

new mexico architecture

January-February 1975

\$1.00



Slumpblock
provides wall
fashion outside—
wall function inside.
And a host of
benefits in between—
complete fire safety
sound control
self-contained
insulation
local availability

CREGO BLOCK CO., INC.

Phone (505) 344-3475

6026 Second St. N.W.

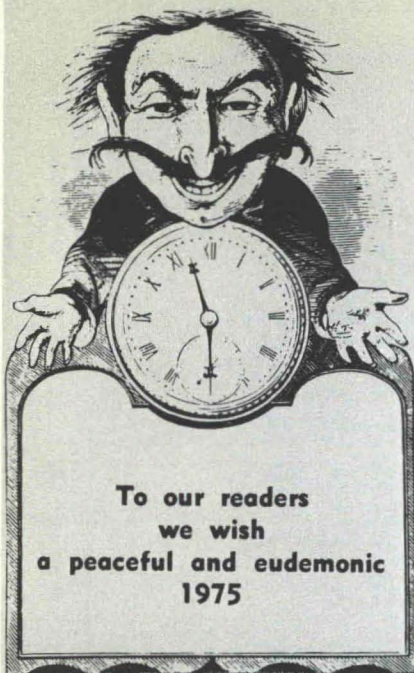
Albuquerque, N.M. 87107



Uptown Plaza
Albuquerque, New Mexico

Architect—Jerry Torr
Owner—R. P. Conway

Contractor—Ubaldo Chavez
Masonry—Escalante Masonry



To our readers
we wish
a peaceful and eudemonic
1975

vol. 17 no. 1

We begin another volume and year of **New Mexico Architecture**. It was way back in March of 1959 that Number 1 of Volume 1 was printed. W. Miles Brittelle, Sr., was president of the New Mexico Chapter, American Institute of Architects. Philippe Register was chairman of the Editorial Board; Phil and Britt were fathers to the child. While I sometimes wonder why, the child still lives and is healthy, if not wealthy.

Beginning with the September-October 1960, Bainbridge Bunting and I became the co-editors. For some eight years, Bain poured into me what knowledge I now possess in this role of editor. It was then, and continues to be, a fascinating and rewarding role.

Robert Mallory and Mildred Brittelle do all the advertising and financial work—the business of the magazine—which makes possible the publication of each succeeding issue of **NMA**.



And thus, we begin the seventeenth year of publication.—JPC

nma

jan-feb 1975 • new mexico architecture

NMA News 9

Electric League of Arizona Trade Show—A Partnership Is Formed

The Rio Grande Zoo 11

The 1974 Arts Commission Award in the Field of New Construction.

Ehricke Space Garden 16

An interview by A. E. Maxwell

Index to Advertisers 22

(Cover — Rio Grande Zoological Park — Ron Hill, Photographer)

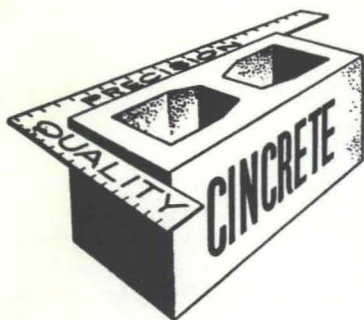
—Official Publication of the New Mexico Society of Architects, A. I. A.—

Society Officers

President—Bob Campbell
Vice President—Edwin French
Secretary-Treasurer—George Owen
Director—Bill Waters
Director—Gene Hunt
Director—Charles Nolan, Jr.
Director—Wilbur Harris
Director—Robert Strader
Director—John Conron, FAIA/FASID

Commission for NMA

John P. Conron—Editor
Bainbridge Bunting—Editorial Consultant
Robert G. Mallory—Advertising
Mildred Brittelle—Financial Secretary, Circulation
John W. McHugh
Sam Pool



serving New Mexico
and the El Paso area
with

Quality Concrete Masonry Products and many allied building materials



Modernfold Wood and Plastic Folding Doors
Hollow Metal Doors and Frames *Reinforcing and Fabricated Steel*
Steel and Formica Toilet Partitions *Commercial Hardware*
Commercial Toilet Accessories *Moderncote Vinyl Wall Covering*
Residential and Commercial Steel and Aluminum Windows

Builders Block & Stone Co., Inc.

P. O. Box 1633
Roswell, N. M. 88201
505 622-1321

Builders Block & Supply Co., Inc.

P. O. Drawer FF
Las Cruces, N. M. 88001
505 524-3633

Builders Block & Stone Co., Inc.

P. O. Box 10284
Albuquerque, N. M. 87114
505 265-6085

Builders Block & Supply Co., Inc.

Telephone
El Paso
915 532-9695

Members: New Mexico Concrete Masonry Association, National Concrete Masonry Association

the fully adaptable building material **PRESTRESSED CONCRETE**



ARCHITECT—William G. Barber, A. I. A.
CONTRACTOR—The Jaynes Corporation

1304 Menaul Blvd., N. E., Albuquerque, N. M. 87105 (505) 345-5671

The new gymnasium structure for Holy Ghost Catholic Church in Albuquerque was built entirely of 8 foot twin tee prestressed concrete members, erected in 4 days.

The 64' x 96' building has a 20' clear ceiling height and a mezanine floor.

For lasting strength, fast erection and maximum fire resistance, prestressed concrete cannot be matched.

PRESTRESSED 
CONCRETE PRODUCTS, INC.

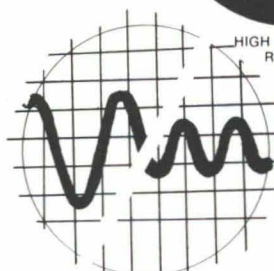


SPRAY INSULATION-
ACOUSTICAL SYSTEM

for its . . .

Keers, Inc.

3323 STANFORD, N. E.
ALBUQUERQUE, NEW MEXICO



ACOUSTICAL
EXCELLENCE



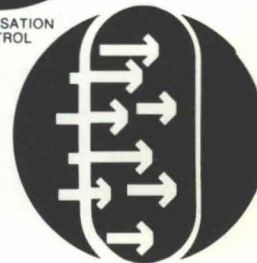
CONDENSATION
CONTROL



FIRE RETARDANT

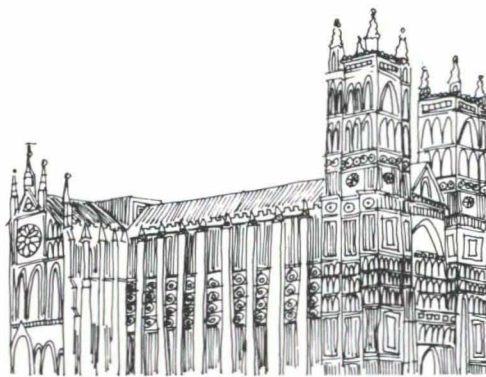


ARCHITECTURAL BEAUTY



EASE OF APPLICATION

***If Henry III had only specified
Zonolite Masonry Fill, the savings would
have already exceeded £875,000.***



Assuming, of course, Westminster Abbey has been getting heating bills for the last 700 years.

By now, Zonolite® Masonry Fill Insulation would not only have paid for itself . . . but the building too!

Today, Zonolite frequently pays for itself within two or three heating seasons. And it will probably make possible a lower investment in heating and cooling equipment.

It's also economical to install. A lightweight, free-flowing, granular vermiculite, Zonolite fills walls up to 20 feet in height in a single pour. And it's permanently water-repellent.

Get the complete savings story from your Zonolite man-on-the-job. Construction Products Division, W. R. Grace & Co., 62 Whittemore Ave., Cambridge, Massachusetts 02140.

Southwest Vermiculite Co.,
5119 Edith Blvd., N. E.,
Albuquerque, N. M. 87107



Just Say Grace



Building: Social Security Office, Albuquerque, N.M.
Builders: Brown & Hurley, Contractors
Architect: Burk & Burk, Albuquerque, N.M.

"Reliability and Flexibility".... Hurley.

That's just the introduction to what Ed Hurley of Brown & Hurley, contractors, thinks of Trus Joist.

"Why do we continue to use Trus Joist? Reliability and flexibility. This building is a good example. We had to span variable lengths, but with the flexibility of using different sizes of Trus Joist we had the same depth throughout.

"In this day of shortages and substitution — no problem with Trus Joist. They arrive on the job as scheduled.

"To say the least — we enjoy building around them."

Reliability and Flexibility . . . TRUS JOIST.

Geo. B. McGill Co., Inc.
3530 - C Pan American N.E.
Albuquerque 87107
Phone 505/345-4501



McGill - Stephens, Inc.
4100 Rio Bravo St., Suite 320
El Paso, Texas 79902
Phone 915/544-4505

For Your Lawn Sprinkler Needs NEUMARK CO., INC.

4121 Edith, N.E. • Albuquerque, New Mexico 87107
(505) 344-8088

Over twenty years experience in design, distribution and installation of quality lawn sprinkler systems.

featuring

Weather  matic

Sprinkler Equipment



DESIGN • SUPPLIES • COMPLETE INSTALLATIONS

George B. McGill & Co., Inc.

Architectural Representatives

FOR

Laminated Wood Beams and Decking

and



BOMANITE
CENTURY TILE
CHILDERS
HOMASOTE
KALWALL

—New Dimensions in Concrete Floor Designs
—Concrete Roof Tile
—Architectural Panels and Equipment Screens
—Floor and Roof Decking
—Super Insulated, Translucent Skylites, Roofs and Wall Systems for Maximum Energy Control

SCOFIELD
SOUNDLOCK
VENTWOOD

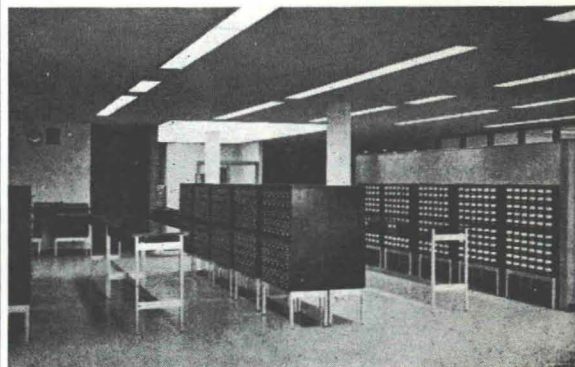
—Concrete Coloring Systems
—Ceiling Systems
—Pre-assembled Wood Panels

Geo. B. McGill Co., Inc.
3530 - C Pan American N.E.
Albuquerque 87107
Phone 505/345-4501

McGill - Stephens, Inc.
4100 Rio Bravo St., Suite 320
El Paso, Texas 79902
Phone 915/544-4505

SUMMIT PRESSED BRICK & TILE CO 5905 MARBLE NE ALBUQUERQUE NM 505 268 9764

FROM CONCEPT TO COMPLETION



Exclusive distributors
for BUCKSTAFF

**Consultation
Planning
Design
Layout**

In the library, where mind speaks to mind, uncluttered and compatible design creates study carrels, personalized learning centers. These centers are a long-time dream of theoretical educators who envisioned the creation of units flexible enough for the needs of individual thought patterns. Now, carrels incorporate storage for film, earphone jacks, 8 mm projectors, pre-recorded magnetic tape . . . and partitioned seclusion for undisturbed concentration.

Architects use our design consultation services for:
Science Labs / Offices / Artrooms / Dormitories /
Libraries / Auditorium Seating / Home Economics
Labs / Gymnasiums

**UNIVERSITY BOOK STORE
ALLIED SUPPLY CO.**

2122 Central, SE
Phone 243-1776
Albuquerque, N. M.

The economies of masonry...

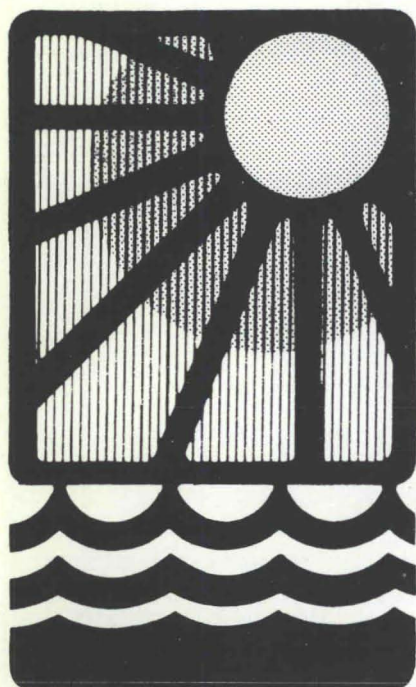
Savings on heating and cooling costs

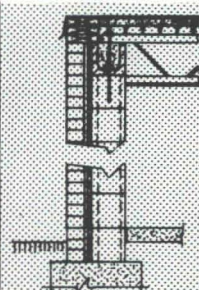
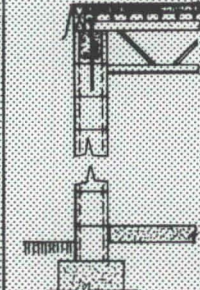
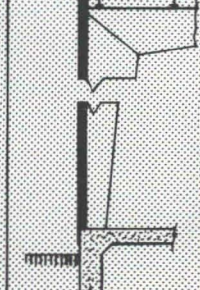
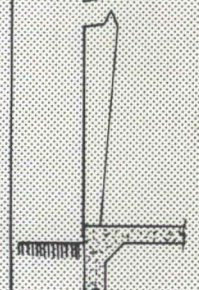
Because masonry is a better insulating material than either steel or glass, it saves you money on both heating and cooling costs. Again, we could overwhelm you with a mass of technical detail on things such as U-factors, resistance, and thermal conductivity. But one simple fact should suffice: it would take a solid steel wall 55 feet thick to even approach the thermal insulation value of an 8-inch masonry wall. And remember: the 26 gauge steel used in most metal buildings is just 1/56 of an inch thick.

That's quite a difference. In this new era of energy conservation, it's a difference that translates directly into dollar savings over the life of your building. Savings that will increase annually... because if there's one thing that can be said with certainty

about the energy crisis, it's that energy costs will continue to rise. The days of cheap energy are over. So by using less, you'll save more.

If you want to maximize these savings, you should consider the use of insulation... either added on, or in cavity-wall construction. And here's another tip: use operative windows. In the event of an electrical emergency that knocks out your air conditioning system, the cooling properties of masonry walls combined with operative windows will give you the most comfortable building possible. With masonry, you don't miss a trick. You even get more *usable* (or *rentable*) square footage. Since you need less energy to heat and cool the building, you don't have to set aside as much space — unproductive space — for mechanical equipment.



| ANNUAL HEATING COSTS* | | | |
|--|--|---|---|
| Based on a 10,000 sq. ft. building | | | |
| \$986 | \$1,092 | \$1,152 | \$2,475 |
|  |  |  |  |
| TYPE 1 4" brick, 1" cavity, 1" rigid insulation, 8" block filled with bulk insulation. Built-up metal deck roof with 1" insulation. | TYPE 2 8" block filled with bulk insulation. Built-up metal deck roof with 1" insulation. | TYPE 3 1/56"-thick metal with 1" insulation. Built-up metal deck with 1" insulation. | TYPE 4 1/56"-thick metal. 1/56"-thick metal roof. |
| ESTIMATED ANNUAL ENERGY CONSUMPTION (MBTU) | | | |
| 780,650 | 866,925 | 915,700 | 1,999,675 |
| *Based on rates supplied by Michigan Consolidated Gas Company. | | | |

MASON CONTRACTORS ASSOCIATION OF NEW MEXICO

ELECTRIC LEAGUE OF ARIZONA

TRADE SHOW SET FOR FEBRUARY 12, 13, 14

Manufacturers of commercial and industrial electrical equipment from throughout the U.S. will be displaying their newest products at the fifth biennial Southwestern regional electrical products trade show to be held in Phoenix, Ariz., on February 12, 13 and 14, 1975. The exhibition will be held at the Phoenix Civic Plaza.

Sponsoring organization is the Electric League of Arizona, trade association for the state's electrical industry. "We have a 10-year history of successful trade shows, and—the economy notwithstanding—we fully expect another outstanding success this year," said R. N. "Dick" Ruecker, executive director of the League.

"Trade shows become more important to sellers, buyers, and users of electrical equipment during an economic downturn," Ruecker continued. "Exhibitors can show their products to a wide audience within a short time period, and buyers save valuable time researching and evaluating new products and new applications just by touring the show. As energy and cost conscious as we all are these days, the trade show offers the ideal opportunity for those who need to update their knowledge on the

new products available in the market," he concluded.

The show attracts architects, engineers, contractors, distributors, purchasing agents, and government and utility representatives from throughout Arizona and its neighboring states, and is the only trade show of its kind anywhere in the Southwest.

Seminars on industry-related topics will be presented each day during the trade show.

Subjects and speakers are:

Aluminum Conductor Connection and Specification Procedures

James P. Moran, Electrical Engineer Consultant
The Aluminum Association

Electrical Code Changes—1975

Panel Discussion:
William Corbin
Corbin-Dykes Electric Co.

James Evans, P.E.
James Evans & Associates

Lloyd Nordholm
Building Safety Department
City of Phoenix

Fluorescent Dimming and Controls

Sal Soscia, Manager
Application Engineering

Wiring Device Business Dept.
General Electric Company

Fuse Coordination

Les Wagner, District Representative
Bussmann Manufacturing Division
McGraw-Edison Co.

Code Requirements for Emergency Light and Power

John Schmidt,
Assistant Sales Manager
Automatic Switch Company

Ground Fault — Problems and Solutions

Phil Belsky, District Engineer
Westinghouse Electric Corporation

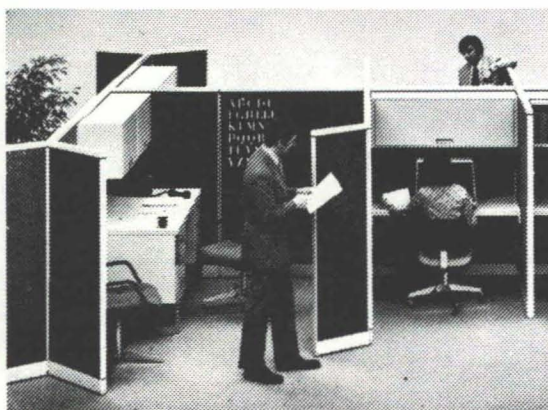
A PARTNERSHIP IS FORMED

Charles Nolan, Jr., Joel Stout, and Sam Pool have formed the architectural firm of Nolan, Stout, Pool, P.A., AIA. The new firm is successor to Charles E. Nolan, Jr., and Associates in Alamogordo, New Mexico.

Nolan is director and past president of the N. M. Society of Architects. Stout is vice president of the N. M. Southern Chapter AIA. Pool is a former secretary of the N. M. Southern Chapter AIA and past president of the Alamogordo Community Center for Theater and Arts.

**Your
business
has to
change with
the times,
so why
have walls
that won't?**

*New
Mexico
Office
Furniture*



Steelcase Movable Walls

A wall that's only a wall is an obstacle. But a Steelcase Movable Wall System can form an office today or a conference room tomorrow or two or three work-stations the day after. In other words, it gives you unlimited flexibility in planning your office interiors. And that's a boon to any business.

6437 LINN AVE. N.E. • ALBUQUERQUE, NEW MEXICO • (505) 265-7841

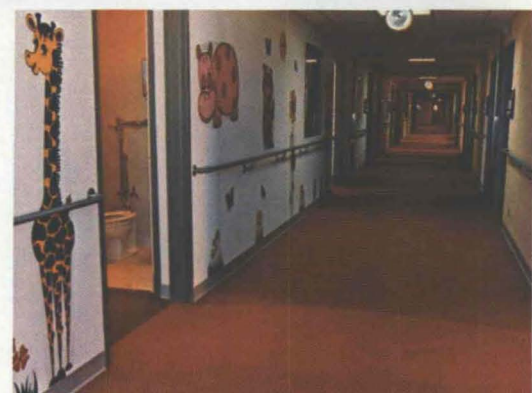


ROYAL STEREO—Used in the Presbyterian Hospital Center is designed for heavy traffic areas and combines both aesthetics and long-wearing qualities for optima performance with static control.

Carpets with a performance record

PRESIDENT'S CHOICE and ROYAL STEREO by Patcraft were the carpets selected by the Presbyterian Hospital Center and the Bank of New Mexico, in Albuquerque, New Mexico, for beauty and service in their efficient and modern buildings.

Both carpets are made of Dow-Badische 70% Zefran Acrylic and 30% Zefran Nylon. Both carpets have proven performance records. Both offer 12 rich, heather colors.



Zefran® is the trademark of the Dow Badische Company



PRESIDENT'S CHOICE—Used in the Bank of New Mexico, has the warm, elegant look of a deep, tightly constructed plush... combining the look of an acrylic with the performance of a nylon.



125 DALE, S. E.
P. O. BOX 2511, ALBUQUERQUE, NM 87125
PHONE 877-5340



1974 NEW MEXICO ARTS COMMISSION AWARD

For Excellence In New Construction

"In order to recognize a distinguished contribution to the total environment this award is presented to:

The Rio Grande Zoological Park
Albuquerque New Mexico



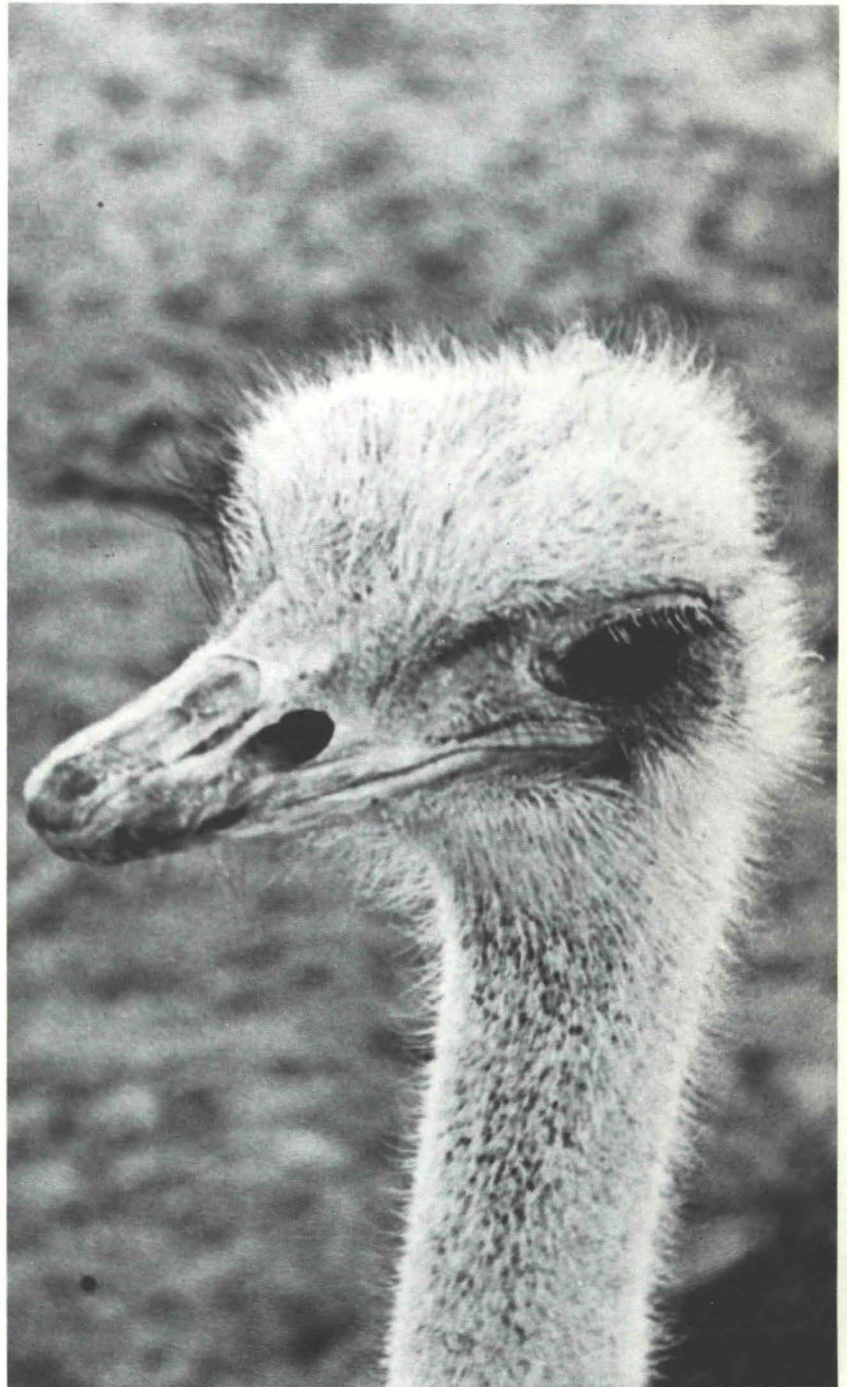
We've come a long way,
baby !!

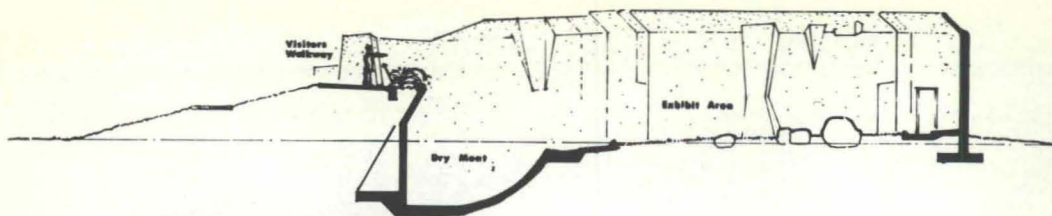
. . . Ron Hill, AIA

Long ago the wealthy emperors of China and the aristocracy of Europe were the privileged few that collected wild animals for the sole purpose of their own enjoyment. In time philosophies changed, population increased, the citizens traveled and small menageries began to develop. When the menageries first appeared, the varieties of species went little beyond that of their ancient forebearers. Since those olden days and through progress in civilization the demands on the zoological parks have caused a gradual development into public institutions with responsibilities far beyond that of private entertainment or recreation, and our Rio Grande Zoological Park is no exception.

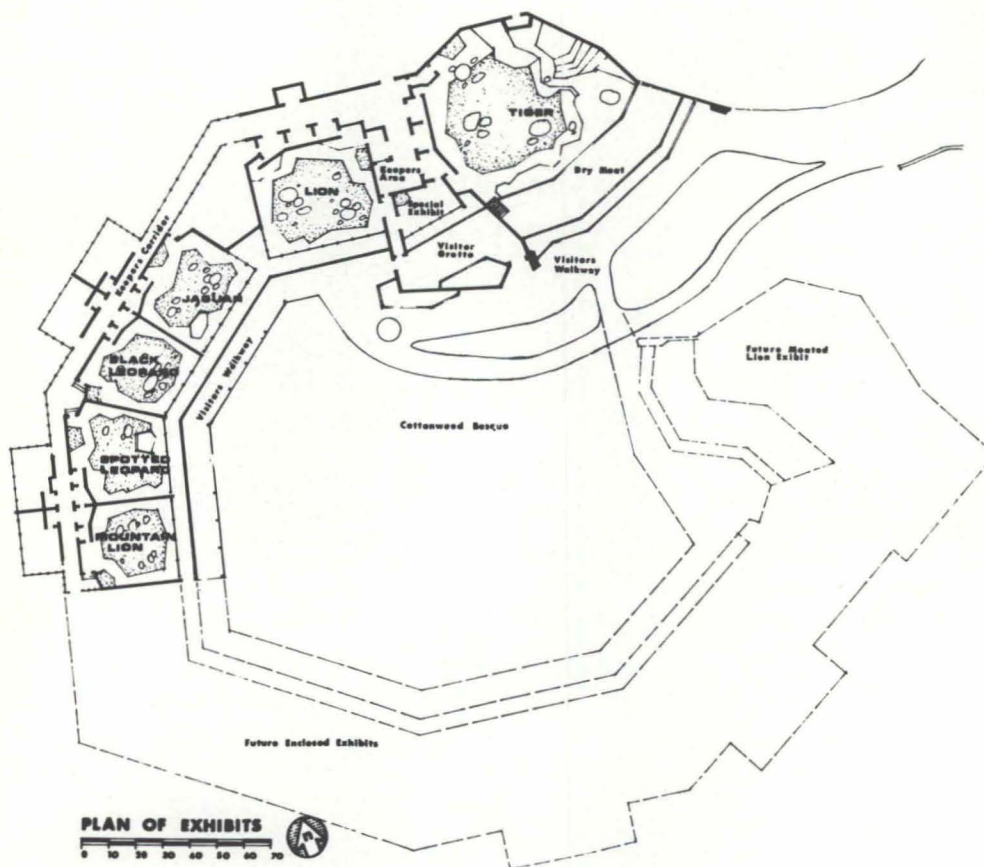
The Albuquerque Zoo was created by Clyde Tingley in the late twenties with only a handful of animals. However, since that scanty beginning the zoo has now progressed into a community-serving institution satisfying multiple goals.

Each year thousands of New Mexicans head for the zoo to participate in its original and ever popular role, recreation. They can saunter under the seventy foot high elm trees that provide a blanket of shade for the entire park while they enjoy the ever increasing number of rare and exotic animals in their own surroundings which have been designed to provide visual impact as well as facilities for the activities and life patterns of the animals themselves. As a result the

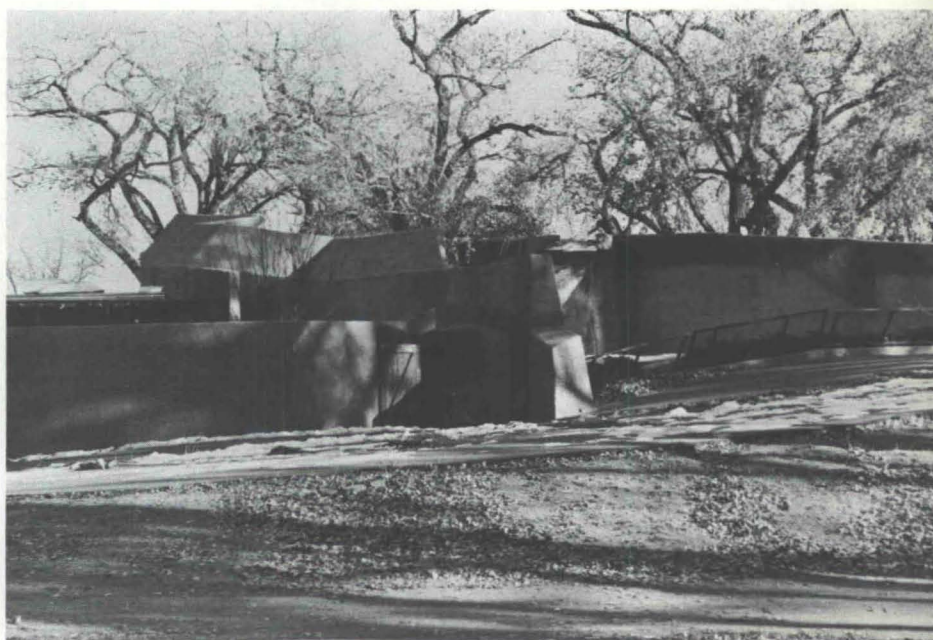




SECTION AT TIGER EXHIBIT
0 5 10 15 20 25 30 35 40



PLAN OF EXHIBITS



The Feline Exhibit constructed in 1968. Pacheco and Graham, Architects. (See NMA, September-October, 1968.)



The Children's Barn—a detail.



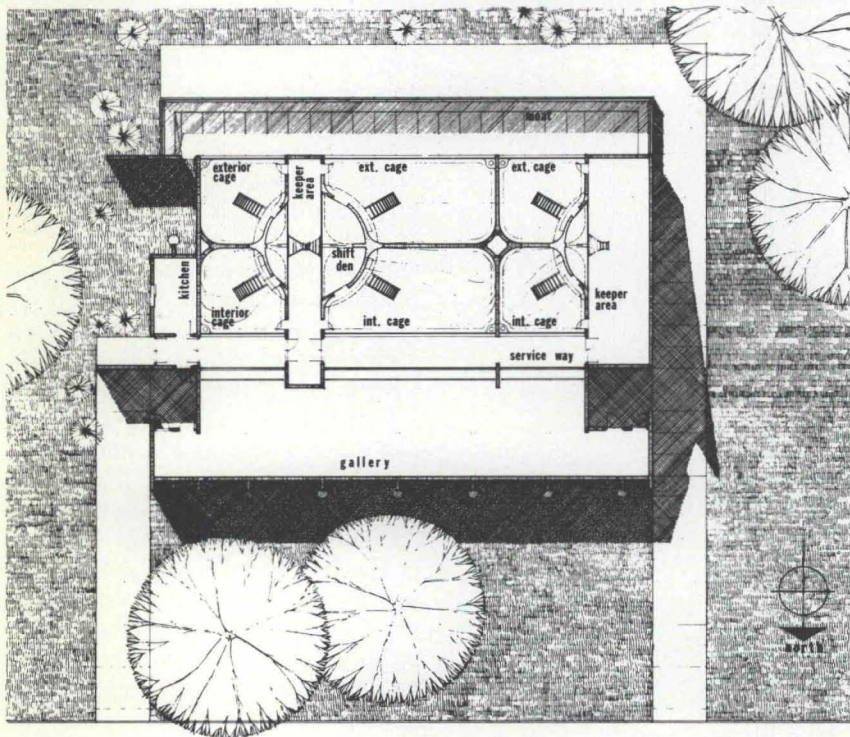
atmosphere is one far removed from one's everyday environment.

A few of these new exhibits include the bears' habitat, the feline pit and a spacious gibbon flight cage now under construction. Future plans include an aviary, completion of the feline exhibits, an island for the gorillas completely surrounded by a moat and the expansion of the hoofed animals area. Unlike the earlier habitats in zoos throughout the world these are being planned to facilitate the animals natural habits and his needs by providing surroundings that are similar to his native land.

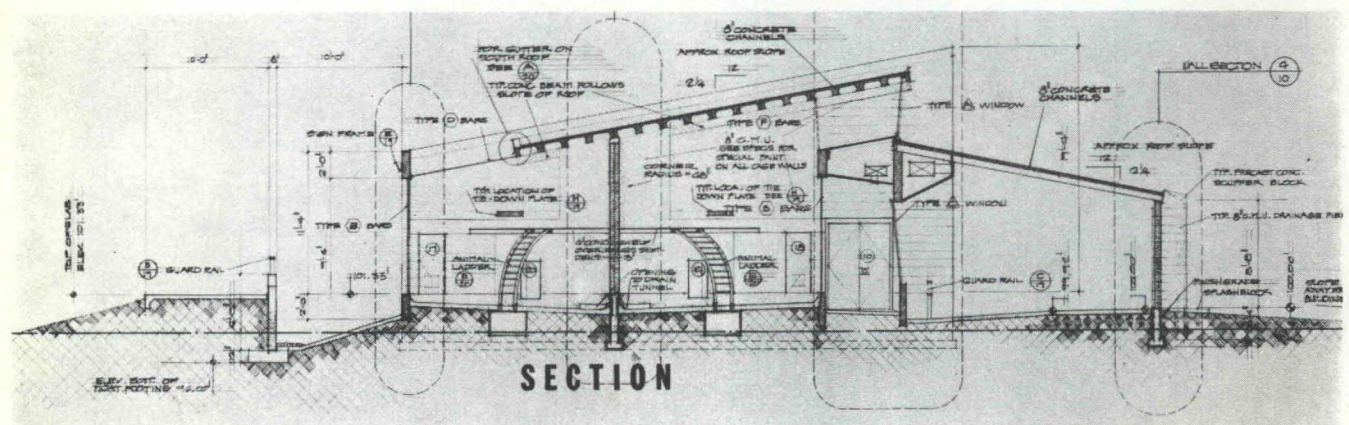
Unfortunately the days when the Fairbanks of Hollywood fame donated animals to the zoos are things of the past. Today's zoo directors are required to be businessmen capable of haggling or trading their way until they have attained the animals that are desirable for their own individual zoos. Albuquerque Zoo excels in this area being one of the few zoos in the world that is a repository for exotic animals as well as endangered species. To enhance our menagerie, the zoo board and director are hard at work acquiring a pair of musk ox indigenous to Arctic America and Greenland. These hardy oxen with a long hairy coat and curved horns will be a welcome addition to our zoo.

In the last ten to fifteen years an increasingly important function of the zoological park has been to provide an active educational facility. Combined with education coordinators and well informed zoo guides the zoo has become a living museum of natural history. It has proven to be an unforgettable experience for over 60,000 school children, all of whom are admitted free each year.

The acquisition of a proposed hospital and veterinary clinic at the Albuquerque Zoo will greatly enhance its potential as a research facility; a role that is increasing in importance each year. Through new techniques, new medicines and the study of diets, the chances of producing healthier animals and similarly more successful breeding within the zoo are greatly in-



*The Home for the Apes construct-
in 1965. Wright and Underwood,
Architects. (See NMA March-April
1966).*





The new Childrens Barn.

A project designed and constructed through donations of money, materials, time and labor. See NMA, November-December, 1973.

Support your New Mexico Zoo. For membership information write:

The New Mexico Zoological Society
c/o Rio Grande Zoo—903 10 Street SW
Albuquerque, New Mexico 7102



creased. The latter is very important if the zoo is to establish itself as a prime contributor to the field of animal conservation.

Urban developments, agricultural exploitation, ever increasing population and technical progress, all are rapidly destroying many of our wilderness areas and the wildlife living therein. The city-dweller will soon find himself bereft of wildlife and untouched nature altogether.

Albuquerque's Zoological park, working in agreement with the New Mexico State Game and Fish Department, is rapidly becoming a repository for endangered species with the goal that they may be kept and perpetuated in captivity until someday they can be released in new and suitable habitats.

During the last decade, at the Albuquerque Zoo, we have witnessed impressive changes and additions, both to our animals' kingdom and their habitats and the educational activities, and the research and conservation programs. All this can be attributed to the zoo board, the director, Dr. Bruce Stringer, and the personal involvement in the various programs by the community. Without the overwhelming public interest and help concerning the tragic fire of the childrens' red barn, the new barn, which has now been completed, would have been a long time coming.

Speaking of a long time, if that describes the last visit you made to your zoo, then you're missing a lot. It's a worth while trip. It's a fun place to be.

R. H.

All photographs by Ron Hill, AIA

EHRICKE SPACE GARDEN

Why not use space to save planet Earth and make it the garden of the solar system?

An interview by A. E. Maxwell

"Ever since the first manned lunar circumnavigation there has been no letup in deploring the fact that the moon and other planets are dead, hostile and, by implication, useless. This attitude has destroyed even a moderate priority rating for the lunar program. It was not and is not recognized that we are most fortunate to have a large dead planet nearby. Because of it our living planet, and human civilization on it, can stay alive."

—Dr. Krafft A. Ehricke

Krafft Ehricke is an outraged and sometimes outrageous man. In 1956 he had the audacity to suggest that space exploration would be a lot simpler if we first developed a half airplane, half spaceship, which he called a satelloid. He missed on the name, but 18 years later American space effort has shifted from multistaged rockets to something called the space shuttle—half airplane and half spaceship.

By now, Ehricke ought to be used to running ahead of his time. A native of Germany, he survived the 1930's and the Nazis' antitechnological worship of Blut und Boden ("blood and earth") to become a primary figure in the development of Hitler's V-2 rocket program at Peenemünde.

In 1947 (with such colleagues as Wernher von Braun), he came to the harsh Texas desert at Fort Bliss to work on America's fledgling rocket program. In the 1950's Ehricke went to what was then Convair Astronautics in San Diego, California, where he became known as "the father of the Atlas-Centaur," a hybrid multistage vehicle that was a mainstay in early space exploration. But while von Braun and others became celebrities for their work with America's manned space program, Ehricke began thinking beyond Apollo. He envisioned an orbiting space observatory, which some referred to as "Ehricke's Orbiting Outhouse" but ultimately became known as "Skylab."

Dr. Ehricke has generated a coherent set of principles based on his belief that man must use space to solve earth's problems in a way that will allow man to grow toward his full potential. This belief, which he refers to as "the extra-terrestrial imperative," seems in direct contradiction to the presently popular prognostications of man's future,

such as those enunciated in The Club of Rome's book The Limits to Growth...

Q: Dr. Ehricke, you advocate the uses of space at a time when most people are concerned only with the environmental abuses on Earth. Is the distance between your concerns and the environmentalists' as great as it appears?

Ehricke: Our goals are the same: to make Earth the garden of the solar system. But the *Limits to Growth* people see Earth as a life raft in hostile space. Hence, they see man's world as a closed system—restricted to Earth. I don't. Humanity's action world is no more closed than it is flat.

Q: Then Dennis Meadows (director of the *Limits to Growth* project) and Jay Forrester (the pioneering MIT theoretician), et al., are wrong in their conclusions about the future?

Ehricke: Their frame of reference is too small. Among other things, they made a straight-line extrapolation from present trends, with the intuitive assumption that man's world is as closed as the biosphere simply because that was always so in the past. That's like an embryo in the eighth month saying, "It's getting tight in here. Lots of waste floating around. I've got to work harder to get what I need." Now when the embryo projects into the ninth month, he gets awfully unhappy. The tenth and eleventh months look even worse. So in the eighth month the embryo might conclude that he's got to stop growing. The embryo is unaware that in the ninth month there will be a major change in the frame of reference: birth.

Q: The closed environment of the womb exchanged for the open world?

Ehricke: Yes. Man has looked at the earth as a womb. The earth cannot much longer be an all-supplying womb for man. It must be looked at as a home, a castle, a center of growth. We can reach a new equilibrium with our environment by expanding our resource bases to include the solar system.

Q: Don't we run the distinct risk of simply expanding our area of pollution?

Ehricke: No, because pollution is a local concept, cosmically speaking. Pollution is lack of "local" environmental compatibility. Environmental compatibility, however, is a relative thing. What's detrimental on Earth can be perfectly compatible with the lunar or any other extraterrestrial environment. Many important industrial processes are environmentally compatible on Moon or in orbit but not on Earth—for example, nuclear-powered industrial processes or the release of large amounts of waste heat. We are not the only animal that befouls its own nest. Rather we are the only animal that, so far, has nowhere else to go. All creatures need several environments commensurate with the scope of their respective metabolic processes. When you housebreak a dog, you teach him environmental compatibility.

Q: Again, it's a question of your frame of reference.

Ehrlicke: Yes. Man is just at the beginning of his growth. And this beginning will be snuffed out if we are restricted to one planet. Just as the brain development in fish could go only so far in one environment. In order to go further the brain needed new environments that were more demanding—land and air. Some people haven't learned that yet; some even advocate returning to the womb. Impossible, of course. Certain death.

Q: Other than shrinking ourselves down to fit the environment, what can we do?

Ehrlicke: As early as 1963 I made the statement that the ultimate purpose of exploring the solar system is not just to gain scientific information. It is to broaden our resource base, to preserve Earth as a garden of the solar system. This was taken as a very far-out and unrealistic reason for interplanetary flight.

Q: Beating the Russians to the moon was the goal we heard of most. Now that we've done that, people seem to have lost interest.

Ehrlicke: And now the spin-off benefits of Apollo and others are used as an apology for a project that needed no apology. People are told that because we've been to the moon we now have a better frying pan and a better fountain pen with which we can write on butter under water. They say, "I don't want to write on butter under water." Even if they are told that they now have better monitoring in intensive-care wards of hospitals or better management of their electric company, which may cut a penny or two off their kilowatt hour, they say, "Listen buddy, you still haven't given me any reason to go to the moon. Those things could have been done on Earth."

Q: It also seems that many people, from scientists to schoolchildren, felt a bit cheated that the moon was so very dead. All those myths destroyed.

Ehrlicke: Yes. Ever since the first manned lunar circumnavigation, there has been no letup in exploring the fact that the moon and other planets are dead, hostile and, by implication, useless. This attitude has destroyed even a moderate priority rating for the lunar program. It was not and is not recognized that we are most fortunate to have a large dead planet nearby. Because of it, our living planet, and human civilization on it, can stay alive.

Q: How?

Ehrlicke: Raw materials, for one. Earth's metal resources are finite, limited. Already we must chew up more and more land for less and less rich ore. Mining produces the largest amount of inorganic waste of any industry.

We must realize that Earth is not, as some call it, a "spaceship" traveling in isolation. Earth is a passenger ship, the only passenger ship, in the convoy of our star. The rest of the planets are freighters. Right now the passengers on Earth seem in-

tent on tearing up the stateroom furniture to use

"We are fortunate to have a large dead planet nearby. Because of it, our living planet can stay alive."

it for resources when they should be taking on resources from the freighters.

The Apollo moon rocks have shown us that oxides of iron, aluminum, calcium, magnesium, titanium and silicon make up between 97 and 100 percent of the material resources of the moon. Of course, the metals are not found in convenient concentrations and would require nuclear mining techniques.

On the moon there is no underground water to get contaminated, no biosphere, nothing to be poisoned by nuclear blasts. The moon is an inorganic environment; it is exposed all the time to what we would call massive pollution in Earth's biosphere—ultraviolet radiation, X rays, solar wind and solar flares. On the moon we can detonate ten-megaton bombs, and it's just a pinprick compared to the radiation these environments are exposed to all the time.

Q: The idea of nuclear blasts as compatible with an environment—that's difficult to believe.

Ehrlicke: Only if you just think in terms of Earth's environment and say that what is bad for this environment is bad for the moon. No. What is bad for the moon is a nice pile of organic matter—cow dung. And what is bad for the Earth is a nuclear detonation. The concept of environmental compatibility has to be understood; you do things where they are most compatible with the existing environment.

An enormously large number of products can be produced on the moon for Earth's benefit. Pipe, cables, for instance. With vacuum techniques, industrial piping could be coated to last forever. No lead paint comes loose. Much better for people. Titanium for marine technology—underwater cities. I could—I have to stop thinking because I can simply go on and on. There are so many possibilities. There is material for thousands of geniuses and millions of intelligent people.

Q: Can the moon also help solve Earth's energy crisis?

Ehrlicke: Indirectly, lunar industries would help, of course. Once again, our problem is that we need more energy than we can safely generate with fossil sources within the biosphere of Earth. Ultimately, solar power will be almost exclusively utilized right here on Earth.

We do have nuclear power generators and they work fine. But there are real—and imagined—problems associated with their proliferation. The economics of power transmission dictate that power plants be located close to population concentrations and industrial load centers. But if we put them into remote areas, we need better means of power transmission over large distances. Then nuclear

The paints and coatings Southwestern professionals use.

Easy-on interior paints, climate-designed exterior paints, color coordinated wall-coverings, industrial-technical coatings, and a complete selection of professional supplies and accessories. Since 1936.

Hanley Paint

Manufacturing Co.

Albuquerque, N.M.: 1214 San Pedro N.E.
El Paso, Texas: 1531 Magoffin, 9054 Dyer,
7636 Gateway East, 5937 N. Mesa

**PLAN NOW TO ATTEND
ARIZONA'S EXCITING TRADE
SHOW FOR ALL THE SOUTHWEST**
A one-stop opportunity to see all the newest
product developments in the Electrical Industry!

SOUTHWESTERN
REGIONAL

"ELECTRICAL PRODUCTS ROUND-UP"

FEB. 12-13-14, 1975



PHOENIX CIVIC PLAZA

Wed. & Thurs. 2 p.m. to 9 p.m.
Friday 2 p.m. to 6 p.m.

**SPECIAL
FEATURES!**

- ★ Informative Product Seminars
- ★ "Conviviality Corners"
- ★ Displays of Everything New

Sponsored by the
MANUFACTURERS' REPRESENTATIVES
Division of the Electric League of Arizona



for over 50 years - - -
from 1921

installed & serviced by

OVERHEAD DOOR COMPANY of ALBUQUERQUE

(505) 344-3467
2840 LOS ARBOLES AVE., N.E. 87107



SUPPORT YOUR LOCAL AIA FORM SERVICE

We give a 20% discount to all AIA members and components on orders over \$10.00—up to and including \$300.00.

And a 30% discount on all orders over \$300.00.

This is a service of the New Mexico Society of Architects.

AIA FORM SERVICE
P. O. BOX 7415
ALBUQUERQUE, NM
87104



plants could be put in places where they would be relatively more compatible with the environment and, above all, away from the high-burden regions.

Q: How do you get the power from distant plants to the consumers cheaply?

Ehricke: By microwave relay. Convert the electric energy into microwave energy and beam it at a power relay satellite. The satellite then reflects it to a conversion station near the consumer area.

Q: That leaves only the problem of radioactive waste disposal.

Ehricke: You can bury hot waste on the moon. Or you can use Jupiter's gravitational field as a "slingshot" to boost waste into interstellar space.

Now, whenever I suggest putting wastes into the biggest space-time wastebasket there is—interstellar space—I immediately get a response like, "What about all those little green men going from place to place out there?" Well, if those Captain Kirks can't dodge a few cans of waste, they've got no business being there, and natural interstellar debris would have gotten them long ago. Even if I were to take the trouble of aiming the wastes at our nearest star, Alpha Centauri—which would take special nastiness for me to do, not to mention the time and machinery to keep it on its precise course—even if I were nasty enough to aim hot wastes at a possible abode of intelligence, it would still take 150,000 years to make the trip. By then the waste would be as harmless as a bag of Wheaties.

Q: Materials, energy. What about population? Can the moon and near space help?

Ehricke: The idea of other planets as an outlet for our excess population is, of course, totally absurd. Mars, Mercury, the moon—even if we could

"The naysayers are the polluters of our future. They deny options to future generations."

use them in that way, they would barely make an area the size of Earth.

Now, a few countries have made the transition from a scientific-agricultural society with high birth, low death rates to the industrial-consumer society with lower birth rates. The industrial-consumer society does not reward large families economically as does the scientific-agricultural society. You can't afford lots of kids and the good life, too. Thus, if you want lower birth rates, then you must have more consumption. But to do that and still live on Earth you must move as much production as possible away from the area of consumption. Put our machine-animals, with their waste-producing propensities, outside the biosphere. Short of catastrophe, or a garrison state, it's our only chance. We must enlarge our world.

Q: The extraterrestrial imperative.

Ehricke: Exactly.

Q: Then you feel that the alternatives outlined in *The Limits to Growth* are less than reasonable?

Ehricke: The notion that man will, in the centuries and millennia ahead, submit to a slowly declining living standard in "harmony" with a slowly degrading terrestrial environment is, of course, not an impossible one—but it seems to me rather absurd.

Q: History indicates that a war over the division of the shrinking pie is more likely than a sudden decision to share and share alike.

Ehricke: You cannot give if there is nothing to give. It would be insane for the "haves"—the community of industrial nations—to rejoin the "have-nots" instead of employing their own technological resources to assure growth and an unlimited future for all mankind.

Q: This unlimited future will be expensive to build.

Ehricke: Of course. But it will be as or more expensive to pursue planned regression, and you will get a hell of a lot less for your time, money and trouble than if you had developed the open world. How can anybody in his right mind actually say to a mankind that has millions of years ahead, that has cosmic powers at its disposal, whose knowledge grows by leaps and bounds, that begins to understand what makes a quasar and a neutron star—how can you say to this mankind that for now and forever it is in solitary confinement on a shrinking world, *and that's all there is, buddy!*

The cheapest thing is to say that we've got to establish new value systems. What value systems? Go down? Get smaller? Get poorer? Get hungrier? Get more wretched? The cost of a frustrated mankind that tries to cripple its mind the way Chinese women used to cripple their feet—the regimentation, the monotony—is totally incompatible with the sweeping statement, "Well, let them have new values." It's about as responsible and reasonable as Marie Antoinette's "Let them eat cake."

And you do this in the face of millions of ideals that you can give to the generations of today and tomorrow: going out and exploring the solar system and planning and building and producing so that people down here can live in dignity and freedom on an Earth that is again clean, an Earth that feeds everybody, in a mankind that is shielded from wars.

The naysayers are the polluters of our future. They deny vital options to future generations. Everybody is running around saying we can't grow anymore. That will be a self-fulfilling prophecy unless someone stands up and says, "Oh yes we can!"

Those who think we have reached the end of our tether live in an even more unreal world than those who in the last century advocated closing the patent offices because their mousy minds could not comprehend that there might be anything left to invent.

Reprinted by permission of *Intellectual Digest Magazine* and the Ziff-Davis Publishing Company.

FLEX SHIELD

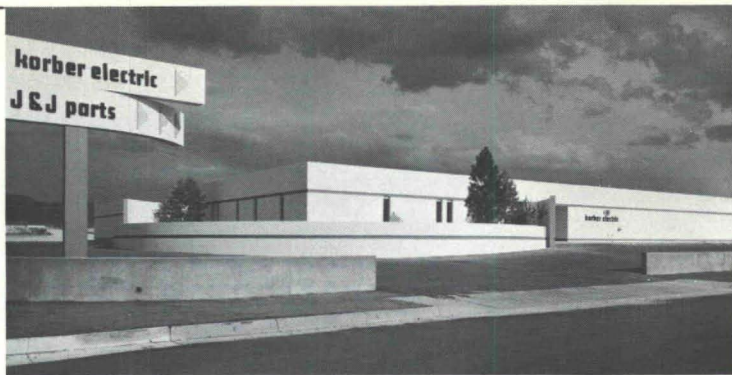
waterproof flexible texture coating

used on the exterior of the new

J. Korber & Co. Building

2400 Menaul Blvd., Albuquerque

Architect: Stevens, Mallory, Pearl & Campbell
Painting Contractor: Keers, Inc.



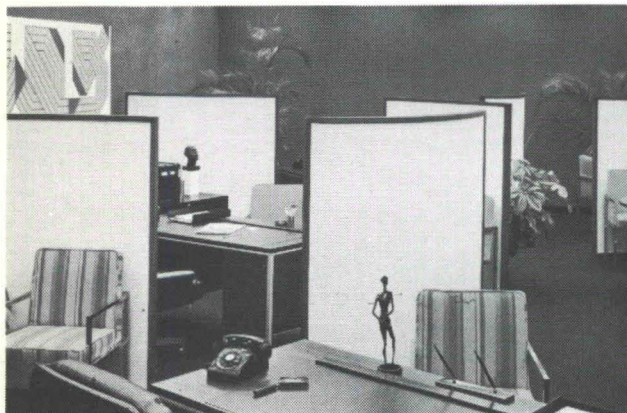
Heavy texture coating for virtually all types of exterior and interior surfaces. Durable, waterproof, flexible.

Wellborn PAINT

Mfg. Company, Albuquerque, N.M. 877-5050

Armstrong

MAKES WORK WORTH LIVING



Armstrong Soundsoak acoustical screens provide effective separation of work stations, while contributing substantially to acoustical and visual privacy. They are freestanding and easy to move. Covered with tufted nylon fabric in a choice of eight colors, Soundsoak screens are effective and decorative, especially when combined with Armstrong C60/30 ceiling systems.



FOR COMPLETE INFORMATION CALL:

COOK'S BUILDING SPECIALTIES

414 SECOND ST., S.W.

243-5541

ALBUQUERQUE, NEW MEXICO • P.O. BOX 834, 87103

ALBUQUERQUE TESTING LABORATORY

Sub-soil Investigations
For Structural and Dam Foundations

**Two Drills and Crews now
available for Prompt Service**

Laboratory Analysis and
Evaluation of Construction Materials

**All work done under the supervision
of Registered Professional Engineers**

532 Jefferson St. N.E. — P. O. Box 4101

Phone AL 5-8916

Albuquerque

Phone AL 5-1322

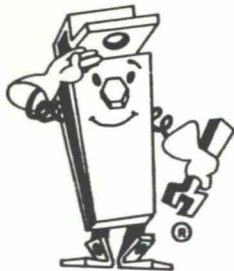
New Mexico

A LITTLE STONE A LOT OF DISTINCTION



**ROCKY MOUNTAIN
STONE COMPANY**

4741 PAN AMERICAN FREEWAY, N.E.
ALBUQUERQUE 344-2611



MR. STRUT

UNISTRUT

NEW MEXICO

METAL FRAMING TELESPAR TUBING

movable partitions
wire mesh partitions
toilet partitions
steel shelving and racks

4820 PAN AMERICAN HIGHWAY, N.E. • P.O. BOX 3128
ALBUQUERQUE, NEW MEXICO 87110
PHONE 505 345-2405

Despite the energy crisis, Southern Union is still urging you to use natural gas appliances. Why?

For one very good reason: *efficiency*. Everyone seems to agree that the best solution to the energy crisis is to make the most efficient use of our existing fuels.

So, you should know that the most efficient source of household energy is natural gas. Natural gas can warm your home, heat the bath water, dry your clothes and cook the family's meals more efficiently than any other energy you can use.

That's because Southern Union can deliver natural gas direct to your home with minimal energy loss. For every 100 units of energy taken from the well, 96 are delivered to your home. That is double or triple the efficiency of converting it to another form of energy to be used for these same household purposes.

Fact is, the best way to conserve natural gas is to use it directly.

That's why Southern Union is still urging you to use natural gas appliances. Now, more than ever before, if you want the job done right...do it with gas.

If you want the job done right,
do it with gas.

SOUTHERN UNION GAS COMPANY



Home of the
Concrete Giant!

DEDICATED TO QUALITY
AND SERVICE

ALBUQUERQUE GRAVEL
PRODUCTS COMPANY

600 JOHN ST. SE



GLAZED CONCRETE
BLOCK WALLS . . .

THE ECONOMIES OF BLOCK COMBINED WITH THE PERFORMANCE OF GLAZE

Build & finish in 1 operation. Thru-wall units, load-bearing or partition, eliminate cost of back-up walls.
Permanent glazed factory finish. 1 trade, faster job, substantial savings.

Low maintenance. Cannot peel or blister. Impervious to moisture (even steam cleaning!) No refurbishing ever!

Resistance to chemicals. Acids, alkalis, solvents, disinfectants, etc.

2-face units available for lowest cost 2-face walls.

Excellent insulation & sound-proofing.

\$ 4.5/Bu
in SWEET'S



Many colors, scored & design faces available. Job-site delivery.

® Reg. U.S. Pat. Off., Canada & other countries by the Burns & Russell Co.

FEATHERLITE BLOCK CO., Box 489, Lubbock, Tex. 79408. 806/763-8202
FEATHERLITE BUILDING PRODUCTS CO., Box 9977, El Paso, Tex. 79990
BUILDERS BLOCK & STONE CO., INC., Roswell, N.M. & Albuquerque, N.M.
EMPIRE BLOCK CO., Santa Fe, New Mexico



In the next issue of NMA

In the March/April **nma** will be the complete roster of the members of the three New Mexico Chapters of the American Institute of Architects.

Also, of course, the roster of the members of the New Mexico Chapter, American Society of Interior Designers.

Additional copies of **nma** are available from John P. Conron, FAIA/FASID, P. O. Box 935, Santa Fe, New Mexico 87501



new mexico architecture

nma

Published bi-monthly by New Mexico Society of Architects, American Institute of Architects, a non-profit organization.

Editorial Correspondence should be addressed to John P. Conron, Box 935, Santa Fe, N. M. 87501. 505 983-6948.

Editorial Policy: Opinions expressed in all signed articles are those of the author and do not necessarily represent the official position of the publishing organization.

No responsibility will be assumed by the editor or publishing organization for unsolicited contributions. Return postage should accompany all unsolicited manuscripts.

Subscriptions: Write Circulation, New Mexico Architecture, Box 7415, Albuquerque, N. M. 87104. Single copy \$1.00. Yearly subscription \$5.00.

Change of address: Notifications should be sent to New Mexico Architecture, Box 7415, Albuquerque, N. M. 87104 at least 45 days prior to effective date. Please send both old and new addresses.

Advertising: Send requests for rates and information to New Mexico Architecture, Robert G. Mallory, 115 Amherst Drive S.E., Albuquerque, N. M. 87106. 505 255-8668.

Additional copies of **NMA** available from John P. Conron AIA/FAID, P. O. Box 935, Santa Fe, N. M. 87501.

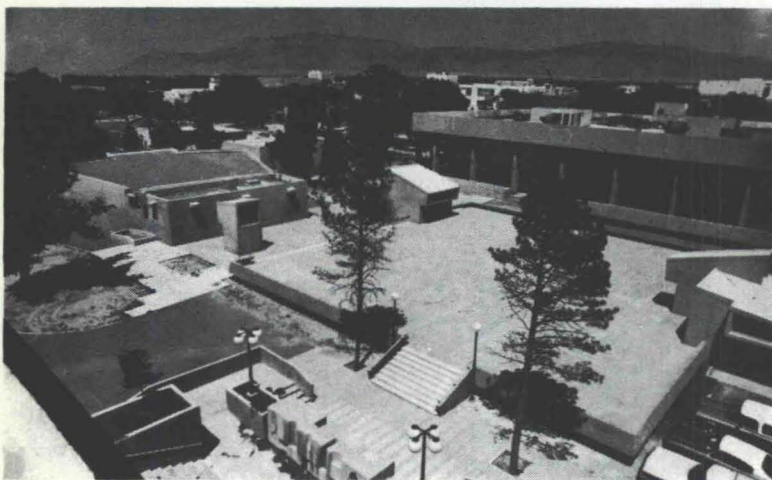
PRINTED BY

HALL-POORBAUGH PRESS, ROSWELL, N. M.

INDEX OF FIRMS who make possible the publication of **NMA** and the page upon which their message may be found:

| | |
|---|----|
| Albuquerque Gravel Products | 21 |
| Albuquerque Testing Laboratory | 20 |
| Builders Block & Stone Co., Inc. | 4 |
| Century Roof Tile, Inc. | 23 |
| Cook's Building Specialties | 20 |
| Crego Block Co., Inc. | 2 |
| Electric League of Arizona | 18 |
| Hanley Paint Mfg. Co., Inc. | 18 |
| Hydro Conduit Corporation | 24 |
| Keers, Inc. | 5 |
| Mason Contractors Assn. of N.M. | 8 |
| McGill Co., Inc., Geo. B. | 6 |
| McGill & Co. | 6 |
| New Mexico Office Furniture | 9 |
| Neumark Co., Inc. | 6 |
| Overhead Door Co. of Albuquerque ... | 18 |
| Prestressed Concrete Products, Inc. ... | 4 |
| Rocky Mountain Stone Co. | 20 |
| Southern Union Gas Co. | 21 |
| Southwestern Portland Cement Co. | 22 |
| Southwest Vermiculite Co. | 5 |
| Spectra Glaze | 21 |
| Stryco Sales, Inc. | 10 |
| Summit Pressed Brick & Tile Co. | 7 |
| Unistrut New Mexico | 21 |
| University Bookstore | 7 |
| Wellborn Paint Mfg. Co. | 20 |

Integrity and Beauty: The concrete facts of Southwestern life.

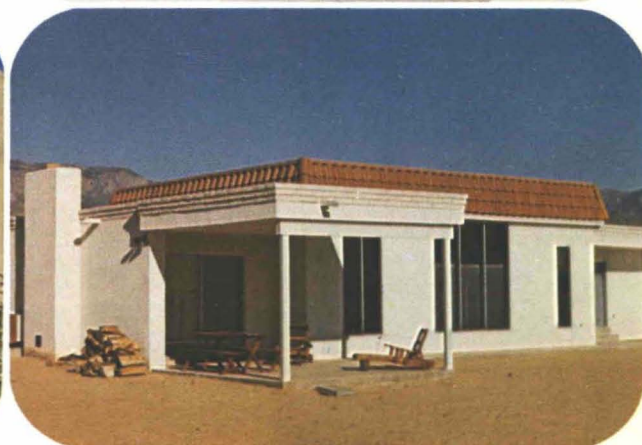
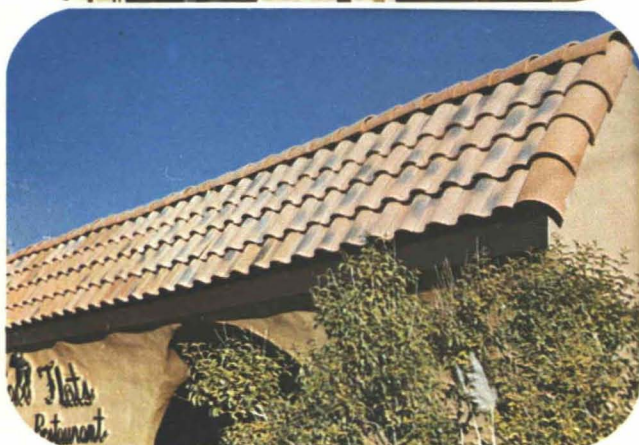
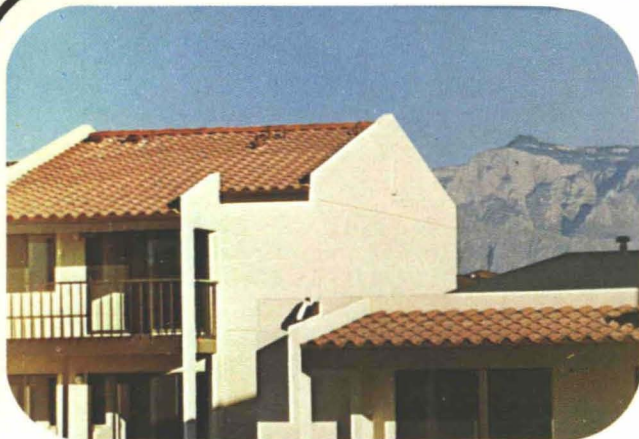


Physics Laboratories and Lecture Hall on the University of New Mexico Campus
Architect: Pacheco and Graham
Structural Engineer: Robert Krause
ChemComp Concrete supplied by Springer Corp.

When you want minimized shrinkage cracking for absolute structural integrity, durability and beauty, the concrete answer is ChemComp, Southwestern Portland's expansive cement. Check ChemComp's many advantages by writing for our free brochure: Box 392, El Paso, Texas 79943.



SOUTHWESTERN PORTLAND CEMENT COMPANY
MAKERS OF EL TORO CEMENTS / EL PASO, AMARILLO, ODESSA



For That Extra Touch of Creativity...

Glazed Mission Roof Tile

It's more than color...it's glorious color.

It's been around for centuries, but because of high costs in the past, Glazed Mission Roof Tile has been relatively rare in this part of the country. No longer...because it's manufactured here.

This means anything you can dream up on your drawing board, you can do with Mission Roof Tile. From over-all patterns to blends to colors to styles. Anything.

The next time you're thinking about design, ask about our new technology and new versatility.

Yes, it's "something different" and it sets the home, building or project you designed apart. No matter how much you use it, it has a distinctive personality. Give your design that extra touch of creativity. For more information...



Century
roof tile, inc.
(505) 843-6677
Sales Representatives

Geo. B. McGill Co., Inc.
3530 - C Pan American N.E.
Albuquerque 87107
Phone 505/345-4501

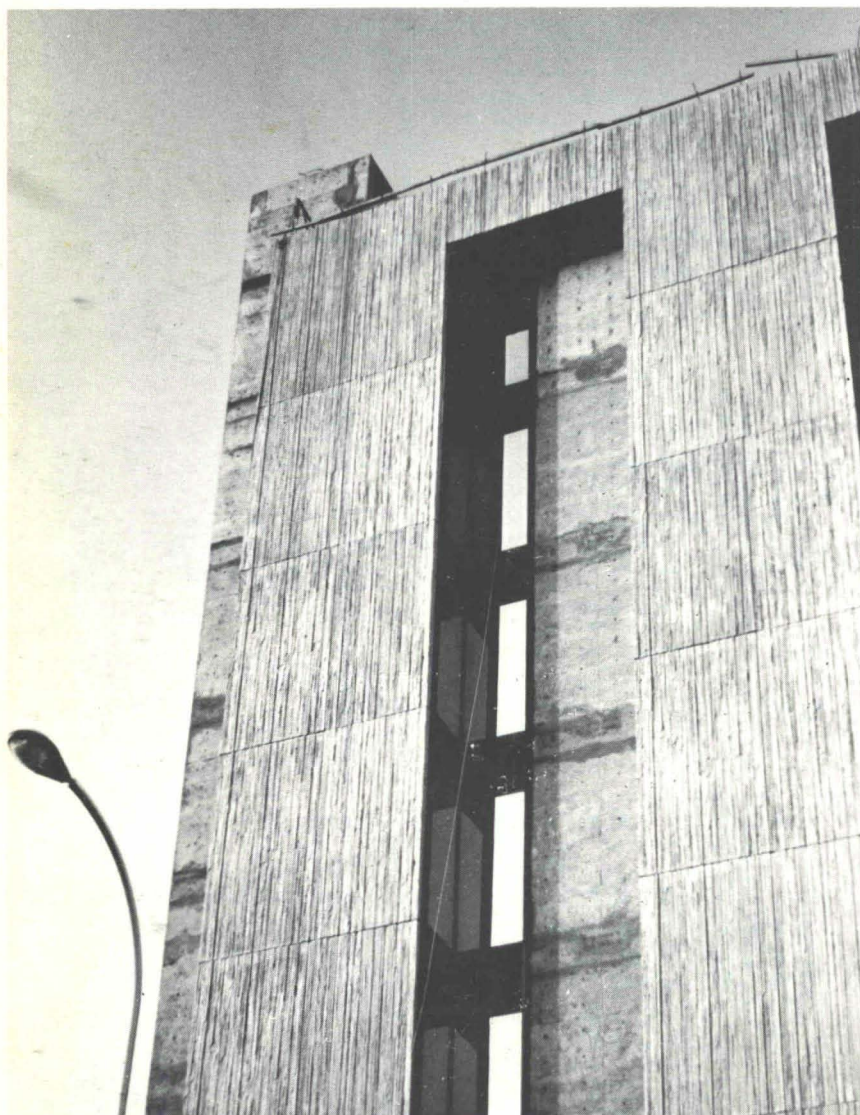
McGill - Stephens, Inc.
4100 Rio Bravo St., Suite 320
El Paso, Texas 79902
Phone 915/544-4505

Bulk Rate
U. S. Postage
PAID
Roswell, N. M.
Permit No. 47

Vol. 17, Nos. 1

PREVIEWING THE NEW . . .

IN CONCRETE



STEVENS, MALLORY, PEARL & CAMPBELL — ARCHITECTS

The attractive new architectural panels in striated texture are the distinguishing feature of the new Western Bank Building now under construction in downtown Albuquerque.

Cast in a warm tone cement color, the concrete panels, aside from being extremely decorative, act as a sun shade for windows on the building's south exposure.

Completion of the building is expected in March or April, '75.



HYDRO CONDUIT CORPORATION

2800 SECOND STREET, SW - ALBUQUERQUE, NEW MEXICO 87103