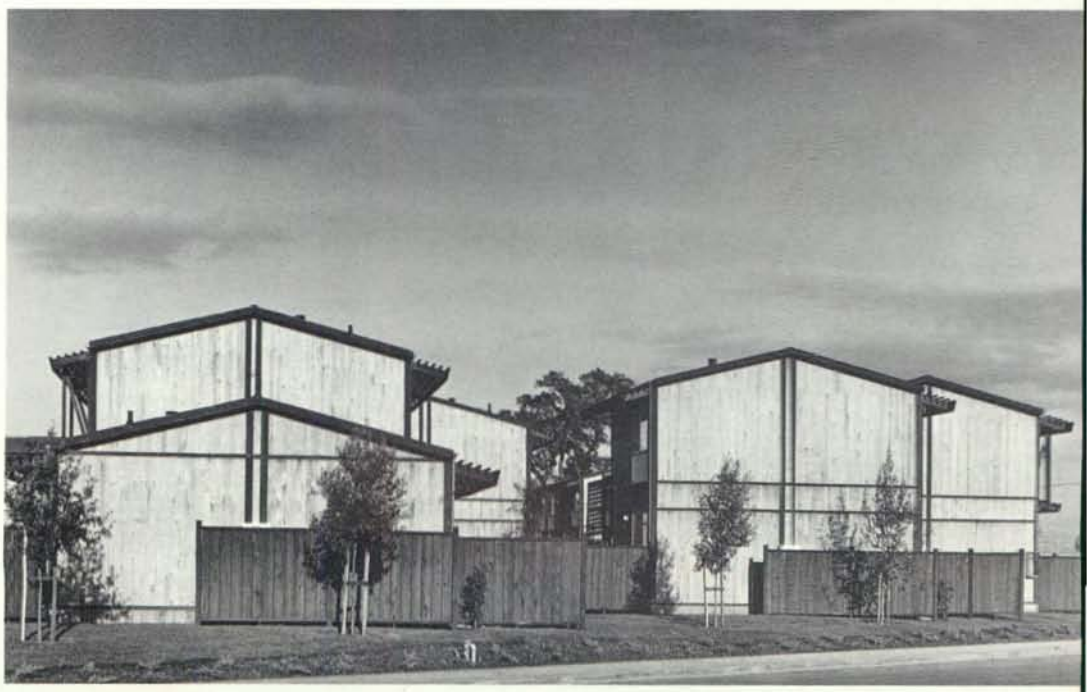
Steel Fabricator
Dukor Modular Systems, Inc., Gilroy, California

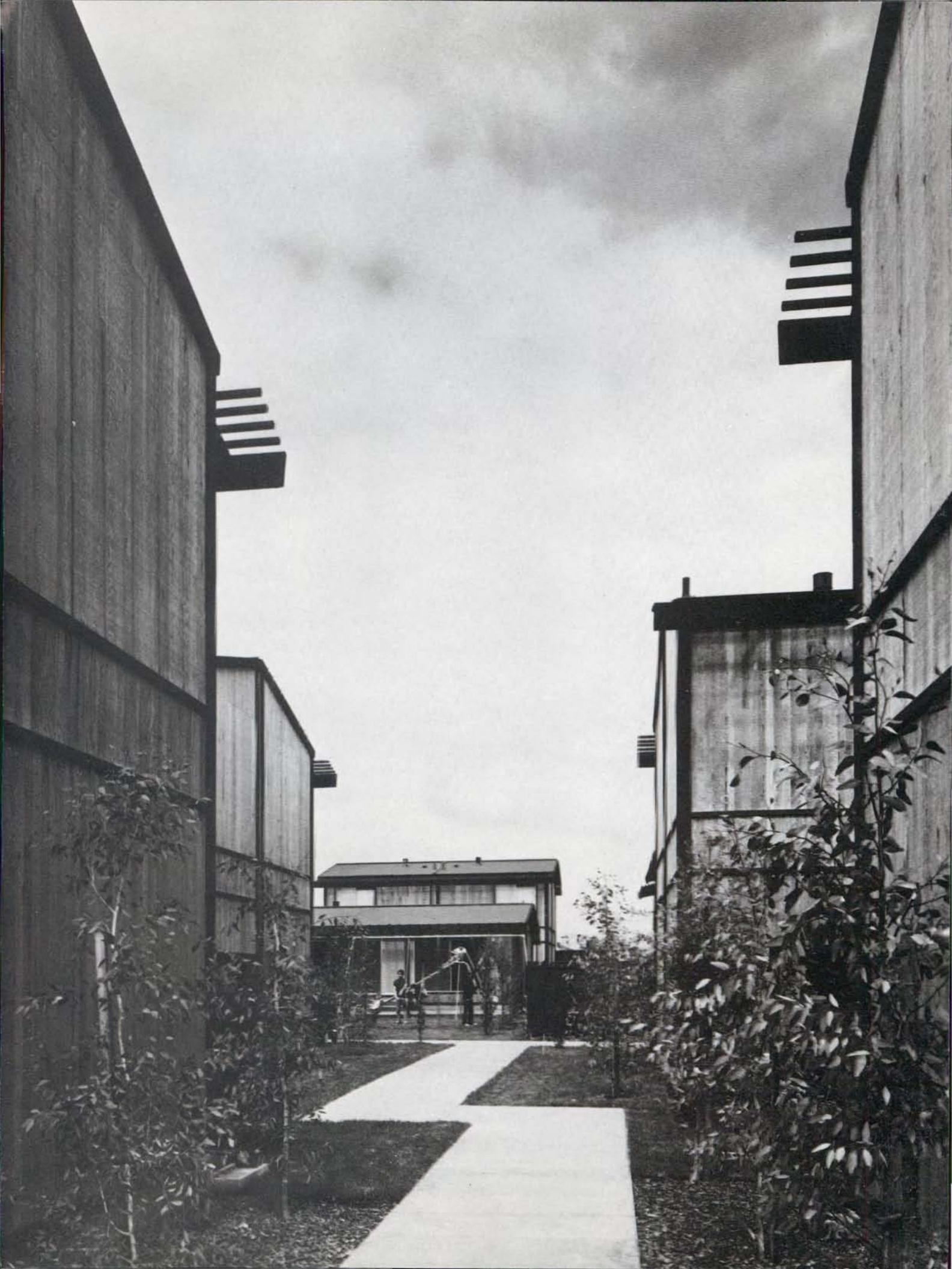
Owner
Pierce Street Apartments, A Limited Partnership, Gilroy, California

One- and two-story town houses comprise this low income rental housing project, which was built completely in a modular factory. The choice of steel as the basic structural material made possible the use of a rigid three-dimensional space frame. The frame served as a chassis both during the manufacture and while being transported to the site—wheels are attached directly to the module, and a tractor pulls the completely finished unit to the job site. This method resulted in a reduction of transportation costs due to its speed and minimal use of equipment.

Additionally, the frame is designed for all lateral (seismic and wind) forces, as well as for vertical loads. This permits a variety of floor plans as all walls are non-load bearing.

"A fine example of the pleasing and socially rewarding results that can be achieved with prefabricated components for low income housing. The innovative combination of exposed steel framing with wood fill-in walls is most attractive."—Jurors' Comments





Architect
Michael & Kemper Goodwin Ltd., Tempe, Arizona

Tempe Municipal Building
Tempe, Arizona

Structural Engineer
Mann and Anderson Engineers, Inc., Phoenix, Arizona

General Contractor
M. M. Sundt Construction Co., Phoenix, Arizona

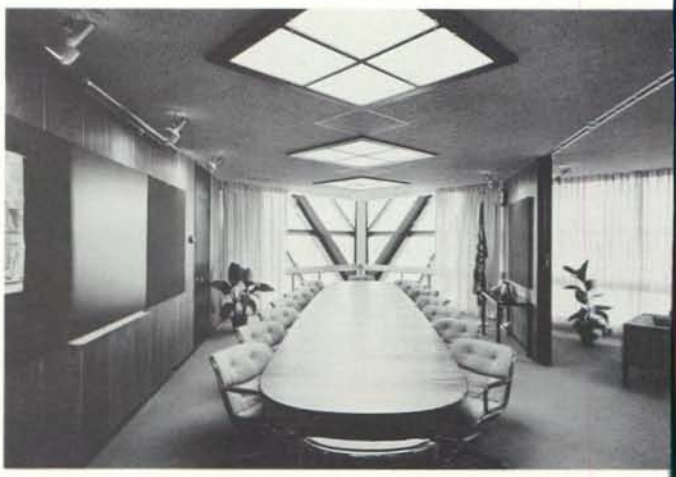
Steel Fabricator
Allison Steel Manufacturing Co., Phoenix, Arizona

Owner
City of Tempe, Tempe, Arizona

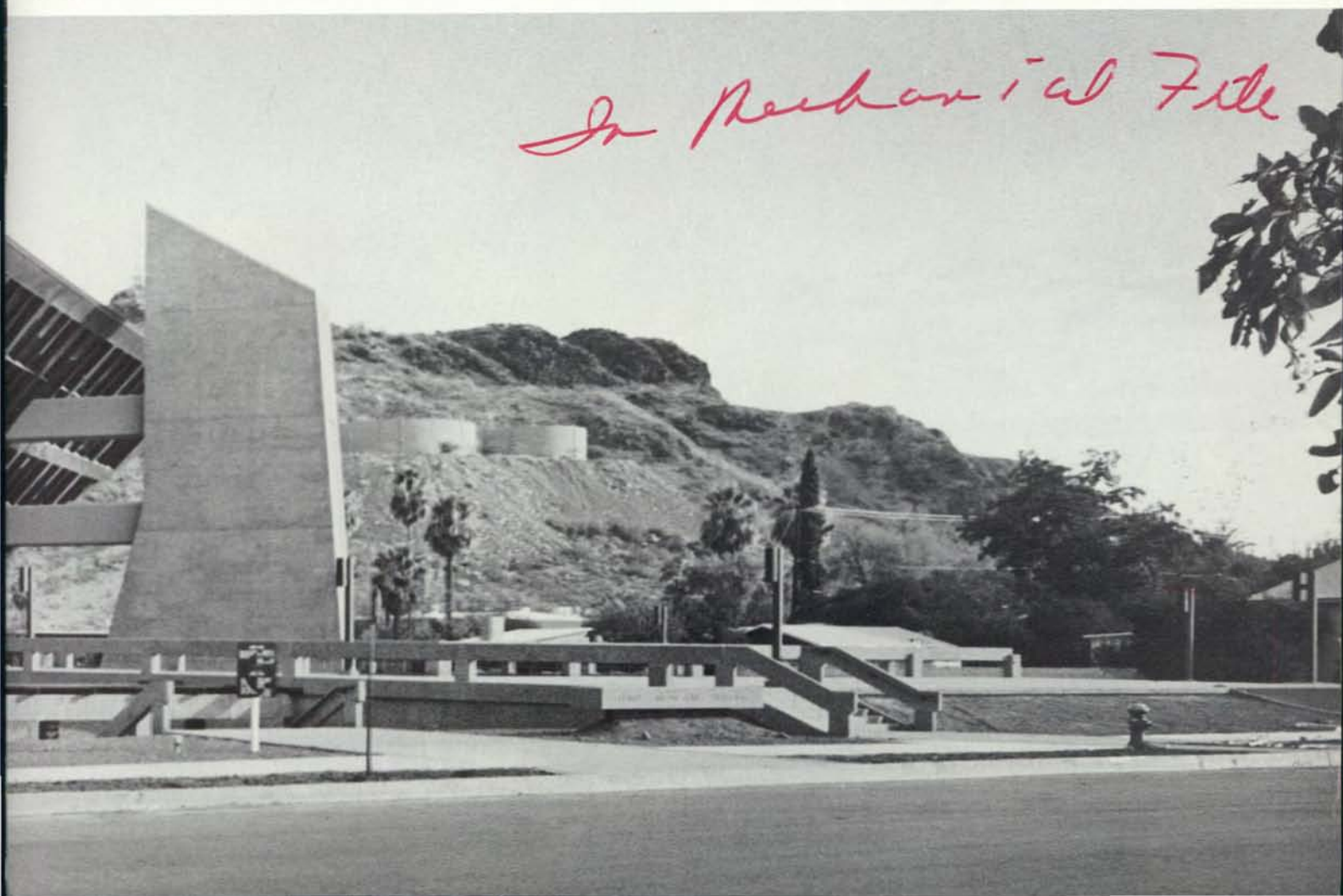
The most important design criteria for this municipal complex was the necessity for the buildings to appear accessible and inviting to Tempe residents. While a panoramic view of the city was a desirable goal, it was a difficult one to achieve in a desert locale. Extensive research resulted in the design of a three-story inverted glass pyramid tower with perimeter offices. The perimeter building is under street level and surrounds the tower on three sides. It houses various city departmental offices.

Sloping of the tower's glass walls at an angle of 45° with the horizontal plane and the orientation of the building at an angle of 45° with the north quadrant provided excellent solar orientation. The windows act as mirrors and reflect much of the intense glare and heat of the sun during the summer months. The building actually shades itself.

"This inverted pyramid is an innovative and imaginative solution to the problem of solar radiation. We commend the architect for his careful research and thoughtful solution. The building boldly expresses its structural steel frame and presents an expression of stability and permanence despite its unusual shape."—Jurors' Comments




In Memorial
Fille


In Memorial Fille


In
Mechanical
File

Architect
Harrison & Abramovitz & Abbe, New York, New York

United States Steel Building
Pittsburgh, Pennsylvania

Structural Engineers
Mueser, Rutledge, Wentworth & Johnston, New York, New York
Skilling, Helle, Christiansen & Robertson, New York, New York
Edwards & Hjorth, New York, New York

General Contractor
Turner Construction Company, New York, New York

Steel Fabricator
American Bridge Division, United States Steel
Pittsburgh, Pennsylvania

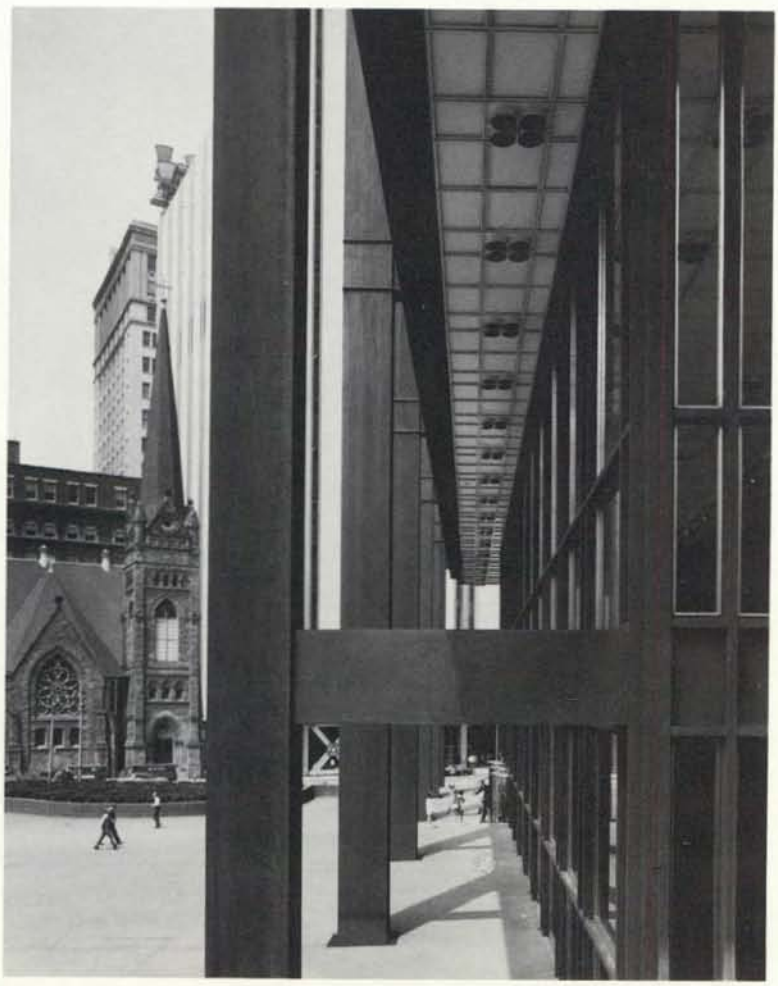
Owner
United States Steel Corporation, Pittsburgh, Pennsylvania

This 64-story corporate headquarters tower was conceived in response to the owner's request that the design explore the full potential of steel.

The architectural solution is the outgrowth and expression of the structural plan of the triangular service core that is surrounded by 18 free-standing, welded, weathering-steel exterior columns, 841 feet long and spaced 39 feet on centers (nine modules). Each column stands out three feet from the structure. Additionally, the columns are fireproofed internally with a gravity circulated anti-freeze liquid.

A rooftop space frame controls thermal and wind effects. This "hat," combined with the bracing surrounding the triangular service core and the tensile capabilities latent in the exterior columns, reduces lateral deflections due to wind and vertical deformations resulting from natural heating and cooling of the exposed exterior columns.

"This innovative structure is a bold expression of steel as a structural and architectural material. It is a successful, unusual design."—Jurors' Comments



Architects
Ben R. Johns, Jr., Richmond, Virginia
Vincent G. Kling & Partners, Philadelphia, Pennsylvania

Richmond Coliseum
Richmond, Virginia

Structural Engineer
Fraioli, Blum & Yesselman, Norfolk, Virginia

General Contractor
J. A. Jones Construction Company
Charlotte, North Carolina

Steel Fabricator
Bristol Steel & Iron Works, Inc., Richmond, Virginia

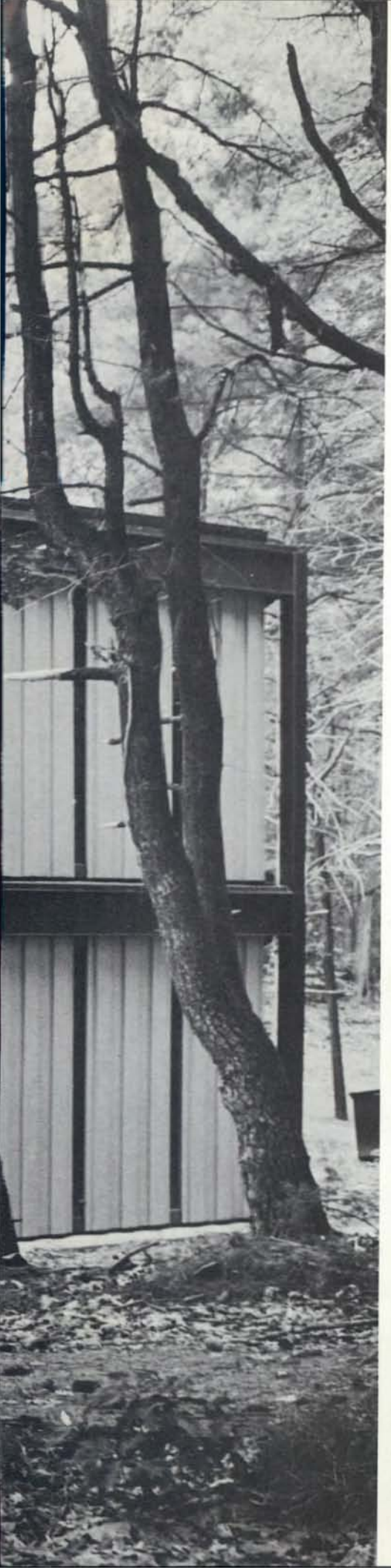
Owner
City of Richmond, Richmond, Virginia

The architectural concept of the Coliseum envisaged a tentlike roof configuration. An exposed steel framework best suited the design aesthetics and was also most economical. An effect of airiness and lightness is reflected in this well organized and uncluttered framing system.

The aesthetic ceiling, looking upward from the seating area, is that of a gigantic spider web, unspoiled in its purity by any intrusion of ducts or any hanging material except for the catwalks which are integrated as part of the truss system.

The plan of the Coliseum is elliptical, with arena seating defined as a circle 308 feet in diameter. The ellipse is 368 feet in the short direction and 408 feet in the long direction. The difference is taken up in the width of the ambulatory. The inside height of the Coliseum is 143 feet; the height from the Plaza level is 119 feet. Seating capacity is 12,000

"This highly unusual circular structure with its simple geometric shape is a very interesting and fine solution. The natural structural expression is not forced in any way. It is a strong, handsome design."
—Jurors' Comments



Architect
Robert F. Lavery, Ballston Lake, New York

Northway 10 Executive Park
Elnora, New York

Structural Engineers
Robert J. Scarano, Consulting Engineer, Loudonville, New York
James T. Cullinan, Schenectady Steel Co., Inc., Schenectady, New York

General Contractor
Robert VanPatten, Elnora, New York

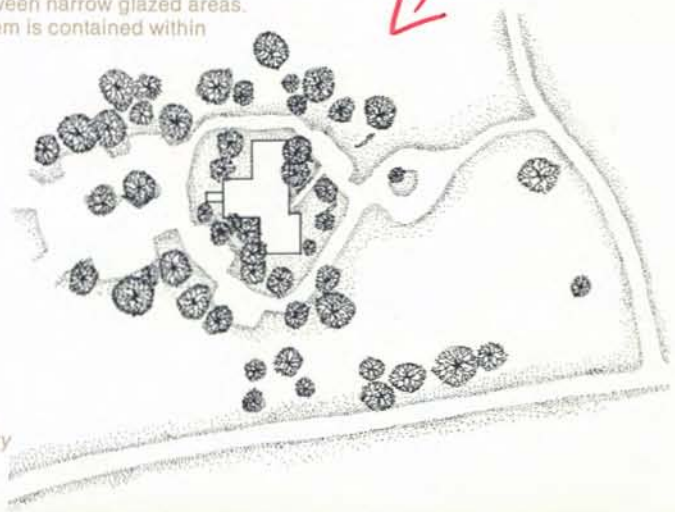
Steel Fabricator
Schenectady Steel Co., Inc., Schenectady, New York

Owner
Robert VanPatten, Elnora, New York

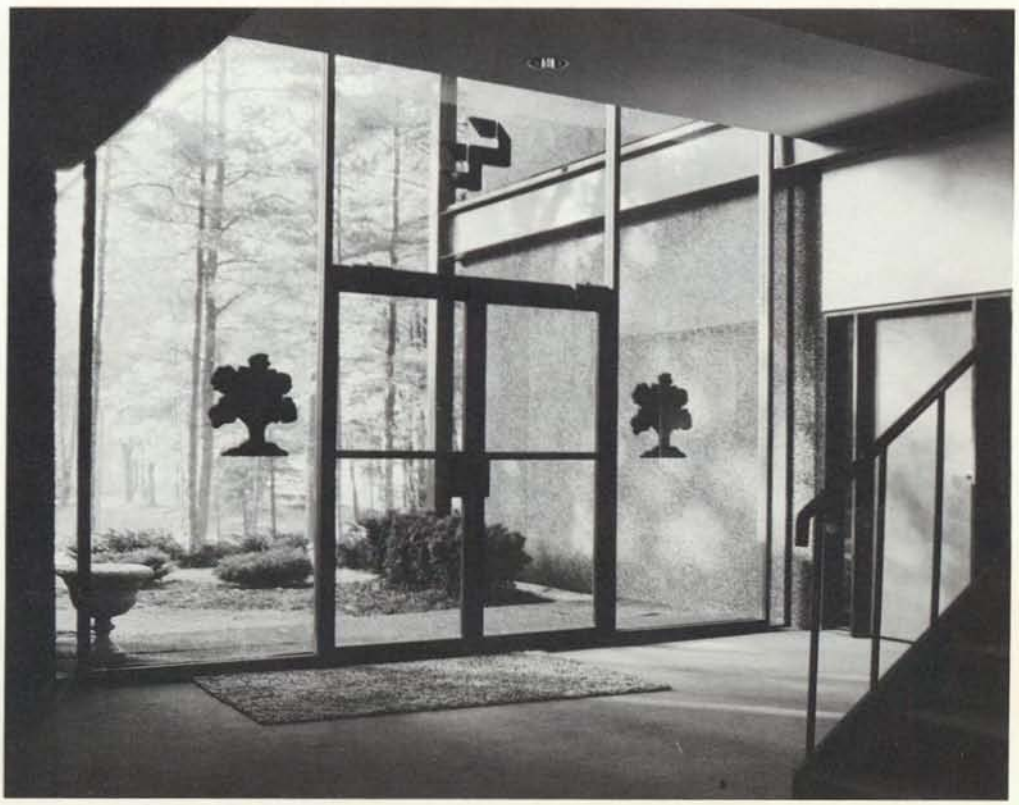
The owner's requirements were for a prototype building using roof and wall systems designed for future mass production by his existing manufacturing plants. Structural steel was selected to provide the economies and aesthetics required for this commercial venture.

A urethane panel curtain wall system was designed to harmonize with and accentuate the verticality of the densely forested site. The panels are actually four foot wide mullions between narrow glazed areas. The entire curtain wall system is contained within the structural steel frame.

in mechanical file



"This modest building uses standard steel components to achieve a very satisfactory architectural solution."
—Jurors' Comments



Architect
McCue Boone Tomsick, San Francisco, California

ALZA Corporate Offices and Medical Research Center
Palo Alto, California

Structural Engineer
John A. Blume & Associates, San Francisco, California

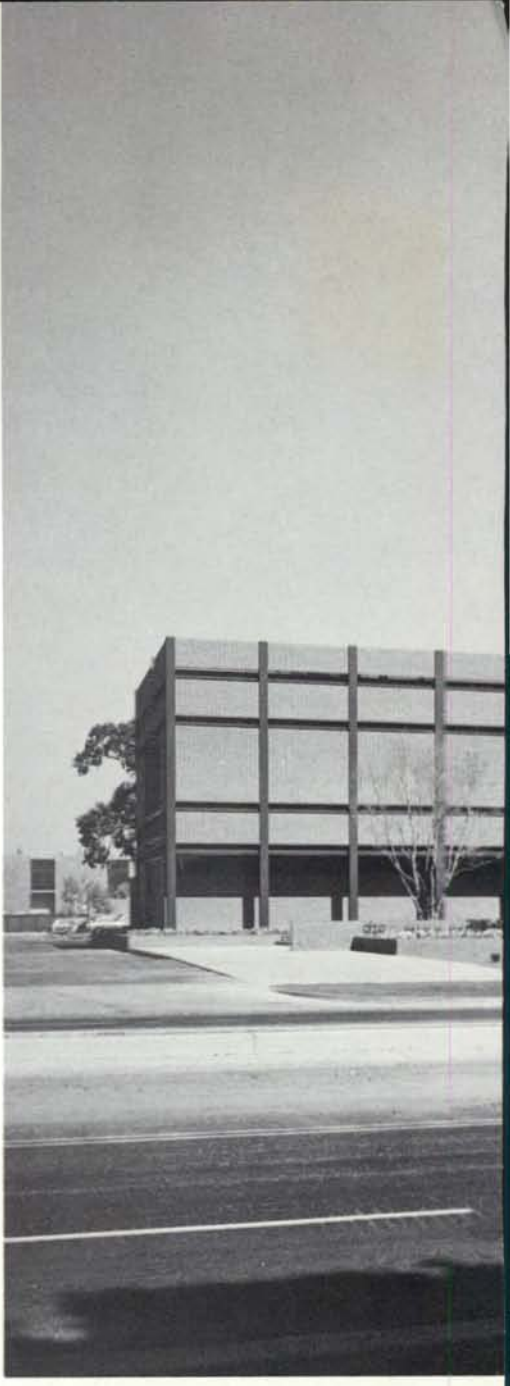
General Contractor
F. P. Lathrop Construction Company, Emeryville, California

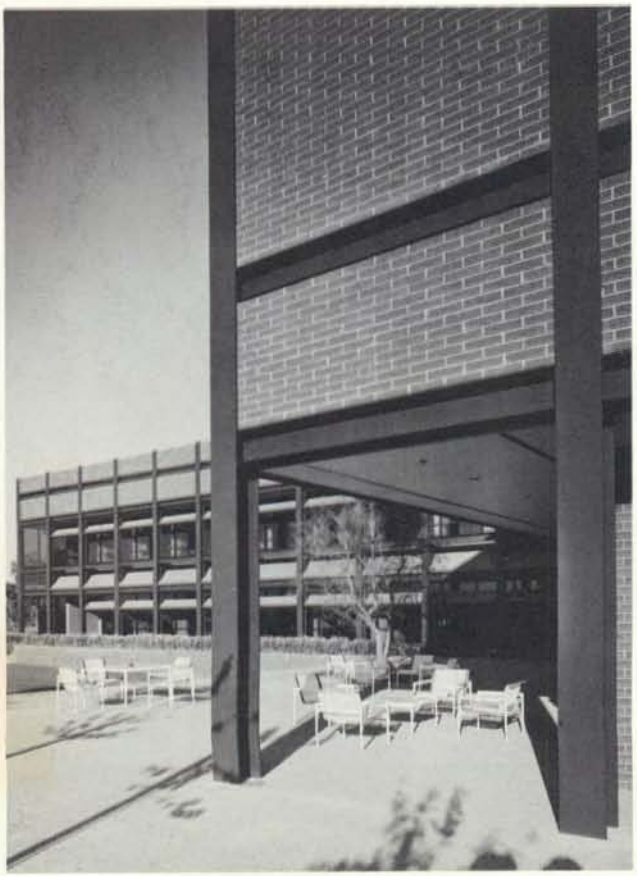
Steel Fabricator
The Herrick Corporation, Hayward, California

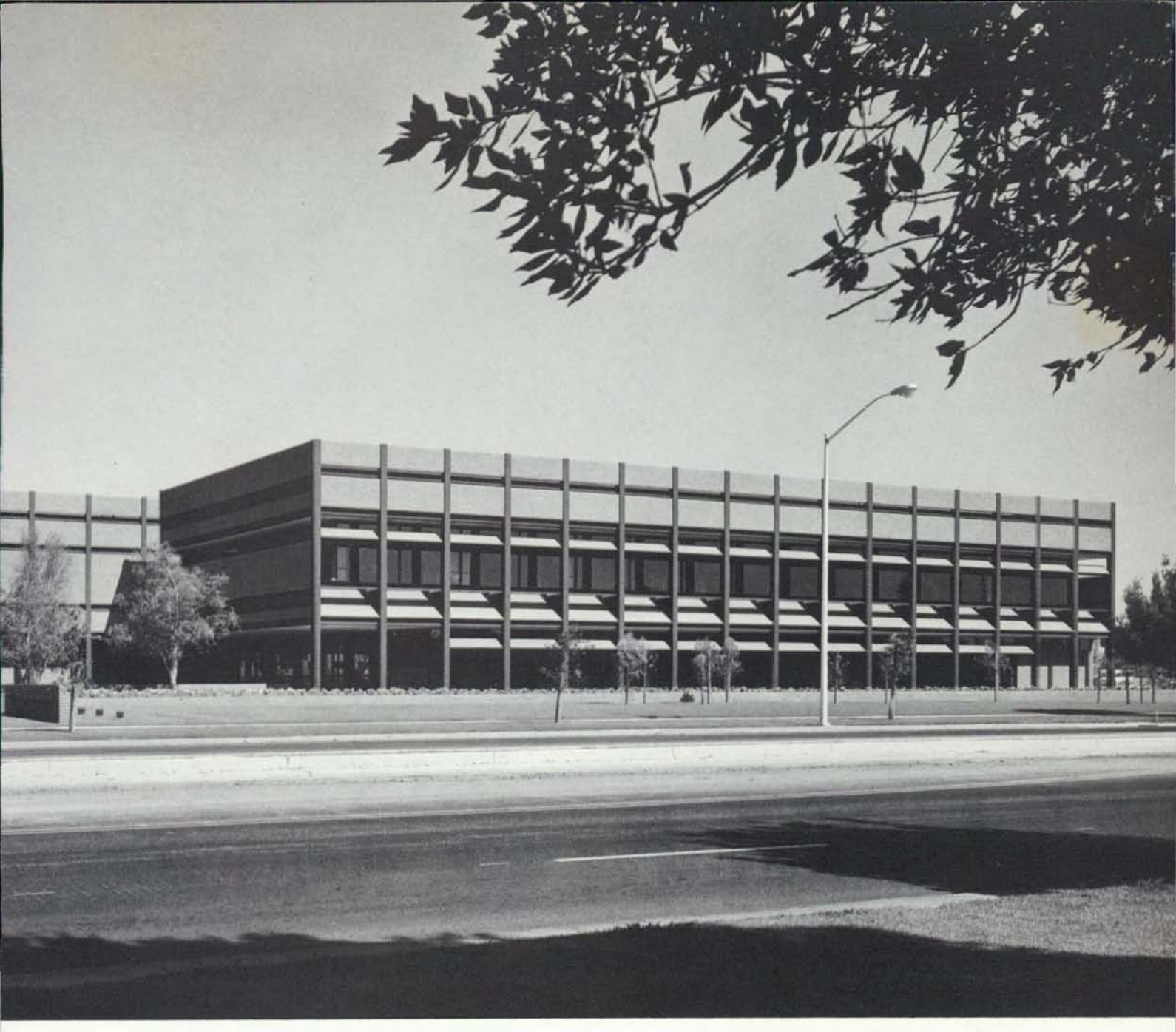
Owner
ALZA Corporation, Palo Alto, California

A new corporation engaging in esoteric research for methods of introducing medicines into the human system urgently needed a new headquarters office and pharmaceutical laboratories. The total time for design and construction could not exceed one year for the offices and fifteen months for laboratories and necessitated an overlapping schedule of design and construction. The resulting building utilized natural systems to achieve these objectives and to provide an environment which would reflect the quality and character of the corporation.

The architect's and engineer's analysis of the problem resulted in the recommendation of a long span structural steel frame on a module suitable for both office and laboratory use. The structural steel was designed, bid and awarded first; with foundations and infill walls next, and finish contracts following. The building was designed on a systems basis evaluating advance time for prefabrication, erection time, initial and long-range costs, and flexibility during construction as well as during the life of the building.







"This is good clean architecture and excellent use of exposed steel. The building is nicely sited and relates well to its neighbors."—Jurors' Comments

Architect-Engineer
Albert C. Martin and Associates, Los Angeles, California

Parker Hannifin Corporation, Irvine Facility
Irvine, California

General Contractor
Robert E. McKee, Inc., Los Angeles, California

Steel Fabricator
Riverside Steel Construction, Santa Fe Springs, California

Owner
Parker Hannifin Corporation, Los Angeles, California

The major criteria for the administrative headquarters and three manufacturing buildings of this sophisticated systems and components producer was total flexibility for the expansion and contraction of physical facilities to be combined with a highly refined atmosphere for its employees.

A 74-acre park contains four buildings totalling 435,000 square feet and 1,500 employees in a campus-like environment. Structures are built on a 60-foot module with exposed steel trusses which carry the lateral forces. The open webs of the trusses are glazed at the building's perimeter to introduce natural light into the interior.

"A fine solution for a manufacturing headquarters building. It is thoughtfully designed and expresses structural steel in an honest and pleasing manner."—Jurors' Comments

Architect-Engineer
Albert C. Martin and Associates, Los Angeles, California

Sears, Roebuck and Co.
Pacific Coast Administrative Offices
Alhambra, California

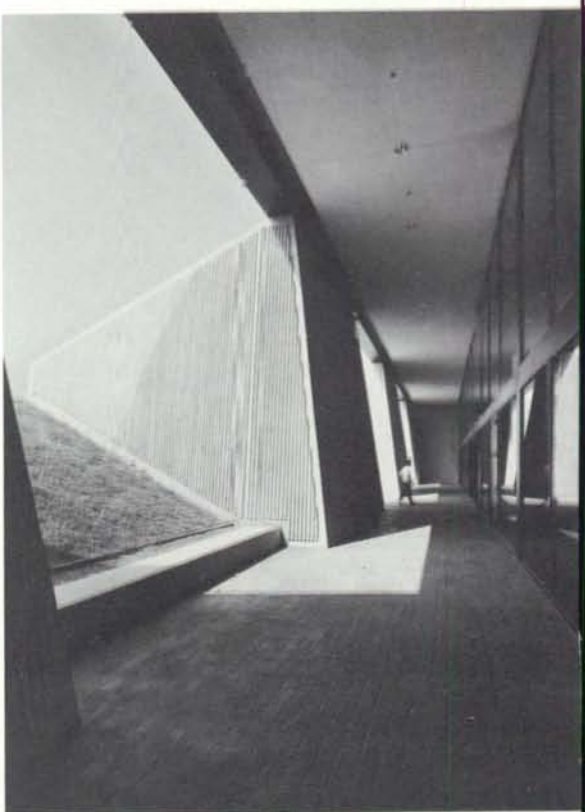
General Contractor
Dinwiddie Construction Co., Los Angeles, California

Steel Fabricator
Bethlehem Steel Corporation, Bethlehem, Pennsylvania

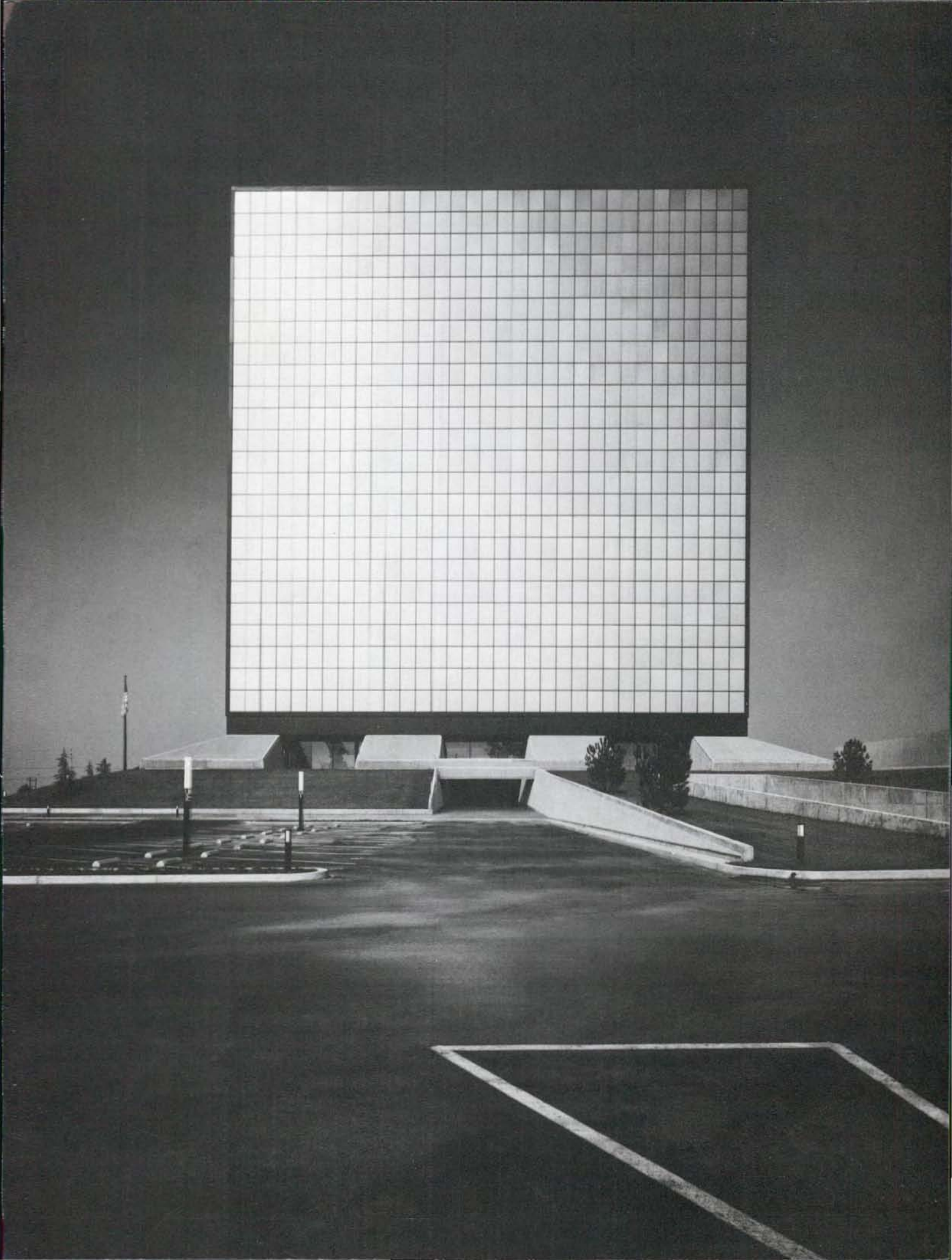
Owner
Sears, Roebuck and Co., Alhambra, California

This 12-story, steel-framed cube, clad in a silver-coated reflective glass curtain wall, provides a constantly changing appearance and mood. The building and its ancillary complex serve as regional headquarters for the eleven western states and are the focal point of a low profile industrial and commercial redevelopment area.

The complex is a counterpoint of various geometric forms, with the superstructure set on a raised, irregular-shaped, landscaped island containing cafeteria, training facilities, and auditoriums which focus inward on a 120-foot circular, recessed courtyard. These basic geometric elements of a cube, square, circle, and triangle not only project a strong image, but are a simple and straightforward solution to achieve large clear floor areas.



"Simplicity, clean form, and excellent siting give this handsome structure an unusual appeal."—Jurors' Comments



Architect
C. F. Murphy Associates, Chicago, Illinois

Malcolm X College
Chicago, Illinois

Structural Engineer
The Engineers' Collaborative, Chicago, Illinois

General Contractor
W. E. O'Neil Construction Co., Chicago, Illinois

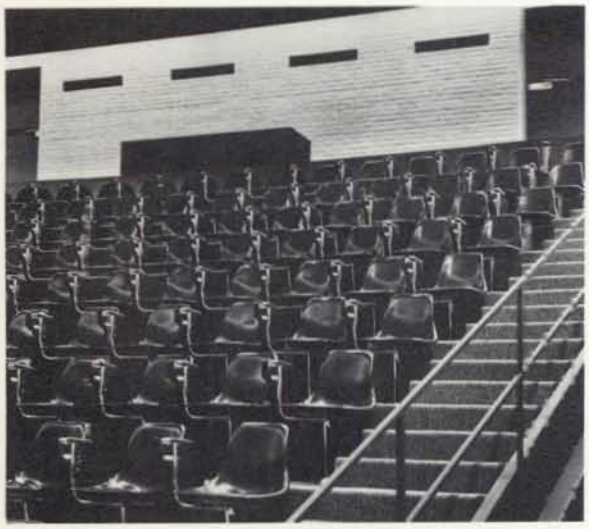
Steel Fabricator
Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania

Owner
Illinois Building Authority, Chicago, Illinois

This facility provides a complete junior college program with allied health and nursing courses for 10,000 students. The college also serves the neighborhood through night vocational courses, speech improvement programs, theater and sports activities, and a child care center.

The architectural solution is a singular building, three blocks in length. Grade level consists of a 415-seat theater-lecture center and administrative areas. Second and third levels contain classrooms, laboratories, lecture halls and instructors' offices. The third level also has two open courts for recreation and meditation purposes. Gymnasium, natatorium, and additional offices are located one level below grade.

all pix in mechanical file



"This building uses standard industrial components in a straightforward expression of steel and the industrial process which produces it. The design is well handled, the exterior appearance is crisp and well detailed."—Jurors' Comments

Architect-Engineer
Odell Associates Inc., Charlotte, North Carolina

Burlington Corporate Headquarters
Greensboro, North Carolina

General Contractor
Daniel Construction Company, Greensboro, North Carolina

Steel Fabricator
Carolina Steel Corporation, Greensboro, North Carolina

Owner
Burlington Industries, Inc., Greensboro, North Carolina

The world's largest textile manufacturing firm requested a corporate headquarters building to house its executive offices, major divisions, and support service functions in one integrated complex. Principal emphasis was placed on creating a corporate image of the firm, while providing maximum flexibility in the arrangement and future growth of each separate operation.

The architectural solution was determined largely by the character of the corporation and the influence of the 30-acre site. The rolling lawns and numerous trees are dramatically reflected in the glazing of the sophisticated complex. A six-story central tower houses executive and personnel functions. The tower is a suspended reflecting glass cube 170 feet on each face, supported and framed within the rhythm of the dramatic six-story steel truss. A two-story horizontal mass, housing divisional offices and ancillary functions, encircles three sides of the tower and the landscaped court, connecting to the central mass through three pedestrian bridges.

"The bold expression of the structural steel frame results in architecture which is tasteful, simple, and strong. This is an excellent design."—Jurors' Comments

Architect
James Stewart Polshek and Associates, New York, New York

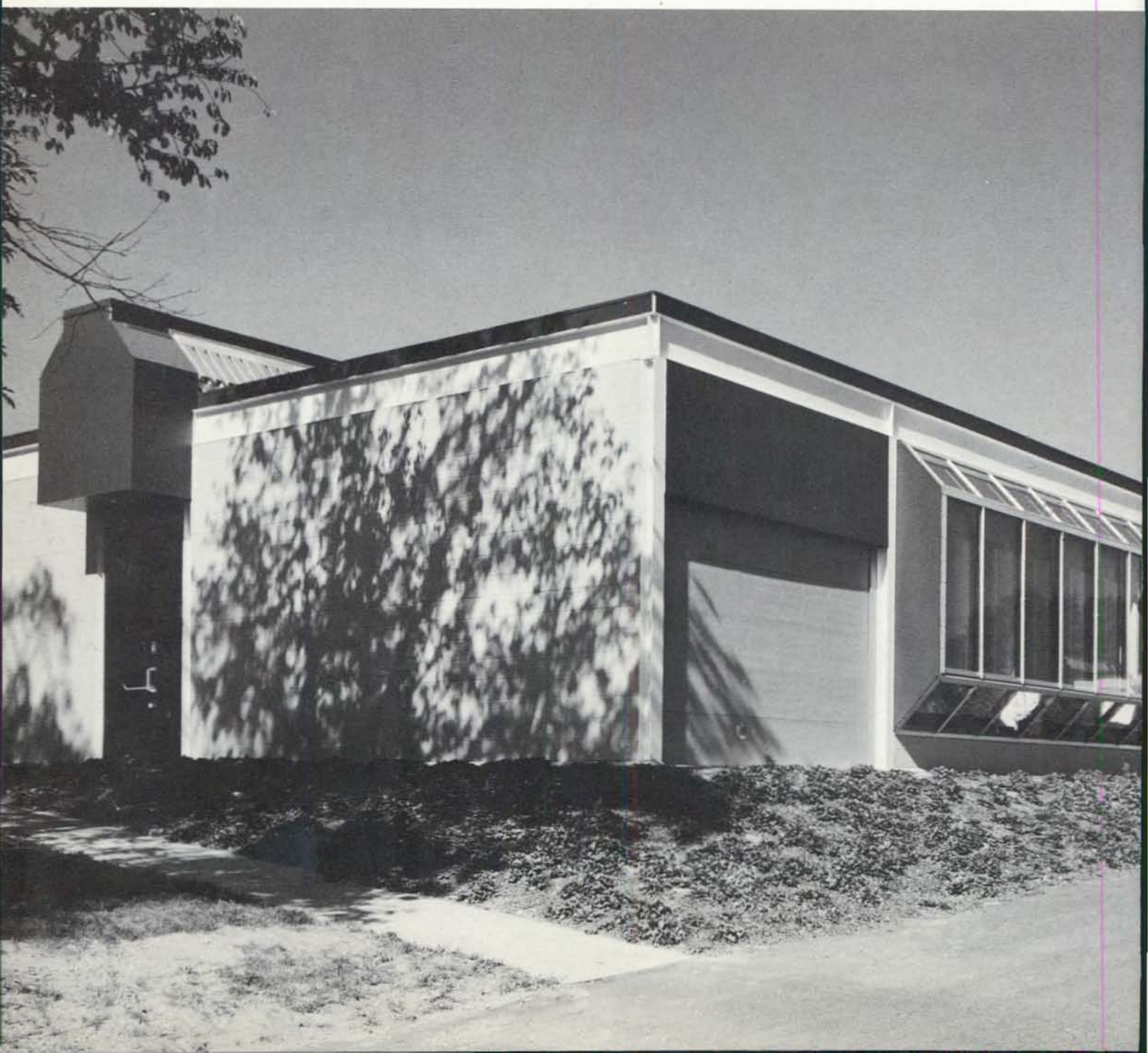
The Service Group, College at Old Westbury
State University of New York, Old Westbury, New York

Structural Engineer
Pfisterer, Tor & Associates, New York, New York

General Contractor
Schumacher & Forelle, Inc., Great Neck, New York

Steel Fabricator
Long Island Steel Products Co., Inc., Mineola, New York

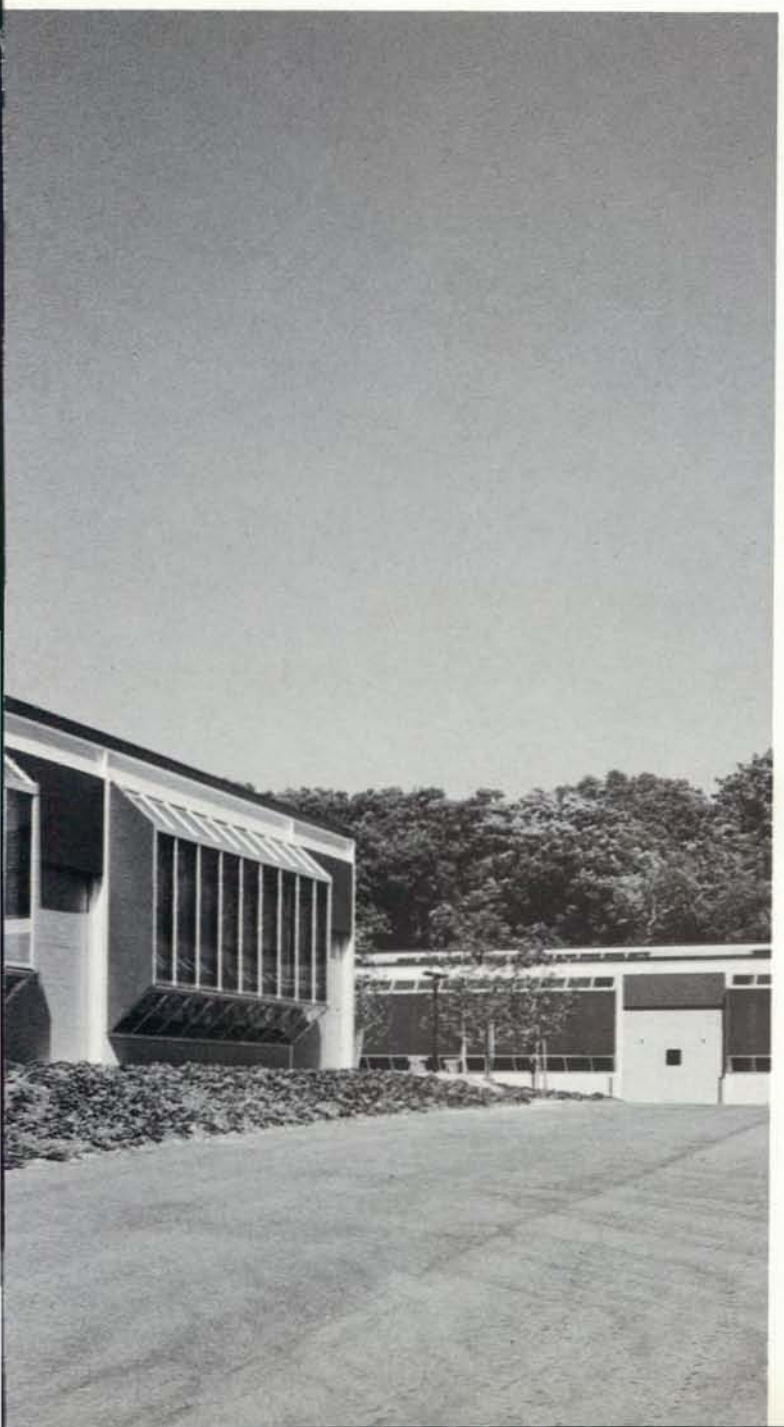
Owner
State University of New York, Old Westbury, New York



Adaptability was the key to the design of this facility to provide warehouses, garages, workshops, and offices for a growing campus complex. Space requirements for each function could not be defined precisely, and future expansion would certainly be required.

The solution was to build two separate structures, each designed with a total steel system utilizing repetitive modular units suitable for all of the service occupancies and able to be easily duplicated when expansion is required.

The repetitive rhythm of the exposed steel modular construction results in a pleasing aesthetic quality that understates the complexity of the design.



"This modest building expresses the structure in a straightforward manner. The detailing of the steel frame is well handled and the use of standard components is especially commendable. This is a sensitive and architecturally pleasing solution."—Jurors' Comments

Architect-Engineer
Skidmore, Owings & Merrill, Chicago, Illinois

Rapid Transit Stations on Dan Ryan and Kennedy Expressways
Chicago, Illinois

General Contractors
J. M. Corbett Chicago, Illinois
Paschen Construction Inc., Chicago, Illinois
W. E. O'Neil Construction Co., Chicago, Illinois

Steel Fabricators
Inland-Ryerson Construction Products Company, Melrose Park, Illinois
Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania

Owner
City of Chicago, Chicago, Illinois

Each of the 15 stations in this project consists of three main elements: a fare collecting area, a waiting area for connecting buses, and a boarding platform for trains. The waiting and fare collecting units are single-story buildings with glass walls and clear-span interiors. The boarding platforms have curved glazed roofs, cantilevered as much as 18 feet on each side of a single row of steel columns.

Exposed steel construction is the basis of the architectural expression. All steel is painted off-white to give a sense of lightness to the structures and crisply define them and the flow of traffic.

"These modest structures are excellent examples of careful, straightforward design and well executed details. The use of graphics to aid pedestrian traffic is handled beautifully."
—Jurors' Comments

Architect-Engineer
Skidmore, Owings & Merrill, Chicago, Illinois

John Hancock Center
Chicago, Illinois

General Contractor
Tishman Construction Company, Chicago, Illinois

Steel Fabricator
American Bridge Division, United States Steel
Pittsburgh, Pennsylvania

Owner
John Hancock Mutual Life Insurance Co.
Boston, Massachusetts

The project is a 100-story, 2,800,000 gross square foot multi-use complex. Major facilities included in the project are 700 apartment units ranging from efficiencies to four-bedroom luxury residences; 812,000 square feet of office space accommodating needs of both large and small tenants; 300,000 square feet of central area commercial entrance lobbies are provided for each of these major functions. Additional facilities include amenities such as restaurants, health clubs, a swimming pool and ice skating rink and a transmitter for Chicago's major television networks.

This project was an attractive opportunity in America to experiment with a building type that has interested architects over the century, but has not been achieved in contemporary architecture. The site itself, three acres in size, helped to create the character of the building. Its situation is uniquely suited for a multi-purpose building in the central area—one that can live 24 hours a day. The tapered shape of the building is a response to density and to wind—intense uses are near the ground, less density on the upper levels; clear spans which are an advantage for shopping, parking, and office space are a necessity to the structure's response to gravity and wind forces. The aesthetic result was not preplanned, but its logic demands attention.

"A highly unusual building—innovative, very well detailed, and completely truthful in its structural expression."
—Jurors' Comments

Architect-Engineer
Tennessee Valley Authority, Knoxville, Tennessee

Paradise Steam Electric Generating Station, Unit 3
Tennessee Valley Authority, near Drakesboro, Kentucky

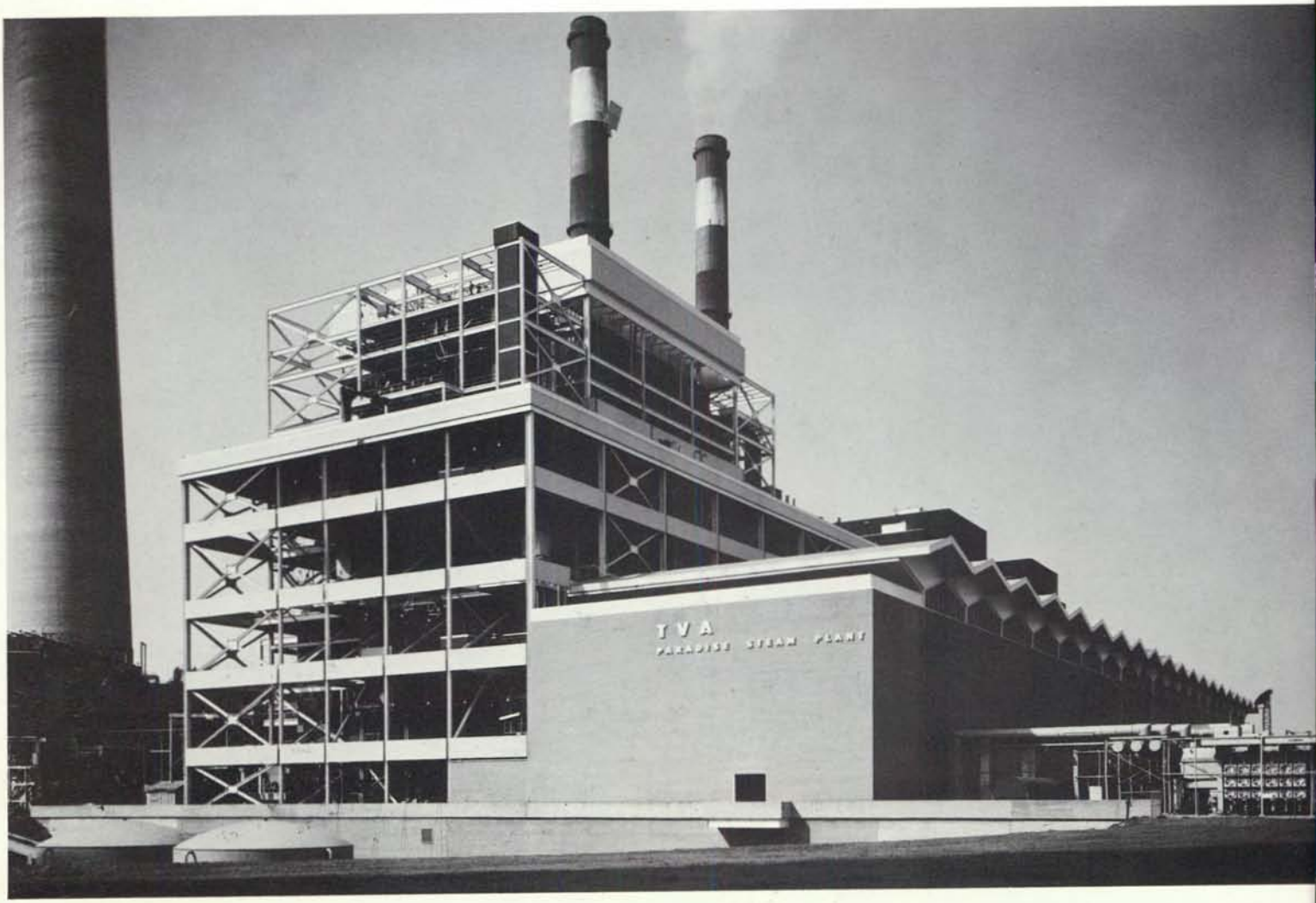
General Contractor
Tennessee Valley Authority, Knoxville, Tennessee

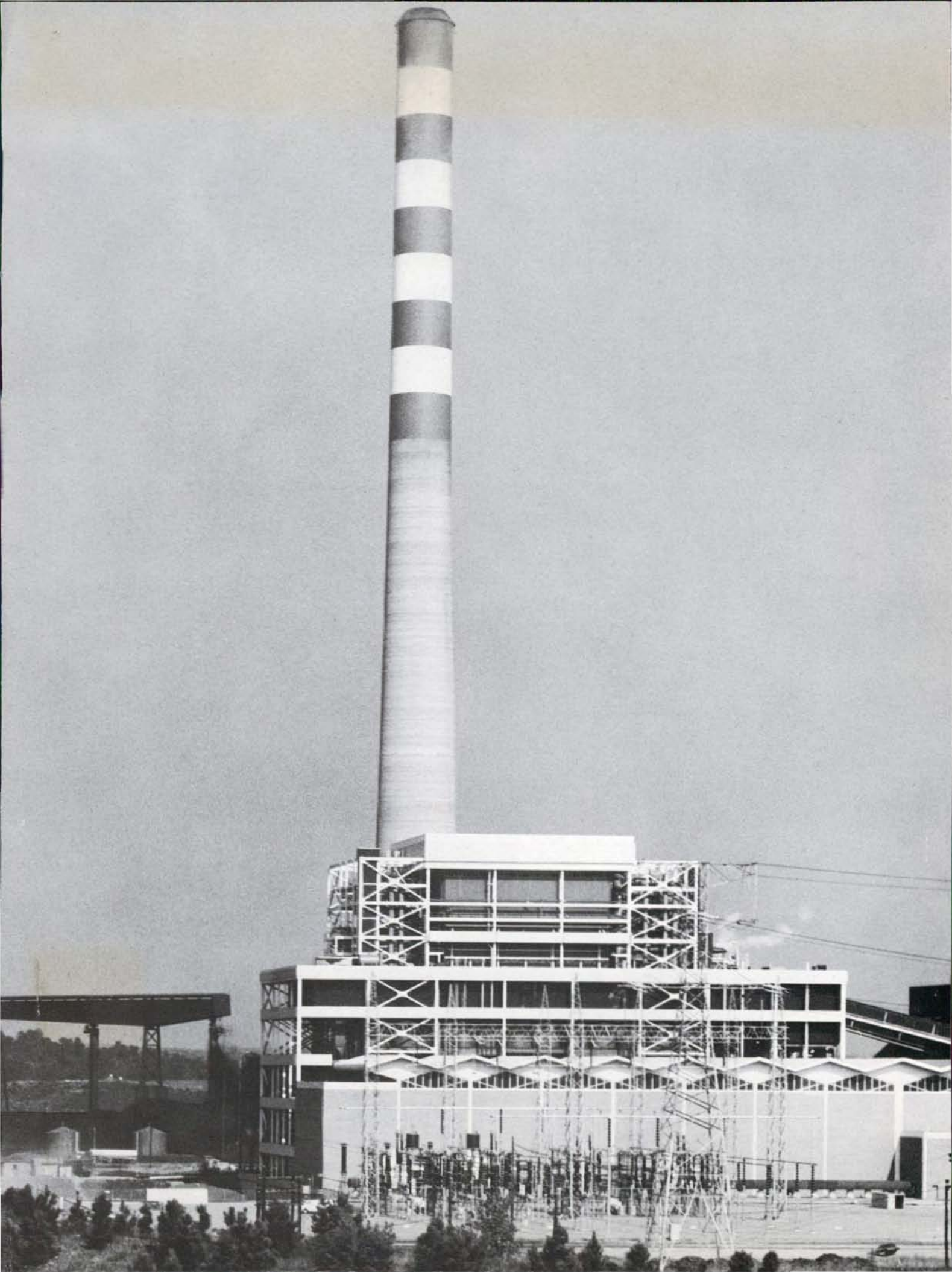
Steel Fabricator
The Ingalls Iron Works Company, Birmingham, Alabama

Owner
Tennessee Valley Authority, Knoxville, Tennessee

In the design of this 1150-megawatt addition to an existing two unit 1440-megawatt electric generating station, architecture and engineering were integrated in an effort to blend art and science to form a functional and pleasing structure. A major architectural consideration was the scale relationship of this larger third unit to the two unit facility. An open airy superstructure for the boiler bay balances this scale relationship. The white structural steel frame recalls the existing exposed structure supporting the existing units and accentuates the airy effect of the superstructure. The metal panel railings and parapets define the working levels of the plant and tend to make the height of the structure less apparent.

"This is an excellent example of high quality design of a power plant. It is simple, well detailed, and uses the steel frame as an attractive architectural expression."—Jurors' Comments





Designers (A Joint Venture)
Lev Zetlin Associates, Inc., Consulting Engineers, New York, New York
Conklin and Rossant, Architects, New York, New York

Superbay Hangar Maintenance Facilities
San Francisco International Airport, San Francisco, California
Los Angeles International Airport, Los Angeles, California

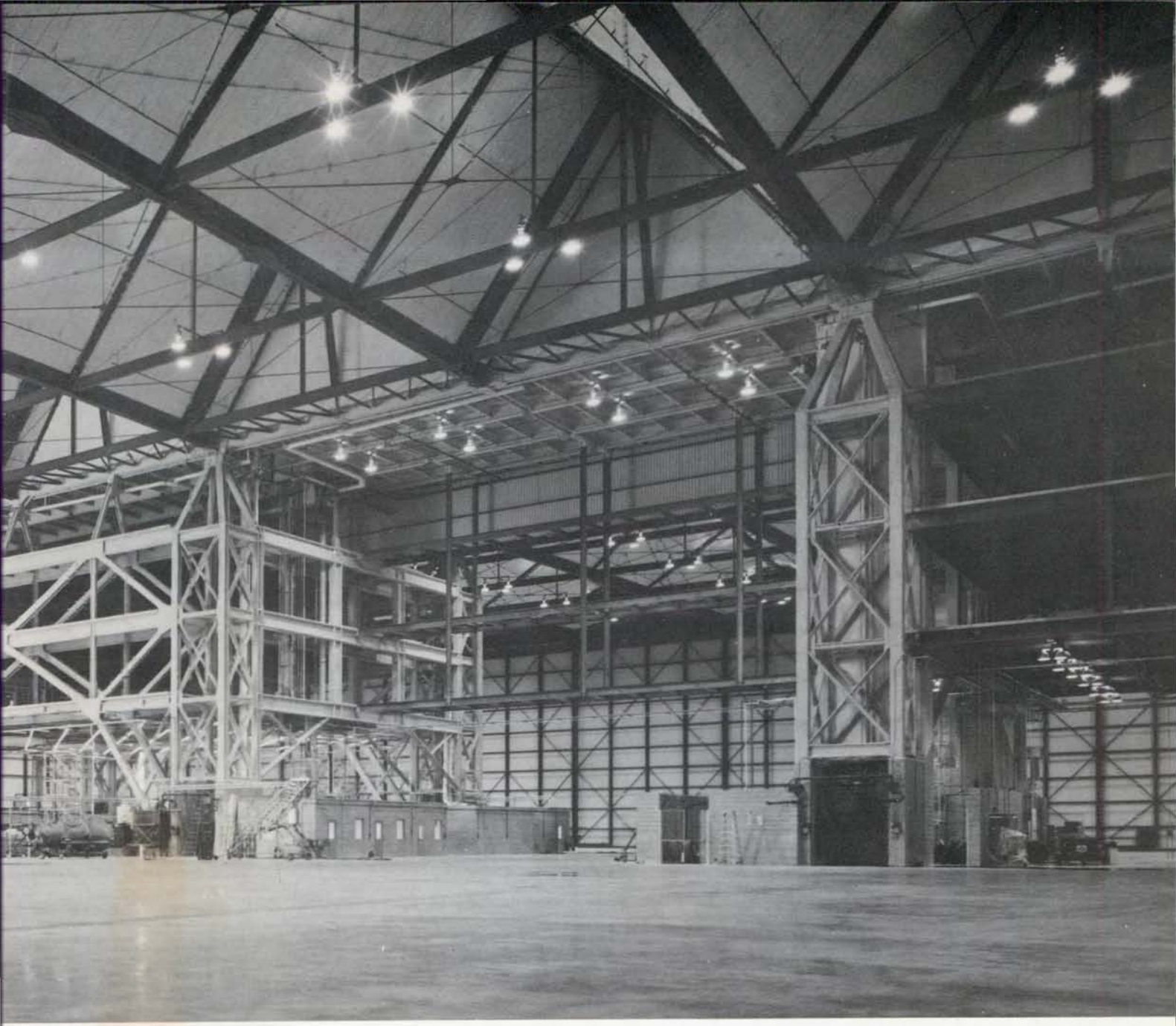
General Contractor
Swinerton & Walberg Co., San Francisco, California
Haas and Hayne Corporation, Los Angeles, California

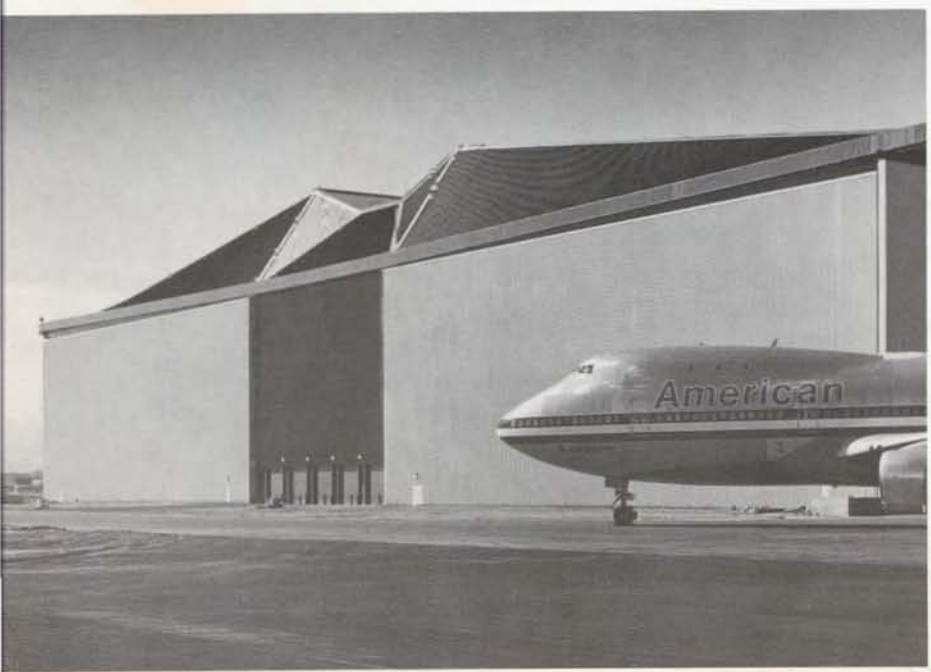
Steel Fabricators
San Jose Steel Company, Inc., San Jose, California
The Herrick Corporation, Hayward, California
Fleming Steel Company, New Castle, Pennsylvania (doors)

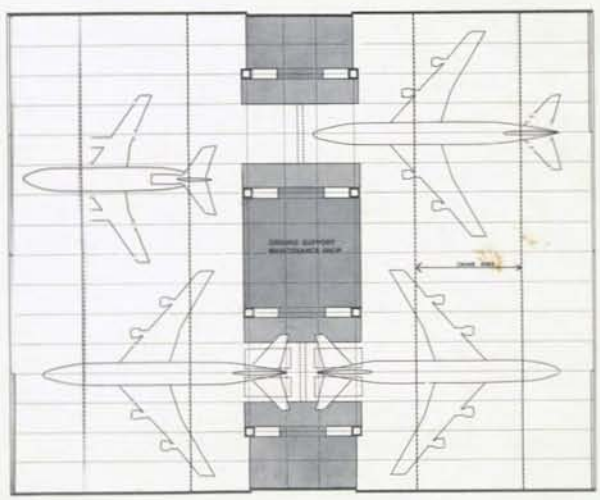
Owner
American Airlines, New York, New York

Designed to accommodate 747's and future jumbo jets, these two closely related maintenance hangars introduce a structural system developed to use steel decking as a stressed skin membrane to carry the roof loads as well as to provide enclosure.

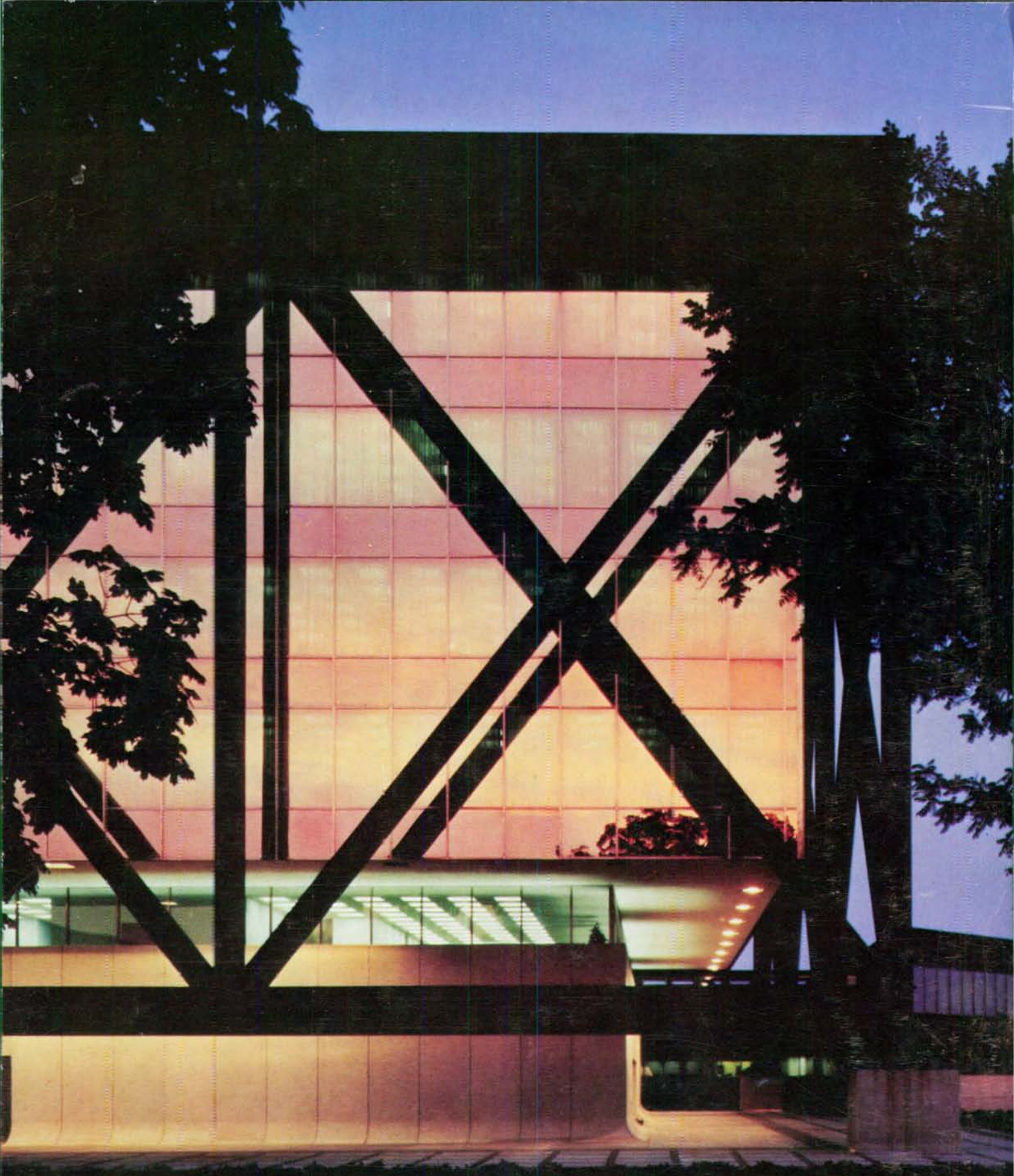
Modular roof sections cantilever 230 feet from either side of a central core structure for a clear span of 450 feet, 80 feet high. The folded form of the roof, in addition to its structural characteristics as a double hyperbolic paraboloic, also permits the vertical tail of the aircraft to protrude up into the roof area when jacked to remove gears.







"This is a simple, straightforward, and very exciting building. The imaginative design of the roof trusses makes maximum use of the strength of steel. It is an excellent solution both structurally and architecturally."—Jurors' Comments



AMERICAN INSTITUTE OF STEEL CONSTRUCTION
101 Park Avenue, New York, N.Y. 10017