All brick and four stories tall.
Thanks to Sarabond® brand high bond mortar additive, the brick tower is freestanding and load-bearing. High bond mortar with Sarabond is a completely new structural concept. One that makes possible higher, thinner walls. And offers a greater safety margin, and better freeze-thaw and chemical resistance. Find out all about it. Call Dow in Denver (303) 266-2329. The Dow Chemical Company, 216 Security Life Building, 1616 Glenarm Place, Denver, Colorado 80202.
HERMAN MILLER'S REMARKABLE COMPREHENSIVE STORAGE SYSTEM

An ideal solution for most offices. The Comprehensive Storage System puts walls to work and is a great help to busy people who want to be more efficient at the office. The CSS includes a full work table or drop-front desk/ book storage/ sliding and flipper doors/ tack boards/ display cases/ drawers and files. Poles out front or mounted directly to the wall. Your choice of finishes for poles and shelves. See it in Seal's showrooms. We suggest that you stop in before you start your design concept. Here you'll also find such great names as Knoll, Art Metal, Domore, Supreme and Harter.
Any traveler South of the Border returns with a warm memory of the famous tiles of Mexico... distinctive in design, glowing with color. Thanks to Don Shewey of Denver Building Supply real Mexican tile made in the traditional manner is now available in the Symposia Region. They are manufactured in Denver by the Mosaico Mexican Tile Company under the supervision of Mexican Tile expert, Natividad (Nat) Avila... and distributed by Mr. Shewey's firm.

It is the design possibilities which make Mosaico Mexican tile of such interest to client, architect and interior designer alike. Tile may be designed—adapted to any use or style of architecture—a c t u a l l y custom created in an infinite range of colors to enhance any structure. Coupled with the unlimited design versatility is a rugged durability. Public buildings... churches, schools, commercial installations as well as residences are all prime candidates for Mosaico Mexican tile because of its long wearing qualities, and maintenance free care. The sheen of the tile lasts for the life of the product, and although it may be waxed for high gloss such treatment is absolutely unnecessary. Soap and water does the job.

The most extensive use of Mosaico Mexican tile to date in the Denver area is at the Englewood Shopping Center where Developer Gerri Von Frellick has chosen it for the block square Central Plaza in the Center due to open this Spring.

It is interesting to note that the Tile Presses now in use at the Denver Mosaico Mexican Tile plant were originally made by R. F. Gonzalez of Monterrey, Mexico and installed in Texas by Jorge Velez, brother of the famous film star, Lupe Velez. Mortgaged in 1966, the presses and molds were purchased by Don Shewey last year, when he retained Nat Avila as Plant Superintendent and the Mosaico Mexican Tile Company came into existence.

Basically of pressed concrete, 8" x 8"—square, round or hexagon in shape—the custom manufacture of this product gives the interior designer or architect the design capability of creating a floor perfectly in keeping with a total architectural concept.

For further information, specifications and installation procedures, contact Mr. Don Shewey, Denver Building Supply Company, 301 Vallejo, Denver 80223. In the metropolitan Denver area, telephone 744-2303.
**Symposia**

serving the construction public in Colorado, Wyoming, New Mexico, Utah, Arizona, Nevada, Montana, and Idaho.

**THIS MONTH**

| Building Blocks | 4 |
| The Last Word | 6 |
| Symposia Salute | 8 |
| Jim Cushing Joins Navajo | 9 |
| CSI Specifications Workshop/Albuquerque | 10 |
| Elevation | 11 |
| Phoenix Plans for Culture/Conventions—by Frederick P. Weaver, FAIA | 13 |
| Exhibit of School Buildings—Hugo Elementary-Secondary School Schools on Exhibit Kelsey to Address School Administrators | 14 |
| The Contract/by Bernard McMenamy | 17 |
| Architecture/Construction—Preview | 19 |
| 18th Annual National Engineers Week | 20 |
| Albuquerque's Model Neighborhood—by Maria O. Blochut, Urban Planner | 21 |
| Your Building and Your Architect | 25 |
| Eyeing the Industry | 28 |
| Symposia/Around the Region | 30 |
| Contemporary Comment | 32 |
| Memo | 33 |
| Index to Advertising | 34 |
Finalists in the Consulting Engineers Council/Utah Engineering Excellence Awards were notified in January. Finished presentations are due by February 8, and winners will be announced in March.

Among the six good men and true (all prominent members of CSI) who authored a December article for the American School and University magazine is Henry B. Baume FCSI, principal in the firm of Baume-Polivnick in Denver. The article titled "How to Write Good Construction Specifications for Educational Buildings" sounds most challenging. Henry is the immediate National Past President and a Fellow of the Construction Specifications Institute.

Date of the upcoming Mixer for Tucson and Phoenix members of the Construction Specifications Institute has been juggled. It will probably be in March and the tentative place is Nogales. And Ole to that!

Office Space Available . . . in the new AGC Building, 1135 South West Temple in Salt Lake City. Contact Hod Gunn, 365-2753.
President Roland Proett of the Rocky Mountain Chapter/Producers' Council reports a very successful "Student's Tour." Fifty graduating Architectural students and professors from Colorado University toured Denver area projects and plants. PC is one of five sponsors for the annual tour which is designed to educate architectural students on materials and their applications.

U. S. Plywood has transferred John Kilbey to Denver. CSI/Denver is hereby alerted—Mr. K. has been active with the Institute's Albuquerque Chapter.

Newly Organized: We note the recent debut on the architecture/construction scene of the Colorado Association of Engineering Technicians. Meeting dates will be noted in "Memo."

Symposia's coverage of the Model Cities Program in our region begins this month with our feature on Albuquerque. More to follow with stories on Trinidad, and Denver! To this end: a delightful luncheon with Miss Maxine Kurtz of the Model Cities program in Larimer Square.

Certified Craftsmanship
Pledge of Performance
are yours
when you contract with
a member of
Mountain States Bureau for Lathing & Plastering, Inc.
Keith E. Bell
Executive Director
221 Santa Fe Drive • Telephone 255-9332
Denver, Colorado 80223

Symposia/the Cover
tation to the city and its residents. Symposia's February cover is a beckoning hand inviting readers to come inside for a closer look around at the plans being made by the city of Phoenix, Arizona for their 16.8 million dollar Cultural-Convention Center. Architects for the project are Charles Luckman Associates, and this graphic was one of several included in the firm's presen-

Teaser: Editorial Board Member Bradley Kidder FAIA, Santa Fe has sent us a fine report of his European jaunt ... and the Rome meeting of the ICOMOS (International Council of Monuments and Sites). It is a delightful article ... look for it in Symposia/march.

624 North 2nd West, Salt Lake City 84103, is the new address for the Utah Consulting Engineering firm of Nielsen and Maxwell. Their new office is located just a quarter block from the 5th North Freeway off-ramp. No change in telephone number.

Western architects are reminded that February 15 is the deadline for Entry slips and fees for the 1968 Reynolds Memorial Award—one of the major AIA Award programs.

Mr. Architect:
Call 322-1925
for
KITCHENS
from planning to complete installation
Edward Hanley & Company
Since 1950
Residential Kitchen Specialists
1454 Oneida St.
Denver, Colorado
Symposia is firing both barrels this February as we salute Stanley Borthwick. He is not only the new 1968 President of the Building Branch of the Associated General Contractors in New Mexico, but has just completed the difficult assignment of General Chairman for the Third Annual Convention of Region 10/Construction Specifications Institute which he serves as Vice President of the Albuquerque Chapter.

Stan's story in the Construction field is strictly a “bootstraps” affair encompassing some 29 years of progress with the Lembke Construction Company from apprentice carpenter to Executive Vice President . . . a position he has held since 1966. Flying the company's aircraft, Mr. Borthwick manages bidding and contracts in Colorado, New Mexico, Nevada, Arizona and California. He has participated enthusiastically in the activities of the New Mexico Building Branch of the Associated General Contractors for many years. He has served as Vice President, Director, Safety Committee Member and Bidding Practices Committee Member. He has been a member of the National AGC Construction Markets Committee for three years, and his advice and experience was sought recently by election to the newly-formed National Turn-Key Study Committee.

Mr. B. is equally well known in Albuquerque and Region 10 for his fine work with the Construction Specifications Institute; he is currently Vice President of the Albuquerque Chapter, and headed up the Host Chapter Committee for the Third Annual Conference. On the community side of the ledger . . . he is a Rotarian and a Shriner.

He is supported on the home-front by his lovely wife, Rita; sons, Bill at the University of New Mexico and Jim with Humble Oil, and a daughter, Sandra at Highland High School.

Hats off then to Stan Borthwick—a man serving the architecture/construction industry on many fronts, and doing a top-notch job in every department. Mr. B.: the February Symposia Salute is yours!
As of January 2, in this bright New Year of 1968, James R. Cushing left his position with the firm of Flatow, Moore, Bryan and Fairburn in Albuquerque to take over the reins as Chief Architect for the Navajo Tribe at Window Rock, Arizona. Jim was the first of Symposia's corresponding Editorial Board members, and his faithful coverage of the architecture/construction scene in New Mexico has been truly outstanding. His letter was received with mingled feelings of regret—and pleasure—"Because of this change, I can no longer be your reporter from the Albuquerque area. In my new position, I could let you know about construction in "Navajo-Land," which I understand, is considerable both in extent and variety, and is a part of your Western States area." So Symposia, it seems, has not really lost a Board Member, but gained a liaison man with the Navajo.

Jim received his Architectural degree from Kansas State University, practiced architecture as the principal of his own firm in the Sunflower State until 1963 when he joined Flatow, Moore Bryan and Fairburn, where much of his work was concerned with the writing of specifications. Jim was the first President of Albuquerque's booming Chapter of the Construction Specifications Institute, and in these latter months has been affectionately referred to as "the Elder Statesman."

Jim and Sandee Cushing are the parents of four boys—pretty well grown up now, Jim has graduated from UCLA, John is with an electronics firm in San Jose, Jeff is with the U.S. Army and Greg, the youngest, is now in college. Jim's new position as Chief Architect for the Navajo is another feather in his bonnet, and it couldn't happen to a nicer guy! All our good wishes go with Jim in his new position, and we're looking forward to those smoke signals from Window Rock.
Headlines to the contrary, Symposia really has not fallen into a vat of Alphabet Soup. Our purpose is only to toot our Thirty-Two Trombones announcing the entrance of the blooming Albuquerque Chapter of the Construction Specifications Institute into the field of Industry Education. Beginning on February 21 and continuing for fifteen weeks, the Albuquerque Chapter will conduct a safari into deepest, darkest Specification-Land, acquainting members and friends with the CSI Format—which is, of course, the ONLY way to fly.

William K. Stewart, Secretary of the Chapter, tells us that the fifteen Workshop Seminars will be held in the Hospitality Room of the First National Bank East each Wednesday from 4:00 to 6:00 p.m. starting on February 21 and continuing for fifteen weeks. He writes: "The cost of the course, which is not firm, is intended to pay only for printing the hand-out material (syllabus etc.) and will not exceed $20.00 per student. Now, pay attention (there will be a quiz in five minutes)—registration may be made by contacting Mr. R. D. Henderson, Room 226, Mountain States Telephone Company, Post Office Box 1355, Albuquerque, New Mexico 87103.

SEMINAR PROGRAMS
(Instructors' names for the first seven Seminars are included. Writes Mr. Stewart, "Some of the fellows who are instructing have not, as yet, had their arms twisted enough.")

I. GENERAL INDOCTRINATION: CSI Format, Filing System, Retrieving System for Information, Accounting System. Instructor: R. J. Schmidt (University of New Mexico.)


III: BIDDING REQUIREMENTS: Advance Public Notice, Cover Sheet, Invitation to Bid, Instructions to Bidders, Bid Form, Unit Price Schedule, Bonds—Guarantees and Warranties. Instructor: James R. Cushing, Design and Construction Department, Navajo Tribe, (Symposia Editorial Board)

IV: INTRODUCTION TO SPECIFICATION WRITING: Purpose of Specifications, Relationship to Project, Relationship to Drawings, Items better shown on drawings, Items to be covered in Specifications. Instructor: K. P. Chenoweth, Bureau of Indian Affairs.

V: THE TECHNICAL SECTION: Arrangement, Type of Specification, Materials, Sources and Information, Writing Procedures, Language, Discussion of CSI Recommended Section. Instructor: Earl Prinz, AIA.

VI: LEGAL RAMIFICATIONS OF CONTRACT DOCUMENTS: Instructor: C. E. Barnhart, Attorney


VIII: DIVISION 4: Masonry. DIVISION 7: Moisture Protection.

IX: DIVISION 5: Metals. DIVISION 13: Special Construction.
Mr. James Hamlett’s excellent Legislative Review in the January CEC/Utah’s Member News Bulletin underlines the need for some pretty serious self-examination on the part of the architecture/construction community. Two bills, Senate 422 and House Resolution 8312 are designed to eliminate “bid shopping” on U.S. Government projects. In essence, the “Anti-Bid Shopping” proposal is a bill to require bidders for public works construction contracts to disclose identity of proposed joint contractors and subcontractors at the time of bidding on all subcontracts of $3,000 or more. This bill is pending before Subcommittee No. 2 in the House Judiciary Committee. Pigs in the parlor? Yes, gentlemen, and we have known their whereabouts for some time. All Industry Organizations subscribe to Ethical Codes . . . yet the old “hanky-panky” is still with us.

Is this all a part of the lack of regard for morality, both public and private, bemoaned by John Steinbeck in ‘America, America?’ We know disregard for “old fashioned” virtues, mainstay of a God-fearing nation for 150 years, is producing frightful consequences. We deplore the violence in our streets, the depravity of our youth, and avert our eyes and ears from the unpleasantness of “psychedelic” culture (?), drug usage, revolt against rightful authority and the generally unwashed condition of an increasing number of Americans, young AND old.

No group of Americans has hollered louder than the architecture/construction community about government interference in private enterprise. Yet, by our very indifference to the pigs in our own parlor, we are inviting “Big Uncle” inside with a big broom. Every reputable member of the Industry must reaffirm his belief in the “old fashioned” homilies. Is “Honesty is the Best Policy” so passe, after all? It is each man’s duty to pick up the particular pig in his particular parlor and heave him, none too gently, into the muck outside!

It is our sincere conviction that the architecture/construction community can do their own housecleaning before somebody else has to move in and do it for them!
Phoenix Plans for Culture and Conventions

by: Frederick P. Weaver, F.A.I.A.
with Elizabeth W. Trunk

Not unlike Jack's proverbial beanstalk, the Cultural Convention Center projected for sun-drenched Phoenix Arizona is beginning to sprout. With the presentation of the schematic plans to the City, the Cultural-Convention Center to be located in downtown Phoenix, promises to be the most ambitious municipal and civic undertaking in the history of the Valley of the Sun.

During the past few months, the preliminary plot plan and the schematics under the design supervision of Charles Luckman Associates and with John Schotanus, Jr. as the local supervising architect, have sketched for Phoenicians two substantially diverse structures housing different functions and located on a six block site. Price tag on the project is now pegged at 16.8 million dollars, a substantial increase from the 4 to 6 million dollar figure which was discussed in 1960 when Stanford Research made its first report. The 1968 cost figure of plus 16 million includes land, structure, equipment and fees, but does, indeed, represent a lot of culture. As they say on "Dragnet"—we just want the facts, ma'am", and here they are from Mr. Edward J. Allen, Cultural Convention Center Director.

1. Site to be located between Second Street and Fifth Street; Washington and Monroe Streets.
2. Main Exhibition Hall will contain 80,000 square feet of area and will provide a built-in utility system for use by exhibitors. Height: 25-35 feet.
3. Assembly area will contain 40,000 square feet and will adjoin the Main Exhibition Hall and will have 25-35 floor to ceiling height.
4. Twenty meeting rooms shall be provided varying in size depending upon the arrangement of the movable partitions within the area.
5. Within the Exhibition complex, offices will be provided for administration of the project.
6. The Concert Hall will provide 2500 seats and will include rehearsal hall, dressing rooms, green room, scenery dock, locker rooms, shops, etc.
7. Covered parking will be provided for 1300 automobiles plus additional service parking as required.
8. The major elements of the Complex will be joined by a one hundred foot Pedestrian Concourse which spans across Third Street.
9. Elevation of Third Street will be dropped so that traffic proceeding through the site will not be seen from the Plaza.
10. Area is reserved in the northwest portion of the site for a future theater.
11. Elevators and ramps will be provided throughout the project to give easy access to invalids and persons confined to wheel chairs.

Many studies were submitted before the present site plan was accepted. It is always regrettable when a site must be separated by a sixty foot traffic barrier—however, the Luckman plan of the hundred foot Pedestrian Concourse, and the depres-

Graphics:
Luckman Associates

Sketch of Main Entrance to Convention-Exhibition Hall (As seen from the Pedestrian Bridge)
Phoenix. Center will be returned to the City of . . . (thirty years) ownership of the bonds have been retired benefit from conventions attracted to the area by the facilities. When the six categories of business—the principally commercial entities likely to benefit from conventions attracted to the area by the facilities. When the last of the bonds have been retired . . . (thirty years) ownership of the Center will be returned to the City of Phoenix.

A ruling by the Arizona Supreme Court prohibiting use of the city's property tax money to redeem the Convention Center bonds makes it impossible for the City to raise taxes should the Center fail financially. Many Phoenicians, including City Manager Robert Coop, agree that the Center may run into an annual deficit. However this will be more than compensated by the anticipated sales tax revenues.

City Manager Coop in explaining the importance of the development of the Cultural-Convention Center termed it a "new industry" for Phoenix drawing millions of dollars annually into the area from conventions and their delegates. The hopeful rejuvenation of the center of the city is being presently viewed optimistically . . . for instance, a 400 room hotel has been committed near the Center—and several other groups have announced plans for additional facilities to serve convention goers in the vicinity, as soon as Center construction begins. The accompanying graphics, most particularly the overall perspective of the Center, emphasize the relatively large open spaces which will function, in a sense, as a central City Park.

The City Parks Board has already authorized an allotment of $500,000 for developing the landscape possibilities of the six block site.

Initial presentation by the Luckman firm of the plans for the Cultural Center and the Convention Hall and Exhibition area drew fire from some Phoenicians and from the press. One columnist leveled criticism at the horizontal roof line of the exhibition hall noting that the vertical elements of the Cultural center were completely overwhelmed by the "mammoth flatness" and "warehouse effect" of the Exhibition facilities. Articles and "letters to the Editor" notwithstanding, it seems the general planning and design for the Center has been substantially completed. A few minor changes may be made, but they are minor. Edward J. Allen, Director for the Cultural Convention Center says the semi-circular driveway or carriage entrance for the Concert Hall is being changed and may be completely eliminated. The project however has progressed beyond the state where any meaningful architectural changes will be made, and perhaps the best professional approach, at this stage, is to realize that many architects would conceive the Project differently, and conceivably better, but the gentleman in charge is Mr. Luckman, and his firm and its staff have the contract. Indeed, it might be extremely detrimental to pick the project to pieces to satisfy the whims of the architectural critiques. The need for the Center is unquestionable, and if the Center fails financially, should the Center fail financially. However this will be more than compensated by the anticipated sales tax revenues.

City Manager Coop in explaining the importance of the development of the Cultural-Convention Center termed it a "new industry" for Phoenix drawing millions of dollars annually into the area from conventions and their delegates. The hopeful rejuvenation of the center of the city is being presently viewed optimistically . . . for instance, a 400 room hotel has been committed near the Center—and several other groups have announced plans for additional facilities to serve convention goers in the vicinity, as soon as Center construction begins. The accompanying graphics, most particularly the overall perspective of the Center, emphasize the relatively large open spaces which will function, in a sense, as a central City Park.
Each Spring in Atlantic City, New Jersey, the American Association of School Administrators meet for their Annual Conference. An integral part of their meeting is the display of outstanding school buildings submitted by members of the architectural profession from throughout the United States. From the many submittals, 240 were selected by the AASA screening jury. Of that number, our Symposia region is represented by thirteen educational structures in the Exhibit itself. Although forty states, including Alaska, Hawaii and the District of Columbia, are represented in the exhibition, Arizona, Idaho, Montana, Nevada and Wyoming are among those states from which there were no entries. From the 1968 exhibit, we are pleased to have in this issue of Symposia, the Elementary-Secondary School at Hugo, Colorado—architects: Bourn and Dulaney.

HUGO ELEMENTARY-SECONDARY (K-12) SCHOOL
HUGO, COLORADO

owner: School District No. RE-1
Lincoln County, Colorado
Wayne M. Nash, Superintendent
architects: Bourn and Dulaney, AIA

engineering consultants: Zeiler and Gray, Structural
Cator Ruma and Associates, Mechanical
F. J. Calvert and Associates, Electrical
Maher-Bonny Construction Company

general contractor: $750,000.00

construction cost:
The primary problem solved by Architects Bourn and Dulaney in their design for the Hugo Elementary-Secondary School was the accommodation of all student levels from Kindergarten through Grade 12. The program required complete separation of the Elementary and Secondary units and the division of the Secondary unit into Junior and Senior High School with those shared facilities (i.e.: Science, Home Economics, etc.), accessible to both the Junior and Senior High School curriculum. In addition, the program required the central facilities (i.e.: Administration, Gymnasium, Lunch Room, etc.), to be convenient to the Elementary and Secondary students and to the staff.

The area of the structure, 48,230 square feet, is designed to house as many as six hundred students—the present enrollment is two hundred and eighty-three. Because 45% of the students are bussed to the school from ranches and farms, and because the environment of the building is rural, the volume of each building unit was kept small. The scale of each building was related to the individual student, and the building materials used were residential in nature. In this, the architects' effort was to make the transition from home to institution as "ordinary" as possible.

Exterior walls, corridors and multi-purpose walls are of face brick; roofing is built up and composition shingles; and glare reducing glass is used in the windows. General teaching, administration and activity flooring is vinyl asbestos tile; wood floors are used in the gymnasium and auditorium stage, and carpeting in the library and materials center. Ceilings are suspended acoustical tile.

A new twenty-six acre site was purchased at the edge of the community of Hugo. This location allowed for the acquisition of the necessary quantity of land to facilitate the new school as well as providing close proximity to the School District's existing athletic fields. An additional reason for this location was the inexpensive cost of the land compared to other available sites.

Since the land sloped rapidly to the south where the existing athletic fields were located, it was logical to place the gymnasium unit on that side of the building complex, taking advantage of both the slope of the site and the proximity of the outside athletic facilities.
Regional Architects Honored by School Administrators

Other Educational facilities to be displayed at the Atlantic City AASA Meeting from our Symposia region are . . .

Junior-Senior High School, Grantsville, Utah
Clarke N. Johnsen, Superintendent

Edwards & Daniels & Associates, Salt Lake City, Utah
Boulder Valley Vocational Technical Center, Boulder, Colorado
Richard Fawley, Acting Superintendent

Heinzman & Ingalls, Boulder, Colorado
Denver Country Day School, Englewood, Colorado
Andrews D. Black, Headmaster

Victor Hornbein & Edward D. White, Jr., Denver, Colorado
Evergreen Junior High School, Jefferson County, Colorado
W. Del Walker, Superintendent

Lamar Kelsey & Associates, Colorado Springs, Colorado
Bell View Elementary School, Sandy, Utah
Reed Beckstead, Superintendent

Bruce J. McIermott & Associates, Salt Lake City, Utah
Everitt Junior High School, Wheat Ridge, Colorado
Irene Z. Dunstan Junior High School, Lakewood, Colorado
W. Del Walker, Superintendent

Morse, Dion & Champion, Denver, Colorado
Riffenburgh Elementary School, Fort Collins, Colorado
I. K. Boltz, Superintendent

William B. Robb, Fort Collins, Colorado

Regional Architects Honored by School Administrators

Homer Peck Elementary School, Arvada, Colorado
W. Del Walker, Superintendent
Sacred Heart Junior High School, Boulder, Colorado
Rev. Bonaventure Tandi, Superintendent

Rogers, Nagel & Langhart, Denver, Colorado
Van Buren Elementary School, Loveland, Colorado
C. L. Retelsdorf, Superintendent

Wheeler & Lewis, Denver, Colorado
John F. Kennedy Junior High School, Gallup, New Mexico
Warren B. Fitzsimmons, Superintendent

George Wright Associates, Albuquerque, New Mexico


KELSEY TO ADDRESS SCHOOL ADMINISTRATORS

F. Lamar Kelsey, FAIA, Symposia Editorial Board Member from Colorado Springs, Colorado will address a Section Meeting of the American Association of School Administrators, February 19th in Atlantic City, New Jersey. Mr. Kelsey's topic will be "Designing Facilities for New Teaching Media," and is one of the major speeches to be heard by School Administrators during their Annual Conference. The Section Chairman is E. Maylon Drake, Superintendent of the Alhambra California Schools. Panel Members are: Dr. Herbert Katzenstein, Audio-Visual Coordinator, School of Education, City College, New York; Mr. Grinnel W. Locke, Locke and Jackson, Architects, Baltimore; Frank Matski, Deputy Manager of Planning, State University Construction Fund, Albany, New York; Dr. James McPherson, Chief of the Demonstration Center, U. S. Office of Education, Washington, D. C.; and Dr. Paul Briggs, Superintendent of Schools, Cleveland, Ohio. Mr. Kelsey is the recipient of many honors and awards for the design of educational facilities, and is the co-author of the book, "Schools for America." He is the author of the definitive article on school construction "Whatever Happened to the Little Red Schoolhouse" which appeared in the September 1967 issue of Symposia.
by Bernard McMenamy

A specialty subcontractor panel composed of mechanical, electrical and sheet metal contractors reduced the bidding monster of separate bid/single contract concept of specialty contract administration to a smiling pussycat at a recent C. S. I. Meeting. The specialty subcontractor panel exposed proposals which if adopted should provide a cure for some of the needless ills now existing in our construction industry.

The separate bid single contract bidding system proposed provides for the awarding authority to take separate bids from prequalified electrical and mechanical contractors. These bids are then opened publicly at least 24 hours but not more than 48 hours prior to the time of bid opening for the general construction work. The awarding authority then announces the selection and bid of the successful electrical and mechanical subcontractors to the bidding general contractors within 24 hours of the general construction bid time. The bidding general contractors will then include in their bid a cost for coordinating and scheduling the work of the assigned electrical and mechanical subcontractors. The electrical and mechanical subcontractors are to include with their bid an agreement for assignment of their subcontract to any of the prequalified general contractors listed. The bids of the general contractors conversely are to include an agreement for acceptance of specialty subcontractors from the successful electrical and mechanical subcontractors.

Prequalification of general, electrical and mechanical contractors is the key to success of the separate bid-single contract method. Each bidding contractor is aware of the prime or subcontractor with whom he may be working, and each is confident that a proper analysis has been made of the bidder's qualification to satisfactorily complete this specific project.

A suggested method for prequalification of contractors is now in the process of development under the direction of our C. S. I. Chapter, and the process will be announced in the near future. Some of the basic contractor qualifications are as follows:
1. Years of experience in the type of work
2. Contracts completed within the last four years
3. Work in progress or under contract
4. Bonafide financial statement
5. Brief description of plant and personnel

Specifications, to implement this system of bidding, will necessarily include bid forms for the electrical and mechanical contractor as well as the general contractor. Bid bonds and performance bonds, when required, should be furnished by the prime and subcontractors for their respective portions of the work. The specifications should be so written as to clearly define the work of the general, electrical, and mechanical contractors, thus defining the limits of responsibility of the respective contractors.

Conditions of both prime and subcontractors should be specified either by reference to existing subcontract forms or by inclusion of the conditions of contract in the specifications. Uniformity of contract conditions should be maintained, and specifications should define relationships between the prime and subcontractors. This is the essence of the proposed separate bid-single contract system. The following are questions from the audience and answers from the panel regarding the proposed separate bid-single contract system.

Q. Should third-tier subcontractors such as temperature control contractors be prequalified?
A. Prequalification is applicable to any subcontractor whom the architect or engineer deems a major contributor to the overall project.

Q. Can this process be used on public buildings?
A. Some government agencies are using similar systems. To date we are not aware of any court tests of the legality of this system.

Q. If specifications are not distinct and clear regarding responsibility of contractors, would not the engineer or architect become the job coordinator?
A. This system would make it more
imperative to distinguish between trades and subcontractors.

Q. Some general contractors may not wish to work with some selected specialty contractors.
A. All specialty and general contractors have been prequalified. The general contractor does not have to bet if he doesn’t like the horses.

Q. How about the general and subcontractors prequalifying the architect?
A. (A nervous titter ran through the audience.)

Q. Who decides on prequalifications?
A. Some methods permit the general and/or subcontractor to state in his bid those prequalified contractors whose contract he will accept.

Q. Why don’t we all get together to eliminate a few of the unethical and unreliable subcontractors in our industry, so that the general contractor is not forced to use the low price of a subcontractor who he has either never heard of, or who he knows is not responsible? Should general contractors use an unqualified low price from an unknown sub bidder in order to submit a low bid, or should he use a higher price from a reputable subcontractor with the probability of losing the job?
A. The answers to your questions are obvious and your questions emphatically describe the basic purpose of this meeting.

The next Meeting of CSI was devoted to further examination of the separate bid — single contract system. The following is a report of this panel discussion.

SINGLE CONTRACT — SEPARATE BID SYSTEM

ADVANTAGES
1. The system will create a better bidding atmosphere which should follow with a better construction atmosphere.
2. Bid shopping after award of contracts will be reduced. Contractors will not add to their initial price in fear of being asked to cut their price after bidding.
3. Bidding direct to the architect or owner will give greater control of the subcontractors.
4. If mechanical and electrical bids are taken prior to the general bids, and these bids are in excess of the budget, it will give the owner an opportunity to negotiate with the low electrical and mechanical bidders at that time, possibly saving the project from going entirely over the money.

DISADVANTAGES
1. Are there enough evils in the present system of bidding to warrant the establishment of a new system?
2. The system will require greater separation and definition in the specifications, as well as preparation of proposal forms for each type of bid.
3. If the system is established for mechanical and electrical bids, why not add all other trades to the system; thereby making it an unwieldy system?
4. General contractors will be forced to use subcontractors without choice. Subcontractors will be forced to work for general contractors without being allowed to choose.
5. Extra discounts given to favored general contractors before the bidding will not be granted. Subcontractors will not know with which general contractor they might be working.
6. General contractors may not feel as responsible for their subcontractors if bids and awards are issued by the owner or architect.

PREQUALIFICATION ADVANTAGES
1. Prequalification tells all of the bidders who will be bidding the project.
2. Unreliable contractors will be eliminated.
3. Prequalification will help to eliminate bid shopping which is usually conducted by unethical and unreliable contractors.
4. The architect and engineer will have more control over prequalified contractors.
5. Better organization of the project will result with prequalified contractors.
6. Prequalification improves the climate of bidding among reliable contractors.

DISADVANTAGES
1. Is the architect or engineer capable to prequalify contractors?
2. Can this system be used where public funds are to be expended?
3. Prequalification dictates to the general contractor those subcontractors which he is to use. It also dictates to the subcontractors those general contractors for which he will be doing work; thus eliminating a free choice.
4. What are the standards for prequalification?

COMMENTS OF INTEREST
1. Should the owner be concerned about bid peddling if bid peddling means money in the owner’s pocket?
2. Bid peddling takes place before the bids are opened by the awarding authority. Bid shopping takes place after the bids are opened by the awarding authority.
3. The general contractor goes mostly on faith regarding the performance of his mechanical and electrical subcontractors. There is a lack of knowledge with most general contractors regarding the technical aspects of mechanical and electrical work.
4. The cost of a project is determined by the overhead of the project. Scheduling of the project, and the coordination of work by the general contractor has a great influence on the true cost of the project.
5. A contractor’s responsibility is to expedite men and materials in the most efficient manner. The successful contractor is the best expeditor. Should architects and engineers tell the contractor how to organize and expedite his job?
6. Are ethics in the construction industry of prime concern? Should not the prime concern be that the owner gets a good building at the lowest price?
7. The climate of bidding depends upon the buyer.
8. Should a contract officer system be established? The contract officer would receive and analyze bids for making awards as well as supervise the construction phase of the project.

The reporter has attempted to remain unbiased in the items stated. Therefore no effort has been made to derive any conclusions from the opinions of the panel. The preference of the architect and owner will still determine the bidding process.

(‘Food for thought? Yes, indeed—and, as always, Symposia welcomes your particular brand of aspirin for this communal Contract headache.)
The Viet Nam conflict caused a rapid increase of officer personnel at Fort Carson. The existing Officers' Open Mess, commonly known as the Officers' Club, built in 1941, was caught in the expansion with inadequate facilities to serve its members. Pierceall and Ten Eyck, Architects, of Colorado Springs, were engaged to study the feasibility of remodeling the existing club building. The study showed that the cost of remodeling was prohibitive and that renovation alone would not solve the problem of space and facility requirements.

As a result of the feasibility study, it was decided by the Board of Governors of the Officers' Club to build a new structure. A hilltop site that overlooks a large area of the Fort was selected. To the west there is an unobstructed view of the Pikes Peak mountain range, with Cheyenne Mountain in the foreground.

The new club is designed to accommodate 1,200 members. It will have an interior floor area of 18,000 square feet, with a proposed second phase expansion of an additional 4,000 square feet. The landscaped exterior areas will include a patio, surrounding colonnade, and a 225-car parking lot.

The club interior will feature a 48 by 113-foot multi-purpose room to be used for meeting, dining, and dancing. There will also be an 80-seat permanent dining room, cafeteria service, formal and informal lounges, game room, barber shop, and related facilities.

The basic construction will be of steel and brick. The exterior appearance will be a long horizontal roof with a deep overhang supported by a colonnade of white precast concrete columns. The exterior brick walls are to be separated from the roof by a narrow glass window. The building will be elevated above the surrounding terrain by a five foot high landscaped base.

Monies for construction of the Officers' Club will not come from tax revenue, but from a central club fund. This fund is sustained by allocations from the profits of officers' clubs throughout the world.
Engineers in Forefront of Battle
To Improve World Health

by: Mark D. Hollis, P. E.

Today's engineer makes the world his laboratory, and no corner of it is too remote for projects which will improve man's health.

Working on a basic sanitation problem in the Congo...a sophisticated nuclear reactor in Europe...nutrition in India...water supply in the remote jungle of Peru...a dam in the Middle East.

In all of these areas, the engineer is now a familiar figure. Indeed, he is often the central figure in the drama of global health. People in many countries look to him for leadership. The depth of his technological know-how excites admiration in peoples only now emerging into national development in the science of human understanding.

To the nations of the world, old and new alike, health is the universal language of respect. It knows no ideology save human progress, owes no allegiance except to man's eternal aspiration for a better life for himself and a more productive life for the society of which he is a part.

Although many disciplines contribute to those goals of all mankind, the engineer for centuries has continued to play a unique part in fulfilling those objectives. His contributions are often taken for granted; few of us pause to think of the civil or sanitary engineer each time we turn on our kitchen tap for a glass of water, yet that simple act would not be possible without the combined efforts of many engineers and many systems.

Similarly, the safe and sanitary disposal of the waste products of our industrial civilization is a tribute to the engineer. This likewise is an amenity of modern civilization we accept without question. Yet, we know that in many areas of the world an adequate supply of drinking water cannot be taken for granted, indoor plumbing remains a dream, basic sanitation in homes is lacking and millions go hungry for lack of food and other millions eat the wrong kind of food.

It is to correct these imbalances in the family of nations that engineers are dedicating themselves. This spirit of cooperation takes many organizational forms—unilaterally, bilaterally, multilaterally or through such agencies as the World Health Organization and its component groups.

It has been observed that many of the newer countries of the world are jumping technologically from the ox-cart to the jet plane, with no intervening stops. Helping many of those countries bridge that gap is in part the job of the engineer.

Engineers are in the forefront of the battle to improve man's health. They are attacking the cause of disease at the source. More important, however, their efforts in water supply, in housing hygiene, in solid waste disposal, in nutrition and other areas clearly show that the engineers are practicing "preventive medicine" in its most humanitarian form.

Each person, it is said, is the product of heredity and environment. The engineer is demonstrating throughout the world that man is not destined to suffer indefinitely from an unhealthy environment. He is helping, through projects too numerous to mention in countries with names sometimes too difficult to pronounce, to enable man to befriend his environment and thus to bring close to him the goals for which he and his ancestors have long struggled.

Engineers today use much more sophisticated techniques than did their predecessors. The business of providing a safe and healthful environment demands the application of such modern innovations as systems analysis, whereby a host of complex inputs can be measured simultaneously by computer-based programming tools, and more rational and efficient answers provided.

For example, the application of systems engineering to comprehensive river basin planning for elimination or control of water pollution demands of the engineer new knowledge, new technology, new tools and, far from last, a new social consciousness. Thus, we are beginning to see a new breed of engineer making his impression on world health—an engineer steeped in social responsibility no less than technology, in public policy decisions no less than the extension of sewer lines, in the grand scale of public health no less than in the master plan of public works.

As a vital and impressive member of the health team, the engineer is thus exerting his influence to reshape new answers to old problems of health and thereby contributing his full measure to meeting mankind's most pressing needs.
Planning Proposals Outlined for Albuquerque’s Model Neighborhood

by Maria O. Blachut, Urban Planner

We are most happy to share with you our short experience in planning for Albuquerque’s Model Neighborhood Area (MNA). Needless to say, Albuquerque feels extremely lucky for having been selected as one of 63 cities in the nation. The originality of the approach built into the program offers unlimited possibilities for new paths in planning. Naturally, our intention is to explore all these to the utmost, and establish the experimental model applicable not only to the MNA itself and the City of Albuquerque, but to other communities throughout New Mexico and the Southwest.

Administratively, the Model Cities Program is set up in the City Manager’s office right at the fingertips of policy makers. It is headed by Mr. John J. Cordova, who is an extremely capable person and a specialist in both community organization and federal programs. He intends to employ a small core staff for the program whose prime task will be liaison and to act as catalyst in involvement of MNA residents. Various city departments and other public agencies pledged their cooperation in the form of technical and other services required by the program.

The core staff will include in addition to the director, Mr. Cordova, and his assistant director, a technical review and research analyst, a community relations coordinator and a community services coordinator . . . plus, of course, community relations aides, secretarial and clerical staff.

There will be an intimate interplay between all policy boards, citizens groups, and the office of the city manager with the Model Cities Program staff . . . assuring maximum coordination of all the organizations and advisory boards.

As may be expected, we do not have much data related to planning proposals as yet, however we are forwarding to Symposium Proposal Highlights and the Design Potentials of the MNA.

PROPOSAL HIGHLIGHTS

Albuquerque/The City

Albuquerque is the only major urban center in the State, serving as a hub for transportation, distribution, and employment. Its economy is heavily dependent on Federal and Federally-supported activities, offering an unusual preponderance of jobs requiring high skill levels.

Originally settled by the Spanish, Albuquerque retains much of the flavor and character of the original culture. The confluence of this cultural orientation with contemporary urban economic system has produced problems as well as benefits, however.

Due to a period of extremely rapid growth, the city, perforce, neglected older areas in the press of providing services to meet this growth. The rapidity also brought problems of comprehensive planning for development.

The city has a young population and progressive business community. Concern with community problems and efforts to widen the economic base are rapidly becoming leading parts of the community picture.

The Designated Area

The Model Neighborhood Area (MNA) lies to the east of the Central Business District (CBD), separated therefrom by extensive railway uses. Its boundaries are quite definite; man-made and natural structures reinforce each other. Bordering the railway throughout its length on the west, the MNA abuts I-25 on the east, I-40 on the north, and differing land uses on the south. In addition, it is traversed by six major arterials. Geographically, it lies, in general, on the eastern edge of the Rio Grande Valley proper. The MNA bears the marks of severe blight and decay. Physical development, educational levels, and employment rates are far below the city as a whole.

Because of the historical pattern of growth in the city, the MNA has been gradually isolated in the physical, economic, and social senses. This, in turn, has led to severe problems in virtually every aspect of the community.

Innovative Characteristics

The following items briefly list the innovative procedures to be developed:

— the definition of MNA problems within the total city context, that is, regarding the problems of the area as inter-related parts of a system.

— defining strategy and approach so as not to limit consideration of alternative solutions.

— selecting programs to fit goals, rather than looking around for programs to fit a program.

— examining unique educational approaches (e.g., the Public Schools’ Title III Program).

— fitting solutions to the social-psychological perceptions of MNA residents.

— accounting for the cultural variables involved.
—using community resources (e.g., the intra-community home improvement program already effective).
—establishing dual role relationships for coordinative purposes.

Although the Proposal Highlights render a general description of the Model Neighborhood Area, to make design objectives better understood, it is necessary to elaborate on the area’s basic physical characteristics.

**DESIGN POTENTIAL OF THE MNA**

Topography and location of the MNA are great physical assets which, although unexploited in the historical growth of the city, offer extremely challenging redevelopment potentials for the future.

The area is part of the Rio Grande Valley, or “inner valley,” which developed in the course of two hundred years, long before Albuquerque’s highlands were urbanized. The MNA encompasses three square miles of land and as the attached location map shows, it represents a strip located along the eastern edge of the valley, or the shelf of the “east mesa.” The area is surrounded by man-made features such as expressways and railroad tracks, but since some of these (such as I-25) follow the topography, in this case the valley bluff, we may also say that it is defined by the topography.

Between Broadway, the main north-south arterial bisecting the MNA, and I-25 the land rises vertically some 50 to 85 feet, causing 3 to 10 percent slopes at places. This land was once a rough cliff cut deeply by arroyos. It has changed in places to a gradual slope as the city expanded eastward, however, most of the undeveloped area of the northeast tip of the MNA is still in the same state the edge of the whole valley bluff was in the old days.

Ninety percent of the structures in the Santa Barbara-Martineztown area, north of Lomas Boulevard, are adobes, many of which are sub-standard structurally. Except for the Spanish Presbyterian Church and a few residences, there aren’t any really significant historical structures in the area. However, the area as a whole, its informal street pattern, the cultural flavor of its environment created by the crude forms of adobes blended with the dirt hills behind them, and its low-rise single-family residential character, lends itself to innovative redevelopment and rehabilitation treatment.

The ruggedness of terrain, closeness of noise-creating expressways, and a current complete lack of organized usable open space in the Santa Barbara-Martineztown area calls for a buffer-like system of parks to meander through the area, which then will tie to an essentially similar type of park system in the balance of the MNA. This will beautifully and integrate slopes, arroyos, and cliffs strung out in Albuquerque along the expressways into the fabric of the MNA, and together with other recreation facilities planned for the area will introduce ample open and leisure time space for its residents. Playgrounds will be equipped with low-cost, yet extremely becoming and attractive play elements such as those designed by local artists, built from scrap wood, wire mesh, cement, and local adobe clay. Such structures are already being enjoyed by youngsters in the general valley area. Financing of parks through Urban Beautification and other programs will be investigated for this purpose.

Enough has been said about the topography of the MNA as one of the prime physical assets of the area. Its location as it is related to other areas of importance and to the transportation network of the city is another, if not more important, asset. Being adjacent to both major freeways of Metropolitan Albuquerque (1-40 and I-25) the area becomes the best accessible and therefore most desirable for redevelopment of all areas in the city. This fact has already been emphasized by the recent interest of the Albuquerque Public Schools in the area. The school administration proposes to use part of the designated MNA for the development of an educational park.

**THE EDUCATIONAL PARK**

**General Criteria**

The educational park represents a true innovation in education. An educational park has been defined as a clustering of schools on one site to achieve a concentration of educational resources. This definition is not quite accurate; for while it is true that individual school units could and should continue to exist, one of the greatest benefits of the park comes in providing facilities—resource centers, libraries, etc.—that are simply not available to the singular school.

In the educational park, classroom buildings will be small and intimate, keeping the children together in familiar groups, but the gyms, auditoriums, science and language facilities, and the art and music buildings will be shared by the children in many classroom buildings. These central facilities will be computer-programmed for full-time use by the children during the day and by the entire community after school hours.

The role of the school in determining the physical form of the city (and thereby, to some extent, its social form), has largely been one of determination by default. The educational park, however, is a major facility; it can easily serve 10,000 to 15,000 students. It requires enormous investments in land, buildings, and space. Because of this, the impact of the school on the form of a community can no longer be ignored. Because of its large enrollments, racial, social and socio-economic imbalances can be ameliorated and in many cases corrected. The capability to provide more and better educational opportunities through better facilities has an obvious effect. Most important, perhaps, the very newness of the idea and the structure tends to break long-standing patterns in education, which, to judge by results, have not been particularly successful.

**Location**

The site for the proposed park is located immediately east of the downtown area. It is bordered by Broadway on the west; by Lomas on the north; by I-40 on the east; and by Central on the south. It represents a vital link between the downtown and the University of New Mexico. The initial site contains approximately 80 acres. With the eventual addition of adjacent land along the freeway, the site would contain some 190 acres.

The site contains some 200 families, some commercial uses, and several public and semi-public uses, including the Civic Auditorium, St. Joseph’s Hospital, the main public library, a large Baptist Church, Albuquerque High School and Longfellow Elementary School.

Schools that serve this general area are among the oldest in the system. The educational park has the potential for providing new and better facilities for students of deprived areas and the proposed location is of prime significance in meeting and solving major inner city problems.

Areas immediately adjacent to an educational park have a great potential to develop as intensive residential areas in response to the demands created by such a concentrated activity center. It would seem likely that a minimum of 400 teachers would be involved in teaching at the proposed park. Specialized and service personnel could easily equal that number. Many of these people would desire to live close by.

**HOUSING**

According to recent statistics, 40% of the houses in the MNA are substandard and an additional 15% are dilapi-
dated. This means that over 50% of the houses in the area need rehabilitation, or in some cases, replacement. In addition, 30% of the houses here are overcrowded, which adds considerably to both physical and psychological blight in the area.

The origins of the development of the MNA go back to the 1880's, the time when the Atchison, Topeka and Santa Fe Railway line reached Albuquerque. The company built its shops south of the area which is today's downtown. They are the largest on the line and became the town's biggest source of income in the nineties. New Town grew up around the railroad yards. Commerce clustered at the passenger depot, with residences to the south and east of it, mostly around the shops. This activi-
ty was in the area of the South Broadway, John Marshall, and northern tip of the East San Jose, communities of the MNA. Houses were built hurriedly and cheaply, 60% of them being of frame construction. Except for a few adobes, none of these houses have survived until our times. They were replaced by new, but not better structures. This area has always been inhabited by a poor Spanish surname population, which constituted then, and still does, the majority of the labor force for the Santa Fe shops. In time they were supplemented by Negros. When in the 1880's New Town (downtown) and its surrounding areas were urbanizing, shaping up as communities and in time becoming subdivided into regular city square blocks, areas in the most southern tip of the MNA (East and South San Jose) remained rural in character. Here, a parallel might be drawn with Santa Barbara-Martinetown since both communities were drawing their population mostly from rural elements of Old and New Mexico. The pattern of streets and lanes in this area resulted more from the irregular fractioning of land performed through the generations and by avoiding natural obstacles such as the large Barelas Canal, then from the surveyor's yardstick and tape. As a result, today we have inherited a situation which is next to impossible. The entire railroad front south of the Santa Fe shops is an incredible jungle of densely clustered huts, outhouses and dirt roads, forming a maze only local residents know how to penetrate.

Housing is the most important physical device to improve living standards. Therefore, housing needs represent one of the most pressing problems of the MNA. The local Model City Agency will cooperate closely with a number of agencies and organizations to best solve the housing problem in the MNA. A home rehabilitation program is already underway in Albuquerque in the form of a Community Action Program "Home Improvement Project" under the direction of the University of New Mexico. Assistance will also be forthcoming from local architects, the Home Builders Association and financial firms.

TRANSPORTATION

Excellent transportation and access to the area is at the same time its curse and blessing, for the area being adjacent to I-40 and of elongated shape is segmented in an east-west direction by no less than eight major arterials. This still would not be a problem if it were not for the railroad tracks which these arterials must cross at separated grades. So far, out of eight, only three do so (Central, Lead and Coal Avenues).

The Grand Avenue crossing, which is being considered for construction next has stirred up a long-standing controversy. This is primarily because it is so crucial for both the educational park and downtown areas, and secondly because it plays a major role in an urban renewal project as a major credit element to the project on behalf of the city. The City of Albuquerque is now in process of putting together its first Urban Renewal Project. The project area covers 160 acres, part of which lies in the downtown section, the other convergent with the earlier mentioned 80 acres of the proposed educational park.

Since the problem of crossing the railroad tracks with at least five more arterials will face us sooner or later, we intend to investigate it in a comprehensive way within the framework of the Model Cities Program.

The creation of Albuquerque artist Julie Graham (Mrs. Chan), this sculptured adobe "Play Tower" uses scrap materials ... provides these black-eyed Albuquerque children with an imaginative and delightful free-form Wonder-Land.
The information in this series of articles (this is the first of five), is from The American Institute of Architects' new eighteen page publication, "Your Building and Your Architect." This booklet is for distribution by AIA members to prospective building owners and can be purchased from the Institute's Document Division at The Octagon for $25.00 for 100 copies and 50 cents each for less than 100. This booklet is an abridgement of a series of articles originally published in Architectural Forum and copyrighted by Urban America, Inc. The author, Donald Canty, then senior editor of Forum, is now director of the Urban Information Center of Urban America, Inc., Washington, D.C., and editor of its magazine, City. The American Institute of Architects has selected Mr. Canty's article for the use of prospective building owners because it is an informed non-architect's candid view of how both client and profession can best be served.

how to pick an architect

By Donald Canty

There is no easy way to pick an architect. True, there are some general rules that can be stated, pitfalls that can be warned against, pointers that can be offered about what to look for in an architect and his work—and all of these things are done in the following pages. But there is no magic formula for selection. "Listen," said a man in charge of building some $10 million in retail stores a year when asked how he does it, "if you come up with a good system, let me know." In reality, systems and procedures are less important in this perilous quest than is the disposition of the client. To the task he must bring good intentions, an open mind, a hardy sales resistance and a willingness to take the time and trouble to learn something of what architects and architecture are all about.

To some clients, used to making clear-cut decisions about clear-cut problems, all of this seems impossibly hazy and impractical. They seek an easy way out, turning to acquaintances, to brothers-in-law, to big, briskly businesslike architectural firms, or to the even bigger organizations which offer a neat package of construction services. Sometimes they get fairly good buildings, but they do not often get architecture. Hence the stress on good intentions. All things being equal, the client gets about as good a building as he wants. To achieve architecture—a building which is soundly put together, which works well and which is an ornament to its surroundings and a source of deep satisfaction to its occupants—the client must have a strong drive to do so. His motivation may be simple pride, public relations, a feeling of responsibility to the community and the building's ultimate users. Whatever the reason, he must actively want the building to be something far more than mere shelter. And then he must try to select the right architect. Otherwise, the best of intentions are wasted. Many a client who starts out with a desire to be a party to greatness winds up a patron of mediocrity, all through making the wrong choice. Selecting an architect is by no means the only decision the client has to make during the building process, but it is far and away the most crucial.

Formal competition: it may be worth the trouble

There does exist one cut-and-dried method of making the choice, which perhaps should be dealt with first. It is the formal architectural competition, held under the code for architectural competitions (AIA Document B451), established by The American Institute of Architects, in which the client hires a professional adviser, sets up a jury and invites architects to submit designs based on a common program. Architectural competitions are popular sport in Europe, but they have never really caught on in the United States. Indeed, it is not difficult to make a case against them: they can be expensive to stage (the AIA code requires compensation to the professional adviser, the jury and the finalists). Sometimes tend to drive out the busier, better-known firms who simply don't have time to take a flyer. They can deprive the client of the chance to closely investigate the extra-design abilities of the firm that gets the jury's nod. And yet the formal competition is the nearest thing to a sure-fire system for attaining superior architecture—a system that lets the client see a facsimile of the product before a designer is selected and provides a panel of experts to guide the choice. It is especially well-suited to public projects: it is, after all, a particularly democratic way to pick architects, and it also takes some of the political pressure off the public client. Most important, it often leads to a freshness and excitement not often found in public buildings. There is reason to question, for example, whether Boston would have the prospect of such a vigorous new city hall had the architects been selected and retained directly by the city government.

The first list: where to go from the yellow pages

For the majority of clients, who don't feel a full-scale competition to be feasible, the search for an architect begins with a list of names. If they are habitual clients or long-time architecture buffs, they probably start with some names in mind. If not, however, they are likely to be seen staring at the yellow pages of the telephone book and wondering where to turn. Some turn to the local chapter of the AIA, but more often than not come away disappointed. The AIA is a membership organization, and in prudence cannot be expected to make qualitative distinctions among those who pay it dues. Many architects, moreover, stoutly resist classification as specialists, and in some localities the AIA office is forbidden even to suggest architects who have done a great many buildings of one type or another.

The best advice that can be offered the bewildered client at this point is to enter into a crash program of self-educa-
tion and to pick the brains of all accessible experts shamelessly. Architectural buff or no, if he has the firm intention to achieve a good building, he probably has some standard of what a good building is. The goals of the education program are to develop these standards further and to find some architects who seem to offer promise of meeting them.

One starting point is in the pages of the architectural magazines, which convey a feeling of what is currently being built and may even contain work by architects in the client's own locale. The AIA chapter may conduct an awards program or have available a guidebook, both of which give some indication (though far from an infallible one) of the practitioners whom the architectural community considers its leaders. But the most instructive procedure of all is for the client to visit new buildings, to get their "feel," and then to find out who designed those to which he responds most positively.

As for the expert counsel, it should be sought on both sides of the fence, among clients as well as architects. Acquaintances or colleagues who have gone through the process of selection recently are rich sources. It is harder on the architects' side: who could summon the nerve to ask Macy's to recommend a good department store? Good prospects here are architect friends who are employees of large offices, architectural journalists and architectural educators. Journalists and educators are often chary about recommendations, however.

The matters of chauvinism, size and specialization

The making of the first list of potential candidates involves more than knowledge. It also involves some tough decisions about matters on which even the most expert disagree. Among them, in fact, are perhaps the three most hotly debated questions about the selection of architects.

The first is whether the client should consider only local firms. If he is a staunch member of the Shop at Home Committee of the chamber of commerce, the question may well answer itself. National concerns who want to become "part of the community" also may find it prudent to use only home-grown talent. Local public agencies, notably school boards, often are subject to some rather unsubtle pressures from the architectural fraternity not to look too far afield. And even beyond such considerations, there are good reasons to have the architect close at hand during the design and construction process.

Unhappily, however, some communities are not rich in the kind of talent required to produce superior work. The client who wants a building of genuine quality may be forced to look elsewhere. After all, the desire to give the community such a building is local pride of an admirable sort. The hometown architects should understand; they are professionals, not juvenile gang leaders carving an area into unimpregnable turfs. As for the convenience of having the architect nearby, it can often be attained through an association between the out-of-town architect and a local firm.

The second knotty question involves the project's size. If it is a large and complex job, should only big firms be considered? The big firm, of course, will answer yes. It will claim, with a good deal of justification, to offer a wider range of services than a small office. The big firm will also point out that it takes both manpower and experience to manage the myriad details involved in a sizable project.

These are compelling arguments—if the client is satisfied that the big firm will deliver quality. Some do, but here another harsh fact must be faced: there are enormous architectural offices, turning out enormous quantities of work, which have yet to do a good building. What may be a large job to the client, moreover, may be run-of-the-mill to the big firm and may wind up in the hands of a 22-year old designer in one corner of its huge drafting room.

There are two alternatives. One is to engage a medium-sized firm with a hard core of superior personnel which is willing to expand its production staff for the job. The client must balance the risks involved against the likelihood that the firm will throw all of its talents unstintingly into his building. The other is, again, an association, this time of a small design office with a big firm to handle production and perhaps construction contract administration.

A word about such associations: they are a little like shotgun weddings, particularly if the two firms have both been contenders for the commission. There should be a precise understanding about who is in charge of what; otherwise, design ideas can be lost in endless bickering and compromise. Also, even though the two firms share the fee, the client should understand that he will be putting out a little more in expenses. Whether the association is worth it is his decision.

The third and final point of controversy is whether the client should seek out those architects who have solid experience in the type of building at hand. Phalanxes of specialists have grown up around those types which are especially complicated in program or function, such as schools, hospitals, laboratories and factories. Often these specialists know the client's problems better than he does. They can make his life a great deal easier.

But sometimes the specialist becomes so steeped in the client's problems that the process of design becomes automatic—and the building looks it. His expertise is not to be dismissed lightly, but it should not be overweighted. Often a fresh solution comes from the application of a fresh talent, even a young talent. A good many outstanding buildings have resulted from the encounter between an imaginative architect and a new problem complex enough to be challenging.

The interview: the selection process gets personal

The client now has his preliminary list. It is not too long, and nicely assorted among architects far and near, big and small, experienced and untrained. The next step is an entertaining one. He should contact each of the candidates, explain the nature of his project and invite them to submit information on their offices and their past work.

The next few days' mail will bring him an amazing variety of missives, ranging from chaste professional communications to thick, multicolor brochures. Careful study, culminating fact from fancy, should enable him to further trim the list to those he wants to interview.

"In the end," an Architectural Forum editorial once said, "a client has to trust two people: himself and his architect." The interview is generally the first face-to-face encounter between the two. One of its principal functions is to give an indication whether their coming together produces that special chemistry required for joint participation in creative effort. The reaction is indefinable—it is more than a matter of mere compatibility—but it must be real if something of worth is to result from the association.

An important corollary of the statement just quoted is that architecture is, in the final analysis, a personal matter, whose creation is best not left to committees. Until now, we have used the word client in the singular. Sometimes in the nature of modern institutions, however, seems to require the setting up of committees for tasks like choosing architects. It is probably unavoidable, and it can turn out all right if one condition is met: that a single, strong individual on the committee be given prime responsibility for the screening process of voices and ideas.
that will produce only contradictions, confusion and, in the end, mediocrity.

No two architect-client interviews are quite alike. Some clients like to visit the architect in his natural habitat; some feel safer meeting the architect on their own home grounds. Some architects appear wreathed in smiles and flanked by vice presidents in charge of client development (salesmen); some come alone and sit quietly, willing to let their work speak for them. In the normal course of the interview, the client explains his project in more detail and asks the architect about his office and his experience. The architect attempts to relate his capabilities to what seem to be the client's needs. Somewhere along the line, each forms the important first impression of what the other would be like to work with.

There are, of course, a few general types the client should be warned away from: the architect who shows more interest in the smoothness of his pitch than in the specifics of the job at hand; the architect who claims to have developed startling, cost-cutting innovations; the architect who comes to the interview already bearing a sketch of what the building might look like and, most sinister of all, the architect who hints that he might be able to shave the fee a bit. The AIA chapters put out schedules of recommended fees which have met the tests of fairness to both sides. The architect can suggest that the fees be higher than the schedule if extra services are required, but beware if he offers to make them lower.

The client will not work solely with the architect himself, and so should get to know the others in the office who will be importantly involved in the project (a step which can be accomplished either in the initial interview or as a follow-up). Included here are the structural, mechanical, electrical and acoustical engineers, whether they are on the architect's staff or are to be engaged by him as consultants.

The client is now almost ready to make the choice, but not quite. The final proof of an architect is in his buildings. The client's final step, then, is a careful investigation of each surviving candidate's past work.

**The tour: what to look for in the architect's work**

The operative word is investigation. This does not mean turning again to the magazines, nor driving by the architect's buildings, nor even walking through them with him and saying periodically, 'Isn't that nice!' (If it really isn't very nice, the client's best line is, 'Say, this is a building.') It means finding out how expeditiously the buildings were built, how much they cost, how well they work and, once again, how they feel as human environment. Advice on procedure would go something like this:

First of all, give the architect a fair shake; let him suggest which of his buildings you should look into. Then steel yourself not to look for the shadow of your building in them. Your building, influenced by your own needs and nature, may turn out to be quite different, even in the hands of this architect.

Next, ask for an advance look at the program for the buildings you are studying (or a verbal summary if the program does not exist on paper). This way you will have an idea of what the architect was expected to deliver.

Approaching the building, look to see how well it fits into its immediate surroundings, particularly if it is in a key location or a neighborhood whose character demands particular respect. Case the exterior, weighing your reaction to the use of materials, the general scale, the proportion of one part to another.

Once inside, do the same and also take note of the handling of the lighting, both natural and artificial. (But don't blame the architect for the furnishings without checking who chose them.) Think back to the program and try to form some impression of how well the building fulfills its function. During the tour, don't hesitate to ask the architect about any aspect of the building you find questionable.

Later, arrange to see the building's owner. Tactfully probe further into the building's function; try to determine how the job went; get as much information as you can about costs. If the owner is reluctant to give you specific figures, at least find out how close the final cost was to the architect's estimate. But do not necessarily take all the owner says at face value. If the building came in high, it could have been because he insisted on changes, or simply because building costs in general rose between estimating and bidding.

Finally, if possible, talk to the contractor. Try to find out from him how complete the plans and specifications were, whether they came in on time and generally how the architect performed as construction administrator. But, again, beware. There is a continual cold war of sorts between contractors and architects, so carry an ample supply of salt.

Such a procedure may seem tedious, but nobody said it wouldn't be. The more time and thought the client puts in, the less likely he is to make a mistake in his choice of an architect, the results of which can only be a building that neither looks, feels, nor works well. And that is a terribly prominent, terribly permanent, kind of mistake to make.

(The second in this series of articles titled "what architects do and how to pay them" will appear in March Symposium. The graphics used with this article are not those from the booklet "Your Building and Your Architect," but the work of AIA members in the Symposia region.)
DENVER SCORES
AT CONFERENCE

Reluctant author Don Wakefield has
as last given us the details of the First
International Conference on Masonry
Structural Systems conducted at Aus­
tin, Texas, by the University of Texas
College of Engineering and under the
sponsorship of the National Science
Foundation, the Clay Products Associ­
ation of the Southwest and the Struc­
tural Clay Products Institute. Eighteen
delegates from Colorado were among
those present. Under SCPI/Region 12
sponsorship were Donald A. Wakefield,
P.E.; Richard Lambert; Ronald Baker;
Dr. James Chinn, P.E.; George C.
Hanson, P.E.; Ib Falk Jorgensen,
P.E.; E. W. F. Peterson, P.E.; William J.
Sallada, P.E.; Don Pyle, P.E.;
Harold A. Simpson, contractor; Frank
Steffen, Summit Pressed Brick and
Tile; and Ralph Stewart, Denver Brick
and Pipe Company. Also present from
Colorado were Orville C. Anderson,
Jr., Architect; Dwight E. Farr, Ma
son Contractor; Edwin G. Hedstrom,
Architect; Michael W. Lombardi, Ar
chitect; Roland Proett, Dow Chemical,
and Robert A. Reay.

Sixty papers were presented with topi
ics including imaginative architectural
design, materials science research,
structural performance of new brick
structures, design, and construction of
masonry systems. Several case studies
were also presented of prominent
structures throughout the world.

Three papers were written by Colo
rado authors. “Park Mayfair East” by
Engineer George C. Hanson was a
case study of the seventeen story high
rise load bearing brick apartment
building of the same name at 955 Eu
dora in Denver, “Hemispheric Brick
Planetarium” by Architect Orville C.
Anderson was a case study of a brick
planetarium in Lamar, Colorado.

“Prefabricated Brick Panels, Why and
How” by Donald A. Wakefield, P.E.
and Regional Director of Structural
Clay Products Institute, told of new
construction techniques in the con
struction of prefabricated brick panels
in the Colorado area. All three of
these papers were considered high
lights of the three day conference and
were of great interest to the 550 archi
tects and engineers in the audience,
representing 13 countries from all over
the world including New Zealand, Aus
tralia, England, Germany, Switzer
land, Africa, Denmark, etc., and 37
states of the U.S.A.

Interpretation:
House or high-rise, we
have a delineation
 technique that best
suited your need; black
and white to full
color, line work,
pencil, wash,
opaque, and a
special few all our
own. Give us a
call... ask for our
interpreter.
534-5717 222-4322

For Technical Information
or Literature
on the
Application, use & availability
of Lumber and Wood Products
Call or Write

WOOD INC.
3121 E. Colfax Ave.
303/322-5890
Riebe-Bowman/New Headquarters
A not-so-reluctant author is Tom Bowman of Riebe & Bowman, Inc., who have moved this February 1 to 2170 South Delaware Street in Denver, 80223. Mr. B claims no kinship with the Bard of Avon, but does write a darned good commercial—"Our new headquarters provides 6,000 square feet of expanded office, warehouse and fabrication facilities. We have been connected with the Construction Industry for a total of 28 years, and during this period General Contractors have become more and more dependent upon reputable suppliers and sub-contractors. As building "systems" become more sophisticated in a strong labor market, the supplier must offer more services. In addition to the fabrication space, our new location will provide the required warehouse and display space for our fine product lines as well as enlarge our design department." Riebe and Bowman represent the following firms: Anaconda Forest Products, Behlen Manufacturing Company, General Tire and Rubber Company, Holland Plastics, Hydrozo Coatings Company, Ickes-Braun Glasshouses, Kalwall Corporation, Mirawal Company, National Gypsum Company, Naturalite, Inc., Panels Plus, Inc., Pinnacle Products, Powerlock Floors, Inc., Sandell Manufacturing Company, Stammit and Weyerhaeuser Company . . . which might be termed a "bunch." In any case, the message is the new address . . . 2170 South Delaware in Denver.

WIC Forum
The Lady on the Left is the symbol of the Women in Construction, a national Association of women actively employed in the various phases of the Construction Industry. The Denver Chapter is busy these days planning for the Region 8 Forum to be held April 26-27 at the Brown Palace Hotel. Delegates from twelve WIC Chapters will be on hand . . . they will come from Albuquerque, New Mexico, from the Texas towns of Amarillo, Big Springs, El Paso, Lubbock, Midland and Odessa, from Phoenix and Tucson, Arizona, Salt Lake City, Utah and from Colorado Springs and Denver. Polly Culpepper of the Ceco Corporation is Forum Chairman, and she and the committee chairmen are meeting frequently to make sure Denver's Forum meeting is the "best in the west." Certain to be on hand will be WIC National Secretary, Margaret Borg of Salt Lake City and perky Bettye Burks, Region 8 Director from Lubbock, Texas.

Guaranteed Waterproof
5 Years

SAHARA
Waterproof Masonry Coating
Keep Concrete and Block Walls "DESERT DRY"
Brilliant White and 1,000's of Colors
COLORADO PAINT COMPANY
Manufacturers of Specification Coatings
Since 1904
4747 Holly Street
Denver, Colorado 80216

201 East 58th Avenue—
Denver, Colorado—80216
Telephone 303-623-4171
a really memorable gathering for those who are fortunate enough to attend. More on this as information is available.

colorado
Talk About Organization!
Denver's CSI met on January 10 to discuss "The Problems With Masonry Specifications." Coordinator for the program was P. C. Prexy Roland B. Proett, and his 5-page, minute-by-minute schedule was something to behold. Panel members were G. C. Don Deck, Mason Contractor Ed Thomas, Brick Supplier Sandy Sandoval, and Architect Orville Anderson. Unfortunately, it wasn't "fit night out for man nor beast" so the turnout was minimal, but it was a fine program...and planned to gnat's eyebrow. Roland could give lessons!

And More Organization!
Barbara Light, Executive Secretary for Colorado's AIA, has been very active promoting a new group for Architectural Secretaries in the Denver area. A joint meeting with the AIA on January 18.

nevada
Walter F. Zick, AIA
Las Vegas, Nevada

New AIA Officers
The Nevada State Association of Architects has new officers for 1968. They are: President, Mr. Ralph Casaza, Reno; Vice President, Mr. George Tate, Las Vegas; Secretary-Treasurer, Mr. Edward Parsons, Reno. Board Members are: Mr. Walter F. Zick, Las Vegas; Mr. Raymond Mellmann, Reno, and Mr. Robert Fielden.

The Las Vegas Chapter of the AIA has given the nod to the following gentlemen for the year ahead. They are Mr. Fielden, President; Mr. Leo Borns, Vice President and Mr. Hugh
Taylor, Secretary-Treasurer.

Needless to say, our best Symposia wishes go with these officers in their new positions. Hopefully the Region will get a closer look at the Presidents themselves in “Take Me to Your Leader.”

Construction Picture Sunny

Everett Brunzell, President of the Nevada Chapter of the Associated General Contractors of America, has predicted increased volume for Nevada’s Construction Industry in 1968! Altho AGC nationally has predicted a 5% increase in construction volume generally throughout the West, President Brunzell feels this increase will be slightly larger in Nevada... estimating a total construction volume of about $165 million. He estimates the most rapid expansion in construction in Clark County where an increase of approximately 15% is expected in 1968. Brunzell's prediction for Northern Nevada is for an increase of 5% or less over 1967 figures.

In Southern Nevada the vacancies for single family dwellings are at their lowest point in years, therefore, some expansion in home building is anticipated during the first six months of 1968. Brunzell predicts a more modest expansion in Northern Nevada commencing during the latter part of 1968. The AGC President cautioned that the increases he has predicted do not indicate the rapid expansion which occurred in 1963 and 1964. He further stated that even with a slight increase in volume there would be a continued shortage of construction work and an oversupply of contractors. Competition will remain exceedingly keen and will keep contractors' profits to a minimum.

new mexico

Bradley P. Kidder, FAIA
Santa Fe, New Mexico

New Mexico AIA Officers

Three Chapters make up the New Mexico Society of Architects... and this gives us a lot of leaders in New Mexico. Mr. K. reports the 1968 officers as follows:

Albuquerque Chapter:
President: John B. Reed; Vice President: Robert G. Mallory; Secretary: Ernest L. Pogue; Treasurer: John J. Heimerich. The Directors are Joseph F. Boehning, Van Horn Hooker and John P. Varsa.

Santa Fe Chapter:
President: Richard S. Clark; Vice President: Charles R. Lugton; Secretary-Treasurer: Terrance Ross. Directors for 1968: Kenneth S. Clark and Albert S. Merker.

Southern Chapter:
President: Loren E. Mastin (Mesilla); Secretary-Treasurer: Craig Protz (Roswell); Directors: Beryl Durham (Carlsbad) and Frank Standhardt (Roswell).

(ED: Somewhere in the wilds of the Southern Chapter of the New Mexico Society of Architects—a Vice President is in hiding. Would you please reveal your whereabouts to either the Editor or to Symposia Board Member Bradley P. Kidder, FAIA, in Santa Fe. We thank you!).

Now—here are the new officers for the New Mexico Society. Kenneth S. Clark, FAIA, of Santa Fe is the new President. The Vice President is Beryl Durham of Carlsbad, the Secretary-Treasurer is Joseph F. Boehning of Albuquerque. Directors are: From Albuquerque: John Reed and Robert Mallory; from Santa Fe: Richard Clark and Albert Merker and from the Southern Chapter, Loren Masten and Frank Standhardt.

As likely a crop of leaders as one is apt to find—and best Symposia wishes to them all!

Santa Fe Opera

Destroyed by fire in 1967, the famous Santa Fe Opera is being rebuilt with Architects McHugh and Kidder in charge. Mr. K. reports: “The Opera is going great guns—we've built shelters all over the place and have heated the areas inside so that we've been able to work all through the worst of the snows—and things are finally beginning to take shape—the big balcony Loggia is up and roofed and ready for the partitions.” Good news indeed for more than just the Santa Feans are hoping the 1968 Opera Season can open in the new quarters.

AGC/Meeting Dates

The New Mexico Building Branch of the Associated General Contractors has kindly sent along a meeting schedule for Symposia’s Memo. The membership gets together on the second Wednesday of every month with the Semi-Annual Convention scheduled for May 11th in Hobbs, New Mexico.

Ellison Joins Staff

Alva J. Coats, Manager of the New Mexico Building Branch of the AGC, has announced that Dewey E. Ellison has joined the staff of the Construction Industry Advancement Program as Market Development, Industry and Public Relations Director. Ellison was New Mexico Branch Manager for Brown-Olde Corporation in Albuquerque for over 14 years. He joins Neil Widner, Staff Education and Safety Director in the Program.

The Construction Industry Advancement Program was created through a constructive Collective Bargaining
we could not rightfully classify the following as a "funny bone," although there is a certain wry humor in its message. However, when it came to us from Symposia Editorial Board Member, Frederick P. Weaver, FAIA, of Phoenix, we felt it deserved mention.)

Fred Weaver writes; "In reading Roman History, I am continually amazed that Man has made such little progress. The following is lifted from that era as well as a little local Trade Industry pamphlet called "Between the Sheets." As you may have guessed, the Industry is Sheet Metal and Air Conditioning."

**After 2,000 Years History Repeats**

"We are taxed in our bread and our wine, in our incomes and investments, on our lands and on our property, not only for base creatures who do not deserve the name of men, but for foreign nations, for complaisant nations who will bow to us and accept our largesse and promise us to assist in the keeping of the peace—these mendicant nations who will destroy us when we show a moment of weakness or our treasury is bare, and surely it is becoming bare! We are taxed to maintain Legions on their soil, in the name of law and order and the Pax Romana, a document which will fall into dust when it pleases our allies and our vassals. We keep them in precarious balance only with our gold. Is the heart-blood of our nation worth these? Shall one Italian be sacrificed for Britain, for Gaul (France) or Egypt, for India, even for Greece, and a score of other nations? Were they bound to us with ties of love, they would not ask our gold. They would ask only our laws. They take our very flesh, and they hate and despise us. And who shall say we are worthy of more?"

The above originally taken from "De Republica"—Marcus Tullius Cicero—106-43 B.C.
FEB. 6: Consulting Engineers Council/Colorado—Director’s Meeting. Cocktails: 6:00; Dinner: 6:30 p.m.—Denver Press Club. (Note: All members are invited and urged to attend Board meetings. For reservations: call before noon on previous day 311, 421-7177.)

FEB. 6: Women In Construction/Forum Committee Chairman—7:30 p.m.—Symposia office, 4070 Estes, Wheat Ridge.

FEB. 6: Construction Specifications Institute (Denver Chapter Workshop Seminar I—Orientation—Conducted by Art Bush, Chapter President. 3:30-5:00 p.m. Majestic Savings and Loan Meeting Room, 517 17th Street.


FEB. 7: Association of Remodeling Contractors/Board of Directors Meeting. Dinner: 6:30 p.m.—Four Winds Motor Hotel, Denver, Colorado.


FEB. 8: American Institute of Architects/Central Arizona Chapter. Regular Chapter Dinner Meeting, ABC Club, Phoenix.

FEB. 8: American Institute of Architects/Santa Fe Chapter. Regular luncheon meeting—La Fonda Hotel.


FEB. 8: Colorado Pipe Trades Industry Program/Board of Trustees. 4:00 p.m.—New Plumbing Showcase.

FEB. 9: Colorado Association of Engineering Technicians, 7:30 p.m.—Public Service Building, 1800 Sheri Lane (Just south of Belleview), Littleton, Colorado.

FEB. 12: Construction Specifications Institute/Tucson Chapter Board Meeting—Casa Molina—Broadway.

FEB. 13: Construction Specifications Institute/Albuquerque Chapter, Regular meeting—Happy Hour: 5:30; Dinner: 6:30; Program: 7:30 p.m. Sundowner Motel, Albuquerque. (Note: Any members of CSI who are in town on that date are cordially invited to join “the group”)

FEB. 13: Construction Specifications Institute/Denver Chapter Workshop Seminar II—General Conditions, Part I—Conducted by James Noone. 3:30-5:00 p.m., Majestic Savings and Loan Meeting Room, 517 17th Street.

NOTE: If you are not “among those present” in this month’s Memo, simply forward your meeting dates to us as near the 10th of the preceding month as possible. We hope Memo helps you to be where you should be when. The Symposia address: 4070 Estes Street, Wheat Ridge, Colorado 80033.

FEB. 14: American Institute of Architects/Southeastern Section, Colorado Chapter. Executive Board: 4:30—General Membership: 6:30 p.m.—Cavalier Lounge, Colorado Springs.

FEB. 14: Associated General Contractors/New Mexico Building Branch. Regular membership meeting.

FEB. 14: Construction Specifications Institute/Denver Chapter. Regular monthly meeting. Cocktails: 6:00; Dinner: 6:30; Meeting: 7:30 p.m.—Engineer’s Club Building, 1380 South Santa Fe Drive.


FEB. 20: Construction Specifications Institute/Salt Lake Chapter. Social Hour: 6:30; Dinner: 7:00; Meeting: 8:00 p.m.—The World Motel, 1900 South State Street, Salt Lake City.

FEB. 20: Construction Specifications Institute/Denver Chapter Workshop Seminar III—General Conditions, Part II—Conducted by R. James Noone. 3:30-5:00 p.m., Majestic Savings and Loan Meeting Room, 517 17th Street.


FEB. 21: Construction Specifications Institute/Albuquerque Chapter. Workshop Seminar I...General Indoc­trination....Conducted by R. J. Schmidt, University of New Mexico. 4:00-6:00 p.m. Hospitality Room, First National Bank, East.

FEB. 26: Producers’ Council/Rocky Mountain Chapter. Armstrong Cork Informational Meeting at Noon. Place to be announced.


FEB. 26: Construction Specifications Institute/Tucson Chapter. Regular Dinner meeting—7:30 p.m., Redwood Gay Nineties.


FEB. 27: Construction Specifications Institute/Denver Chapter. Executive Board Meeting—Noon, Engineers Club Building, 1380 South Santa Fe.

FEB. 27: Construction Specifications Institute/Denver Chapter Workshop Seminar IV—Legal Ramifications—Conducted by Don Klene and Bill Caskins, Attorneys. 3:30-5:00 p.m. Majestic Savings and Loan Meeting Room, 517 17th Street.

FEB. 28: Mountain States Bureau for Lathing and Plastering/Board of Governor’s Meeting—10:00 a.m.—221 Santa Fe Drive, Denver.

FEB. 28: Construction Specifications Institute/Albuquerque Chapter. Workshop Seminar II—Division I: General Requirements—Conducted by J. D. Long, AIA, 4:00-6:00 p.m. Hospitality Room, First National Bank, East.
FOR WOOD, METAL OR FIBER FORMS AND CASTING BEDS:

JAHN

FOR FORM RELEASE

* Contains Butyl-T

• The modern, scientific successor to chemical reactants and form oils.
• Exclusive "BUTYL-T" formula guarantees clean release every time.
• Ready-to-use in this light-weight, distinctive, factory-sealed drum. No dilution or contamination.

MONEY-BACK GUARANTEE

Jahn STRIP-eez is fully guaranteed when used according to instructions. You must be satisfied or full purchase price refunded.

K. C. CONSTRUCTION SUPPLY CO.
19th & BRYANT ST. DENVER, COLO. • (303) 477-1601

Specifying HIGH-LITE Plastic

SKYLIGHTS
IN PLEXIGLAS AND FIBER GLASS

21 sizes in stock

National Leaders in Custom Design

Manufactured in Denver for over 15 years by

PLASTICRAFTS
DENVER, COLORADO
2800 No. Speer Blvd. 303/433-3367

Index to Advertising

<table>
<thead>
<tr>
<th>CSI Specification Division</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Colorado Paint Company</td>
<td>29</td>
</tr>
<tr>
<td>8 W. Ray Crabb Inc.</td>
<td>10</td>
</tr>
<tr>
<td>Designers West, Inc.</td>
<td>28</td>
</tr>
<tr>
<td>3 Dow Chemical Company</td>
<td>28</td>
</tr>
<tr>
<td>7 H. B. Fuller Company</td>
<td>34</td>
</tr>
<tr>
<td>5 General Building Service and Supply, Inc.</td>
<td>9</td>
</tr>
<tr>
<td>6 Georgia Pacific</td>
<td>34</td>
</tr>
<tr>
<td>10 Edward Hanley and Company</td>
<td>7</td>
</tr>
<tr>
<td>6 Imperial Dry Wall Company</td>
<td>32</td>
</tr>
<tr>
<td>7 K. C. Construction Supply Company</td>
<td>34</td>
</tr>
<tr>
<td>3 Mack Precast Products Company</td>
<td>7</td>
</tr>
<tr>
<td>9 Mountain States Bureau for Lathing and Plastering</td>
<td>31</td>
</tr>
<tr>
<td>11 Nelson Distributing Company</td>
<td>31</td>
</tr>
<tr>
<td>10 Plasticrafts, Inc.</td>
<td>32</td>
</tr>
<tr>
<td>Public Service Company</td>
<td>8</td>
</tr>
<tr>
<td>2 Richlawn Turf Farms</td>
<td>3</td>
</tr>
<tr>
<td>12 Seal Furniture, Inc.</td>
<td>6</td>
</tr>
<tr>
<td>15 Shaker Air Conditioning Company</td>
<td>6</td>
</tr>
<tr>
<td>G. A. Tallbert, Inc.</td>
<td>10</td>
</tr>
<tr>
<td>5 Trus-Joist Corporation</td>
<td>30</td>
</tr>
<tr>
<td>10 Unistrut Western, Inc.</td>
<td>8</td>
</tr>
<tr>
<td>6 Wood, Inc.</td>
<td>28</td>
</tr>
<tr>
<td>5 William G. Zimmerman Architectural Metals, Inc.</td>
<td>29</td>
</tr>
<tr>
<td>4 Zonolite Division, W. R. Grace Company</td>
<td>Outside Back Cover</td>
</tr>
</tbody>
</table>
HOW PUMPS AND CAULKING GUNS MAKE BETTER WALLS

Bonding polystyrene foams—does not collapse foam.

FOR PANELING—REDUCES NAILING.

EASY TO APPLY BY GUN, PUMP OR TROWEL.

WITH

FUL-O-MITE® BLACK STUFF

New Black Stuff Construction Adhesive is smooth, tacky, easy to use. It goes through automatic pumping systems. Pushes easily and effortlessly through hand caulking guns. Black Stuff is never heavy, thick or lumpy. It does not sag off or run off vertical surfaces.

Black Stuff grabs fast—develops a strong, solid bond—eliminates “ringing” or “thumping” in drywall construction. Makes a solid, unitized wall structure.

Black Stuff cuts down on nailing and nail hole patching. Eliminates nail popping. Reduces hammer marks when working with decorative paneling.

Black Stuff is available now in 1 and 5 gallon containers plus 1/10 gallon and 1/4 gallon cartridges. Check with your distributor or write directly to H. B. Fuller Company.

LEADER IN ADHESIVE TECHNOLOGY

H B FULLER COMPANY

Distributed by ECONOMY BUILDING SPECIALTIES, INC.

1033 W. Mississippi • Denver, Colorado 80223 • 744-6166/744-7008
There’s more to a good roof than meets the weather.

A good roof deck is a combination of two things: the materials that go into its construction; and how they go in.

ZONOLITE® VERMICULITE INSULATING CONCRETE is the ideal roof deck material. This fireproof, seamless super heat stopper weighs only \( \frac{1}{6} \) the weight of structural concrete. And since it is poured in place, it easily conforms to the variety of forms and shapes found in today’s modern design.

As approved Zonolite Applicators we have the know-how to do your job right. By following rigid industry standards and keeping a running progress log on your job, we offer not only the finest insulating roof deck available, but a written certificate that your Zonolite concrete was mixed and applied as specified.

When there’s no question about the quality you’re looking for in a roof deck, specify Zonolite Vermiculite Insulating Concrete.

For more information on the best between you and the weather, contact your nearest local approved Zonolite Applicator:

GRACE
ZONOLITE DIVISION
Merchandise Mart Plaza • Chicago, Ill. 60654
(312) 527-5700