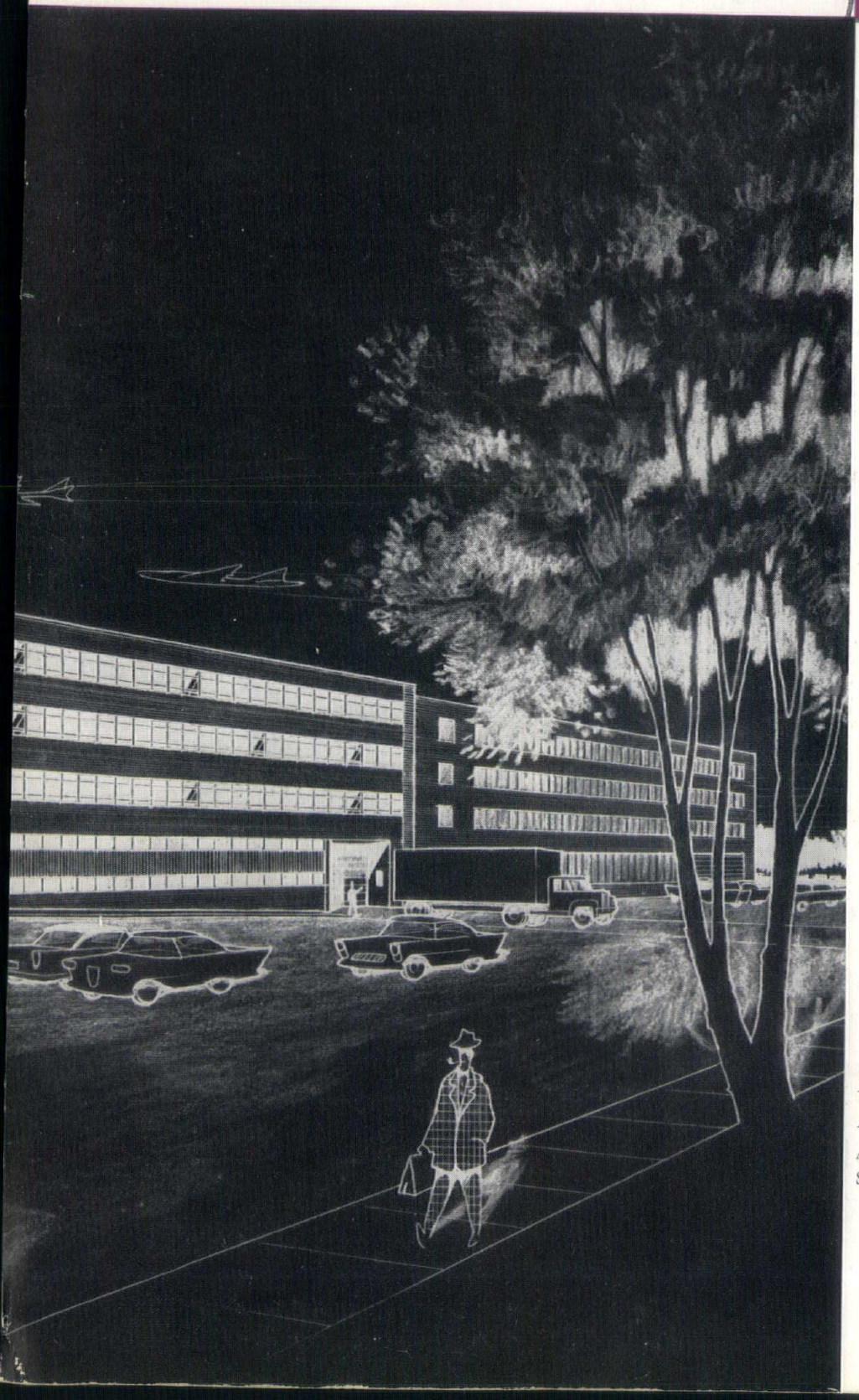
new england

ARCHITECT AND BUILDER

illustrated

NUMBER TWELVE



NORBROOK PUBLISHING COMPANY, Inc.

Northeast Airlines Administration Building

ARCHITECT
SAMUEL GLASER ASSOCIATES

Photo Courtesy of Samuel M. Langston Company

ARCHITECT: SUMNER SCHEIN
BUILDER: LILLY CONSTRUCTION COMPANY

The New Plant of Allied Container Corporation, Dedham, Mass.

Good things come in enormous packages...

... good things, we mean, like the largest container plant in New England, now housed in a new, 200,000 square foot "package" built by Lilly Construction Company.

Every advanced feature available to modern box design and manufacture is included: a completely enclosed railroad siding that can accommodate 14 freight cars ... a corrugator that produces 96-inch board at speeds of up to 750 feet per minute ... a research and development department for devising new packages ... and a ventilating system that changes the air completely every 14 minutes. In just 6 hours of production, the plant could package the entire John Hancock Building, and this production capacity can be doubled whenever future expansion requires it.

Making boxes is big, big business today. The package has to fit, of course, without cramping or waste space; it has to protect the contents; and it has to please the eye. The same applies to building plants — the same necessity for precisely engineered space and beautiful execution. In packaging, the name to trust and to watch is Allied Container; in construction, the name is Lilly.

LILLY
CONSTRUCTION COMPANY
BOSTON

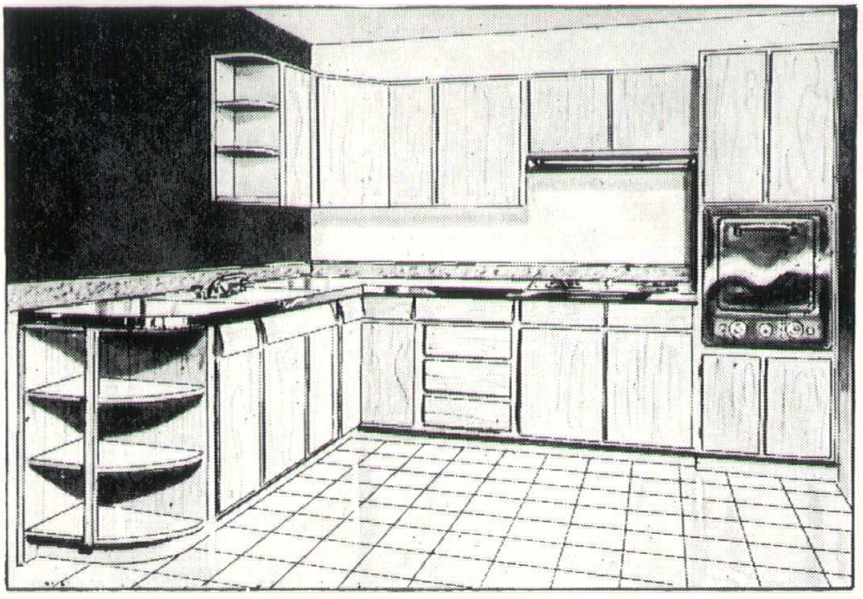
LILLY
construction company

PRIDE IN CRAFTSMANSHIP

BOSTON, MASSACHUSETTS

GROSSMAN'S SAYS....

"Let Yorktowne Natural Birch Kitchens be your home Sales Clincher"



COST LESS THAN THE FINEST STEEL KITCHENS

HAND MADE BY SKILLED PENNSYLVANIA DUTCH CABINET MAKERS

- Formica wear-styled counter top
- Hand rubbed furniture-veneer lifetime doors
- Choicest cabinet wood, selected for beauty and everlasting durability
- Mortise and tenon tongue and groove construction
- No unsightly nails or screws to show
- Acid-resistant two-bowl sink
- Jewelry chrome mixing faucet
- Lifetime finish
- Hardwood furniture drawer guides
- Sliding cutting board
- Metal bread and cake box

Only YORKTOWNE offers an unconditional five year guarantee against defective material or workmanship. Insist on this added protection.

The focal point of clinching a home sale is, in most cases, the kitchen. The prospective woman buyer will spend more time, ask more questions, examine more closely the kitchen of a newly constructed home than anywhere else. Let the clean, uncluttered lines; the matchless features of YORKTOWNE KITCHENS be your silent salesman. Only YORKTOWNE offers the warmth and beauty of wood with an intelligent design incorporating the finest of modern conveniences.

FREE KITCHEN PLANNING SERVICE

Exclusively for Architects and Builders . . . a FREE money saving, time saving service . . . Grossman's will expertly design or quote on any style or size YORKTOWNE KITCHEN . . . for homes or apartments . . . specification literature sent upon request.

L shape . . T shape . . U shape or straight line . . compact or vast, a selection of over 750 YORKTOWNE KITCHEN cabinets mean exact fit for all kitchens.

FAST SITE DELIVERY
25 YARDS THROUGHOUT NEW ENGLAND

GROSSMAN'S
NEW ENGLAND'S LARGEST BUILDING MATERIAL DEALERS

Main Office: 130 GRANITE STREET, QUINCY, MASS. PHONE: PR 3-7100

Table of Contents . . . NOVEMBER 1959

new england ARCHITECT **and** BUILDER **illustrated**

ARCHITECTURE

and

CONSTRUCTION

FEATURE

Cover

See pages 10 and 11.

Signed Articles. As one object of the "New England Architect and Builder, Illustrated" is to afford a forum for the free expression of matters of importance relating to the building trade and architectural profession, and as the widest range of opinion is necessary in order that different aspects of such matters may be presented, the editors assume no responsibility for the opinions or facts in signed articles.

New England ARCHITECT and BUILDER Illustrated is published monthly by NORBROOK PUBLISHING CO., INC., 215 Stuart St. — Motor Mart Building, Boston, Mass. The cover design and contents of New England Architect and Builder Illustrated are fully protected by copyright, and must not be reproduced in any manner or form. Subscription: 1 year, $5.00; 2 years, $8.00; single copy, $1.00. Foreign subscription rates available. Accepted as controlled circulation publication at Boston, Massachusetts.

The only regional publication designed for the promotional interest of Architects, General Contractors, Sub-Contractors, Builders, Engineers, and all others actively engaged in Building Construction within the (6) New England States.

POSTMASTER: Form #3579 requested to: "new england ARCHITECT and BUILDER illustrated", 215 Stuart St., Boston 16, Massachusetts.

Johns-Manville *Aquadam* Built-Up Roofs

Built with a bitumen that means better application—longer life

AQUADAM IS A SUPERIOR CEMENTING AGENT developed by Johns-Manville for dead-level roofs. It combines the best features of coal tar pitch and of asphalt without their weaknesses. It quickly cements and securely seals the felts. And, as years roll on, Aquadam retains its self-sealing properties.

In addition, Aquadam offers these other proven advantages: ability to end "standing water worry"; high resistance to all kinds of weather conditions; "superior bond," because Aquadam spreads, wets and saturates the roofing felts uniformly.

For further information on how Aquadam Built-Up Roofs pay off in longer roof life and maximum protection send for a copy of booklet, "J-M Aquadam Built-Up Roofs." Write to: Johns-Manville, Box 158, New York 16, New York. In Canada, write Port Credit, Ontario.

JOHNS-MANVILLE

JOHNS-MANVILLE JM PRODUCTS

STAFF

PUBLISHERS
Richard P. Zinkowski
Leon Arber

MANAGING EDITOR
Richard Zinkowski

DIRECTOR OF ADVERTISING
Leon Arber

ADVERTISING MANAGER
Charles D. Harrington

ASSOCIATE EDITOR
M. Patricia Williams

ART DIRECTOR
E. Richard Frenière

STAFF PHOTOGRAPHERS
Richard P. Lewis, Jr.
M. Z. Gerard

CIRCULATION
Maureen T. Connolly

PUBLISHERS REPRESENTATIVES

Mid-Atlantic & New York
Whiteman Associates
342 Madison Avenue
New York, New York
YUkon 6-4762

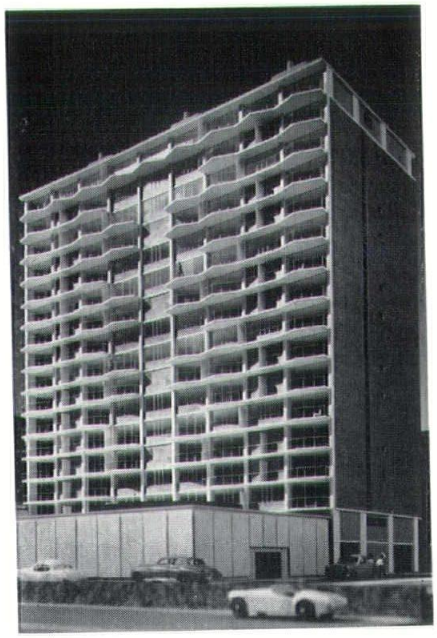
Southeastern
Jack Williams
934 N.W. 53rd St.
Miami 37, Florida
Highland 3-8610, Plaza 1-5308

Contributors are advised to retain a copy of their manuscript and illustrations. Material should be mailed to the Boston Editorial office, and must be accompanied by return postage. Contributions are handled with reasonable care, but the N.E.A.B. assumes no responsibility for their safety. Any acceptable manuscript is subject to whatever adaptations and revisions necessary.

ARCHITECT UNKNOWN

As a profession, Architecture has been for years dragging its heels in the Public Relations field. Newspapers constantly ignore the Architect in reporting the news about new buildings and their progress. As a result, the public is almost always unaware of the important role the Architect plays in every construction project, and undeserved credits are usually attributed to politicians or business figureheads.

Much of the fault belongs to the individual Architect. With few exceptions, he refuses to devote time to civic organizations, public committees and even his own A.I.A. Chapter if he is a member. Instead he withdraws to a lofty pinnacle from which he ofttimes cannot see or be seen. We feel that Architects must emerge quickly from their cocoon and take their places as an honored, indispensable, well recognized profession, or else be relegated to the position of being an unknown factor whose names cannot be remembered in a world of ever-increasing construction activity.

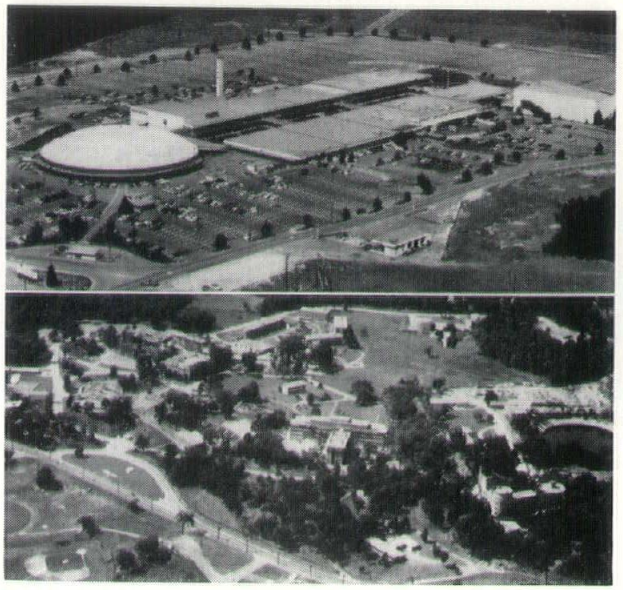


330 BEACON
GOLDBERG-LEMESSURIER ASSOCIATES
STRUCTURAL ENGINEERS

OMISSION

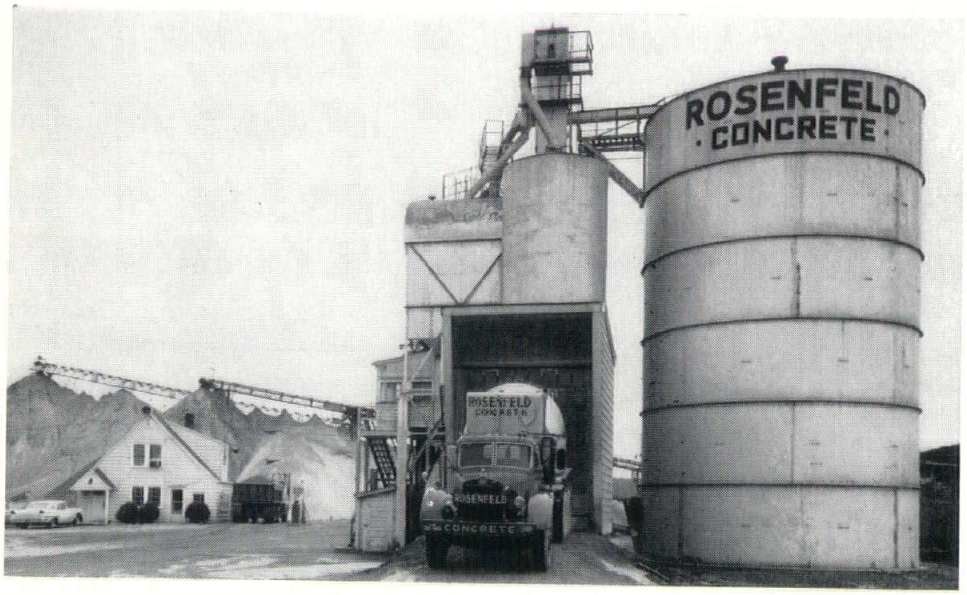
We speak of promoting better public relations in the above editorial and in the same breath here, report (*red-faced*) an omission. We must admit, we make every effort to include all the project principals whenever this information is made available to us . . . occasionally we slip. This was the case when the engineering firm of *Goldberg-LeMessurier & Associates* was not listed as *Structural Engineers* for the report of the 330 Beacon Apartments in our October Issue. We stand corrected.

Confidence in Concrete



ROSENFELD CONCRETE COMPANY—Our Ready-Mixed Concrete has been used on hundreds of outstanding construction projects such as Shoppers' World, Framingham; Army Quartermaster Corps, Natick; Wellesley College; Brandeis University; Arlington High School and Lexington High School.

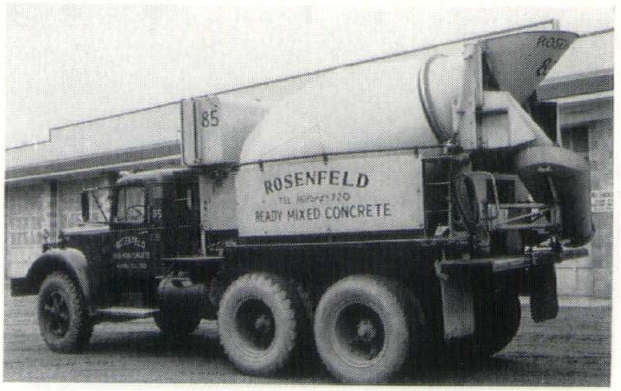
ROSENFELD CONCRETE COMPANY rapidly and dependably services your job from any of four strategically located plants in Milford, Ashland, Walpole and Waltham.



• *Our thirty-seventh year*

ROSENFELD CONCRETE COMPANY has the finest and most modern Electronic Computing and Weighing Equipment available, for your most exacting daily requirements and specifications.

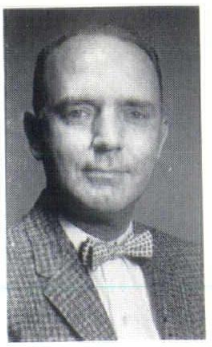
ROSENFELD CONCRETE COMPANY is easily recognized as one of the largest manufacturers of Ready-Mixed Concrete, utilizing the latest and largest fleet of truck mixers and manned by competent, safety-minded operators.



ROSENFELD
CONCRETE COMPANY
HOME OFFICE: MILFORD • MASSACHUSETTS

DIRECT PHONES CONNECTING ALL PLANTS
MILFORD • GREENLEAF 3-7200

"... as herein specified."



by George R. Glover
Specifications Consultant

As mentioned in my introductory article of June 1959, what is much needed in our modern construction specs is a "stimulant, hypo or proper prescription" for our patient, namely the specs. Architecturally and engineeringwise we are constantly striving to improve our style for more concise drawings with less frills, while we sadly neglect the complement to these the drawings, the specs. This article is the first in a series to chat informally about some specifics that are troubling our building and engineering projects of today. I may digress to the lighter side at times to prove a point or just to create a smile.

Modular Specifications and Standardization. **There is so darn much talk nowadays about "modular" building materials and "modular" drafting room practice, and "modular" this-and-that, but to my knowledge no one has come up with an infallible "modular" specification format. Reams of good paper are given over to talk on standardization of sections, standardization of formats, etcetera, etcetera; but they all differ, although good points are brought out. These could be enlarged upon to short cut our tremendous task of specs coordination. But maybe someone, someday will develop an electronic brain machine that will chew up all our specs data and ideas, all we can feed it, and spew them out at the other end in nice little modular squares of specs just suited for the particular design at hand! How about that? It's really not so silly as you think, what with today's scientific know-how.**

Preparation of Site. **Now who would ever think that this section would give us any trouble? But time and again the very start of a project stumps the experts and causes hangovers. Improper boring data due to vague requirements lead directly to costly redesigning. Inadequate knowledge of the site and guesswork in specifying are two very common faults. Field study of the site, and I don't mean a cursory glance at the**

topography, combined with enough intelligent borings and other data sets the stage for good design and total construction. Let me quote from a recent specs for an example. "Explorations have been made at the site of building operations to assist the contractor in ascertaining the character of material to be encountered in excavation and the results of these explorations are noted on the drawings; however, neither the Architect nor the Owner guarantees that materials other than those disclosed by the explorations will be encountered, nor that the proportions of the various materials encountered will not vary from those indicated by the explorations." This is an intelligent sounding paragraph on the surface but there are hidden uncertainties as to the interpretation of those above quoted words. For instance, the Architect-Engineer has gone to some lengths in taking elaborate borings every so many feet on centers and so noted on the drawings in minute detail. But, lo and behold, the site was shifted slightly without final check-back and just out of range of this elaborate boring set-up. This caused the entire detail and reference to explorations to become obsolete. I think also that the phrase, "however, neither the Architect nor the Owner guarantees that materials other than those disclosed by the explorations will be encountered." is a little loose and vague. Firm bids should be dependent on known conditions so that Mr. Contractor and Mr. Owner won't have to pay up for items that may or may not come up during the site preparation activities. There should be inserted in this paragraph-section of the specs an adjustment clause providing for an increase or a decrease of cost if certain materials are encountered during actual excavation. Do you agree with me?

Here is an excerpt from another recent construction specs. "The contractor shall furnish, put in place, and maintain such sheeting and bracing, etc., as may be required to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation below that necessary for proper construction, or otherwise injure or delay the work or endanger adjacent structures." How very pretty, but what in blazes is an "etc."? This little three lettered abbreviation has caused many a dilemma like a bikini on Main Street. Never use etc. as a catch-all or all-inclusive phrase as used here. Always complete the series of collective words. Also dangerous are the words "as may be required" and "necessary for proper construction." What may be required? What is proper construction? Who determines it? Possibly these questions could be cleared up in the General Conditions or Supplementary but it seems to me that a granddaddy clause like that is just ripe for a juicy extra!

Excavating in Public Ways of Massachusetts. Those of you who refer in their excavation section to the encounter of existing services and utilities in public ways of Massachusetts should remember to make mention of the requirements of the Massachusetts General Laws, Chapter 82, Section 40. This new law requires contractors to notify public utility companies in writing at least 48 hours (excluding Sats., Suns., and legal holidays) before excavating in a public way. We constantly seem to be saddled with these parasitic laws, including those already on the books relative to the public bidding procedures, aimed at protecting the public but falling short for the benefit of the political handouts and what have you.

PART III—THE ARCHITECT . . . A BUSINESSMAN

By JAN REINER

As a businessman, an architect acts like any other businessman in soliciting, working upon, and discharging obligations. His commodity is "the blueprint" and his specialty is that fragile item called beauty.

Among his services are conferences with the clients, preliminary studies, working drawings, specifications, certifications of payments to the builders, and supervision of the construction. It goes without saying that the larger the assignment, the more complex his services. The fact is that on very large commissions the architect becomes a coordinator and administrator who welds together the thinking and performance of technical specialists into one "package" — the blueprint.

SINCE ARCHITECTURE is to a great extent a luxury business, its practice is susceptible to national and local economic conditions. But even in prosperous times and in "good" areas, the demand for architectural services depends upon the need for additional new buildings. Furthermore, the architectural fee may also depend upon the pressure from other architects (registered or otherwise), competing for the same commission. Since, in our "business-as-usual" world, the lowest bidder has the best chance of economic survival, it is understandable (though hardly excusable) that many a business-architect skimps on his estimate in order to get a job. Little wonder, then, that the majority of buildings we see around us contain so little artistic inspiration.

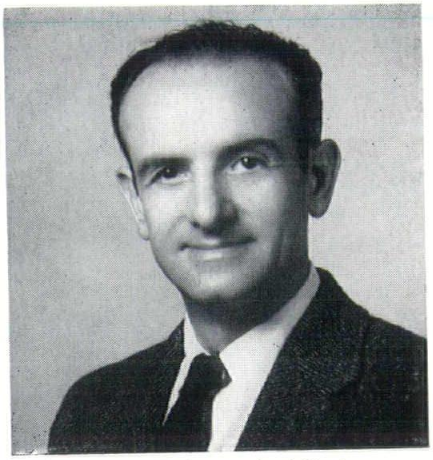
There is a marked difference — and at times antagonism — between the personality of the architect-artist and that of the architect-businessman. The difference is based upon the intellectual benchmark from which each views the basic values of life.

To the former art is a way of life; to the latter it is a desirable ingredient of a salable commodity.

What beauty is to the artist-architect, profit is to the business-architect.

Where the artist-architect tries to create everlasting beauty and often ignores the time spent in the search for it, the business-architect, always conscious of his overhead ("Time is Money"), emphasizes speed of production.

It is not hard to see why there would be a good deal of feeling between the "dreamer" artist and the "practical" businessman. Often the artist-architect is overshadowed by the prestige and recognition accorded to the business-architect who has millions of dollars worth of work "on the boards."



Jan Reiner, Architect

EDITOR'S NOTE: Here's the last of three articles on "The Architect — Man of Many Facets," the artist, the technician and the businessman. With originality and expression of forms, the architect-artist can create buildings of lasting beauty providing he is a mature person with something significant to say in his work. As a technician, the architect must possess mastery over the technology of his day and through feeling and reasoning select the materials and structural methods best suited for his type of design.

While many dispute the statement that architecture is 99 per cent business and 1 per cent art, it is nevertheless true that aggressive firms get most jobs. National statistics reveal that during the past 10 years or so, the bulk of architectural work has been done by a handful of large firms which, like other large organizations, maintain offices in various parts of the country and are geared to "production."

HOWEVER, ONE must not overlook the one great potential asset of the business-architect. It is his ability to sell. Since we live in a business world where the "art" of influencing people and selling them a "bill of goods" is of paramount importance, we can well see where the business-architect could become the "indispensable man."

If he were a man of professional skill, personal integrity, and a keen interest in citizenship, he — far more than the architect-artist or technician — could "sell" to the municipal, state and national governments the need for overall planning. He could lead the promotion of large scale planning — a field which today is frequently neglected or in the hands of dilettantes, or, worse yet, of land speculators, who under a variety of disguises operate for selfish purposes usually detrimental to the community.

It is not an exaggeration to forecast that if the business-architect could become the chairman of a planning board, or the head of an urban renewal commission, our cities would benefit. He could do something about the gradual decay of older areas of the cities, including the slums, traffic congestion, planless decentralization, and lack of coordination of metropolitan transit systems, just to mention a few of the most vital issues today.

However, the crux of the situation lies in the scarcity of business-architects who are both artists and public-spirited administrators. Today's education and training of young architects does not seem to orient them toward this goal.

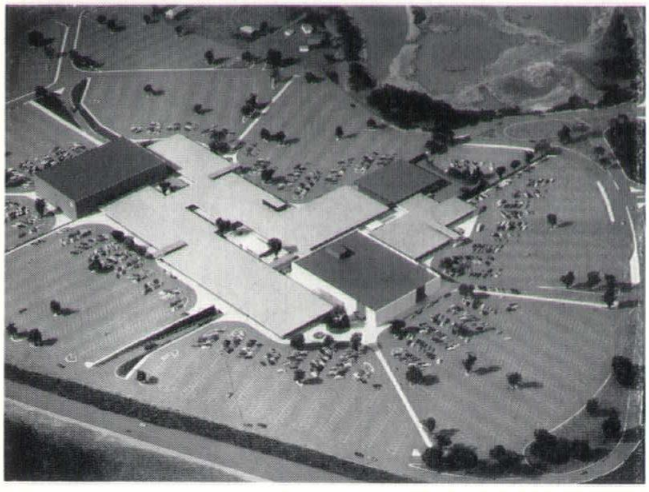
ARCHITECTURE has always been one of man's greatest attempts to create lasting beauty. It has expressed the individual and national ideals of a time. By its very nature, architecture has always been a social art. It has always been based upon teamwork of dedicated individuals.

In today's society teamwork, more than ever before, is expressive of a new stage of social and technological development based upon the rapid transformation from a rural (agricultural) society into an urban (industrialized) one. Perhaps one of the roots of the architectural uncertainty of today lies in the fact that the basic values of this major transformation have not yet been fully grasped by most architects and social planners. Perhaps in the competitive rush for the commission (and the ensuing publicity) there has not been enough time or need to search too deeply for that new philosophy of the art of living and building.

What is needed most today is to raise the concept of architecture and planning to a plateau from which the architect would again gain an overall view of the society so that he could appreciate the potential importance and responsibility of his historic mission. Only then could he act as a "chief builder," exercising his ability as a creative artist, competent technician, businessman, and civic leader.

CONSTRUCTION UNDERWAY FOR SOUTH SHORE PLAZA IN BRAINTREE

It was announced that construction is underway on South Shore Plaza, a multi-million dollar regional shopping center, located at the junction of the new Southeast Expressway, Route 128 and Route 37 in Braintree, Mass. The Plaza is situated on an 81-acre site assembled by Filene's, the Boston affiliate of Federated Department Stores, and is being developed by Cabot, Cabot & Forbes Co., one of the major real estate organizations in the country, in conjunction with Larry Smith & Co., the nation's foremost shopping center consultant firm.

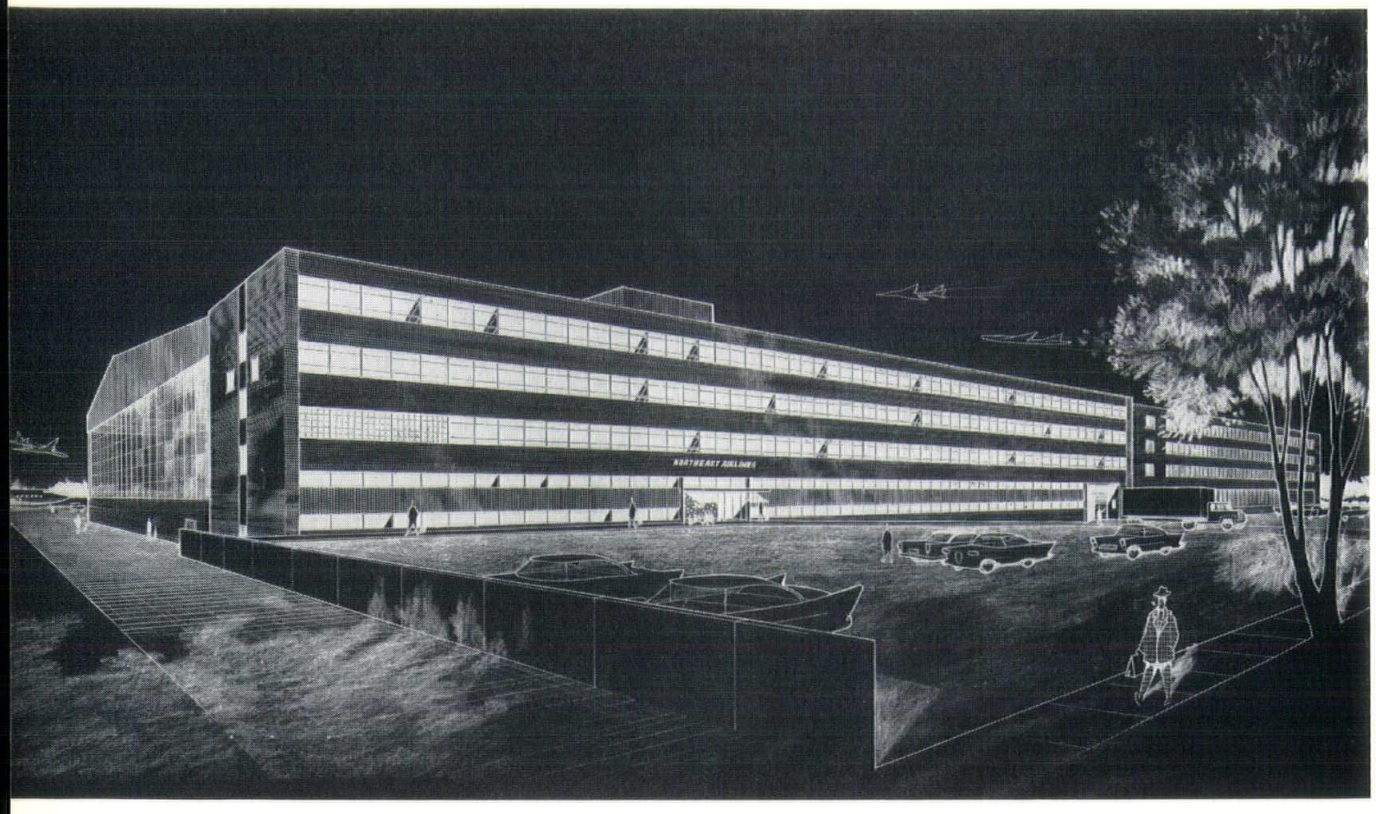


MODEL OF THE MULTI-MILLION DOLLAR SHOPPING CENTER, SOUTH SHORE PLAZA, NOW UNDER CONSTRUCTION AT THE JUNCTION OF THE NEW SOUTHEAST EXPRESSWAY, ROUTE 128 AND ROUTE 37 IN BRAINTREE, MASS.

The John Hancock Mutual Life Insurance Company, as the principal investor in the construction of South Shore Plaza, has provided the first mortgage financing. In commenting on this holding, Byron K. Elliott, President of the John Hancock, said: "This is another of our investments reaffirming our faith in the economic

(Continued on page 40)

NORTHEAST AIRLINES ADMINISTRATION & HANGAR BUILDING



OFFICE BUILDING

SAMUEL GLASER ASSOCIATES	ARCHITECTS
GOLDBERG-LeMESSURIER & ASSOCIATES	CONSULTING ENGINEERS
ANDERSON NICHOLS & COMPANY	MECHANICAL ENGINEERS
L & R CONSTRUCTION COMPANY	GENERAL CONTRACTORS

Out at Logan International Airport they are putting the finishing touches on a hangar that has the longest and heaviest building truss on the Atlantic Coast. The 300-foot steel truss weighing a whopping three-quarters of a ton per lineal foot will support the roof of Northeast Airlines' new $2,500,000 jet maintenance hangar and makes possible an unobstructed area of 37,500 square feet.

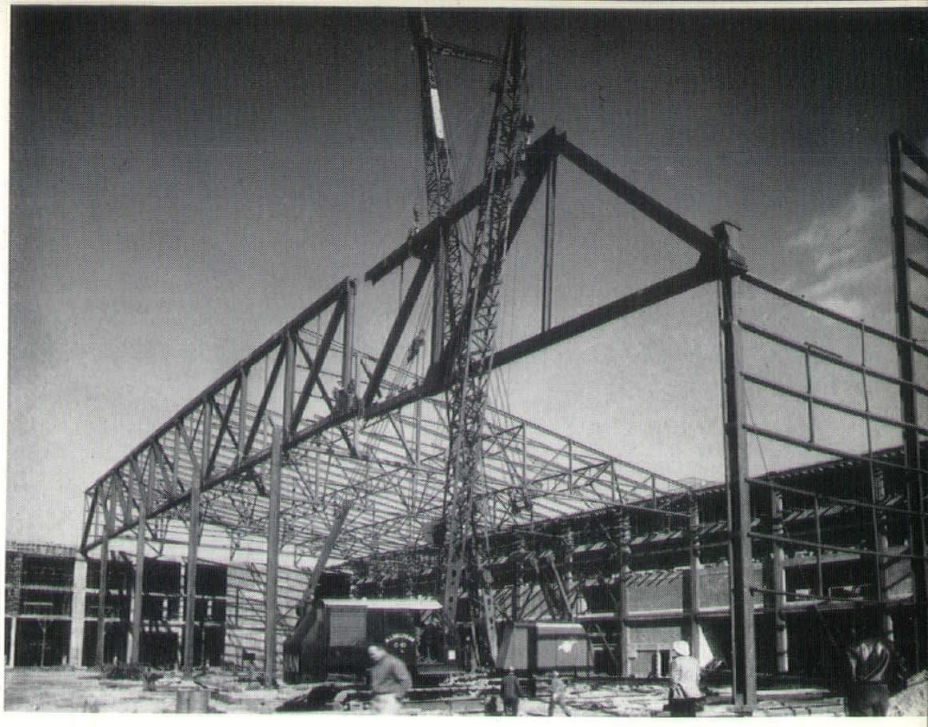
The truss design of the hangar, which can shelter the Boeing 707 Intercontinental jets with their wing span of 142′ 5″, was dictated by the space between an existing hangar and the property line, and the need to maintain maximum clear space. Arches spanning the 300-foot truss were ruled out because the heavy legs would take up too much room, and the cantilever method required more steel and demanded a considerably higher structure with columns and supports exposed to the weather.

The mammoth truss, designed by Goldberg-LeMessurier & Associates, consulting engineers of Boston, consists of twelve 25-foot panels, 25 ft.-5 in. high. It is supported at one end by an existing hangar, and at the other by one heavy steel leg. Clear height from floor to bottom of the truss is 47 ft.-7 inches.

The huge truss is located 53 feet in from the front of the building. The remainder of the roof is supported by a series of 121-foot trusses running from the main truss back to the rear wall of the giant hangar. Fifty-three-foot trusses cantilever from the main truss to the front end of the hangar, where five 60-foot-wide doors slide from pockets located in the adjoining storage building to close up the entire 300-foot entrance.

Fabrication of the huge steel truss was done in the shops of A. O. Wilson Structural Co., Inc., Cambridge. When the structural steel was completely fabricated, the entire truss was assembled and checked to very close tolerances with the use of precision instruments. Precision was essential, as the truss will carry greater loads than those imposed on a railroad bridge when a heavy freight train roars across it.

After all tolerances were checked, the truss was disassembled into five pieces 50 to 75 ft. long. The five



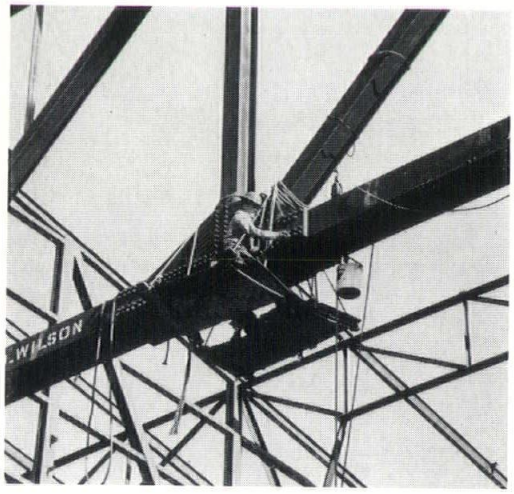
Fifth and Final section of a 300-foot-long truss, fabricated from Bethlehem Steel shapes and plates by A. O. Wilson Structural Co., Cambridge, being hoisted into place today for the roof of the new $2,500,000 Northeast Airlines hangar under construction at Logan International Airport.

sections were trucked to the site between 2 A.M. and 6 A.M. when traffic would be the lightest. A police escort cleared the way for two pickup trucks traveling abreast in front of low-bed trucks carrying the truss sections. Two more pickups followed the load.

Every few miles the whole convoy would pull over to the side of the road to let any traffic that had backed up behind them pass through. The 25-mile trip to Logan from Cambridge was carefully plotted so that the trucks with their 27-foot-wide loads would have maximum clearance on the two-lane highways. Along expressways there was often only three inches clearance between rails and the bottom of the truss.

On arrival at the site, the truss sections were lifted off the trucks with two cranes, lifted into position, and supported on four temporary columns. When the truss was fully in place, the columns were removed. Cost of structural steel was only $4.25 per square foot erected.

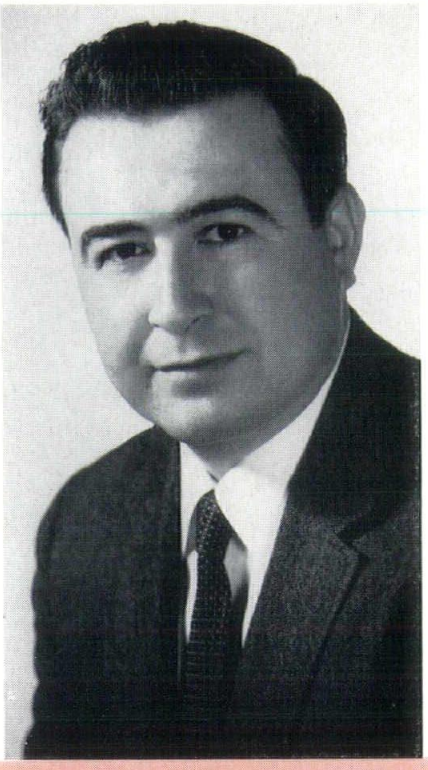
In addition to the hangar the Northeast Airlines projects include a large office and service building in the rear of the hangar. This five-story building 47 ft. by 360 ft. is separated by an expansion joint from the steel hangar.



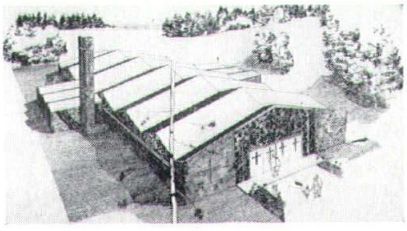
An iron worker tightens high strength structural bolts on all field connections. Bolting is faster, quieter and safer than riveting and makes tighter joints.

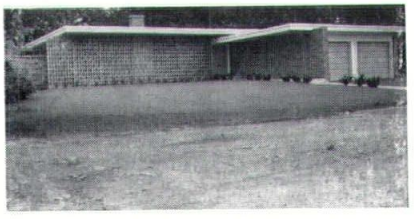
HANGAR VIEW

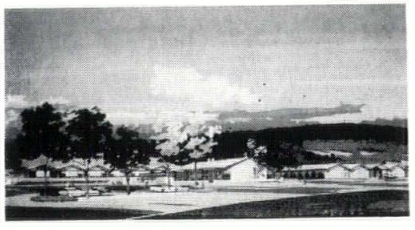
Office of Frank R. Masiello, Jr., & Associates, Inc.



PROFILE







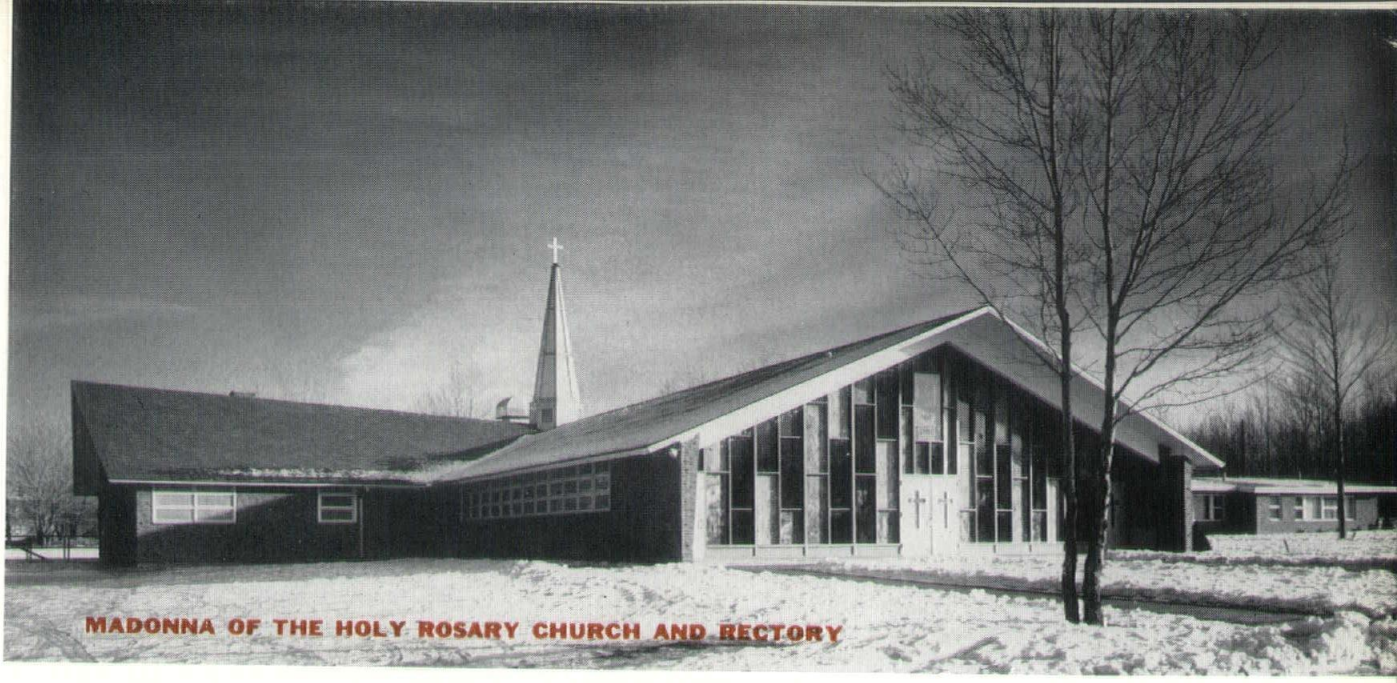
The office of Frank R. Masiello, Jr., & Associates, Inc. located at 791 Main Street, Worcester, Massachusetts, is a young but firmly established architectural practice. It was originally organized under the name of Roger Garland and Associates in 1954 — in which the late Roger Garland and Frank R. Masiello were partners. Upon the death of Mr. Garland, the firm continued to do business until 1958 when it was incorporated under its present title.

Native born in the city of Worcester, Mr. Masiello attended public schools there and furthered his education at West Virginia University, Boston Architectural Center and the Architectural Designers Club in Miami. He is now registered in the Commonwealth of Massachusetts and is a corporate member of A.I.A.

Early years were spent, after serving with the U. S. Army Air Force, in well known architectural firms such as: Arthur G. Maneselian of Boston, as an associate in the firm, also in the employ of Thomas T. Madden and Associates in Miami, Florida, as well as Cram and Ferguson in Boston.

The following pages present a small fraction of more than 50 building projects to which Mr. Masiello has so far devoted his competent design talents.

Associates in the firm are Edward M. Healy and Lincoln E. Swan.



MADONNA OF THE HOLY ROSARY CHURCH AND RECTORY

Fitchburg, Massachusetts

Structural Engineer	Francis S. Harvey, Worcester
Electrical Engineer	Frank Shepard, Worcester
Heating & Ventilating Engineer	C. W. Green, Worcester
Plumbing Engineers	Tucker & Rice Co., Worcester
GENERAL CONTRACTOR	WILEY & FOSS, Fitchburg, Mass.

This well designed project was completed in the late fall of 1958 and the following is a description in the words of Mr. Masiello, the architect.

Program:

Construct a church in a growing diocesan parish to seat 400 persons at each Sunday Mass, allowing provisions for expansion to an ultimate 800 seats. Allowance must be made to provide a parish hall to seat a minimum of 250 persons, a chapel to seat a maximum of 60 persons at daily Mass, a sacristy, parish offices and a choir located in such a manner to serve both Sunday and daily Masses. The rectory program must include a pastor's bedroom and bath unit, two bedrooms with bath for visiting priests, dining room, living room, a housekeeper's suite with bath facilities, a large kitchen and laundry facilities.

The budget, including fees, church furnishings (including an electronic organ) and buildings, shall not exceed $250,000.

Design Solution:

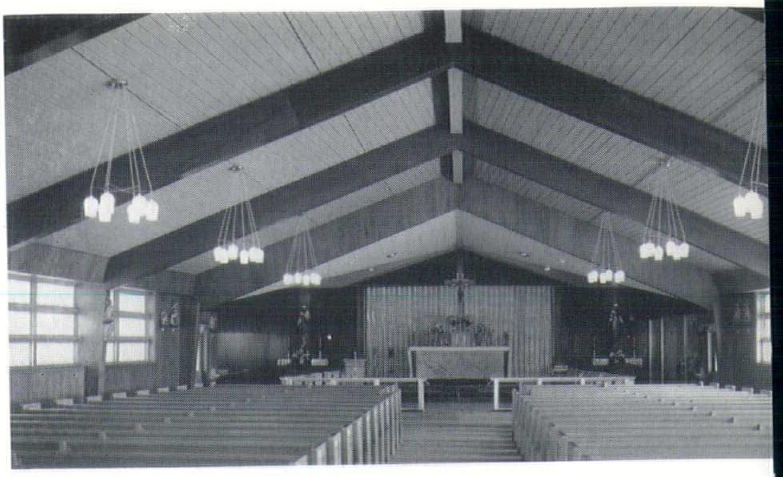
Design church building using a cruciform plan. Locate choir and organ to seat 50 persons to left of nave sanctuary to enable choir and organist to observe and follow Mass in either nave or chapel sanctuary, depending on use.

Locate parish hall at rear of main altar and separate the hall and sanctuary by means of a sound-proofed folding partition which will open up allowing the use of the parish hall as a second nave, increasing the capacity at a Mass to 650 parishioners. When the folding partition is closed it serves as an altar screen. The finished surface of the screen in back of the altar is a vinyl plastic, metallic gold disc covering. On the parish hall side, it serves as a backdrop for the hall platform.

Locate the chapel to the right of the nave sanctuary, install sliding glass doors between the chapel and the sanctuary to zone the main church from the chapel. Make the pew seats reversible so that parishioners can view the main sanctuary altar from the chapel, further increasing Mass seating capacity by an additional 60 seats. Sliding glass doors allow the chapel to be used as a "crying room" at Sunday Masses. At daily Mass when parishioners number less than 60, pews are reversed and made to face chapel altar.

Using the cruciform plan the total seating capacity for each Mass can accommodate a total of 760 parishioners making the need of expanding the church buildings in future years questionable.

(Continued on page 14)



Offices and sacristy are located between the chapel and the rectory, the corridor between the two units is sheathed in a pattern of multi-colored cathedral glass set in aluminum members.

The tower directly over the main altar is constructed of aluminited gold extrusions with white plexiglass inserts. The tower is lighted by means of internal incandescent spotlight which evenly light the tower at night.

The entrance to the narthex is sheathed in multi-colored cathedral glass panels set in red wood structural members.

The church buildings and rectory are basically constructed around a steel frame. Exterior walls are red antique brick veneer with $\frac{3}{8}$" mahogany plywood interior finish. Roof sheathing is 3" thick T & G wood plank exposed underside.

The heating system is a radiant panel system embedded in the concrete slabs.

Statistics:	Square Feet	Cubic Feet
Church buildings and offices	9,248	160,290
Rectory	1,845	22,140
	11,093	182,430

Building Cost:	
Construction Cost	$205,525
Pews	7,800
Organ	3,000
Altars and Furnishings	8,000
Total Cost Completed Buildings	$224,325

Cost per Square Foot	$20.21
Cost per Cubic Foot	1.22

Principal Sub-contractors and Manufacturers

Structural Steel — United Structural Steel Co., Worcester, Mass.

Millwork & Cathedral Glass Curtain Wall — Iaccarino & Sons, Worcester, Mass.

Glazing — National Glass Co., Worcester, Mass.

Terrazzo — De Paoli Mosaic Co., Boston, Mass.

Roofing & Flushing — Normandin & Co., Fitchburg, Mass.

Painting — Wiley & Foss, Fitchburg, Mass.

Pews and Interior Furnishings — Gothicraft Co., Northboro, Mass.

Acoustical Tile — Pitcher & Co., Worcester-Boston, Mass.

Marble Altars & Sanctuary Floors — Dibona Co., Boston, Mass.

Kitchen Equipment — J. E. Haddad Co., Worcester, Mass.

Plastering — Victor Pelettier & Sons, Fitchburg, Mass.

Heating and Ventilating — DuPont Heating & Plumbing Co., Worcester, Mass.

Plumbing — William Lynch Co., Worcester, Mass.

Electrical — A. C. Senecal Co., Worcester, Mass.

Sound Equipment & Electronic Carillon — Fred G. Walters Co., Worcester, Mass.

Aluminum Steeple & Misc. Aluminum — Alumiline Co., Pawtucket, Rhode Island

Lighting Fixtures — Lightolier by Benjamin Electric Co., Worcester, Mass.

Wood Windows — Andersen Co., Bayport, Minn.

Hardware — Lockwood Co., Fitchburg, Mass.

Doors — U. S. Plywood Corp., Boston, Mass.

Weatherstripping — Chamberlain Co., New York

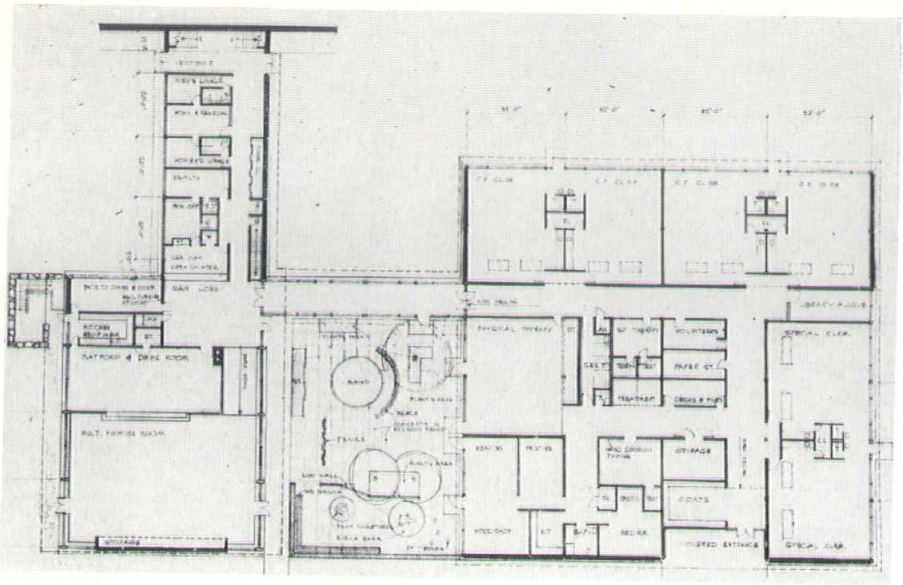
Lightning Protection — Brown Lightning Protection Co., Bloomfield, Conn.

Vinyl Asbestos Floors — Kentile Co.

Plumbing Fixtures — American Standard Co.

Heating Equipment — Smith Mills Co.

FRANK R. MASIELLO, Jr., & ASSOCIATES, INC.

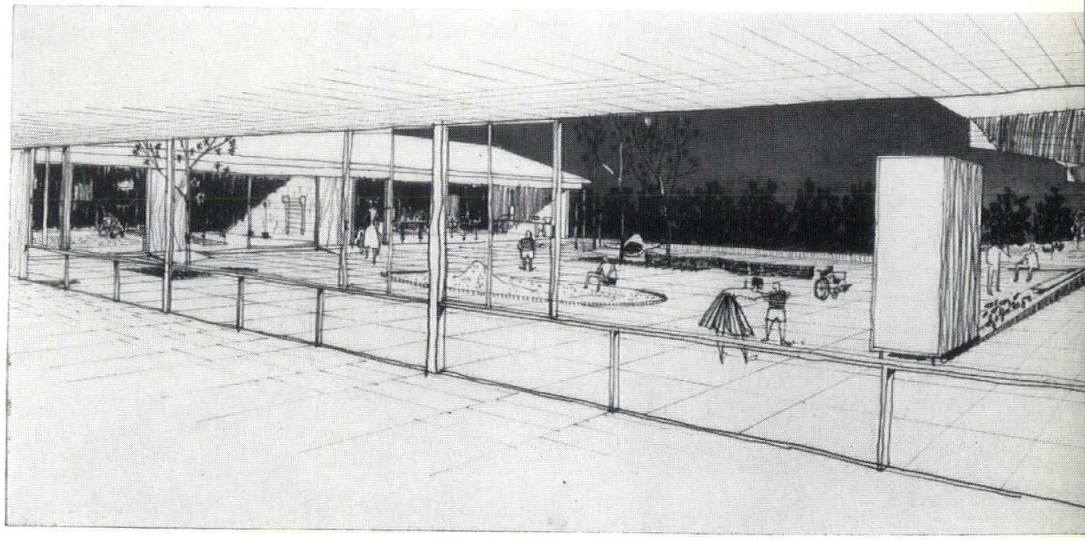


Elementary School
Worcester, Massachusetts
with a special classroom wing for physically handicapped children.

Architect:
Frank R. Masiello, Jr., & Associates, Inc.
and Perkins & Will

Structural Engineers:
Goldberg & LeMessurier & Associates

Mechanical Engineers:
Muzzillo Tizian

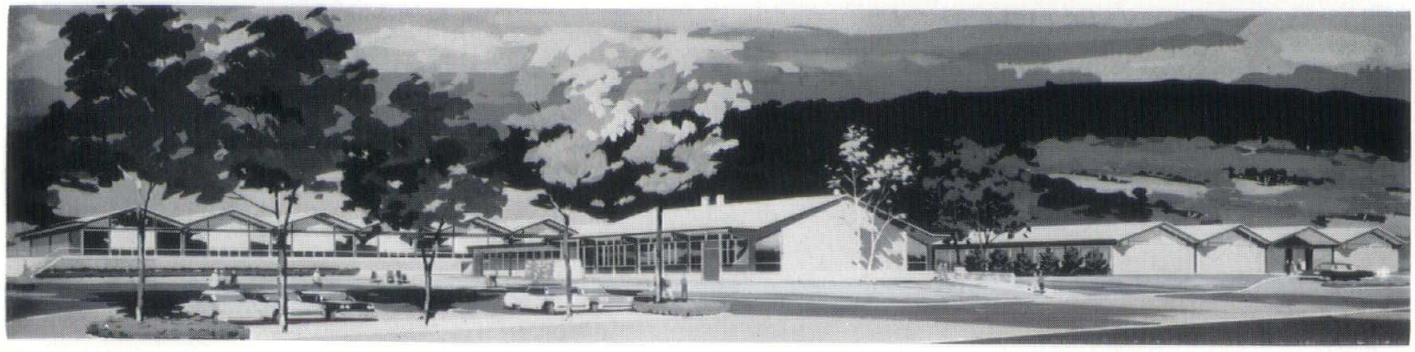


This structure is the first municipally-sponsored elementary school in the country that will also have a special section for physically-handicapped children in which they will receive therapy as well as education.

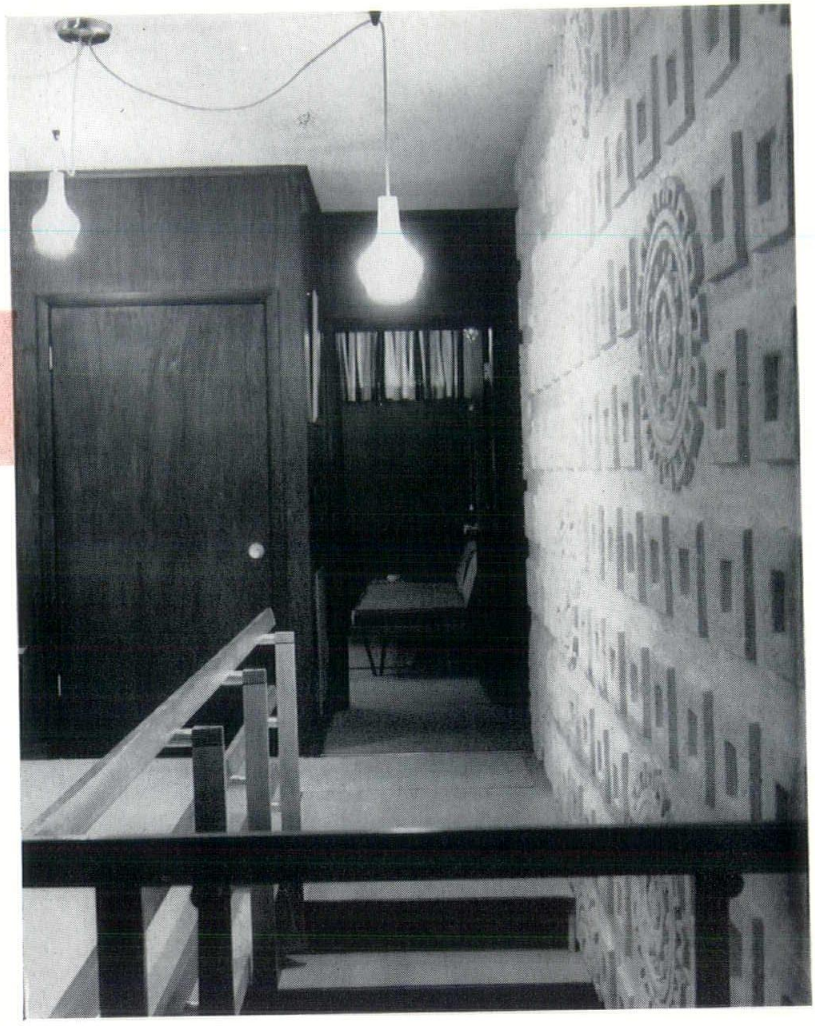
The combined neighborhood elementary and physically handicapped children's school will have separate and commonly used facilities within approximately 36,000 square feet of building area. This includes a wing containing a kindergarten and 6 classrooms for grades 1 through 6, also a separate wing for handicapped children containing 6 classrooms plus 3 therapy rooms. Both wings are connected by a centrally located multi-purpose room with provisions for a kitchenette. There is also a health room and an administrative area. Some of the features in the wing for the handicapped are wider doorways for children using wheelchairs and crutches, also ramps instead of stairways. Educational specifications indicate a separate out-door play area each for physically handicapped, for kindergarten children and for the regular grade pupils.

Structurally the buildings will be of wood construction — one story — with laminated beams and joists plus acoustic ceilings. The exterior will show brick and glass with wood post and mullion dividers. The concrete floor non-grade, generally will carry various flooring materials, such as asphalt, vinyl asbestos and ceramic tiles.

The total cost of construction is estimated to be $595,000.



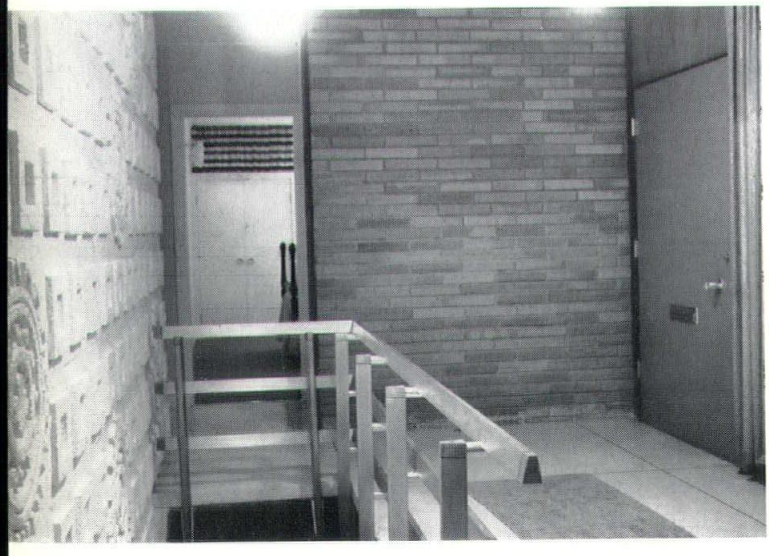
FRANK R. MASIELLO, Jr., & ASSOCIATES, INC.



The Residence of
Mr. & Mrs. Frank R. Masiello, Jr.
Worcester, Massachusetts

There is certainly a natural curiosity about the home an architect designs and builds for himself and his family.

We like to believe that here is where the architect expresses himself with no restrictions except costs and perhaps an influence exerted by his wife that certainly cannot be ignored.



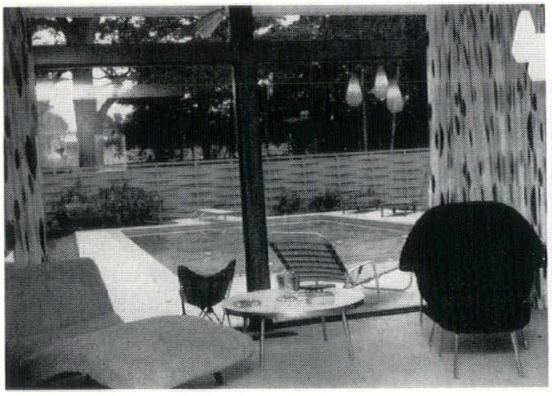
In this case an eight-room contemporary with a touch of Italy, Denmark, and Mexico. This is the fourth home Mr. Masiello has designed and lived in, in ten years of marriage. To quote Mrs. Masiello, "This is the last one, I am completely happy."

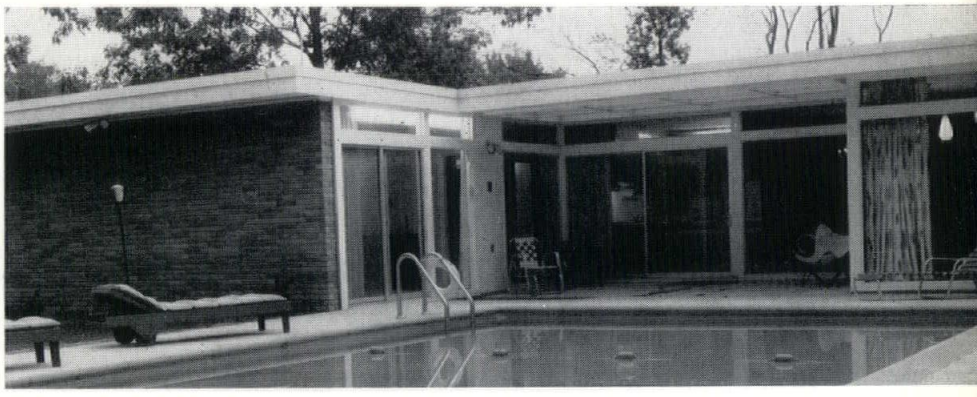
It was designed in an "H" form with a swimming pool between the upper wings, viewed through ceiling height picture windows from both the livingroom on the right and the master bedroom on the left. A feature of the front of the house is a screen wall of solar stone which admits daylight illumination to the interior without harsh direct sun rays. It also allows a clear view of the front lawn. Upon entering the large foyer we face a wall constructed of white Yusaton stone set in an ancient Mayan design. An aluminum guard rail protects an open stairway down to the recreation room below. A corridor from the foyer leads to a two-car garage, the guest room, the master bedroom, a double bathroom and the daughter's bedroom. The bedrooms are partly paneled in walnut with one wall in tinted sandstone brick. The modern kitchen is separated by sliding panels from the dining room area by accordian

FRANK R. MASIELLO, Jr.,

&

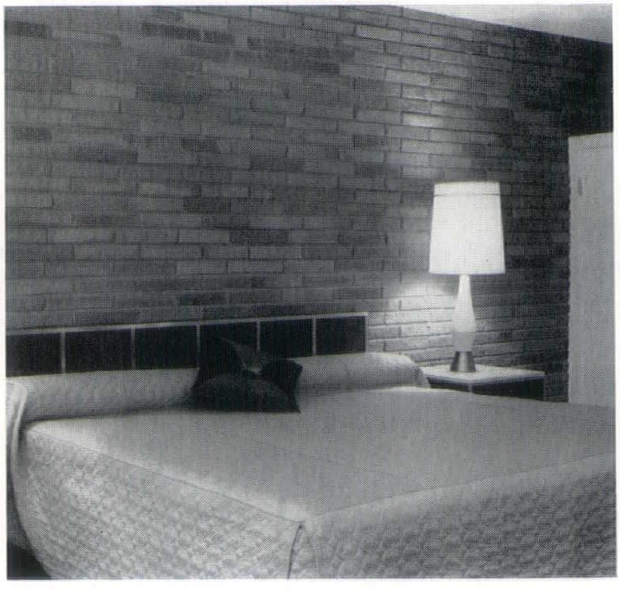
ASSOCIATES, INC.

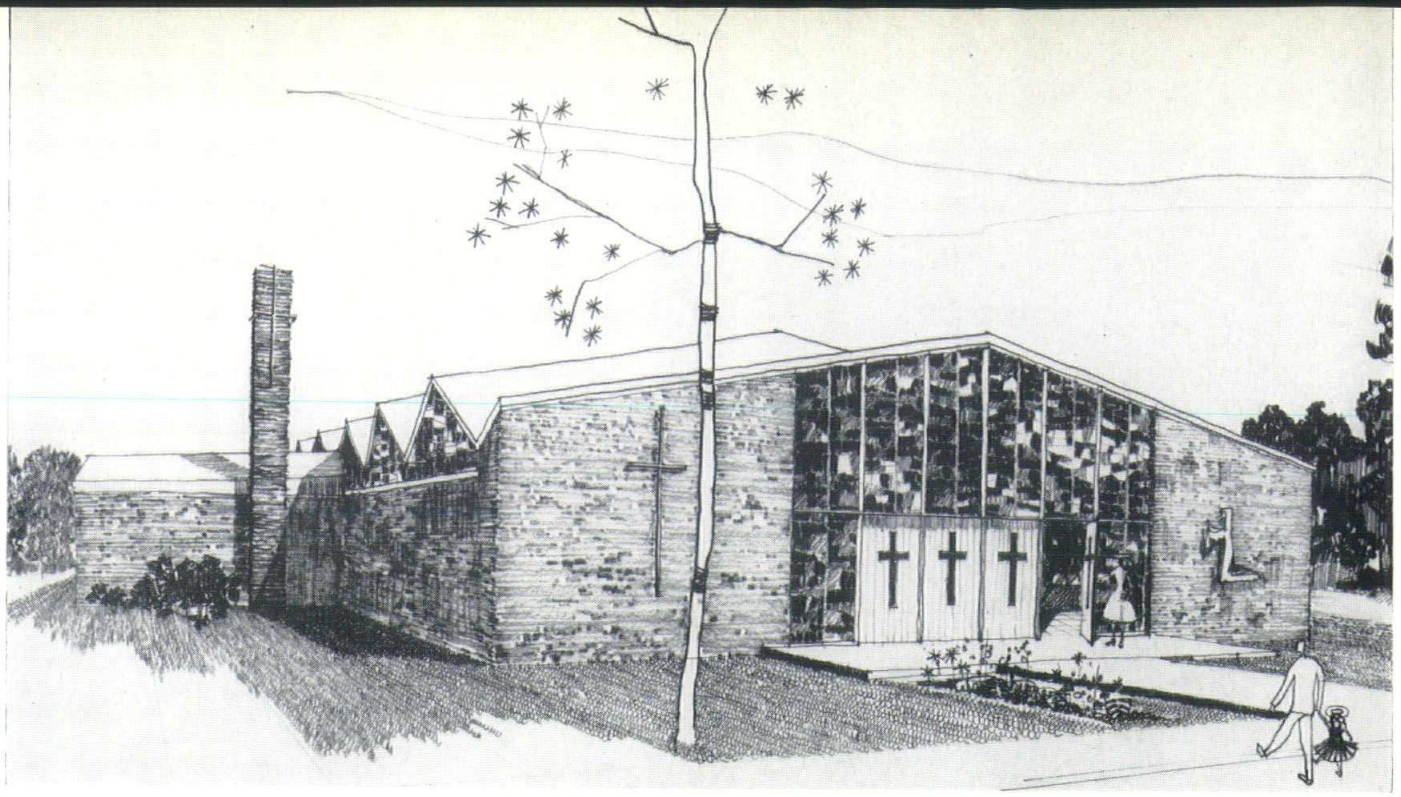




tube folding doors. The furnishings, lighting fixtures and other decor were selected by Mrs. Masiello and range from French Provincial to modern crafted walnut in furniture. Italian imported lighting fixtures are to be found in the master bedroom, while a chandelier from Denmark overlooks the dining room table.

Modern appliances such as built-in intercom, a built-in vacuum cleaner system, and central air-conditioning add to a complete picture of comfortable living.





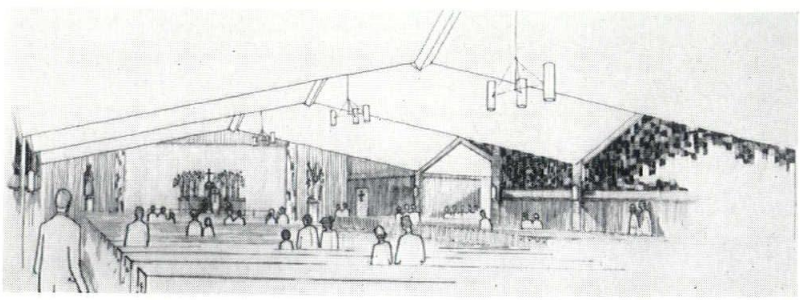
ST. BERNADETTE — NORTHBORO, MASSACHUSETTS

Mechanical Engineers	Greenleaf & Wong, Cambridge, Massachusetts
Structural Engineers	Goldberg & LeMessurier, Boston, Massachusetts
Landscape Architects	Moriece & Gary, Inc., Cambridge, Massachusetts

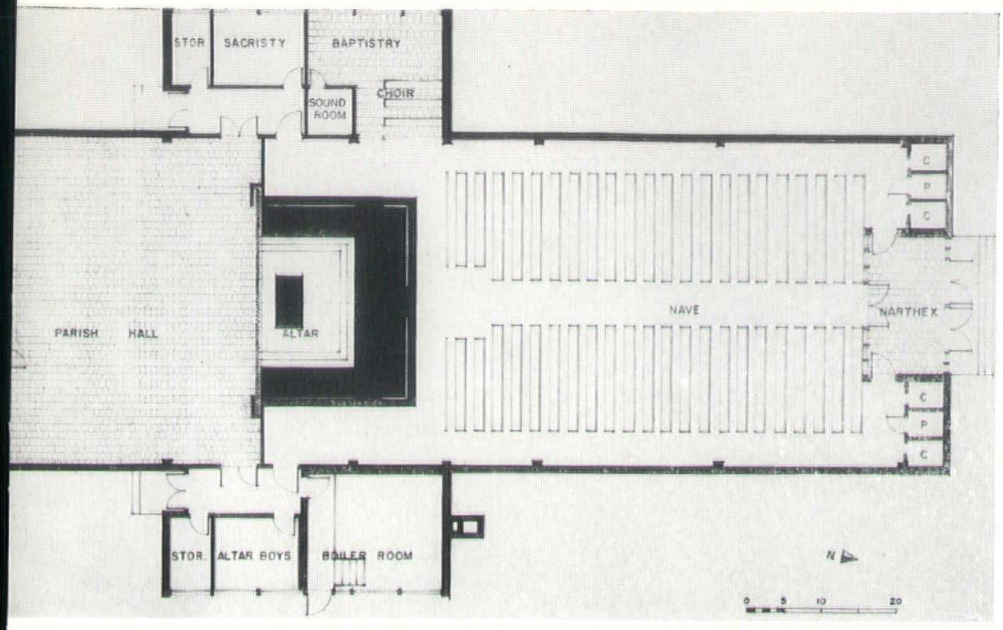
St. Bernadette's Parish, Northboro, Massachusetts, is a newly formed congregation in the Diocese of Worcester, Massachusetts, and was recently formed in March 1959 by Bishop John J. Wright, D.D., the former Bishop of the Worcester Diocese.

When the parish was formed it contained little more than 200 families. In conferences with Father Edward F. Kane, Pastor of the parish and Monsignor John F. Gannon, new Administrator of the Worcester Diocese, it was decided that the new church should meet the religious and social needs of these original 200 families and that it should be flexible enough to handle a projected increase of 150 more families entering the growing parish. The requirements were then outlined as a nave seating 400 people, a parish hall for various social-religious activities, a choir, confessionals and the necessary mechanical equipment room. In connection with the parish hall it was decided to provide a small kitchen, toilet facilities for men and women and coat storage facilities. The rectory and garage were to be located in buildings existing on the site.

With these requirements established, design studies were initiated during which it became apparent that the easiest and most economical way to achieve the needed expansion was to have the altar located between the nave and the parish hall. By providing a marble screen between the altar and the parish hall it became possible to seat 250 more people at the Masses. This part provided the eventual expansion in the original building and made unnecessary any future disruption of the parish activities to add space. It was the feeling of diocesan authorities that this Northboro parish would not exceed 600 to 700 seats and for this reason they much commended this approach. The choir, sacristy, altar boys' room, boiler room and storage areas were located in wings directly off the altar area with this cruciform plan parti we were able to incorporate side entrances to the nave directly from the parking area located at the rear of the site, with the necessary provision of off street parking, this was considered a necessity for a successful functioning plan. The small choir to the right of the main altar will also serve as a baptistry and as an isolated crying room during Masses. The electronic organ will be located here and its sound will be projected from two sound boxes located at the rear of the nave directly over the confessionals.



The roof form evolved from a series of comparisons of systems available such as a gable roof with wood plank or wood joist construction, laminated wood beams, and various shell concrete structures. This pitched folded plate concrete roof shell was studied by means of a 1-inch scale mock-up by the structural engineers Goldberg & LeMessurier. Construction costs



were checked with local contractors who would be bidding the work, and it was found that this structure would roll roofing on 1-inch rigid insulation board with a vapor seal, and interior finish of a sprayed-on acoustical plaster with special bonding agent to concrete compared very favorably with more conventional systems. This folded plate is supported at the low points by a concrete column and a concrete tie beam forms the sill of the cathedral glass windows.

The exterior walls will be constructed of brick veneer with wood studs to take interior vertical wood paneling.

The flooring under the pews will be asphalt tile and in the aisle areas rubber tile will be installed. The floor of the church, parish hall and other areas will be a concrete slab on fill.

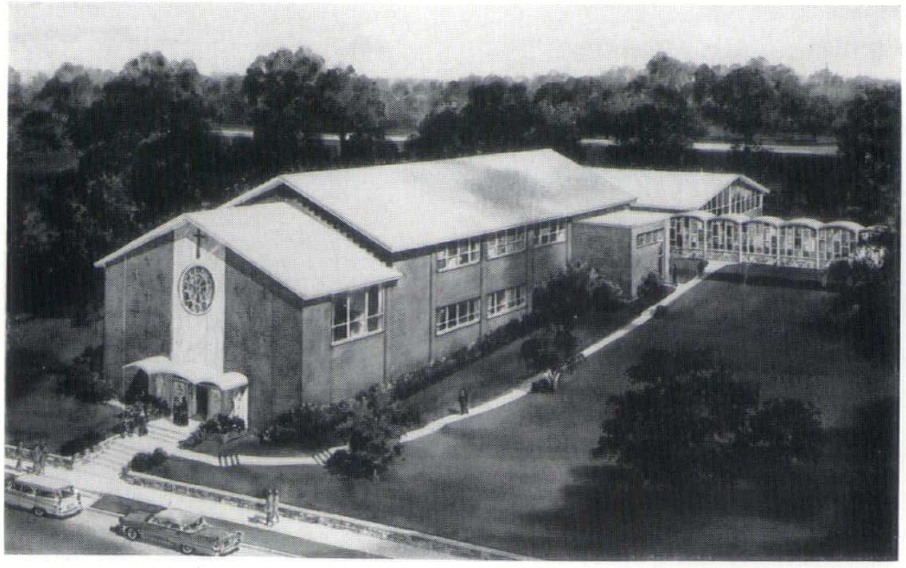
Lighting will be by means of incandescent overhead lighting employing special designed fixtures, heating will be by means of console heaters and ventilation will be through ducts carried back and exhausted into a special flue in the chimney, which with its crosses will become a vertical counterpoint for the folded plates rhythmic horizontals.

Cathedral glass set in various patterns will be installed in redwood members and all supporting sash will be steel units. All of the exterior crosses will be anodized gold aluminum. The relief of St. Bernadette's indicated to the right of the entrance will be executed in mosaic tile.

Venerini Academy Building

Worcester, Massachusetts

Housing An Auditorium, A gymnasium and a Chapel



General Contractor:
Victor A. Cusanello

The two-story building for the Venerini Sisters who staff the academy, was completed in 1958 at a cost of approximately $440,000. It consists of tan-colored brick trimmed in rose marble and is connected to the left side of the Sisters' convent by a glassed-in cloister walk. The walk has an arched concrete roof and connects directly to the chapel section of the new building. The chapel seats 470 persons and is located above the theater-style auditorium capable of seating 655. Behind and adjoining the chapel and auditorium is a regulation sized gymnasium. Over the concrete arched entrance the wall is inset with a rose window surmounted by a glass cross.

A Typical Language Laboratory Installation. The twenty-eight booths are of wooden construction with glass fronts to permit vision ahead, arranged in a chevron formation with aisles in the center and at either side. The central console, at left, contains master lesson distribution facilities (far side) and the intercommunication and monitoring panel (near side). Fluorescent lights are used, the ceiling has been acoustically treated, and booth wiring is run in floor ducts.

The Electronic Language Teaching Laboratory

William F. Massy

INSTRUCTOR OF INDUSTRIAL MANAGEMENT
Massachusetts Institute of Technology

Consultant to the DeMambro Sound Equipment Co., Boston

The rise of the electronic language teaching laboratory to its present state of importance is the result of a realization that mastering a modern foreign language implies more than the learning of a set of rules. In addition to knowing the rules, the student must acquire complex vocal skills and then begin to think "in the language," since translation to and from English is much too slow to permit unstrained conversation. The language laboratory was evolved to give the student more direct contact with the spoken language than a teacher could economically provide — a contact that permits practice in relation to a standard at the student's own pace and in relative isolation.

The language laboratory consists of three major elements — the electronic equipment, the booths in which it is housed, and the laboratory room itself. Each will be discussed in turn.

Necessary equipment for an up-to-date laboratory includes a tape transport mechanism and record-playback amplifier for each student location, and a central console for distributing master program material, monitoring student performance, and intercommunication. The "Dual Channel Listen-Record System," the most highly developed system in use today, allows the student to listen to the central console or a special master track provided on one-half of his own tape, and record the lesson and response sequentially on his individual practice channel. The tape may then be played back to allow the student and master voices to be readily compared. Facilities for intercommunication and monitoring allow the instructor to appraise any student's performance without leaving the central console, and to converse with him directly if desired. This type of equipment is used for class exercises with individual review, aural examinations, or individual (library) practice.

Points to Remember When Planning

The state of the art in equipment design is changing rapidly, requiring a careful appraisal of the most up-to-date offerings before setting laboratory specifications. Two generations of language laboratory equipment are shown on these pages. The first, installed in 1956, used standard home recording components. The second, designed by the author in 1958 especially for language laboratory use and representative of most units on the market today, is already being made obsolete by a new, third generation unit now being put into production. The various types must be evaluated in terms of the following three questions:

Functional Performance. "Can the laboratory do the teaching job desired by the faculties of the purchasing institutions?"

The school's language faculty will determine the teaching methods to be used in the laboratory — and thus determine the functional specifications. These might require the use of a single channel system or variations of the dual channel system described above, the ability to transmit multiple lessons, special provisions for recording student responses at the central console, facilities for the mass duplication of tapes, as well as interconnection with other laboratories or with audio-visual equipment. The first generation machine is, functionally, a single channel system — it cannot be used for individual (library) practice. The later units possess full functional versatility.

Simplicity of Operation. "Can faculty and students effectively utilize the full capabilities of the system without the necessity of acquiring special skills or being distracted from their primary purpose of teaching and learning a language?"

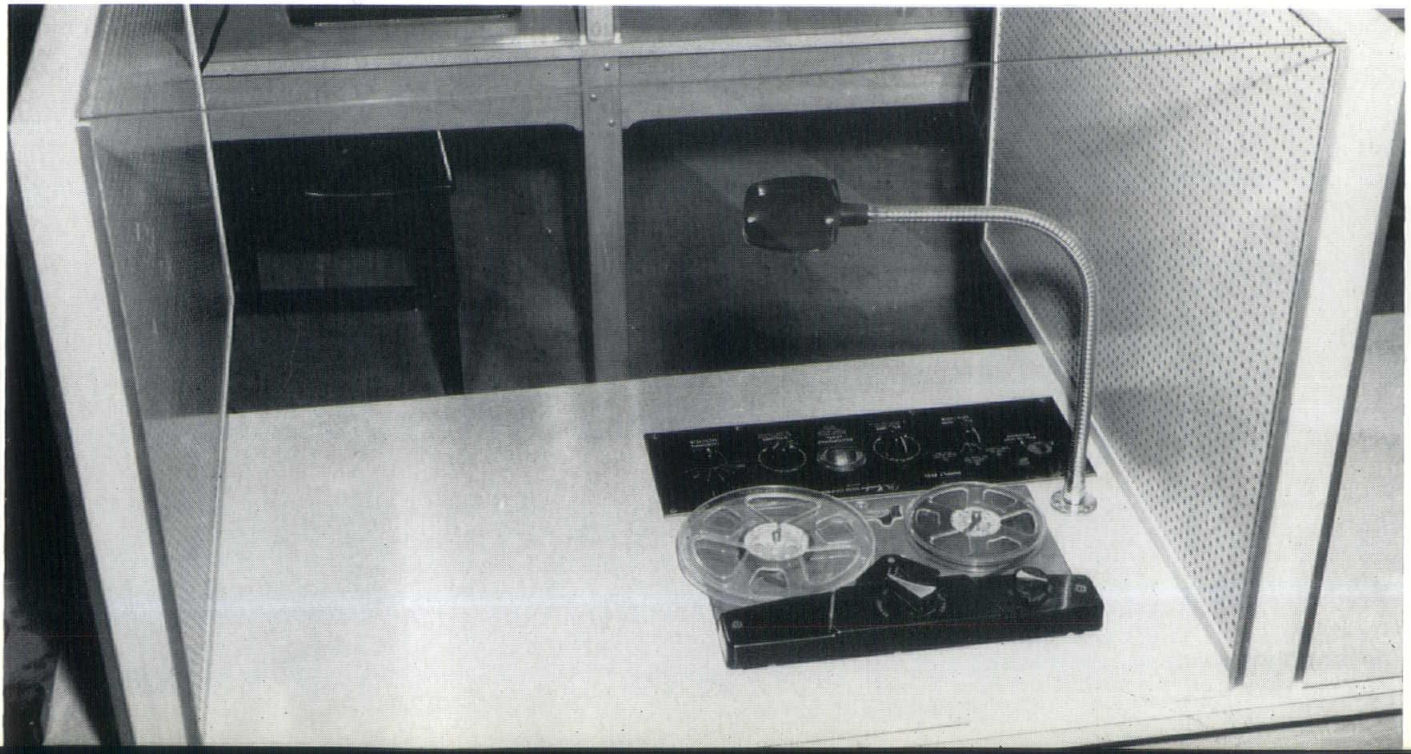
Threading the tape, and setting switches and volume controls are the most difficult operations encountered in using laboratory machines. At present, the best approach to tape threading involves providing a clear slot into which the tape can be dropped — endless tape cartridges do not meet certain important functional requirements, and are difficult for teaching personnel to prepare.

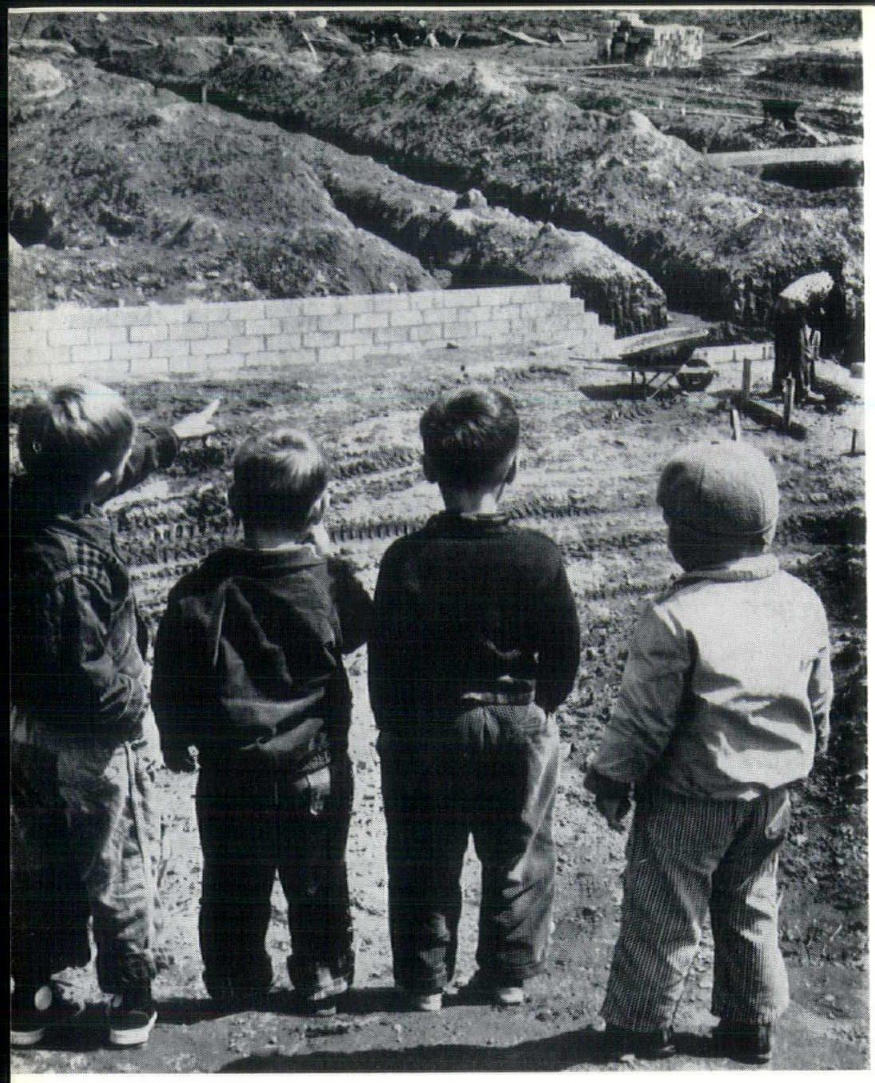
THE SECOND GENERATION STUDENT MACHINE (1958)
(Dual Channel)

Minimizing the number of function switches and switch positions and interlocking those that remain will help reduce student confusion and the chance of error. Where possible, critical operations — such as recording on the master track in a dual channel system — should be remotely controlled from the console. The third generation machine provides a 50% reduction over the second in the number of switches and, in addition, they are mechanically and electronically interlocked to prevent accidental erasure of important material or other misuse.

The accurate setting of volume levels is important in recording if distortion is to be avoided, a good signal-to-noise ratio achieved, and an accurate comparison of master and student voices made possible. Students do not usually set volume controls accurately, even when a recording indicator or v.u. meter is provided, and using pre-set controls is to ignore rather than solve the problem. The third generation machine utilizes an automatic volume control circuit to eliminate the need for making recording volume adjustments.

THE FIRST GENERATION STUDENT MACHINE (1956)
(Single Channel)



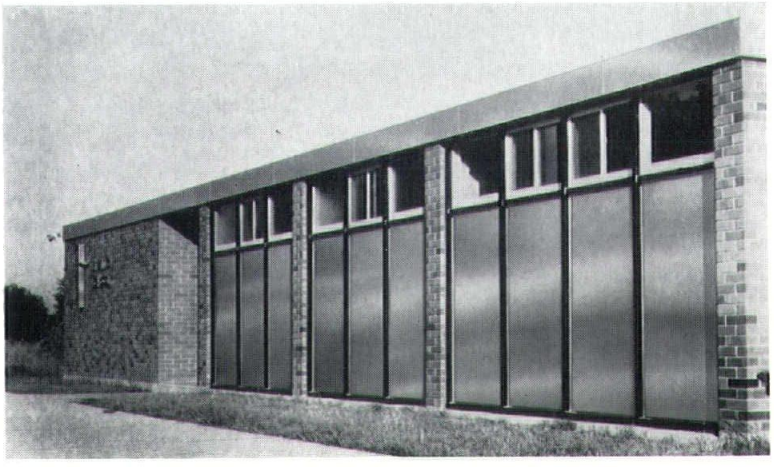


THE NEED. Four youngsters in this photo typify the children in the country today whose proper education demands new school construction at a near-frightening rate. The statistics: close to 11,600 infants born each day; even the 68 thousand classrooms being built this year won't keep up with requirements.

LET THERE BE *Learning*

Sure as angels kissed their dimpled cheeks, the babies born this morning at your local hospital will grow up into tomorrow's first-graders. And in a matter of a few years, like millions of other moppets throughout the country, they'll be crowding into schools that are already bursting at the seams with bright-faced scholars.

Children, bless them, are being born this year at the rate of 11,600 a day. That's more than enough to populate with diapered infants a town of 75,000 inhabitants every week. As the baby boom keeps booming, the need for new schoolrooms to accommodate them keeps increasing at a near-frightening rate.



THE ANSWER. New schools, modern in design and outstanding in educational accommodations, can be built simply and quickly with curtain wall panels designed by architects. Use of durable materials like stainless steel keeps operating costs down for taxpayers. A typical example of such a school is this recently completed building in Fenwick, Ontario. It uses stainless panels as its sidewall. When the school must grow in size, the panels can be removed and used again on the new sidewall of the expanded building.

LET THERE BE LEARNING — Continued

Communities throughout the U. S. are recognizing the need for new schools, and doing something about it. An estimated 68,400 classrooms will be completed during the current school year. But elementary school enrollments are to increase close to twenty-five per cent over the next ten years, and reach a total of 32.8 million.

Even at its current rate, school building can at best stay two or three steps *behind* the basic needs of the baby boom.

The hard fact for taxpayers to face is simple enough: more schools must be built. And an equally hard fact is that the attractive, pleasant and well-equipped schools of today cost more money than the schools of twenty or thirty years ago.

The outlook is not as black as it may seem at first glance, though. For what consolation the information may provide, the U. S. Office of Education points out that the cost of school construction in the last twenty years has risen only two and a half times. During the same period, the overall building cost index rose to three times its previous rate.

The advantages of modern schools, their property value to their communities, and the favorable educational environment they create, are obvious. But how does a community pay for them? How does a taxpayer know his community is receiving the most for its education dollar?

Two timely suggestions are offered by various school groups. So taxpayers, pay attention, because you'll be asking questions later.

The first suggestion may appear contradictory at first glance. It is recommended that citizens spend money to make sure they save money on one item, design of the building itself.

"Stock plans," blueprints that can be used throughout a state or school district, do eliminate architect's fees and cut construction costs. But in most cases, the use of such plans appears to be false economy. A competent architect is well worth his fee, usually about six to eight per cent of the building's cost.

In fact, several states now have laws reflecting the belief of most school specialists that good schools deserve good architects.

Instead of standardization of plans, most specialists urge standardization of the parts that go into the buildings, such as doors, windows, lights and heating elements, and modular planning in construction.

Then, equally important is the selection of materials for construction. No comparison of costs, the National Citizens Council for Better Schools points out, is valid if it stops with initial outlay. The total bill to taxpayers will include insurance, maintenance, custodial care and other long-range items. Probably the highest is maintenance, which can add as much as twenty-five per cent to yearly operating costs.

Suppliers of building materials for schools have kept apace with these demands, and now manufacture standard parts of materials that require little maintenance care over long years of hard use.

The steel industry, for example, has over recent years developed standardized components such as windows, doors and whole panels of what is called "curtain wall" from which school buildings can be constructed quickly and economically.

"Curtain wall," a term familiar to modern architects and builders, is simply a wall of metal panels hung on the steel or reinforced concrete framework of a building. It is distinguished from a conventional "bearing" wall of masonry that supports its own weight and much of the weight of the building at the same time.

In the same respect, the steel industry now has made available to school builders curtain wall and other standard building components made of stainless steel. This is a corrosion resisting metal that requires far less maintenance than other customary building materials, and appreciably reduces the cost for yearly upkeep of a school plant.

"Pound for pound, stainless steel is the most permanent building material today," said a professor of Princeton University's School of Architecture after extensive tests of available materials.

It is used in roofing and drainage equipment as well as windows and curtain walls. Stainless steel is common in school kitchens, plumbing and sanitation fixtures. In these cases its durability reduces replacement costs; its easy cleaning properties cut maintenance time; its appearance is always attractive.

Applied to school buildings, the advantages of stainless steel mean that the citizens will get the most for their money over the life of the building — in terms of construction that will remain modern, efficient and handsome over a long span of years, and that will require a minimum of maintenance expense.

The use of standard components now available in stainless steel will also mean that a building will go up fast. Since there is seldom a school built that is not urgently needed, this factor comes as an important one.

While it is only one factor, it becomes more significant as each community listens to the louder cries of its newest citizens — and heeds these cries for new schools so that, after all, there may be learning.

Bulletin DIGEST

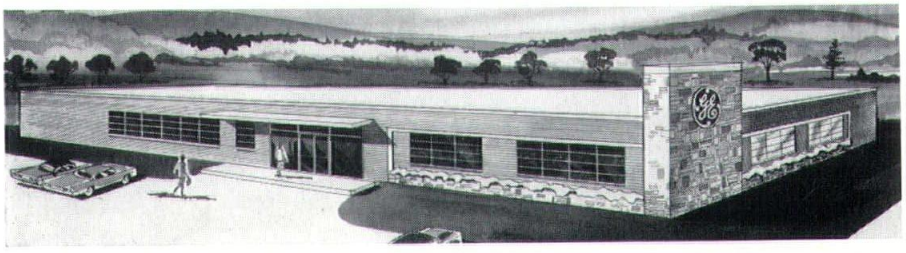
AS COMPILED BY M. PATRICIA WILLIAMS, ASSOCIATE EDITOR

GENERAL ELECTRIC BREAKS GROUND FOR NEW BUILDING

Dignitaries attending left to right: F. V. Quinlan, representing Bernard J. O'Toole, the owner of the building; Leonard S. Muir, Architect; Merlon C. Soule, representing H. M. Soule Company, builder; Malcom Healey, Citizens Savings Bank, Providence; H. A. Olsen, Vice President, General Electric Company; Mayor Lawrence A. McCarthy, Pawtucket, Rhode Island; and Adolph Schmidt, Rhode Island Development Council.

Groundbreaking ceremonies were held today for a new General Electric sales and service building according to L. F. Simcock, Manager, Rhode Island and Southeastern Massachusetts Branch of the General Electric Company, New England District, Major Appliance Division.

The ceremonies were held at Newport Avenue, Pawtucket, site of the new building, the Honorable Lawrence A. McCarthy, Mayor of Pawtucket,



H. A. Olsen, Vice President, General Electric Company, Northeastern Regional Relations, Malcom Healey, Citizens Savings Bank, Providence, and representatives of the Rhode Island Development Council were among the dignitaries attending.

An 8400 sq. ft. structure, the new headquarters will house offices, service shops, wholesale display facilities, and an auditorium for training sessions and dealer meetings. It is being constructed in a modern style and according to General Electric specifications. Architect for the structure is Leonard S. Muir Company, Providence. Builders are H. M. Soule Company, Inc. Pawtucket.

OCCUPANCY MAY 1960 — Approximately thirty G–E sales, clerical and service personnel will occupy the headquarters the first of May 1960. They will move from the present distributor building at 560 Mineral Spring Avenue, Pawtucket.

LONG LEASE — General Electric will occupy the building under a long term lease from the owner, Bernard J. O'Toole of Pawtucket. The site is adjacent to the present Prudential Life Insurance Company building.

AISC REPORT

The fabricated structural steel industry booked 284,114 tons during September for the sharpest upturn in new orders during 1959. According to reports compiled by the American Institute of Steel Construction this rebound in new orders represents an increase of 87,000 tons over the previous month and is 11 per cent greater than the corresponding September of last year.

Accumulated bookings during the first nine months of this year totaled 2,352,483 tons, 13 per cent greater than the same period last year.

The industry has been able to deliver most of its work during the prolonged steel strike. Although September shipments totaled only 182,596 tons it represents the greater share of tonnage scheduled for September delivery. Total shipments during the first nine months of this year amounted to 2,292,636 tons.

The AISC reported backlog as of September 30th at 1,870,763 tons. Of this amount, 1,092,611 tons are scheduled for future fabrication during the next four months ending January 31, 1960.

NICHOLAS CAZANAS, CONTRACTOR, DIES

Nicholas D. Cazanas, 64, of 119 Rawson Rd., Brookline, Greater Boston contractor, died yesterday.

He was a native of Greece, came to this country in 1912 and over a period of years developed the N.D.C. Construction Co., of which he was president and treasurer.

He was the builder of many churches. Many public buildings and schools were built by him in Lowell, Lexington, Sudbury, Charlestown, Framingham and Boston.

ENGINEERS FORM MASSACHUSETTS ASSOCIATION OF CONSULTING ENGINEERS

At the October 27th meeting, principals of nineteen prominent Metropolitan Boston Electrical, Civil, Mechanical and Structural Consulting Engineers established the Massachusetts Association of Consulting Engineers.

The basic purpose of the Association will be to advance the value of the Consulting Engineer to the public.

(Continued on next page)

Hugh P. Duffill of Duffill Associates, Paul Norton of Nichols, Norton and Zaldastani, C. D. Bratiotis of Hayden, Hardin & Buchanan and J. F. Maguire Jr. of Stressenger, Adams, Maguire & Reidy have been elected temporary Chairman, Vice Chairman, Treasurer and Secretary.

Mr. Duffill has been authorized to attend the Semi-Annual Board of Directors Meeting of the Consulting Engineers Council to be held in Cincinnati on November 6, 7, and 8 as an observer.

Membership will be limited to Registered Engineers in Massachusetts who are principals of consulting engineering firms engaged principally in the independent practice of Professional Consulting Engineering. Interested parties may contact Francis J. Linehan Jr., 6 Beacon Street, Boston 8, Mass. for membership information.

RECENT PURCHASE

An 850,000 square foot site on Route 9, Natick, Massachusetts was purchased recently by Atlantic Development Company of Boston from Cerel-Perini Associates, Inc., for the establishment of a new shopping center.

Announcement was also made that Zayre's Department Store and an Elm Farm Food Center have already leased space in the new Sherwood Plaza at Natick, and that a variety of other stores are in the process of being signed.

The new center, strategically located on Route 9, has been designed by Architects, Samuel Glazer and Associates to incorporate the vital elements that provide a convenient one-stop shopping center for today's homemaker. Ample parking facilities will be provided in front of each unit; broad covered sidewalks will shield the shopper from inclement weather, and all stores will be air-conditioned for summer comfort.

The Lilly Construction Company, builders of the new Sherwood Plaza, revealed that construction will begin immediately, and that the entire project will be completed by April of 1960.

FOLLANSBEE'S FIRST ISSUE

The first issue of "Now & Then", a "topical miscellany" for architects and builders, is currently being forwarded to top architects and builders throughout the country.

Prepared by Follansbee Steel Corporation, producers of Seamless Terne Roofing, "Now & Then" is designed to act as a digest of news and notes about the architectural and building professions and will appear approximately four times throughout the year.

Edited by Owen Young Kinnard, Director of Marketing for Follansbee, the first issue features a review of "Time Magazine's" recent poll of "The Seven Wonders of American Architecture" in comparison with similar polls of 1948 and 1931.

BLANCHARD ELECTED PRESIDENT OF A.I.M.

Raymond H. Blanchard of Melrose, president of the B.F.Goodrich Footwear and Flooring Company (formerly Hood Rubber Company), Watertown, Mass., was installed as the 24th president of the Associated Industries of Massachusetts at the 44th annual meeting of that organization at the Statler Hilton Hotel, last month.

Mr. Blanchard succeeds Robert W. Stoddard, president of the Wyman-Gordon Company of Worcester, as the head of the A.I.M. Mr. Stoddard turned over the gavel to Mr. Blanchard in a traditional ceremony at the big anniversary banquet in the Statler Hilton Imperial Ballroom.

The election of Mr. Blanchard was one of the highlights of the 44th annual A.I.M. meeting attended by approximately 2,000 industrial leaders from all sections of the Commonwealth and addressed by speakers of national prominence.

One of the most noted industrial figures in the Commonwealth, Raymond H. Blanchard, newly-elected president of the Associated Industries of Massachusetts, has been the president of the B.F.Goodrich Footwear and Flooring Co. for the past nine years.

MARRIED

Jacek von Henneberg, popular architect and city planning expert was married to the former Sara Sherman Mitchell in a ceremony at Greenwich, Connecticut, on the twenty-fourth of October, 1959. Mr. von Henneberg is a member of the firm of Henneberg and Henneberg, with offices in Cambridge, Massachusetts.

SMITHCRAFT INAUGURATES SHUTTLE SERVICE

Smithcraft Lighting of Chelsea, Massachusetts, recently announced the start of a weekly trucking service between the main plant in Chelsea and Smithcraft's new assembly plant, located at 5475 North Northwest Highway, Chicago, Illinois. The trucking service will take components from Chelsea to Chicago for assembly and will return with component parts manufactured by Midwestern suppliers for assembly at the main Chelsea plant.

Shown beside Smithcraft's impressive overland trailer-truck are, left to right, Parke Hoyt, Manager of Manufacturing of Smithcraft Lighting; Thomas J. Kerrins, Manager of Smithcraft's Chicago Assembly Plant; and Louis E. Newman, President of Smithcraft Corporation.

WORKERS' WAGE SCALE IS RISING

Higher wage scales were earned by two out of every three construction workers the second quarter of 1959, the Bureau of Labor Statistics reports. Its figures are based on a survey of seven major building trades in 100 cities.

Rates advanced for 79 per cent of the carpenters, 75 per cent of the brick layers, 73 per cent of the building laborers, and from 38 to 67 per cent of the workers in each of other trades surveyed.

Numerous spring and early summer contract re-openings are reflected in wage increases during the quarter, raising the average hourly scale 9.9 cents.

Gains for individual trades varied from 11.9 cents for carpenters to 4.2 cents for painters.

The average union rate for all building tradeworkers was put at $3.50 an hour on July 1.

NORTON INTERNATIONAL

The corporate name of Norton Behr-Manning Overseas Inc. has been changed to Norton International Inc., according to announcement by A. Donald Kelso, President.

The corporation itself has not been changed in any way. It will continue to operate the firm's 16 plants in 10 countries and to handle export sales of products made by Norton Company of Worcester, Massachusetts, and its Behr-Manning Division at Troy, New York.

NORTON and BEHR-MANNING products include abrasives, grinding wheels, coated abrasives, precision machine tools, high temperature refractory products, pressure sensitive tapes, wear-resistant products, and pulpstones.

Manpower Galore

It is estimated that for every home constructed in the U.S., one man-year is required on-site in actual construction. Another man-year is needed off-site in factories producing bricks, lumber, steel, cement, electrical equipment, furniture and many other products.

UNIT STRUCTURES

Donald O. Barth has been named Manager of Electronic Computing for Unit Structures, Inc., Peshtigo, Wisconsin, according to an announcement by Unit President Max Hanisch, Jr.

In his new position, Barth will be in charge of a new department recently established, following installation of a modern electronic computer unit at the Company's general offices at Peshtigo.

Barth formerly was Assistant Chief Engineer for Unit Structures. Prior to joining the Company, he was employed as a structural engineer by the Wisconsin Bureau of Engineering.

He is a graduate of the University of Wisconsin, where he received a B.S. Degree in civil engineering in 1950 and a Masters Degree in structural engineering in 1951.

Barth is a registered professional engineer and a member of the National Society of Professional Engineers and the American Society of Civil Engineers.

First of a Three-Part Series

GENERAL CONTRACTING.. the Atlas in the Nation's Economy

by Joel Leighton
Managing Director,
Associated General Contractors
of Massachusetts

Other American enterprises — General Motors, U. S. Steel, American Telephone & Telegraph, for instance — may sound bigger, but the Atlas in the nation's economy is the general contracting business.

At last count, the U. S. Department of Commerce placed the number of firms engaged in construction activity at 500,000. They employ 3,000,000 men directly, have the biggest total weekly payroll in the country, and create work for millions of others in industries that supply the machines, material and tools for the construction industry.

Like the garment and textile industries in the soft goods field, it is an industry of many relatively small units.

Federal and state governments have, at various times, established minimum safety standards, minimum wage standards, bidding procedures, licensing and bonding requirements.

But for the most part, general contractors have been regulating themselves since the end of World War I when 97 of them gathered in Chicago and established an organization devoted equally to their own interests and the public's. Since then the Associated General Contractors of America, Inc. has grown to a vigorous national association of 7500 of the nation's leading general contractors under whose management and care 80% of the nation's highway, heavy and building projects, exclusive of home building, are constructed. The 126 chapters of the national association are located in every one of our 50 states.

This spring, the self-governing Massachusetts chapter observes its 25th Anniversary. The 114 members of the Associated General Contractors of Massachusetts are awarded approximately 75% of the state's building construction contracts which this year will reach about $300,000,000.

They do it with know-how and strict adherence to the national association's credo — "Skill, Integrity, Responsibility".

The AGC was founded, as its first president stated it, so that the general contractor could serve his own legitimate ends, open the gates for greater prosperity, benefit the country in normal times and serve it royally in emergencies.

The AGC's code of ethical conduct is based on the realization that the construction industry has a vital bearing on the well-being, comfort and safety of the general public. The responsibility of AGC members is to seek constantly for improvement in construction methods, management and service; to eliminate uneconomical and improper practices and to foster honor and trust throughout the industry.

To qualify for membership in the Associated General Contractors of Massachusetts, an applicant must have at least two years of experience in general contracting, the technical and practical know-how to enable him to fulfill his contracts with precision and economy, the cash, credit, equipment and manpower to meet all his commitments.

Above all, he is enjoined to "comply with the spirit as well as the letter of his contracts".

Unless a general contractor has all these attributes, we don't feel he can live up to our motto — Skill, Integrity, Responsibility.

The popular conception of a general contractor is a man in a battered hat and baggy pants — operating out of a telephone booth and making his calculations on the back of an old invoice or crumpled envelope.

That image may have been a true one only a few decades ago — because the backbone of the general contracting industry was formed by men who were originally master craftsmen, masons, carpenters or even laborers with a determination to better the lot of their family in the best American tradition.

Many of these rugged individualists are still in the construction industry today, but they have leavened their spirit of free enterprise and their practical experience with highly trained engineers and technicians.

Competition for outstanding graduates of civil engineering schools is as keen as it is for contracts.

There is still plenty of room in the industry for rugged individualism — but the Associated General Contractors of Massachusetts have a new name for it. We call it creative management.

It's creative management that enables one general contractor to win a multi-million dollar contract on the strength of a bid that was lowest by only $365.40, as occurred here in Massachusetts recently.

As the Atlas of American industry —carrying the nation's economic health and public welfare on its shoulders — the construction business has imposed upon itself a professional status operating creatively within the firm AGC framework of "Skill, Integrity, Responsibility".

You can see how Nuclear Metals, Inc. put an end to drainline troubles

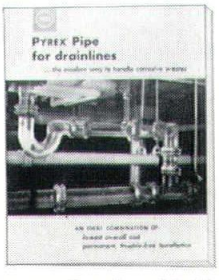
No more undetected clog-ups. No more corrosion. No more patchwork maintenance. No more *leaks.*

That's the story at Nuclear Metals, Inc., Concord, Mass., since they installed an extensive drainline system of PYREX® pipe.

This is the pipe you can *see into;* so, you can spot clog-ups before they cause trouble. But that's just the beginning—there's *no leakage* at the joint because of the positive compression seal—no pocket for corrosive wastes to sit in—both pipe and gasket are corrosion resistant. And because glass is *smooth* you seldom have to worry about buildup inside the pipe.

You can forget about *corrosion* because this pipe is made from PYREX brand glass No. 7740. This is the glass developed originally for lab use. It stands up to most acids and alkalies; it's unaffected by live steam. It's seldom affected by jolting temperature differentials.

Result? Very easy to clean. Very little need for replacement. No more patchwork maintenance. No more drainline troubles at all!



Get all the facts today. Send for PE-30, "PYREX® Pipe for drainlines." Write to Corning Glass Works, 18 Crystal Street, Corning, N. Y.

PROCESS EQUIPMENT COMPANY

MACALASTER BICKNELL COMPANY

243 Broadway
CAMBRIDGE, MASS.
KIrkland 7-6933

3 Eudora Street
PROVIDENCE, R. I.
DExter 1-7380

ENterprise 6400

SELECTED

Two of the East's leading metal firms have been selected as jobbers for Aluminum Company of America's complete line of industrial building products.

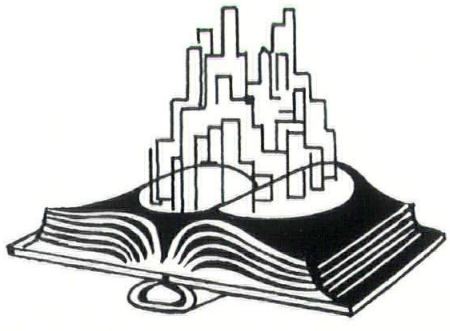
Under their new appointments, New England Erecting Co., Cochituate (Wayland), Mass., and Edgcomb Steel of New England, Nashua, N. H., will handle sales of aluminum corrugated sheet, V-Beam roofing and siding, ribbed siding, and various accessory items for industrial construction throughout the New England area.

Aluminum applications in industrial buildings have grown rapidly since World War II due to ease of application, low maintenance requirements, and competitive costs. With the trend toward aesthetics in this type construction, the light metal will play an even bigger role in the future, according to Alcoa.

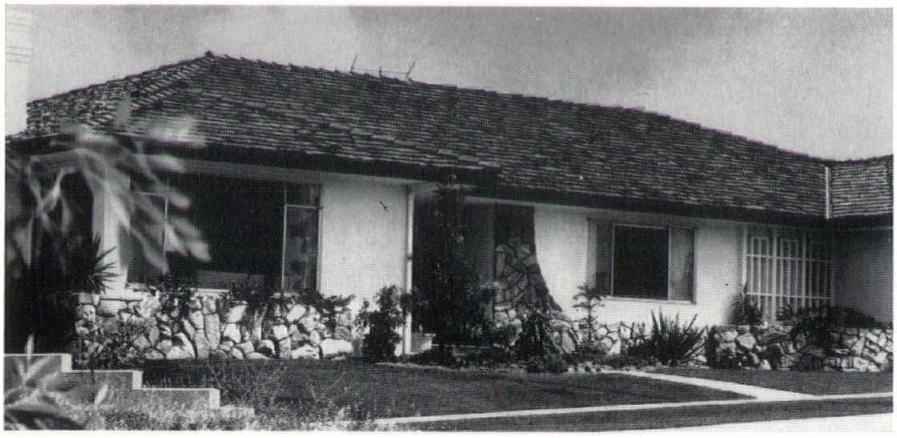
To increase aluminum's importance in outstanding industrial projects, Alcoa recently announced the development of Alumalure Colors, a line of 11 new low-cost sparkling finishes. The color tones, many of them containing aluminum pigments for added luster, will be available on aluminum products to be supplied by the two firms.

Edgcomb Steel is the largest aluminum distributor in the area, although they started business only eight years ago. In addition to handling the new industrial building products, Edgcomb also distributes a complete line of Alcoa architectural aluminum stock items, including such products as angles, structural plate, extruded shapes and specialty items.

New England Erecting Company, a metals contractor, has been in business for 14 years. It has been associated with such projects as the St. Lawrence Seaway, a new terminal for Trans American Freight Lines, Inc., and the modern, aluminum-clad warehouse for John H. Pray & Co.



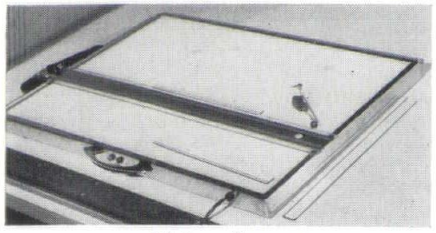
New Products



Superior Column Co. of Chelsea, Mass. is pleased to announce that they have been appointed New England Distributor of Featherock — the lightweight garden stone weighing 1/8 the weight of regular stone, and Featherock Veneer — for lightweight Masonry. This unusual NATURAL rock has unlimited uses — for the most unique rock gardens — both inside and outside! Create your own cascade effects as Featherock is easily adapted to water installation . . . Small boulders for TV Planters . . . Veneer of Wall Facing at lower cost and more realistic stonework! Color Range from light grey to charcoal to harmonize with any color scheme . . . Can be placed in 25% of time required for conventional stone . . . as it weighs only 1/8 the weight of stone, etc.! Cellular lava foam composition simulates many other types and textures! The only answer to problem of size and space without expensive preparation for support! Works easily with light chisels, abrasive bits, or SAWS! Will support plant culture for more natural effects! Easily Sculptured for the most unusual individual designs. Now in New England Stock.

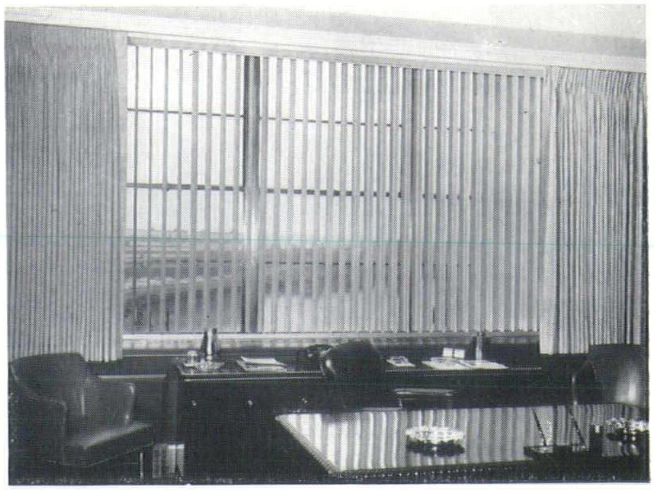
PORTA-TRACE UNIT

The conventional T-Square and far-end locking arrangement have left much to be desired. Now we have



an answer which solves the problem 100%. As seen in the photo, a heavy-duty aluminum channel extrusion has been screwed to the top and left side of a standard Porta-Trace unit. A "Cam Lock" professional-quality T-Square slides freely in this channel but locks tight at the turn of a knob, to facilitate lettering and scribing. The T-Square can be used horizontally or vertically with the arrangement shown; and as an added feature, the T-Square and channel are accurately calibrated to 1/16 inch for accurate line ruling or form layout.

FLEXALUM WIDE LOUVERS

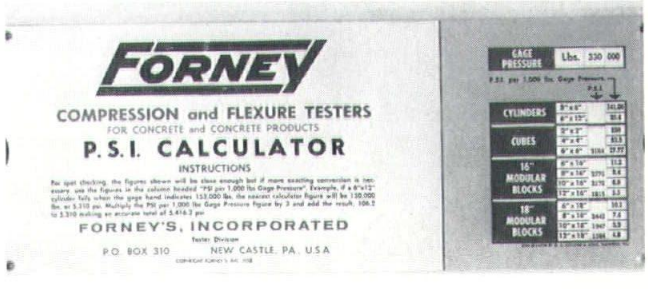


Stylish and practical wide louvers of aluminum for vertical blinds were introduced by the Hunter Douglas Division of Bridgeport Brass Co. These aluminum louvers have been designed to fit the mechanism of existing vertical blind hardware in that they tilt like a venetian and draw like a drapery.

Flexalum wide louvers are made of a special aluminum alloy and formed to a modified M-shape. They come in 4¾ and 6¾″ widths. Hunter Douglas engineers point out that with the growing use of curtain wall construction and large window areas, effective heat, light, glare and privacy control has become increasingly important. Wide louvered verticals of aluminum have excellent reflective properties to reduce solar radiation, they effectively control glare and light and they provide ventilation and privacy at the same time.

The modified M-shape of Flexalum louvers gives vertical blinds a smart tailored look and insures perfect closure from top to bottom. Additional shapes are in the development stage. The development of Flexalum wide louvers was a direct result of prodding by architects who felt that existing materials lacked durability. *Bridgeport Brass Company, Hunter Douglas Division, 405 Lexington Avenue, New York 17, N. Y.*

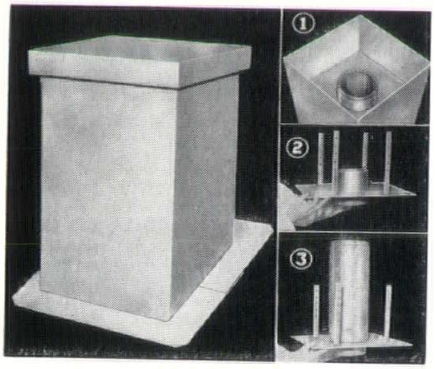
NEW POCKET SIZE PSI CALCULATOR



Engineers, contractors, inspectors, and producers of concrete and cement products will find a most useful instrument in the completely revised Forney calculator for instantly converting applied load into psi on a wide variety of cubes, cylinders, and masonry units. *Mailed FREE to requests on company letterhead. Forney's Incorporated, Tester Division, P. O. Box 310, New Castle, Pa.*

NEW VITROLINER CHIMNEY

Condensation Engineering Corporation is now manufacturing a housing and support for use on gas fired Type "B" vents.



This 19" square, .025 gauge aluminum housing is designed to give a more massive appearance to Type "B" vents. It is available in a neutral gray finish, as well as a brick design in red, buff or white color. It is shipped knocked down so that it can be cut to fit any roof pitch. It is available in 2' 0" to 5' 0" heights in six inch increments.

The support is designed to be installed flush against the ceiling.

The three small photos show:

1. The interior of the housing with Type "B" vent projecting through baffle.
2. The support and adapter for use on 5", 6" and 7" diameter Type "B" flues.
3. Type "B" vent installed in position on the support and adapter.

For further information, write the manufacturer, Condensation Engineering Corporation, 3511 West Potomac Avenue, Chicago 51, Illinois.

For further information, write the manufacturer, Condensation Engineering Corporation, 3511 West Potomac Avenue, Chicago 51, Illinois.

REFRIGERATION AND AIR-CONDITIONING CATALOG

A complete line of products for air-conditioning and refrigeration work is fully described in a new 40-page catalog now available from The Imperial Brass Manufacturing Company, Chicago, Ill.

Catalog No. 82 covers many of the tools and supplies you need for most repair, maintenance or installation jobs.

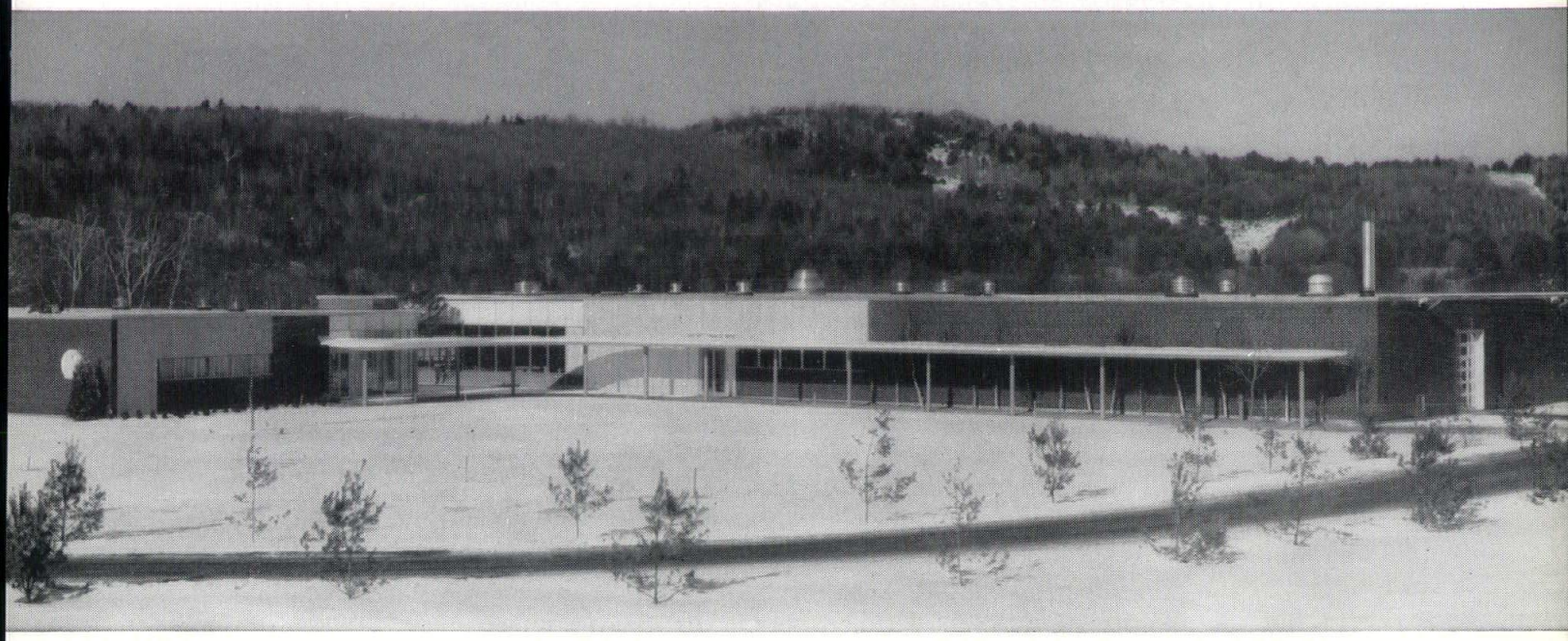
There are full details on Imperial's Freon hose and reusable couplings, "Torpedo Driers" and Imperial "Make-Up" lines which enable you to make your own charging lines quickly to any length you need. Also provides a concise easy-to-follow explanation of recommended use of Imperial Charging and Testing Units.

This is uniquely indexed on the front cover, allowing you to locate items you want quickly. 8½ x 11 inches. Punched for Kalamazoo Binder. Order today from The Imperial Brass Manufacturing Company, 6300 West Howard Street, Chicago 48, Illinois.

Order today from The Imperial Brass Manufacturing Company, 6300 West Howard Street, Chicago 48, Illinois.

"TOP TEN" New England plant uses distinctive Natco clay brick

Appearance of building and grounds was one of the important selecting factors in the "top ten" competition.



Decorative and durable Natco black velour brick gives the Split Ballbearing plant in Lebanon, N.H., distinctive design. This plant (Division of Miniature Precision Bearings, Inc.) was designed by Carl Koelb & Associates, Architect, Weston, Mass.

Split Ballbearing's new plant in Lebanon, New Hampshire, was recently named one of the "top ten" plants constructed in the United States during 1958. Chosen by Factory Magazine, selection was based on beauty and utility. These qualities were needed in competing against more than 700 entrants.

One of the main considerations was the appearance of the plant exterior. Natco Ceramic Glaze Velour Brick was used on the outside wall construction. Versatile black velour brick serves a dual purpose. First, it is distinct in design . . . modern now *and* in the future. Second, it is durable . . . will help solve outside maintenance problems.

Velour brick is furnished in nine attractive colors, plus black and white. It is available in standard brick sizes and conforms to ASTM specifications. For more information, write for Circular CB-20.

Beauty and utility . . . Natco velour brick has them both

natco corporation

GENERAL OFFICES: 327 Fifth Avenue, Pittsburgh 22, Pennsylvania . . . Branch Offices: Boston • Chicago • Detroit • Houston • New York • Philadelphia • Pittsburgh • Syracuse Birmingham, Alabama • Brazil, Indiana...IN CANADA: Natco Clay Products Limited, Toronto

THE ELECTRONIC LANGUAGE TEACHING LAB

(Continued from page 21)

Technical Characteristics. "Will the equipment perform its functions at an adequate quality level, day in and day out, with a minimum of adjustment, maintenance, down-time, and repair?"

Durability is particularly important in the language laboratory, where equipment undergoes long hours of operation and abuse from inexperienced operators. Switches and controls are particularly vulnerable points, and should be rugged — of commercial quality, if possible — with definite stopping points and free action between. The tape mechanism should be able to withstand considerably greater abuse than that given by the average hi-fidelity enthusiast.

The system quality level should fall between that accepted for normal home radio listening and hi-fidelity requirements. A frequency response of 150 to 7,000 cycles is adequate, while distortion and signal-to-noise ratio should be about 1½ to 2 per cent and 50 db, respectively. Technical specifications must be obtained for the laboratory system as a whole, rather than for individual units, since quality tends to fall off as signals are fed through successive electronic components.

While the laboratory electronic system is of the utmost importance, it can only function effectively if the student units are housed in appropriate booths and located in a properly designed room. The booth functions to house and protect the equipment, provide a reading and writing surface, isolate each student from distractions occurring in the rest of the laboratory, and deaden his voice for proper microphone pickup. Its inner walls should be treated with an efficient sound absorbent material — though a compromise may have to be made if forward vision is necessary. Finally, the booth's structural material must absorb energy given it by the vibration of recorder motors, and kicks and blows from the students — mechanical transmissions to microphones, delicate amplifier tubes, and adjacent student locations must be avoided. Wooden booths are preferable to metal since sheet metal readily transmits energy. If convertible or folding booths are desired, care should be taken to see that they are solidly constructed.

Whether converted from other applications or designed as part of a new project, the language laboratory room should be isolated from outside sources of noise, such as emanate from traffic, playgrounds, main corridors, gymnasiums, and cafeterias. Inside, floors should be quiet and motors and fans avoided. Heavy doors and double windows are desirable. Special precautions are necessary since seemingly innocuous background noise levels will prove distracting when picked up by a microphone and amplified — especially when a student is concentrating attention on his auditory senses.

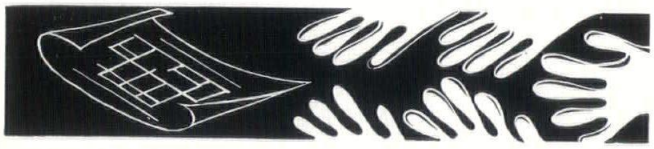
Internal acoustical treatment is less important than an initial exclusion of noise sources. The use of acoustical tiles on the ceiling and Venetian blinds to break up flat window areas will often suffice, since a good deal of internally generated energy will be absorbed by the booths themselves. Drapes or off-parallel walls are not necessary unless the use of loudspeakers for audio-visual activities drastically increases the acoustical power level.

(Continued on next page)

LANGUAGE LABORATORY

Booths can be arranged to face the central console, with aisles located to minimize the number of steps necessary to visit each in turn. Chairs are usually movable rather than attached to booth or floor, since the operation of the tape mechanism and microphone requires good individual positioning. Fluorescent lighting will not interfere with well designed audio equipment and may be used if desired. Low tension wiring to booths should be run in duct rather than conduit where possible, to allow for future expansion or equipment alterations.

Finally the number of booth locations required for any installation will depend upon the number of students enrolled in modern language courses at the school, the number of hours a student is to use the laboratory each week, the teaching system employed, and available funds. For a modern language enrollment of 600 and one-half hour of student exposure per week (the minimum recommended), one authority puts the booth requirement at 37 for class exercises and 23 for individual (library) practice — the figures including a 15 per cent allowance for unscheduled remedial and make-up work and machine down-time. A rough budget estimate for a completed laboratory of the most modern design, exclusive of chairs and room construction or conversion costs, is four to five hundred dollars per student position.



THE UNIVERSITY OF CHICAGO LAW SCHOOL CENTER

The new University of Chicago Law School center, at 1121 East 60th Street, is the latest addition to the "cultural mile" on the Midway Plaisance on the University of Chicago campus. Dedicated October 5, 1959, the four buildings were designed by Eero Saarinen. Construction cost $4,100,000. On the left, the dodecagonal courtroom-auditorium building was designed for actual courtroom trials as well as educational and civic occasions. The next structure, emphasizing horizontal lines, is a classroom-seminar building with a broad corridor designed to encourage the continuation of discussions begun in class sessions. The Library-Office Building, a six-story unit, dominates the group, emphasizing the dependence of the law on the written word. At the far right, a two-level administration building is connected to the existing dormitories where law students will live. A broad court and reflecting pool unify the group of buildings.

HOME BUILDING TRENDS IN THE SIXTIES

Harold Boeschenstein
President
Owens-Corning Fiberglas Corporation

Excerpts from a speech delivered by Harold Boeschenstein, president, Owens-Corning Fiberglas Corporation, via closed-circuit telecast to audience of home builders, decorators, bankers and housing industry officials in the Somerset Hotel, Boston, and Statler-Hilton, Hartford, at 4:00 p.m. Monday, Nov. 16, 1959.

We have before us in the 1960's, a market opportunity greater than any we have yet realized. To understand this, we need only consider the success of the automobile industry in recent years. Long ago that industry recognized that the first-time car buyer was not the key factor in the market. Today no matter what kind of a car a man is driving, the automobile manufacturers seek to market a new car that will interest him in a trade. They have accomplished this by incorporating into their products more quality, more value, new design principles, new equipment, new ideas, as well as new financing methods and an extensive system for marketing trade-ins.

We in the housing industry must recognize the ever-changing wants and aspirations of most people for better homes. We must also develop a system of financing which will facilitate this growth. And we must develop a system of handling used homes in a way as efficient as the one the motor industry has devised to handle its second hand products.

The degree to which we accomplish things will measure the level and continuities of consumer demand.

What are other trends which we must recognize and embody in the homes we offer? What are the automatic transmissions, the power steering, the new silhouettes in *our* industry? There are many, of course, but our surveys indicate five major housing trends:

CLIMATE CONTROL

Air conditioning has been regarded as a luxury by both consumers and by our industry. That notion is passing. The fact is that full-time air conditioning actually produces dollars-and-cents operating savings in most climates in the U. S. and these more than pay their way in the early years of home ownership.

The benefits to health and comfort are already known to most people. Equipment and methods for year-round weather conditioning are available today. By the end of the 1960's, full climate control can be a basic element of new housing throughout most of our country.

LAND UTILIZATION

The limited supply of well-located land presents us with another basic trend: better utilization of land. We have already seen this manifested in the great increase in apartments in the suburbs, and we see it in the increasing concern for better layout and better orientation of homes on the land.

As the land per home becomes less we must give the consumer a better layout, the opportunity to improve the usable space he has and to enjoy the benefits of indoor living.

SOUND CONDITIONING

With homes built closer together and more open and spacious in interior design, we will see a marked trend toward sound conditioning.

Today most of us expect as necessary the acoustical treatment of new public, commercial, and industrial buildings. Soon sound conditioning can become an accepted fact in home building. It is an opportunity to demonstrate to the home prospect the benefits to him and her in privacy and peace afforded by sound conditioning in the home.

MAINTENANCE

Our era of practically full employment has made household help a scarce luxury which few can find even if they can afford it. The number of women, employed full or part-time, has also greatly increased. This has accelerated and emphasized the trend toward convenience and ease of maintenance. So our homes of the 60's must offer materials, surfaces, and labor-saving appliances and equipment which afford maximum convenience and minimum attention.

PREFABRICATION

These quality homes must be offered at prices that will move them. We all know that first cost is always important. Without consideration of this, we run the risk of pricing ourselves out of the market — so we must concentrate on such developments as prefabrication, component building, and other methods that move a larger part of construction from the site to the factory or assembly center. Only by such means can we hope to reduce total labor costs in the face of rising hourly labor rates. Homes buyers are becoming more sophisticated, so to justify first costs we must be able to demonstrate living and maintenance economies once the first cost has been met.

We must be able to prove that our homes in the sixties require relatively less power, less fuel, and less servicing for the comfort and convenience they afford and less replacement, more durability and, therefore, more value now and in the long run. Owens-Corning Fiberglas recognizes these trends and is dedicated to meeting these challenges with our present products and with those we seek to develop for future homes.

DEATH CLAIMS NOTED MANUFACTURER

Napoleon M. Bernier, 65, died early Sunday morning, November 22, at Mount Auburn Hospital. A long time resident of Belmont, Mass., Mr. Bernier was Founder and President of California Stucco Products of New England, Inc. (now California Products Corporation) of Cambridge. He was also Vice-President and Director of the Vermiculite Association, Inc. with Headquarters in New York.

New Literature Available

MACOMBER OFFERS DESIGN MANUAL FOR ALLSPAN OPEN WEB FRAMING

Design information on new Allspan open-web structural steel framing members is available in a 28-page manual MA-59 from Macomber Incorporated, Canton 1, Ohio.

The booklet gives complete dimensions and properties of the new Allspans, which have a design stress 25 per cent higher than conventional open-web structurals and a safety factor 12 per cent higher. Available for spans up to 120 feet, short, intermediate and long span framing members can for the first time be chosen from a single table of allowable loads. All sizes are made with cold rollformed V-section chords, and both top and bottom chords are nailable.

In addition to comprehensive tables of dimensions, properties, and allowable loads, the booklet illustrates general construction details for all sizes of Macomber Allspans. Instructions for determining the correct size required for combined uniform and concentrated loads are included. A beam deflection formula permits calculation of deflection under uniform loads, which under usual live load conditions do not exceed 1/360 of the span.

Recommended bridging is detailed, as are methods of combining the new Allspans with the company's line of trusses and steel decking. Architect's specifications are suggested.

HOMEOWNERS' GUIDE TO BETTER SEWER SERVICE

Do you know where a contractor installs your house-to-sewer connection? After it is installed, should you have the interior pipes cleaned? Will your lawn be damaged?

These are representative of 50 basic questions — with answers — contained in a recently published homeowners guide to better sewer service made available as a public service by Johns-Manville.

The booklet states that many homes built in the past, as well as others built today, have private sanitary disposal systems which may be equipped with cesspools or make use of septic tanks. Such disposal systems are a necessity when public or community sewer systems are not available.

"But when your community has installed a sewer system to serve your home and others in the area," the booklet emphasizes, "you should consider connecting your sewer to it as soon as you can."

Though practices and regulations vary in many localities and states, the local contractor, Public Works Department or Sanitary District can offer practical approaches to homeowner house sewer problems as it applies to his specific area.

As a manufacturer of Transite house sewer pipe for sanitary service, the highly illustrated Johns-Manville booklet, "50 Questions and Answers," provides a solid background to make house-to-street connections an easily understood improvement to the homeowner's plumbing system.

Copies of the booklet may be obtained by writing to Johns-Manville general headquarters, 22 East 40th Street, New York 16, N. Y.

SOUTH SHORE PLAZA

Continued from page 9

growth of Greater Boston. It is gratifying to witness the expansion of retail opportunities on the South Shore as part of this area-wide movement."

Filene's, one of Boston's leading major department stores, is the dominant feature of the Plaza, occupying 130,000 square feet of floor space.

In addition to the Filene's branch store, the Plaza has been designed to accommodate over 350,000 square feet of retailing space for approximately 60 shops and service outlets, including various leading chain stores, complemented by local merchants. The main tenants in the Plaza include: John H. Pray, Stop & Shop, S. S. Kresge, Franklin Simon, Kennedy's, Inc., A. S. Beck, Wilbar's and Thayer McNeil. Fanny Farmer, Thomas Long, Brigham's, Inc., Primrose Shop and South Shore National Bank, among others, will be in smaller stores. Special features of the Plaza will be restaurants, snack bars, beauty shops, cleaning service, shoe repair, and travel agency.

South Shore Plaza has been designed by Victor Gruen & Associates in collaboration with Cabot, Cabot & Forbes Associates, Inc., as a mall type center. The specialty and variety stores will cluster around the main department store, Filene's, with a beautifully landscaped central pedestrian mall which will provide the customer with convenient one-level access to all stores. Canopied walks in front of all stores will afford comfortable shopping under all weather conditions. The lower level will contain the service outlets. Parking will be available for 6,000 cars.

Another feature of the Plaza will be an underground truck service tunnel. This delivery concourse eliminates any possibility of congestion with shopping traffic and enables service deliveries to be made to all shops. Incorporated into the design of the Plaza are the latest advances in heating, lighting and air-conditioning.

The strategic location of the Plaza in relation to the surrounding highway network provides rapid and easy access from the southeastern portion of the Boston metropolitan and suburban areas. Wilbur Smith Associates, leading traffic consultants, have studied the area for over two years in order to insure that the Plaza will have convenient entrances and exits from the adjacent high-speed routes, and a controlled flow of traffic throughout the shopping area. In addition to the excellent highway system, the Plaza will be serviced by bus lines.

The center has been planned for its highest use, providing the most pleasant and efficient living, shopping and business surroundings. Full scale construction on the Plaza will proceed as rapidly as possible, to the extent winter weather conditions will permit. It is anticipated that the Plaza will open in the early spring of 1961.

ELECTRONIC DIGITAL COMPUTER INSTALLED

A modern high-speed computing system has been added to the facilities of Unit Structures, Inc., Peshtigo, Wisconsin and Magnolia, Arkansas, according to an announcement by Unit President Max Hanisch.

The heart of the system is an electronic digital computer which performs long and complex arithmetical operations at astonishing speeds. For example, a complete design analysis of some Unit laminated wood member can be obtained in a matter of minutes simply by processing certain "command" data through the machine. Compiling design analyses heretofore has required considerable time on the part of competent engineers working with desk calculator and slide rule.

In addition to providing design analyses in a matter of seconds, the machine simultaneously processes price data, raw material requirements and/or several other factors.

Present plans call for the computer to be used basically for design analysis and price data. However, because it is a general purpose machine, Unit officials already have devised additional ways in which it may be used to speed up customer service.

SCHOOL LIGHTING FOLDER

A new four-page folder, giving information on the Smithcraft line of dependable, economical school lighting fixtures, is now available from Smithcraft Lighting, Chelsea 50, Mass. The folder includes detailed descriptions and illustrations of Smithcraft's "Engineered economy" fixtures, designed specifically to meet present-day high level school lighting standards at substantial savings in initial cost, installation and maintenance.

The new Smithcraft Federal, an attractive fixture that is ideal for classroom and other school lighting areas, is featured in the folder. The new Federal, priced to meet exacting budget requirements, is a quality-constructed unit that provides very high overall lighting efficiency with a minimum of maintenance.

The Smithcraft School Lighting folder is available as an immediate reference guide for architects, engineers, and other school lighting specifiers. For copies, write to: Smithcraft Lighting, Chelsea 50, Massachusetts.

"RESCUE TEAM" SAVES BUILDING; "RIVETS" STRUCTURE TO SUBSOIL

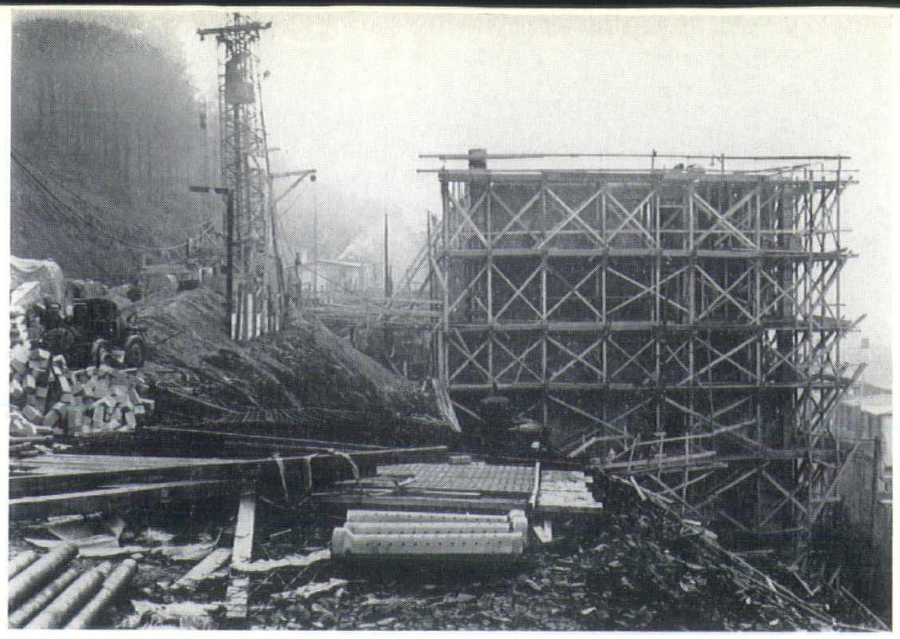
Rock drilling specialists saved the day — and the job — for a Westphalian contractor when a partially-completed eight-story office building began to crack up and slide away from its mountain-side perch here at Altena.

Foundations for the 174 by 44-foot building had been set in a layer of loose ground that failed under the weight of five completed floors. First cracks appeared in the basement and then the building began to move downhill along a layer of hard quartzite underneath it.

Engineers decided the only way to save the structure was to "fix" the loose ground to the solid subsoil, anchoring the entire building down to a firm foundation at the same time.

Setting their own crews to work on the "rescue project," the contractors soon decided their regular equipment was inadequate to cope with the emergency. Faced with the possible loss of their investment in the job if the problem were not swiftly solved, they called in drilling experts.

Emergency workers use heavy-duty Atlas Copco rock drill to punch 20-foot-deep holes down through loose topsoil into subsoil in race against time to save partially-completed eight-story office building at Altena, Germany. Built on a mountainside, the contractors had finished five of the eight stories when cracks showed in the basement and the structure began to move. Approximately 150 iron bars — 1¾-inch diameter — were quickly grouted in cement to "rivet" the topsoil and building to solid subsoil.



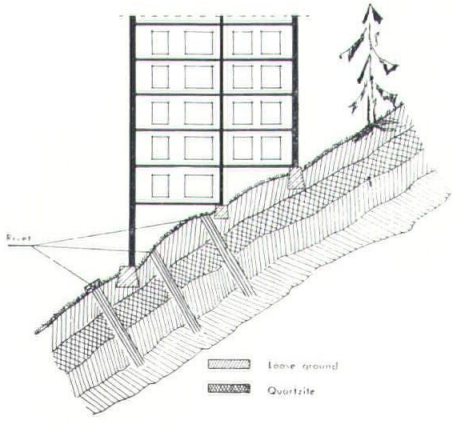
TH' AR SHE GOES — With five floors of a new eight-story building nearly completed, loose ground on a mountain slope at Altena, Germany, gave way and the structure began to slide downhill. Emergency drilling team "riveted" the loose topsoil and the building to solid subsoil with iron bars grouted into 20-foot-deep holes.

This cross-sectional view shows the loose layers of ground above which an eight-story office building was being erected at Altena, Germany, when the structure began to move down the hillside. Emergency teams "riveted" the loose ground — and the building — to the solid subsoil with about 150 1¾-inch-diameter iron bars grouted in 20-foot-deep holes.

Armed with a heavy-duty Atlas Copco "Bison" rock drill, the new emergency team quickly drilled about 150 two-inch-diameter holes 20 feet deep through the basement floor. Then the workers set 1¾-inch-diameter iron bars into cement grout, effectively "riveting" the loose topsoil to the solid rock below.

The workers formed a solid block with every four of the long "rivets," providing a series of firm anchors for the structure above. To complete the job, the drilling specialists linked these "blocks" together with reinforced concrete beams.

Depths of the layers of rock beneath the building were calculated accurately by progressively drilling 20-foot-deep holes with four-foot long-drill steels. The rate of progress of the five lengths of drill steel was accurately timed to establish the exact distance from the surface and depth of strata regarded as sufficiently solid to support the building's "anchors."



Above sketch shows how new office building under construction at Altena, Germany, and loose topsoil on which it was erected was "riveted" to solid subsoil to stop its downhill slide.

PILOT-TOUCH CONTROL

A new master control that turns the job of driving crawler tractors into the simple matter of pushing a single control stick forward, backward, or to the side has been developed by John Deere engineers.

The new single-stick control activates hydraulics to perform the various steps of clutching, braking, steering, and shifting for forward and reverse travel. The new control, called "Pilot-Touch," will be offered as optional equipment on John Deere "440" Industrial Crawlers.

New John Deere "Pilot-Touch" concentrates hydraulic-powered control of all steering, clutching, stopping, and reversing direction of travel into a single control stick. Located within easy reach of the operator's hand, it frees the other hand for full-time control of working equipment. New freedom from driver fatigue and stepped up daily work production are important advantages of this new optional feature engineered for John Deere crawler tractors.

Prior to this time, operation of a crawler has required the coordinated manual operation of two control levers, foot clutching, braking, and either shifting of transmission gears or switching of a direction reverser.

With the new control, the operator merely has to select his speed of travel, then move the control stick. If he pushes it forward and then returns it to the center position, the crawler moves forward. If he pulls it backward and returns it to the center position, the crawler moves backward.

To turn, the operator merely moves the stick to the right or to the left.

Only slight pressure is required on the control stick. Its movement brings the proper hydraulic controls into action to do the actual work of braking, clutching, shifting from forward to reverse and other steering work.

Since the crawler can be operated with one hand, the other hand is freed for full-time control of loaders, bulldozers, or other working equipment being used with the crawler.

In addition to reducing operator fatigue, the simplified operation and ease of control will speed up working cycles and increase working capacity significantly.

FEATHEROCK

Architects and builders, always on the alert for new products with strong consumer appeal, are welcoming a new natural building stone product — Featherock veneer.

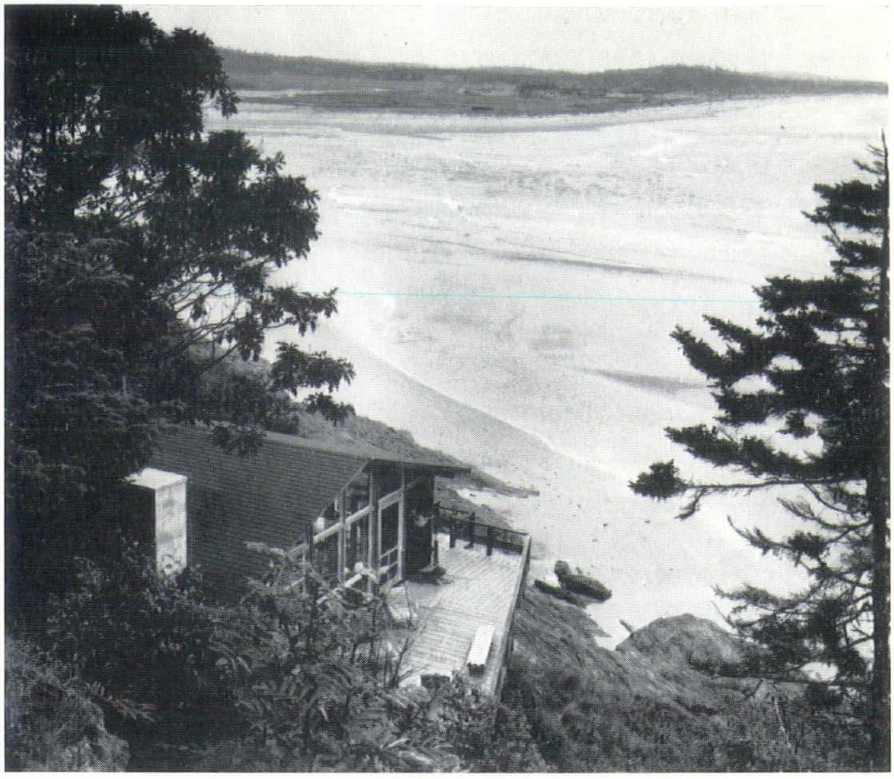
Featherock veneer is a beautiful lighweight lava stone quarried near Mono Lake, California, in the High Sierras. Because of its unusual cellular composition, it weighs one-fifth less than marble, limestone and sandstone. Contractors appreciate its unusual "feather lightness" which reduces the load on a weight-bearing wall, and cuts installation time by one-half.

Because of Featherock's interesting color range from silvery-grey to charcoal, it makes an arresting decorative note for both interior and exterior construction. In its ornamental form, it is ideal for garden landscapings, and waterfall effects. As a façade ornamentation for large commercial buildings, it is strikingly handsome, combined with contrasting or matching mortars.

The veneers range from one to five inches in depth, and from one to twelve inches in width, in handsome shapes. Ornamental featherock for landscaping runs from small to eight-foot massive rocks ideal for waterfall, and other natural effects.

Silver-grey featherock is of small cellular lava foam composition, with a slight abrasive surface. It is chemically neutral, another admirable quality. Charcoal-colored rock has a large cellular lava foam composition, and abrasive surfaces. All featherock bonds well with mortar or approved mastuc, because of its porous volcanic structure.

Among its other admirable features is that it is extremely durable, will withstand freezing, and has a high acoustical and insulation value.



CARL KOCH VACATION COTTAGES

Winterized for Ski Season

A brand new usage for the Techbuilt vacation cottage has been brought to our attention. The three basic cottages named, "The Montauk," "The Riverhead" and "The Saranac" designed by Carl Koch of Cambridge, Mass., can now be used for ski weekends in the winter as well as season-long vacations in the summer.

These prefabricated Techbuilt ski cottages average about 865 square feet of living space, including a living room, dining room, kitchenette, two or three bedrooms and a

CARL KOCH VACATION COTTAGE

Techbuilt Vacation Cottage in Maine has a walk-around deck and a beautiful view of ocean and sky. The living-dining room area is large enough for indoor entertaining.

sleeping loft above the bedrooms to accommodate two additional children.

This is the latest variation on the original prefabricated Techbuilts designed by Koch and first introduced to the country by the Ford Foundation on NBC-TV's program "Excursion" and later on "Omnibus" in 1954. The first vacation cottage was built the following year on Koch's own land in Concord, Mass. — as an experiment for summer living. Utilizing his Techbuilt modular construction technique, the model cottage had colorful panels contrasting with outside walls of douglas fir plywood, a pitched roof and ceiling, a large covered porch for outside living and a front wall of glass designed to add a feeling of spaciousness inside and to provide for a panoramic view of mountains, woods or water.

When opened to the public, the experiment rapidly became a popularly accepted building project.

Cannon Mountain was the site for the first ski cottage built in 1956 on four successive weekends by Techbuilt employees and was used by the group itself throughout the following winter to test the structure's livability under severe New England weather conditions. Closely following the proven results of these tests, the vacationing public accepted this innovation and has since been responsible for the many Techbuilt ski cottages that now dot the famous New England ski resort area.

CONTRACTS AWARDED

This resume was compiled with the cooperation of GAINEY'S CONSTRUCTION NEWSLETTER and represents a total of $57,199,683 in building construction contracts ($100,000 or over) awarded during the month of October, 1959.

MASSACHUSETTS

ARLINGTON — **$586,800**
Housing For The Elderly
Archt: Harold C. Knight Assoc., Boston
Contr: Roberto Constr. Co. Inc., Wakefield

DORCHESTER — **$252,900**
Store & office Bldg., Roche Bldg. Trust
Archt: Wagner Salisbury & Harding, Lynn
Contr: Reznick Constr. Co. Inc., Dorchester

DUXBURY — **$1,116,000**
Jr. & Sr. High School
Archt: Korslund, LeNormand & Quann, Norwood
Contr: Tornebene Bros. Co., Newton

GARDNER — **$179,027**
Chestnut St. Methodist Church
Archt: Edward L. Baker Inc., Leominster
Contr: Francis Piermarochi Inc., Fitchburg

HATFIELD — **$401,217**
Elementary School
Archt: Caolo Assoc., Springfield
Contr: Aquadro & Cerruti Inc., Northampton

LEOMINSTER — **$259,900**
Police Station & Firehouse
Archt: Edward L. Baker, Leominster
Contr: P. Madonia Co., Fitchburg

LOWELL — **$200,000**
First United Baptist Church Addn.
Archt: Arthur Englund, Lowell
Contr: Singleton Constr. Co., Tewksbury

MONSON — **$308,400**
Laundry Bldg. — Mass. Dept. of Health
Archt: Harold C. Knight Assoc., Boston
Contr: Fontaine Bros. Inc., Chicopee Falls

NEEDHAM — **$152,393**
Public Library Addns.
Archt: Kilham, Hopkins, Greeley & Brodie, Boston
Contr: Reid Constr. Co. Inc., Cambridge

NEW BEDFORD — **$252,900**
Motel — 28 Units — David Lipsitt
Archt: Bishop & Hackett, New Bedford
Contr: John H. Fellouris, New Bedford

NORTH ADAMS — **$177,915**
First Congr. Church, Parish House & Stores
Archt: Prentice Bradley, Pittsfield
Contr: George E. Emerson Inc., Pittsfield

NORTH ANDOVER — **$848,000**
Merrimac College — 2 Dormitories
Archt: Clinton F. Goodwin, Haverhill
Contr: Frasca Constr. Co., Lynn

NORTHBRIDGE — **$382,000**
Housing For The Elderly
Archt: Utility Engrg. Inc., Boston
Contr: Concrete Constr. Co., Everett

NORTHAMPTON — **$152,460**
Factory Addn. — Kollmorgen Optical Corp.
Archt: James A. Britton, Greenfield
Contr: Ley Constr. Co., Springfield

NORTON — **$403,500**
Elementary School
Archt: Stoner Assoc., Boston
Contr: Westcott Constr. Co., N. Attleboro

REHOBOTH — **$202,446**
Palmer River Elem. School Addn.
Archt: Harkness & Geddes, Providence, R. I.
Contr: Alfred Veader, Providence, R. I.

ROXBURY — **$1,336,570**
Roxbury Mem'l High School Addns.
Archt: Thomas F. McDonough, Boston
Contr: D. Antonellis Inc., Brighton, Mass.

SOUTHWICK — **$974,000**
High School Addn.
Archt: Aldeman & MacNeish, Springfield
Contr: M. I. O'Conner Inc., Northampton

SPRINGFIELD — **$820,500**
Springfield College — Hall of Fame Bldg.
Archt: Munson, Mallis, Bradley, Peterson & Burgener, Springfield
Contr: A. R. Green & Son Inc., Holyoke

TOWNSEND — **$1,353,335**
No. Middlesex Reg. High School — Townsend & Pepperell
Archt: Kilham, Hopkins, Greeley & Brodie, Boston
Contr: Chicks Constr. Co. Inc., Lancaster

WAVERLY — **$280,000**
McLean Hospital Addn.
Archt: Shepley, Bulfinch, Richardson & Abbott, Boston
Contr: Hew Constr. Co., Boston

WESTFORD — **$364,611**
Elementary School
Archt: Perley F. Gilbert & Assoc., Lowell
Contr: W. W. Granger Constr. Co., Shrewsbury

WESTON — **$424,000**
Rivers Country Day School — Campus & 3 Bldgs.
Archt: Huygens & Chapman, N.Y.C.
Assoc. Archt: Charles H. Cole, Lexington
Contr: Temple & Crane Inc., Boston

WEYMOUTH — **$535,530**
Highway Bldg. & Garage — Town of Weymouth
Archt: Harry Gulesian, Boston
Contr: R. R. Jacobucci Inc., Quincy

(Continued on next page)

WILMINGTON $336,951
Elementary Schoo
Archt: Valtz & Kimberley Inc., Melrose
Contr: Conti & Donahue Inc., Lynn

WINCHENDON $1,084,197
Jr.-Sr. High School
Archt: Perley Gilbert & Assoc., Lowell
Contr: V. A. Cusanello Contr. Inc., Worcester

WINCHESTER $638,000
Elementary School
Archt: Donaldson, Ray McMullin Assoc., Cambridge
Contr: Keystone Constr. Co. Inc., Boston

NEW HAMPSHIRE

KEENE $606,920
Secondary Schools — Addns.
Archt: Alonzo J. Harriman Inc., Auburn, Maine
Contr: Ley Construction Co., Springfield, Mass.

CONNECTICUT

BERLIN $1,000,000
Laurel Restaurant Bldg., c/o Levitt Co. Inc.
Contr: Frechette Bldrs. Inc., Hartford

DANIELSON $530,000
Danielson Federal Savings & Loan Bldg.
Archt: David C. Barker, West Hartford
Contr: Conyers Constr. Co., Manchester, Conn.

GREENWICH $1,000,000
Convent of Sacred Heart School Addn.
Archt: Lyons & Mather, Bridgeport
Contr: E. & F. Constr. Co., Bridgeport

MILFORD $2,724,400
Jonathan Law High School
Archt: Jesse James Hamblin, Bridgeport
Contr: John Zandonella Inc., Bridgeport

NEW CANAAN $1,273,000
St. Mark's Episcopal Church
Archt: Sherwood, Mills & Smith, Stamford
Contr: Franke Mercede & Sons Inc., Stamford

NEW HAVEN $198,300
Fire Station
Archt: Earl P. Carlin, New Haven
Contr: Bomarc Constr. Co., Derby

NEW HAVEN $20-25,000,000 est.
Commercial Block — New Haven Redevelopment Agy.
Archt: John Graham & Co., N.Y.C.
Contr: Gilbane Bldg. Co., Providence, R. I.

NEW HAVEN $285,000
Apartment Bldg. — Ogden Inc., New Haven
Archt: Irving W. Rutherford, Hartford
Contr: Owner Builds

PROSPECT $359,750
Grammar School Bldg.
Archt: Alexander & Nichols, Waterbury
Contr: P. Francini & Co., Derby

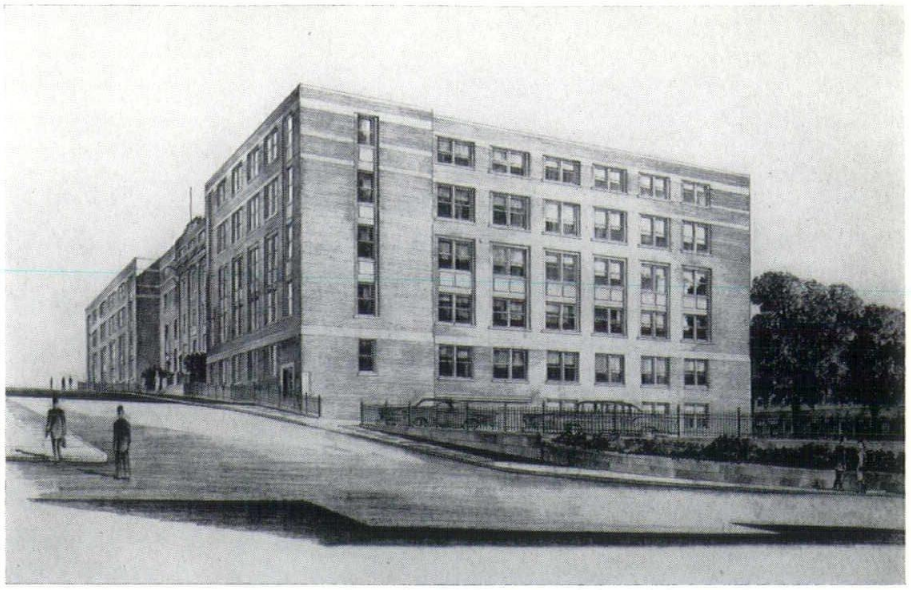
(Continued on next page)

Paul Revere Life Insurance Co. Bldg., Worcester, Mass.

ARCHITECTS, Hoyle, Doran and Berry, Boston, Mass.

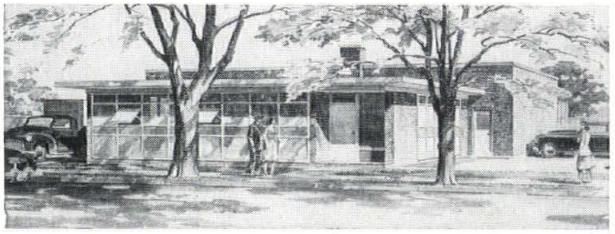
ELECTRICAL ENGINEER, Willard W. Thompson, Boston, Mass.

ELECTRICAL CONTRACTORS, Ostrow Electric Co., Worcester, Mass.



Shown above is the recently completed South Wing of the Paul Revere Life Insurance Company, Worcester, Mass. There is approximately ⅓ of a million dollar electrical installation.

Entire Electrical Installation by Ostrow Electric Company



OSTROW *ELECTRIC COMPANY*

Electric Contractors

9 MASON ST., WORCESTER 9, MASS.

SIMSBURY **$442,877**
Sr. High School Addn. to Jr. High School
Archt: Russell & Gibson, West Hartford
Contr: A. F. Peaslee Inc., Hartford

STAMFORD **$200,000**
Research Lab. & Office Addn. — Amer. Machine & Foundry Co.
Archt: Caproni Assoc., New Haven
Contr: Gellatly Constr. Co., Bridgeport

WATERBURY **$319,000**
Classroom Bldg. — Univ. of Conn., Waterbury Branch
Archt: Alexander & Nichols, Waterbury
Contr: Monaco Constr. Co., Bridgeport

WEST HARTFORD **$215,815**
Covenant Congr. Church & Educational Bldg.
Archt: Kelton C. Painchaud — Carlton B. Ryder, Madison, Conn.
Contr: Bartlett, Brainard & Eacott Co., W. Hartford

RHODE ISLAND

CRANSTON **$200,000**
Warehouse — City Hall Store
Archt: Private plans
Contr: Bowerman Bros. Inc., Providence

NATICK **$263,000**
Sacred Heart School Bldg.
Archt: Oresto DiSaia, Providence
Contr: Molony & Rubien Constr. Co., Providence

(Continued on next page)

NORTH PROVIDENCE — $304,539
Marieville — Stephen Olney Elementary School
Archt: Robinson, Green & Beretta, Providence
Contr: Donatelli Bldg. Co., No. Providence

PORTSMOUTH — $1,750,000
Manufacturing Plant — Raytheon Mfg. Co.
Archt: Charles A. Maguire & Assoc., Providence
Contr: Dimeo Constr. Co., Providence

PROVIDENCE — $250,000
Sales & Service Plant — Mack Trucks Inc.
Archt: Phillip Franklin Eddy, Providence

MAINE

BANGOR — $412,800
Elementary School
Archt: Crowell, Lancaster, Higgins & Webster, Bangor
Contr: Nickerson & O'Day Inc., Brewer

NORTH WINDHAM — $500,000
Dormitory Bldg. — St. Joseph's College
Archt: Alonzo J. Harriman Inc., Auburn
Contr: F. W. Cunningham & Sons, Portland

ORONO — $762,000
Women's Dormitory Bldg. — Univ. of Maine
Archt: Alonzo J. Harriman, Auburn
Contr: C. Profeno Co., Portland

PORTLAND — $106,389
Sales & Service Bldg. — Morong Bros. Inc.
Archt: John Calvin Stevens, Portland
Contr: Casburage Co. Inc., Portland

PORTLAND — $100,000
Factory Bldg. — ADC Bldg. Fund Inc.
Engr: Engineering Services Inc., Portland
Contr: Allied Constr. Co., Portland

VAN BUREN — $496,000
Hospital Bldg. — Van Buren Hospital Distr.
Archt: Kendall, Taylor & Co., Cambridge, Mass.
Contr: Algo Corp., Wakefield, Mass.

WASHINGTON COUNTY (CUTLER) — $2,219,187
HF Radio & Administration Facilities — USA — First Naval Distr.
Engr: Hayden, Harding & Buchanan, Brighton, Mass.
Contr: Franchi Constr. Co., Newton, Mass.

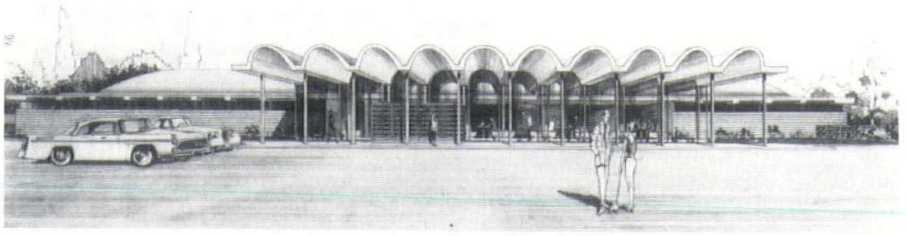
VERMONT

WINOOSKI PARK — $894,900
Student Union Bldg. & Dining Hall — St. Michael's College
Archt: Freeman, French & Freeman, Burlington
Contr: H. P. Cummings Constr. Co., Woodside, N. H.

BURLINGTON — $350,000
Parochial School Addn. — Christ the King Parish
Archt: Julian W. Goodrich, Burlington
Contr: Wright & Morrissey Inc., Burlington

SWANTON — $170,922
Armory, one Unit — U.S.A.
Archt: Webber & Erickson, Rutland
Contr: Reed & Stone, Essex Junction

HOLIDAY LANES—40-LANE BOWLING ALLEY—FIRST OF SIX



Ground will be broken this week for the construction of "Holiday Lanes," a new 40-lane bowling alley to be erected on the Fellsway in Medford, adjacent to the huge new Fellsway Shopping City.

The modern building, first of six similar projects to be started in Greater Boston as part of a multi-million dollar bowling and recreation center program by the Smith Management Company, is expected to be ready for patrons on Washington's Birthday, February 22, 1960. In addition to the 40 lanes equipped with the latest Brunswick-Balke automatic pin-setting equipment, the building will offer patrons a children's nursery area and a pancake style restaurant and snack bar. Bowling will be the popular ten-pin style most familiar to Greater Boston keglers.

General contractors for "Holiday Lanes" is the S & A Allen Construction Company, builders of the Fellsway Shopping City, Logan International Airport Control Tower and Administration Building, Sidney Hill Country Club, the Hayward Place Mechanical Garage and many other multi-million dollar projects throughout New England. The building was designed by the architectural firm of Wm. Riseman and Associates of Boston, with structural engineering by Goldberg-LeMessurier Associates of Boston.

Smith Management Company, which operates a nation-wide chain of theaters, restaurants and recreation centers, is headed by Philip Smith, president, and Richard Smith, treasurer.

"There has been a tremendous resurgence of interest in bowling in recent years, not only as an adult competitive sport, but as a wholesome recreational activity for the entire family," said Holiday Lanes owner, Philip Smith.

"We have on the planning board a facility which meets the family demand for a wholesome, sparkling bright recreation center that will, I am sure, attract patrons from many surrounding communities. "Holiday Lanes" will provide individual and league bowlers with the finest, most modern bowling accommodations in the nation."

ARMSTRONG

Armstrong Cork Company has published a 12-page color booklet explaining how its new fire protective acoustical ceiling tile, Armstrong Acoustical Fire Guard, can save time and money in practically any form of non-residential construction where rated fire protection is required. The booklet will be distributed to all holders of Sweet's Architectural File, as well as to leading architectural colleges and to members of the Construction Specifications Institute.

Acoustical Fire Guard, announced early this year, is the first acoustical tile ceiling to offer rated fire protection to the structural components of a building. It is designed to help check the spread of fire and to protect the floor assembly above from collapse by resisting dangerous transmission of heat through the ceiling. The new product has gained a one, two and four-hour time design rating in official Underwriters' Laboratories tests.

"The major significance of Acoustical Fire Guard," explained E. J. Hodapp, Assistant Manager of Armstrong's Acoustical Department, "is that it eliminates many of the costly, time-consuming delays required to install other means of fire protection. In this booklet, we have attempted to show, through actual case examples, how Acoustical Fire Guard has brought about substantial time and cost savings in construction, or has resulted in lower fire insurance rates on various buildings throughout the country."

The booklet also contains detailed descriptions and drawings of the three different Fire Guard installation systems, Hodapp added.

BUILDING CONSTRUCTION INDUSTRY IS TURNING TO NEW TECHNIQUES

"Lift-Slab" Method Now Widely Used

No industry is changing more rapidly than the nation's largest one — building and construction.

The new "lift-slab" technique of commercial building construction is an example of the type of innovation being used by construction crews.

Here's how it works: Workmen pour the concrete roof and all the floors of buildings up to 17 stories right on the ground. Then they lift these huge slabs into position with hydraulic jacks.

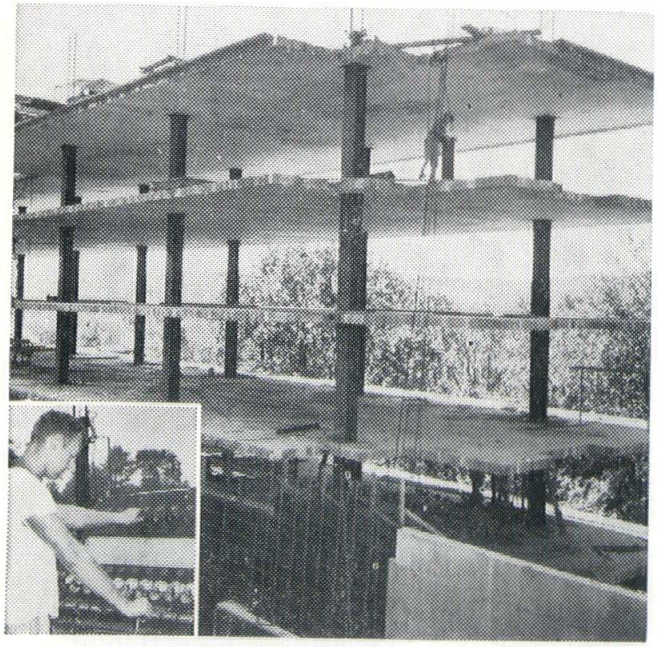
Lifting concrete slabs 17 stories into the air is a tricky business. How, then, do building trades workmen, who've never before seen the technique, learn it?

Shown on Films

One answer is another modern technique: They study films which show and explain the methods used from start to finish.

The United Brotherhood of Carpenters and Joiners of America, whose members make the forms in which the slabs are poured and operate the control panel which runs the precision lifting operation, is contributing to the rapid development of this technique.

The union has just produced a new sound color film on lift-slab construction. Prints are available to its more than 3,000 locals in the U.S. and Canada on request.



Huge slabs are raised into position with hydraulic jacks operated by a control panel

Technique Clear

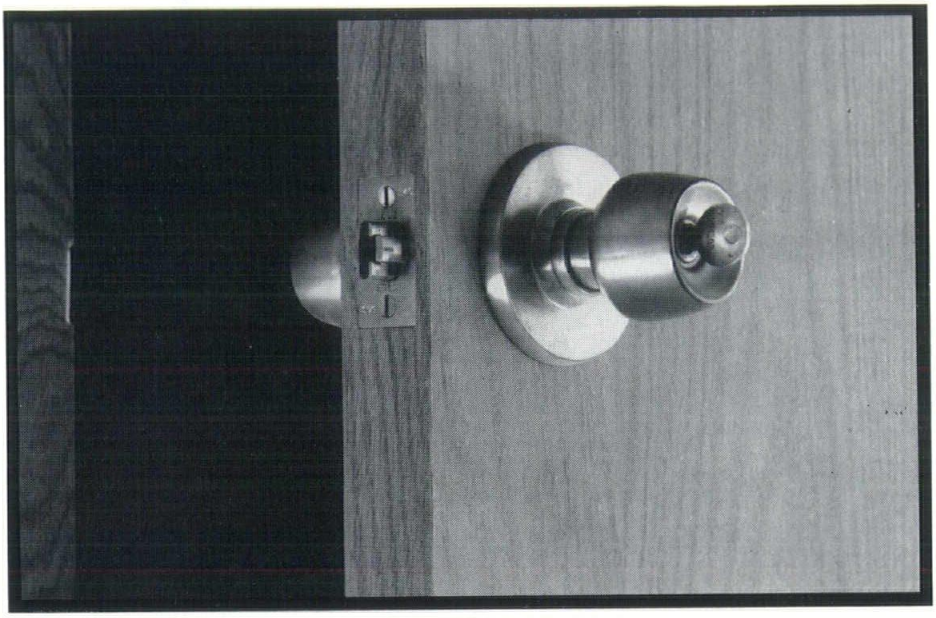
The Brotherhood has other films detailing the latest techniques on subjects ranging from floor laying to putting up acoustical ceilings, erecting bowling alleys, building bridges.

The potential of lift-slab construction is clear to those viewing the film. As a union official points out, every carpenter "would do well to acquaint himself with this type of construction because there is a strong possibility he may come in contact with it before long."

D. H. ESKIN COMPANY

Distributors YALE Hardware

FEATURING YALE 5400 SERIES
HEAVY-DUTY LOCKS IN BRANDYWINE DESIGN



D. H.
ESKIN
CO., INC.
BUILDERS HARDWARE
AND SPECIALTIES

YALE DISTRIBUTORS

1255 TREMONT STREET
BOSTON 26, MASSACHUSETTS
Call: Highlands 2-8700

QUINCY HOSPITAL
QUINCY, MASS.

ARCHITECT:
COLETTI BROS.
BOSTON, MASS.

CONTRACTOR:
JOHN CAPOBIANCO
BOSTON, MASS.

HARDWARE CONSULTANT:
WALLER W. ELLIOTT JR., A.H.C.

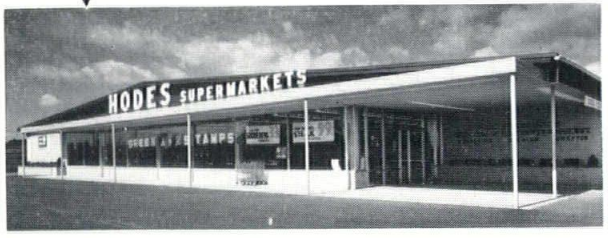
NO forest of Interior Posts and Trusses...

Butler clear - span low - profile construction combines low cost and speedy erection, with nothing to limit layout planning, partitioning, illumination or decoration.

Tel. OLympic 5-0650

BUTLER STEEL PRODUCTS

Above: Weiss Super Market, Oxford, Massachusetts. Lower left: Hodes Super Market, Oxford, Massachusetts



We furnish complete structural steel and aluminum roof systems.

NEW ENGLAND
Erecting Company

321 COMMONWEALTH ROAD — COHITUATE, MASSACHUSETTS

RAPIDS FURNITURE COMPANY OPENS NEWLY DECORATED VALLEY "WORLD OF MODERN" FLOOR

NORMAN FOX MACGREGOR, JR.

Mr. A. B. Fox, President and Founder of Rapids Furniture Company, 90 Canal Street, Boston, Massachusetts today announced the opening for dealers, decorators and architects of the magnificent new air-conditioned, Valley "World of Modern" showroom floor, designed and decorated by Valley Upholstery's world-famous designer, Norman Fox MacGregor, Jr.

A highlight in the decor of the beautiful new Valley floor at Rapids is a modern elevated fireplace with a mantel of pecky cypress.

Covering a 15-foot wall from floor to ceiling is an oriental tree of life in antique gold and sepia blocks. Another wall area is dramatized with a new and interesting drapery treatment in peach and raw silk. The floor is white marbleized rubber tile in 27-inch squares outlined with brass inlay.

The new waiting room is separated from this showroom floor by custom made wrought iron quatrefoil grill work which allows an unobstructed view of the Valley collection. The grill work is finished in antique white and gold crackle.

On display is designed Norman Fox MacGregor's 1960 world of Valley modern, with some nostalgic touches of oriental, Spanish and Mediterranean. Many of the new styles have beautiful show wood frames in genuine solid walnut. Trapunto is optional on all fabrics. Sectionals, for which both MacGregor and Valley are especially famous, are represented in exciting variety; and the Valley showing generally is more diversified and striking than ever.

Norman Fox MacGregor, Jr. is a graduate architect of McGill University. Even while studying, however, his interests were directed primarily toward the interior of the house and the functions of furnishings.

After graduation he spent several years in Montreal doing custom furniture for the various decorators in that city. He later came to New York where his experience was broadened by doing a variety of work, all connected with home furnishings. For a period, he was assistant editor of Scribner's publication "Architecture". He was in charge of interior design for the Walter Dorwin Teague organization until he left in 1940 to join Valley Upholstery Corporation as Valley's chief designer. He has worked ever since (with four years leave of absence in the Navy) toward establishing Valley in its pre-eminent position in the field of modern furniture.

During his years at Valley, Mr. MacGregor has also had the opportunity of designing a considerable number of custom furnished homes and Furniture Showrooms. The Rapids Furniture Company's "World of Modern" floor for the display of his Valley furniture is another example of his skill and artistry.

CONSUMER SERVICE CLASSIFIED

Box Numbers % New England ARCHITECT and BUILDER, illustrated, 215 Stuart St., Boston 16, Mass.

Consumer Classified Advertisements are provided for the readers of New England Architect and Builder, Illustrated as a regular monthly service. Rates: $6.00 per column inch.

Copy will be accepted for all position vacancies, new and used equipment, and business opportunities. Situations wanted are at half rate, minimum $3.00. All notices require payment in advance. Closing date — 10 days prior to publication date. No agency commissions apply.

DON'T SCRATCH...

. . . for extra cash. **BUY** and **SELL** through **LOW COST CLASSIFIED Advertising.**

"**Interior Designer or Architect** to direct interior design organization. Must have contract or commercial experience. Excellent Opportunity." Write Box #1122.

Experienced Estimator Wanted. Salary to commensurate with ability. Reply to G. W. CARPENTER, INC., 63 Alden St., Fall River, Mass.

CONTRACTORS EQUIPMENT. Excess Heavy Construction Equipment; also Building Contractors' Equipment and Tools — FOR SALE. Call FARINA BROTHERS CO., 429 Watertown Street, Newton, Massachusetts, Tel. LA 7-5447.

WANTED TO BUY. All types of building construction and road builders' equipment. Write to Bay State Machinery Co., 739 Boylston Street, Boston, Mass.

LAND FOR DEVELOPMENT

#1 — 41 acres, Holbrook, zoned industrial; #2 — 23 acres, East Bridgewater, zoned residential; #3 — 300 lots, South of Boston, zoned choice residential; #4 — 20,000 ft., Dorchester-Milton Line, main road, zoned commercial; #5 — 30,000 ft., Brookline, zoned for multiple apartments; #6 — 20,000 ft., Brookline, zoned for multiple apartments; #7 — 58 acres, Canton-Randolph, zoned residential, industrial or commercial; #8 — 6½ acres, Cohasset, zoned residential, includes 17-room house.

Reply to Box 11–13 — N.E. Architect & Builder Illustrated — 215 Stuart St., Boston, Mass.

ARCHITECTURAL DRAFTSMAN . . . firm (31 employees) located in Boston suburb has position for experienced man with industrial and school construction background. Send resume. All replies will be held in strict confidence. Write Box #4507.

OPPORTUNITY — SOUND EQUIPMENT SALESMAN

Experienced person to contact architects, engineers and contractors in New England Area. All replies will be held in strictest confidence. Send resume to Mr. Gardner Hanson at DEMAMBRO SOUND EQUIPMENT CO., 1095 Commonwealth Avenue, Boston, Massachusetts.

*SELECTED

Electrical Contractors

ARCHITECTS & ENGINEERS — WM. NELSON JACOBS ASSOC., INC.

***FOR THE ALLERTON HOSPITAL**
BROOKLINE, MASSACHUSETTS

J & J ELECTRICAL COMPANY

ELECTRICAL CONTRACTORS AND ENGINEERS SINCE 1921

338 BELGRADE AVENUE
BOSTON 31, MASS.

FAirview 7-8700

•

MEMBER—NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION

Ultra Smart So Practical

PLIANT WOOD—genuine wood veneer with a fabric backing • ideally suited for executive suites and offices • library and conference rooms.

VIN-L-FAB "22"—indestructible clear vinyl with color and grain fused to the top side • a heavy duty sheet for the toughest wall covering.

Available in custom colors.

VIN-L-FAB—vinyl wall fabric—to give you the ultimate in beauty and service.

JOANNA VINYL—economical wall fabric . . . for carefree . . . costfree decorating.

For estimates and installation
CALL COpley 7-9584

WINSTON C. PORTER
New England Distributor

25 HUNTINGTON AVENUE
BOSTON, MASSACHUSETTS

PLANT CASE HISTORY:

new modern mixing plant at Quincy

Gentlemen;

For reliable on-schedule service, **BOSTON SAND & GRAVEL CO.** operates seven individual concrete plants at the following locations:

CAMBRIDGE plant servicing the City of Cambridge — Boston proper — Somerville — Medford — Arlington

---

SOUTH BOSTON and **ROSLINDALE** plants servicing the City of Boston and towns to the west of Boston, such as the Newtons — Brookline, etc.

CANTON plant servicing Canton — Milton — Stoughton — Brockton — Sharon — and as far west as Route 9 and Route 128.

EAST BOSTON plant servicing the East Boston area, and north to Revere — Chelsea — Malden.

BURLINGTON plant servicing towns in the Burlington area and north to Wilmington, north and west to Billerica — Bedford — Lincoln and general surrounding area.

QUINCY-BRAINTREE plant servicing Quincy — Braintree — Weymouth — Hingham — Hull — Cohasset — Norwell — Rockland — Hanover — Whitman.

BOSTON SAND & GRAVEL COMPANY

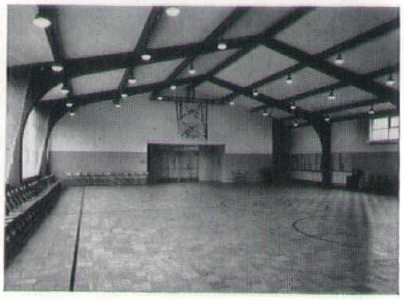
118 FIRST STREET, CAMBRIDGE 41, MASS.

"Why didn't someone tell me the deadline was two days ago?"

NEA&B ADVERTISERS INDEX

AERIAL

SHARP AND
FULLY DETAILED



ARCHITECTURAL

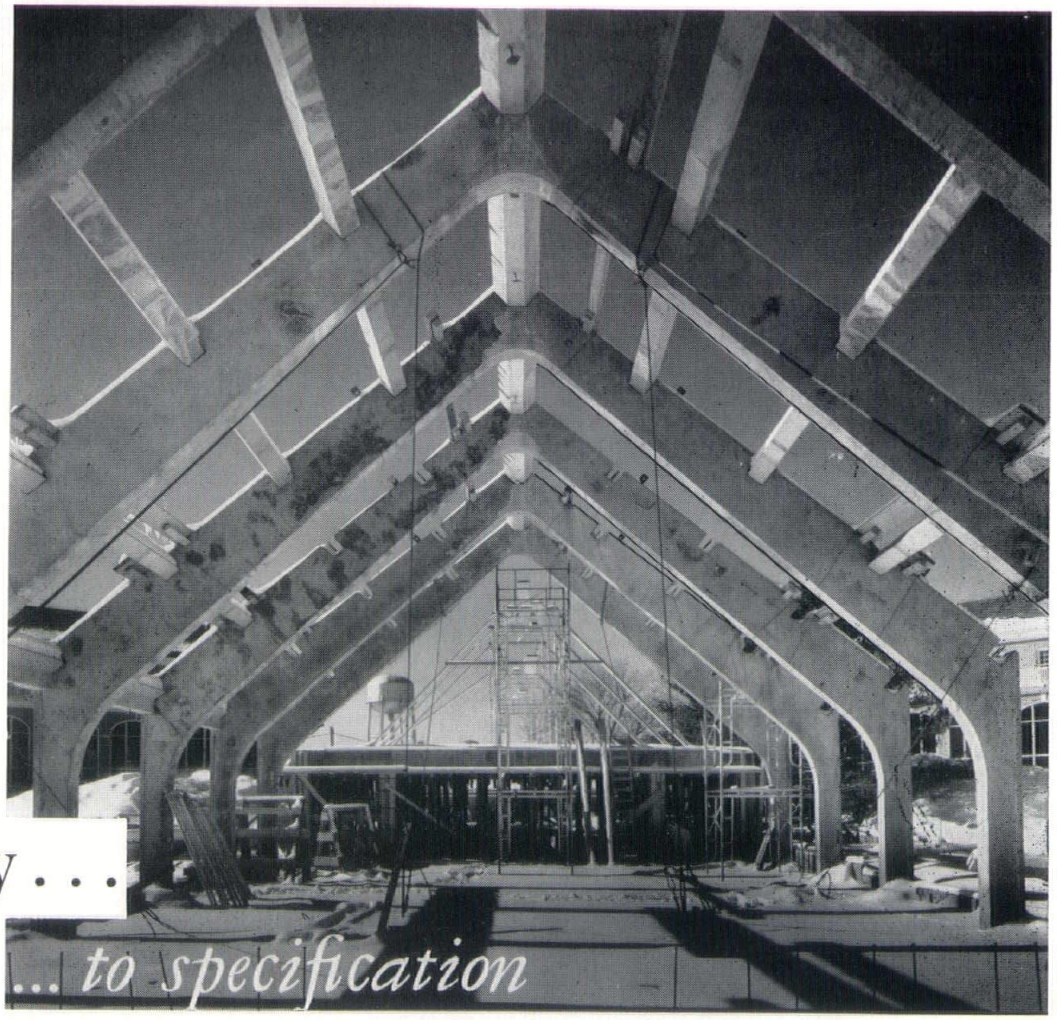
PHOTOGRAPHY

WITH ARCHITECTURAL
INTERPRETATION

CONSTRUCTION

PHOTOGRAPHY

WITH CONSTRUCTION &
ENGINEERING KNOW-HOW



photography...

... to specification

phone: HUbbard 2-4340

AF

ARBER-FRENCH & CO.

INCORPORATED

PHOTOGRAPHERS

MOTOR MART BUILDING • 215 STUART STREET • BOSTON • MASSACHUSETTS

OFFICIAL PHOTOGRAPHER • NEW ENGLAND ARCHITECT & BUILDER ILLUSTRATED

Language Laboratory Teaching COMES OF AGE*

* Incorporating the latest facilities for Language Laboratory teaching at Wellesley College

DESIGNED AND INSTALLED BY

Telephone ALgonquin 4-7870

DeMambro

SOUND EQUIPMENT COMPANY, INC.

1095 COMMONWEALTH AVE., BOSTON, MASS.

BRANCH OFFICES IN: MASSACHUSETTS: Worcester, Brockton, Lawrence, Hyannis — NEW HAMPSHIRE: Manchester, Keene — RHODE ISLAND: Providence

SPECIALISTS FOR SCHOOLS, HOSPITALS, INDUSTRIAL AND COMMERCIAL BUILDINGS