Lifestyles
 Sports and Culture
 Applying Village Concepts

BULK RATE U.S. POSTAGE Permit No. 1023 Permit No. 1023 P)

cember 199

When plans call for contemporary grandeur to blend with kamaaina past

Allied Builders System can execute a community dream.

Case in point is the transformation of the Alice Cooke Spalding House, built in Makiki heights in 1925, into the beautiful new Contemporary Art Museum. The assignment called for a creative approach by CJS Group Architects Ltd. and sensitive craftsmanship by Allied Builders – to preserve the estate's historic spirit and charm.

Construction challenges included creating a Grand Gallery via basementto-ceiling reconfiguration, bisected by a bridge suspended from two smaller galleries; rebuilding the roof to conform to its original missionary style; matching detailed wood flooring, ceilings and wall panels; and carefully eradicating termite damage.

Now a treasury of public appreciation, the museum showcases world class contemporary art in an environment that remains residential in character.



ALLIED BUILDERS SYSTEM Teamwork, Our motto. Our method.

> Contractor License BC-5068 1717 Akahi Street Honolulu, Hawaii 96819 Telephone (808) 847-3763



Plan To Make Dreams Come True

Turn dreams into dream kitchens with elegant, efficient Sub-Zero built-in refrigeration that's perfect for any size family or home.

ream kitchens start with Sub-Zero built-in refrigeration. Sub-Zero defines the standard for beauty, quality and performance in the finest new home kitchens. Sub-Zero plans for the future and the environment, too. Meeting the Federal Government 1995 Energy Standards, all but the largest model consume less energy during a year's continuous use than a 100-watt light bulb.

Stall

Two over-and under models feature a refrigerator on top, and a freezer below. The pull-out two-tier freezer compartment has an internal sliding drawer for easy access that's perfect for elderly or handicapped individuals.

Award-winning Sub-Zero 500 Series full-size models feature exclusive dual compressors for precise temperature control, superior food preservation and energy efficiency. Available in side-by-side, exclusive bottom freezer, or unique separate refrigerator and freezer pairs, Sub-Zero 500 Series models come in 30", 36", and 48" widths. For entertainment areas throughout the home, Sub-Zero offers built-in undercounter series refrigerators, freezers, and ice makers. All Sub-Zero models are backed by the industry's strongest twelve-year warranty.

For the name of a dealer that can make kitchen dreams come true anywhere in Hawaii, contact our Hawaii Manager, Rick DeLa Cruz in our Honolulu office (808) 593-1055

See A-23, Det 3 For Stair Sectio

Sub-Zero 550s

Sub-Zero Distributors, Inc. 250 Ward Avenue, Suite 110, Honolulu, Hawaii 96814 Telephone (808) 593-1055 • Fax (808) 593-1604 The 1601 Kapiolani Building's impressive design called for an equally-impressive exterior treatment. Polished and thermal-finished polychrome granite, a Canadian import combining rugged beauty with ease of maintenance, was the ideal solution. Another symbol of dynamic strength and creativity etched in stone.

Phone 526-0467

Owner: Kapiolani Properties Corp. Developer: Monroe & Friedlander Inc.

HAWAII CERAMIC TILE, MARBLE & TERRAZZO PROMOTION PROGRAM





Volume 22, Number 12

Leadership Message



People in Architecture: Sharing personal visions Personalities play a vital role in architecture. by Daniel G. Chun, AIA

People in Architecture



Sheryl Seaman, AIA: An architect's profile Group 70 International's president believes some professionals fail to reconcile social and cultural issues and the built environment. by Paul Sanders



'Cocooning:' A matter of style

Five architects tell why they prefer to work at home. by Paul Sanders

Architectural Concepts

16

Hawaii at a Crossroad: The new village concept Workshop gives local architects an opportunity to apply `avant garde' architectural concepts in Hawaii. by Gerald T. Takano, AIA

Technology

Electric Vehicles: An ideal transportation solution HECO will be installing charging stations in the near future. by Ralph Dobson, Associate

Recreation



18

Outrigger Canoe Races: Part of Hawaiian culture Canoeing is a reminder of Hawaii's early Polynesian settlements. by Lawrence Ho, AIA

Features



Reforestation Project: Undoing past damage

Long-term program will ensure the return of sandalwood trees to Maui. by Jean Dickinson



Carter Professional Center: A winning approach Careful project team selection is an important part of architecture.

by Philip K. White, AIA

- 22 News
- 23 Business News
- 30 Survival in the 90s



In this issue ...

Personalities in Architecture is the focus of this issue of Hawaii Architect.

The cover depicts the former Banyan Gardens, Waikiki, winner of a merit award in the 1983 AIA Honolulu awards program. The

DAVID FRANZEN PHOTO

Banyan Gardens was designed by Sheryl B. Seaman, AIA (cover inset). Seaman, president-elect, AIA Hono-Iulu, will succeed Kurt Mitchell, AIA, in 1994.

Seaman has had a successful career as an architect and manager at Group 70 International where she is a partner and president.

Highlights of Seaman's career and philosophy are also reported in this issue.

"Cocooning" is becoming increasingly popular among architects and members of associated professions. The term describes the practice adopted by people who elect to work out of their homes.

It is estimated that more than 20,000 professionals in Hawaii have already joined the ranks of "cocooners." A large number of architects have already embraced this practice.

Five architects who are currently "cocooning" discuss the reasons for adopting this new life style.

The leadership of the Hawaii State Council/AIA and PMP Company extend our best wishes to all of you and your family members for a happy and safe holiday season and a successful new year.

PMP Company Ltd

Publishers	
Publisher/	
Executive Editor	Peggi Marshall Murchison
Sales Manager	Miki Riker
Managing Editor	Paul Sanders
Art Director	Maria Bracho
Production	
Manager	Cynthia Becklund
Graphic Artist	Cheryl Ruddach Carol Uyeda
	Lara Prestfeldt
Production	Rose Cabanlit Rudy Tietjen
Business	
Manager	Susan Colletto
	-

Copyright®1993 PMP Company, Ltd., 1034 Kilani Avenue, Wahiawa, Hawaii 96786, Phone 621-8200. Fax 622-3025. All rights reserved. Reproduction of the whole or any part of the contents of *Hawaii Architect* without written permission is prohibited. Postmaster: send change of addresses to *Hawaii Architect* (ISSN 0919-83111) at 1034 Kilani Ave., Wahiawa, Hawaii 96786.



THE HAWAII STATE COUNCIL

1993 Hawaii State Council/ AIA Officers

President, Daniel G. Chun, AIA

Vice President/ President-elect,

Stanley S. Gima, AIA Secretary/Treasurer

E. Alan Holl, AIA

Directors

Christopher J. Smith, FAIA Gerald N. Hiyakumoto, AIA Virginia Macdonald, AIA John Okita, AIA Charles A. Ehrhorn, AIA Steven H. Heller, AIA Francis Oda, AIA

AIA Honolulu

1128 Nuuanu Avenue Honolulu, Hawaii 96817 (808) 545-4242

Honolulu Chapter President Kurt H. Mitchell, AIA

AlA Hawaii Island P.O. Box 1893 Kamuela, Hawaii 96743 (808) 885-4431

Hawaii Island Section President Ed W. Campbell, AIA

AlA Maui P.O. Box 929 Wailuku, Hawaii 96793 (808) 244-9574

Maui Chapter President Thomas R. Cannon, AIA

Hawaii Architect is a monthly journal of the Hawaii Council/American Institute of Architects. Subscriptions are \$24 per year. Opinions expressed by authors do not necessarily reflect those of either the Hawaii State Council/AIA or the publisher. The appearance of advertisements or new products and service information does not constitute an endorsement of the items featured. People in Architecture

t the close of 1993, I ask readers to allow me some personal comments on the role people and personalities play in architecture.

Leadership Message

Professional Diversity

The American Institute of Architects counts 660 Hawaii architects in its membership. Hawaii's architects manage some 180 different firms of widely varying staff size, specialization and design philosophies.

There is an architect of every size, color and taste for potential patrons to call on in Hawaii. Because I stand about five and a half feet tall, I used to believe that only short people made great architects. Size was in inverse proportion to design ego. Frank Lloyd Wright was a short guy who designed low doorways as a revenge on the less "vertically challenged." I now know that tall women and men are equally talented.

Personal Vision

The long history of architecture is largely a chronicle of high personal achievement in art. Yet, many modern architects are embarrassed to discuss architecture as art. Architecture remains one of the last arts actually grounded in public purpose and orientation. The sister arts have largely moved toward purely personal and often esoteric visions.

Recent architectural trends seem to be driving this personal vision in opposite directions. A few so-called "star architects" design projects on every continent and in every climate. At the same time, collaborative design activity is practiced with greater frequency in our architectural offices.

Following the idea of personal vision, I

have a theory that architects design buildings that reflect their own personal body architecture. When I was a young apprentice, I had to develop the designs of the different senior architects for whom I worked. If the senior architect



Daniel G. Chun, AIA

was tall and thin, I would develop the design accordingly. If the senior architect was shorter and solidly built, the design would proceed in that direction. Patrons of architecture should test my theory by comparing buildings and their architects.

Patronage

Patrons are absolutely critical to the realization of architecture. Architecture is unique among the arts in that it requires such an enormous commitment of human and material resources.

The enlightened patron shares the architect's personal vision. The patron is selfless in supporting a public art for the society in which it was created. Yet, the patron is also selfish in the knowledge that architecture is an enduring symbol of power. It can also sell a lot of soap and hotel rooms.

At the closing of the year, I want to thank all of the patrons of architecture for recognizing the need for and value of good architecture in our community.

✤ Daniel G. Chun, AIA, is president, The Hawaii State Council/AIA.

Sheryl Seaman, AIA

by Paul Sanders

Seaman did interior architecture at the Lodge at Koele, Lanai. The project won an AIA Honolulu design award in 1990. ▼ DAVID FRANZEN PHOTOS urt Mitchell, AIA, current president, AIA Honolulu Chapter, recently stormed out of his office at Kober/ Hanssen/Mitchell Architects and told his assistant he was off to a meeting.

The assistant routinely asked Mitchell who the client was.

"No client," said Mitchell as he darted out the door, "Sheryl Seaman—and I'd better not be late because she won't wait for me."



For Sheryl B. Seaman, AIA, ASID, who replaces Mitchell at the helm of AIA Honolulu in 1994, punctuality and skillful planning are key business practices. Through careful planning, Seaman squeezes as much as anyone can out of a 24-hour day, yet still finds time to address design details.

The Group 70 International's president is not a "typical" executive. Seaman may be negotiating a multi-million dollar project one minute and selecting fabrics, materials and color schemes for another project the next.

This portion of her "dual life" is carried out in a "hideaway" in a building next door to her office building.

THIS IS THE CHAOTIC but creative world where Seaman sifts through heaps of materials, lining compatible items up on a work bench in preparation for a project presentation, rushing to yet another meeting, and returning later to pick up where she left off.

Seaman, an all-around architect, finds interior design of particular interest.

"Interiors affect people psychologically and physically," she said. "We design for the occupants of the building, not for ourselves. We can improve the quality of the work place. We can make a nice building nicer, or a not-so-great one better."

She views architecture as a "social art." "If a design will impact more than one person, there has to be interaction," said Seaman.

She believes that not enough emphasis is put into understanding how social and cultural issues relate to the built environment.

"Architecture should not be done in isolation as an expression of the individual designer," she pointed out. "It takes into consideration the way people will use the built environment, history and the social context."

ORIGINALLY AN ART MAJOR, Seaman did not select architecture as a profession until after the birth of her daughter in the mid-sixties.

"By then, I had decided that I could not make a living as a sculptress," she quips. "Architecture offered more potential because it draws on the arts, math and sciences endeavors that interest me."

She graduated from the University of Hawaii with a BA in architecture, a goal that took eight years to achieve as she divided her time between school, odd jobs and her baby.

Seaman developed an appreciation for the arts from her mother, a painter, and an interest in the sciences from her father, who studied chemical engineering before entering the military.

"My parents impressed upon me that I could achieve whatever I decided to achieve," she said. "And this carried forward in adulthood."

While attending the University of Hawaii, Seaman often was the only female in architecture classes.

"THIS DISCOURAGED SOME other girls from pursuing a career in architecture," she pointed out. "I was undaunted by what anyone thought."

Being a woman in a male-dominated profession was never an obstacle, she explained, because "it never occurred to me that it was an obstacle."

She never felt handicapped dealing with clients, although it is possible that she may not have been selected for some projects because she is a woman.

Seaman began a career in architecture at Media Five as an intern, fresh out of school, rising to director of Environmental Planning during a six-year career at that firm.

She joined Group 70 as an architect in 1978, working her way up to associate, partner and then president in 1990, a tour of duty that will end in two years.

"EACH PARTNER TAKES a turn at this position," she said. "We realize not all architects relish administrative duties. Rotating this responsibility gives each partner a change of pace and a chance to re-establish client relations after the tour ends."



Sheryl B. Seaman, AIA, was project architect for the former Banyan Gardens in Waikiki, which won an AIA Honolulu design award in 1983.

Seaman credits Media Five for providing the creative environment where she could prove herself.

"I had opportunities to work in all aspects of architecture, even though I had little experience," she explained. "It was excellent training, and I learned fast."

Architecture is a "continuing educational process," she believes, a topic that will head her agenda when she assumes her duties as president, AIA Honolulu in 1994.

"Next year's AIA agenda has been outlined for me," said Seaman. "I will focus my efforts on making sure a successful pilot program for continuing education is in place by end of my term."

DURING ECONOMIC DOWN-TURNS," she remarked, "professions start to rethink themselves. Throughout history, architecture has always been a cyclical profession. In the early days, architects depended on patrons for subsistence, with idle periods in between jobs. Nothing has changed."

She is encouraged by what she sees happening in the built-environment today.

"Hawaii has a rich cultural architectural heritage," she said. "Some interesting buildings have been done. People care about these buildings. We went through a phase when only mainland-type buildings were erected here. We are getting away from that. There seems to be a better appreciation of what makes Hawaii unique."

She is quick to add, however, that it is sometimes discouraging to see what has happened in certain island localities, for instance Kahala Avenue, where "large pretentious houses were built to the edges of lots."

"IT'S NOT WHAT HAWAII is all about," she said. "These homes have no relationship to the outdoors; they lock out the neighborhood and the walls prevent the manifestation of a sense of community."

In contrast, Seaman, a Kailua resident, said streets in her neighborhood are narrow, neighbors know one another and look out for each other. Born in Berkeley, Seaman, a military "brat," has lived in most of the nation's states and chose to make Hawaii home after arriving in 1962 with her family, on a ship that docked at the Aloha Towers.

"I recall the Royal Hawaiian Band playing, people with leis, the blue water—it was beautiful. I remember telling my parents at the time: 'I think I'd love staying here a while.'" And true to her feelings, she has.



DuPont TYVEK[®] Housewrap Outperforms **Competition in Laboratory Tests***



Resistance



Test Method: TAPPI T-460*

TYVEK® Housewrap is the best air barrier, eight times better than the competition*, because it stops most outside air and dirt from coming in through the cracks and seamsthereby dramatically increasing the energy efficiency of a home.

*based on independent laboratory tests

Check with your local construction material supplier.

Neighbor Islands Toll Free 1-800-392-2431 • Fax 682-4436

Serving Hawaii Since 1955



HONOLULU WOOD TREATING CO., LTD. 91-291 Hanua St., Ewa Beach, HI 96707 Phone 682-5704

QUPOND

better than the competition* reducing the chance of harmful in-wall condensation build-up, which can lead to rot and termite damage.

barrier during construction. It is eleven times more water resistant than the competition.*

People in Architecture

Cocooning'



ver the last decade, the high tech industry has been heralding the day when professionals electronically linked to the outside world would never leave home to tend to daily tasks. That day may have arrived—apparently ushered in not by high tech—but by the silkworm.

Ensuring the perpetuation of its species by weaving a silky protective envelope around itself during rebirth, the silkworm transforms from lowly slug to butterfly in the safety of nature's ideal model home—a cocoon.

"Cocooning" may be the catchword of the 90s in architecture, a profession that seems ideally suited to integrating the workplace into the most humble or lavish abode.

FOR MANY, THE RETREAT from lifeless cubicles or sterile offices is a way to integrate work demands with personal needs relating to economics, lifestyle, security and convenience.

Whether more architects who seek release from the urban rat race will join the growing ranks of cocooners remains to be seen.

Nancy L. Peacock, AIA



For Nancy Peacock, AIA, past president, Hawaii State Council/AIA, who recently moved her office from downtown Honolulu into an apartment above her garage behind her home in the lower

Tantalus area off Punahou, "cocooning" means convenience for

the customer and a more naturally integrated and easier lifestyle for herself. "Going to my downtown office demanded too much effort from me and my clients," Peacock said. "Parking was expensive and the office hard to find."

SAFETY WAS ALSO A FACTOR in Peacock's decision. "I like to work evenings and week-

ends," she said, "but I had no desire to drive downtown evenings. It didn't feel safe."

Peacock revels in her total command over her workplace. "I am not bound by office regulations or restrictions," she said. "I can turn on the air conditioning or open the windows if it suits me."

Clients love the more casual arrangement that allows for easy parking, yet is conducted in attractive and professional business settings, Peacock said.

ANOTHER BENEFIT of working at home is that "I can do household chores during work hours; I can, for example, start my wash and return to my work," she said. Peacock believes that as cocooning becomes more popular, Americans will get an opportunity to pick their own work hours and lifestyle.

"There will be opportunities for the 'owls' and the 'early birds,'" she said. "Self-discipline, however, is a prime criterion for successful cocooning."

Robert A. Lazo, AIA

Bob Lazo, who started his own practice in 1992, said "cocooning" is a necessity for him at this stage in his career. "I chose it strictly for economic reasons," he said. "It helps keep overhead expenses under control."

One room in his apartment in the Kukui Plaza Residential Tower in downtown Honolulu is dedicated to

work space and a large assortment of electronic equipment.

"I didn't feel that I needed formal facilities," said Lazo. "I usually meet clients at the site or at their place of business, which is usually within walking range and an integral part of my physical fitness program."

His office is highly computerized because "it helps simplify and optimize work and it is more



efficient."

A POSSIBLE DRAWBACK IS that the current arrangement "does not have the high-profile image a formal office brings—but there is no difference in service provided to customers.

"Although cocooning works well for me," he said, "it doesn't mean it's good for everyone. It has to fit one's personality. Some people need a formal, structured work environment."

He admitted, however, that as his business grows and there is a need to hire employees, "I will go out and rent office space."

Douglas P. Luna, AIA

Doug Luna, a past local AIA director and treasurer, combined his office and private quarters in Honolulu's Harbor Tower in June. He transformed the master bedroom suite into office space complete with CAD work station and plotter.

"Computers did not have anything to do with this move," he said. "I would have relocated anyway, even if I still used a drafting table."

HIGH OFFICE RENTAL COSTS were a major factor in his decision to adopt "cocooning," Luna said. "I wasn't getting any value for the money I spent. Having an outside office did not result in getting clients that I wouldn't get otherwise."

Clients have reacted positively to this new arrangement, he said. "Clients either come to Harbor Tower or I meet them at their home or place of business." Luna agreed with Peacock that he is more apt to work evenings and weekend. "I find that I have less inhibition in working evenings, even if it is for a few minutes," he pointed out. "It (cocooning) adds to flexibility."

During the first two years of his practice, Luna worked from his home but thought his practice would gain quicker credibility with a Bishop Street office.

"Working conditions at home are comfortable and pleasant," he said. "I listen to good music on my stereo while I work ... and I have a magnificent view of the harbor."

According to Luna an office outside the home is really only needed if you have employees. "I found that where I have needed help in my work I can get support easily from independent contractors," he added.



Exterior of Architects Maui's office in which Tom Cannon is "cocooning."

Thomas R. Cannon, AIA

Tom Cannon, president, AIA Maui, who lives approximately a 45minute drive away from Kahului and Wailuku, wanted both the comfort of home and the formality of a separate of-

fice. He also wanted to do his part to ease traffic congestion on Maui highways and for the environment.

His solution was a compromise — cocooning of sort — which gave him the lifestyle he was looking for.

"I built a one-room office bunga-



low on the corner of our 4-acre plot," said Cannon. "I now walk 100 feet from home to the office, away from the temptations of the refrigerator."

> Cannon finds this arrangement works for him and his family, wife Agnes and three-yearold daughter Alisi.

> "At the end of the work day,"

said Cannon, "I walk away from the office, closing the door on work yet to be done to spend more time with my family. This does not preclude my going back to the office if something needs to be addressed, but I don't carry a briefcase home."

Cannon finds his scenic office sur-

Cocooners Should Consult Land Use Ordinance

Jo Paul Rognstad, AIA, advises would-be cocooners to consult the Land Use Ordinance (LUO) of 1986 before establishing an office in their private residences. The following are excerpts from the current LUO.

3.140-1 Home Occupations: Standards and Prohibited Uses.

The purpose of this subsection is to permit home occupations as an accessory use to dwelling units under the following restrictions and standards:

A. Home occupations shall be incidental and subordinate to the principal use of the site as a residence and shall not change the character and external appearance of the dwelling.

B. Only household members shall be employed under the home occupation.

C. There shall be no exterior sign that shows the building is used for anything but residential use. There shall be no exterior displays or advertisements.

D. There shall be no outdoor storage of materials or supplies.

E. Indoor storage of materials and supplies shall be enclosed and shall not exceed 250 cubic feet or 20 percent of the total floor area, whichever is less.

F. Articles sold on the premises shall be limited to those produced by the home occupation and to instructional materials pertinent to the home occupation.

G. Home occupations which depend on client visits, including group instruction, shall provide one parking space per five clients on the premises at one time. This shall be in addition to parking required for dwelling use. Residents of multi-family buildings may fulfill the requirement by the use of guest parking with the approval of the building owner (management) or condominium association.

H. Activities which exceed the allowable noise levels as set forth in Chapter 43, Title 11, Department of Health Administrative Rules, as amended, must be conducted in fully enclosed, noise-attenuated structures.

roundings conducive to creativity.

"I AM SURROUNDED BY lush green vegetation," he pointed out. "Looking out the window or from the deck, I see a little stream running along the property line and a taro patch I planted myself. It surely beats the physical and psychological wear and tear of having to drive to the office."

For Cannon, technology makes this "cocooning" arrangement possible.

"I don't feel isolated," he remarked. "I am well-versed with computers and do all design on CAD. The equipment I have allows me, in seconds, to send faxes to clients or drawings to engineers."

As Cannon pointed out with great satisfaction, "there is one less car on the road, which might help postpone the need for mass transit transportation a little bit longer."

Jo Paul Rognstad, AIA

Pioneer cocooner Jo Paul Rognstad embraced the concept as early as 1978 in designing the mixed-use Cen-



tury Center on the edge of Waikiki.

The building, developed by Bob Allen of Centrum, consists of onethird residential apartments and



two-thirds commercial offices.

THIS WAS MADE POSSIBLE because of the site's unique zoning, Rognstad said. The zoning boundaries — residential and commercial — zigzagged through the property perpendicularly to Kalakaua Avenue.

"Because of this strange situation, we were able to legally connect upper floor apartments to lower floor offices," he said. "We had to do it this way in those days, because the comprehensive zoning code made no provisions for mixed use."

Rognstad occupies the entire 40th floor, which sprawls over 5200 square feet of space. According to Rognstad, building code provisions allowed for accessory apartments in Century Center, provided a person also had an office in the same building. Rognstad also seized the opportunity to personally design his floor and import furniture from all over the world to create his splendid cocoon.

"I cannot think of anything better than this arrangement," said Rognstad. "There is no way I could improve on it. It's very convenient that is if you enjoy your work."

"IF YOU ENJOY ARCHITECTURE as a hobby as much as a job," he pointed out, "you can do work weekends and evenings. I can go into my private quarters, prepare a sandwich and get right back to work. I have everything I need in this building, including one of the better restaurants in town where I can entertain visiting clients. Convenience makes it easy to work extra hours.

Rognstad said his new lifestyle hardly requires any driving compared to the pre-cocoon era. He said his Porsche may sit for a week in the garage without a need to use it. The car Rognstad bought 15 years ago has only 30,000 miles on the odometer. There is a reliable

alternative to electricity that's safe,

environmentally friendly, and

cost-efficient. It isn't years away.

It's here, now. It's gas.

Hawaii's reliable energy alternative.

Water heating. Cooking. Clothes drying.

Transportation fuels. Gas does everything

better and faster for less. And with competitive

prices that include complimentary design services,

gas is a very affordable alternative.

Gas energy. You get it best from us,

The Gas Company,

the only full-service

gas company.





Structural Steel Update



Project Profile: Hawaii Film Facility Expansion - Phase I

Architecture

After two years of construction, the state Department of Business, Economic Development & Tourism (DBED&T) is eagerly awaiting the completion of Phase One of the Hawaii film facility expansion located at Diamond Head Road and 18th Avenue.

A steel-framed system was selected by designers of the Hawaii Film Facility's state-of-theart new sound stage, which is scheduled for completion this month.

Although creaky with age, the existing movie and television facility has been home for some of the most popular television programs ever produced, such as "Hawaii Five-0" and "Magnum P.I." According to



Mufi Hannemann, head of DBED&T, the complex was recently leased by Steven Bochco's production company for a new Hawaii-based series called "The Byrds of Paradise" and a new sound stage is scheduled to be ready for use in December.

The first phase of a major expansion of this facility consists of the sound stage, a large parking area, a crew rest area and a gated entry. When completed, the total development will include a second sound stage, office and administration buildings and a technical building for storage and construction of set components.

Architects for Phase One of the expansion are Johnson Tsushima Luersen Lowrey Inc. who have been associated with the project since the mid-1980's.

JTLL said the centerpiece of the first increment of this project is the new sound stage, a state-of-the-art building over onethird of an acre in size.

Because of the requirement for a large uninterrupted floor area and a very high ceiling plane, it was necessary to select materials capable of long spans for the roof structure.

A decision was made early in the design program to use a steel-framed roof system. The structure consists of fabricated steel trusses set at 18 feet 9 inches apart, with intermediate purlines which support a composite metal roof decking with a low



slump concrete topping. The 3 in 12 pitch of the roof allowed for installation of a long-life modified bitumen roofing with a copper coating which will ultimately weather to a gray-green patina.

Engineering

According to Project Engineer Ted Suzuki, the trusses, fabricated and erected by Industrial Welding Inc., have a 110-foot free span and are supported on concrete pilasters, which are integral with the tilt-up concrete wall panels.

The primary benefit of the steel-trussed roof is the column-free interior, which allows total flexibility in building both permanent and temporary sets.

Additionally, the openings framed by the truss members provide a clear passage for the installation of building system components—especially the large airconditioning duct work, which distributes the low-temperature, low-velocity, low-noise coefficient air supply.



Structural Steel 181 tons

Miscellaneous Metal 12 tons

Steel Decking 19,000 square feet

Steel Contractor Industrial Welding, Inc.

Architect

Johnson Tsushima Luersen Lowrey Inc. Robert Luersen, AIA, principal in charge

Structural Engineer Robert Englekirk Consulting Engineers Inc.

General Contractor Western Engineering



STEEL FABRICATORS AND ERECTORS OF HAWAII

STEEL INDUSTRY IMPROVEMENT FUND P.O. BOX 30062 HONOLULU, HAWAII 96820-0062

For further information call 839-5111

Architectural Concepts

Hawaii at a Crossroad



everal months ago a visitor was overheard saying to another, "Don't bother going to Honolulu, it's just like Los Angeles." Comparison with a stereotyped LA suggests a Honolulu stripped of its unique island character, racing with freeways and greased with anonymous communities. As a commentary on Hawaii's urban design, this remark is disturbing. Our poststatehood achievements of automotive conveniences and single family consumerism give us the "mainland" acknowledgment with only modest hints of what is special to Hawaii.

Those dependent on a strong, boom era tourism economy can criticize the highly urbanized sections of Waikiki and other resort areas as the visible examples of our concern. But while these areas may have lost their idyllic imagery, other major land developments during the last few decades have a more dramatic impact on the regional appearances of our place. Inevitably, our attention shifts to the sprawling single-family subdivisions, wide

Representative sketch generated by a participant at the Workshop Charette Oct. 22, which applied new village principles.



roadways and megashopping centers that appear endemic across the landscape of our state. This is where our image is most vulnerable. Cognizant of Hawaii's dilemma of a limited physical land mass and intense market



Gerald T. Takano

demand for suburban preferences, a coalition committee of planners and architects was formed to developed a forum in which such issues can be discussed and evaluated. Members of the American Planning Association, Hawaii Chapter and the AIA Honolulu combined their expertise to promote a "problemsolving" workshop where individuals can analyze new ways to plan communities.

THE VILLAGE CONCEPT, with its adherence to sustainable and integrated models and commercial, residential and open space components, was a logical choice for a workshop.

This concept includes a departure from automotive dependency associated with town planning, and instead encourages an environment with an identifiable town commercial center and pedestrian-friendly residential activities radiating from the core in linear and curvilinear streetway patterns.

This idea is rooted in historical precedents and suggests that new village planning can survive the dominance of the automobile on our physical environment. For example, rather than create a design that forces residents to drive to a nearby shopping center, the new village concept gives pedestrians, bicyclers and others alternative pathways throughout a community.

AUTOMOBILE USE, however, is still viewed as an important part of the development and is skillfully incorporated into the overall design. Commercial or landscape focal points or nodes are situated for orientation and directional clarity. Many of these and other parameters are basic and common-sense design considerations, but rarely are they so systematically assembled as a total community approach.

The Oct. 22 New Village workshop held at Tokai University in Honolulu was thereby structured to give participants an opportunity to explore this concept in a "hands-on" session. Several teams were organized and each was given a particular problem to address as a planning and design solution on three specific sites, including Hanapepe (a rural, historical setting), Kaimuki (urbanized neighborhood with existing development) and Kapolei (a large 1000+-acre vacant site adjacent to other planning developments).

Dr. Anne Vernez Moudon and Peter Calthorpe led the workshop. Moudon, a professor of architecture, landscape architecture and urban design at the University of Washington in Seattle, gave an overview and historical context for new village planning. Peter Calthorpe, a nationally known architect and planner in private practice and founder of Calthorpe Associates, discussed the principles of new village planning. Both individuals provided guidance and additional information throughout the entire workshop session.

OVER 100 ARCHITECTS, planners, developers, governmental officials and community leaders participated in the workshop session. Following the lectures and slides by Moudon and Calthorpe, each team adjourned for lunch and discussed strategies for the problem solving exercise. The timetable was set at three hours to identify the program's requirements and develop a conceptual land-use map, imagery studies and other planning and design recommendations. Working on assigned tables and using tracing paper and marking pens, each team began the tedious tasks requiring consensus given team members with differing viewpoints and assumptions. Teams, however, were asked to consider the new village principles presented by Moudon and Calthorpe and to incorporate them into their solutions.

By workshop's end, all teams displayed their solutions. Each team selected a representative who explained the intent and results of their assignment. Following this, Moudon and Calthorpe commented on and reviewed all submittals. A special group of UH planning students meeting separately from the main teams presented their material as well.

By the end of the day, the coalition committee members and workshop participants suggested possible application of the new village process and planning into mainstream planning and design processes. Revisions to the existing zoning and other regulatory areas, for example, could allow more flexibility to encourage new village planning in Hawaii. The workshop therefore provided the setting for creative interaction among planners. architects and others to understand each discipline's priorities in development processes.

In summary, Hawaii is entering a period of transition. The shape of our communities tomorrow will definitely depend on the available choices for planning and design today. The New Village Workshop is merely a starting point for all of us to assess our special place called Hawaii. If we begin to be Los Angeles, we can learn from the best of LA and other mainland lessons for our own unique models.

As we approach a new and exciting technological time, we ironically look back at simple ways to create a humane and yet practical plan for our living areas. This is the new village concept. As best stated by Calthorpe: "The challenge is to synthesize the relevant pieces of the past with the progressive ideas of the present."

➡ Gerald Takano, AIA, chaired the New Village Workshop. He is an architect and planner at Media Five Ltd, and is currently Hawaii's advisor to the National Trust for Historic Preservation in Washington, D.C.

When Consistency Counts, Count On GE Silicone Construction Sealants

Different jobs demand different kinds of sealants. That's why GE silicone construction sealants are specifically engineered to be the best products for their individual applications. Always have been, always will be. That's consistency. Whether the job is structural glazing, weatherproofing or general-purpose sealing, go with the best-GE Silicones. For complete

Contact us today. Distributed in Hawaii by:

product information,



819 Moowaa Street, Bay 109, Honolulu, Hawaii 96817 Phone: 847-5266 ■ Fax: 841-7295





Technology

The ideal transportation solution Electric Vehicles

This is Part II of a two-part article on electric vehicles and technology.

atteries and battery technology are critical factors in the development and acceptance of electric vehicles (EVs) as a locomotion option. The distance an electric vehicle can be driven before refueling depends primarily on battery capacity. Other factors, such as gross vehicle weight, driving profile and ter-

rain affect the distance an EV can be driven, but the overriding element is the storage capacity of the battery. For the next few years, lead acid batteries will be the best option.

New battery technologies are being studied by the USABC (United States Advanced Battery Consortium). Among these are advanced sealed lead acid with gel electrolyte, nickel metal hydride, nickel iron and sodium-sulfur.

Current EVs have a range of 80–100 miles. On Oahu, the average car is driven 8,849 miles per year or 24.2 miles per day, which leaves a large margin of safety for daily driving. As time goes on, internal conversion vehicles will extend the range even further.

SLUGGISH ACCELERATION and limited speed, once the chief reasons for lack of public enthusiasm and acceptance, are not valid issues anymore; ECs today match ICEV performance, thanks to technological breakthroughs and improvements in propulsion systems and controllers.

Formerly, EVs used DC motors with DC controllers which contributed to heavy motors, inefficient operation and poor performance.

Newer technology transferred from aerospace companies like Hughes Power Control Systems (HPCS) is one example. They have developed an AC drive train. A DC-AC power inverter coupled with an AC motor provides 0–60 times of 9 seconds and a governed top speed of over 75 mph. A converted GEOStorm, with the above power train, was in Hawaii in April. The car was driven by over 50 people who became believers in the future of electric transportation.

The ECs, however, cannot be fully

marketed in Hawaii until adequate infrastructure providing parts and service and convenient battery recharging capability is in place.

Ralph Dobson

The full range of supporting policies which define the operating environment for electric vehicles is an area where Hawaii's architects can play a significant role. Charging stations for home recharging, opportunity charging, rapid charging and fleet charging need to be developed. Logos to signify the services available to drivers need to be designed.

HECO WILL BE INSTALLING charging stations in the near future as part of a Hawaii Electric Vehicle Demonstration Program. What should they look like? New homes could be designed with an EV charging port already available in the garage. Sacramento is revising their building code to require such equipment. Does Hawaii have to do the same or will architects anticipate the need and routinely include a charging port as part of a design?

New technology always has a high price tag. The electronic calculator of today costs about one tenth of the original and has many more features. The price came down because of volume, technology enhancements, production techniques and market acceptance. The same factors will affect the price of EVs in the future.

Several actions have taken place which will stimulate the market for EVs. The Energy Policy



A Brighter Outlook

A brighter outlook is assured for you with VELUX[®] Roof Windows and Skylights. They will give your home a bright and spacious feel along with a new horizon of sights to enjoy. They are built with affordable quality and backed by 50 years of experience and superior craftsmanship. VELUX also offers a wide range of sunscreening accessories to help control the light and heat. If you want a brighter outlook for you and your home, please stop by for more details.



531 Waiakamilo Road • Honolulu, Hawaii 96817 Phone: 847-4021 • Fax: 845-9638

Hawaii's Largest Inventory of Architectural Materials and Hardware









quality product and service

Hawaii's Lumber People since 1935

Thousands of building professionals have relied on Honsador for basic framing packages, speciality products and knowledgeable assistance since 1935. And as your needs have grown, Honsador has responded with innovative, customized service like containerized orders, jobsite delivery, bonding and house packages.

When you get down to basics, Honsador offers you more.

• Truss Joist Lumber and wood products... • Lumber are the basic components of Hawaii's construc-• Drywall Siding tion projects. That's why your need for a depend- Custom Orders • Cedar able source of quatity materials is our #1 Glulam Beams • Doors priority. Clears Roofing Mouldings Redwood MDO & HDO Plyforms olmaniz Plywood • Lightweight Steel Framing • OAHU MAUI Ph: (808) 682-2011 Ph: (808) 877-5045 Fax: (808) 682-5252 Fax (808) 877-6571 **KONA** HILO KAUAI Ph: (808) 329-0738 Ph: (808) 961-6000 Ph: (808) 246-2412 Fax: (808) 526-2764 Fax: (808)961-5892 Fax: (808)246-2413

Act of 1992, Title V, states that municipal and private fleets must purchase alternate fuel vehicles at the following rates: 30 percent of new vehicles purchased in 1996 must be alternate fuel, 50 percent in 1997, 70 percent in 1998 and 90 percent in 1999 and thereafter.

In addition, California and most of the East Coast states, require that 2 percent of all cars offered for sale in 1998 and 10 percent of vehicles in 2003 must be zero emission vehicles. The electric vehicle is the only vehicle that meets the zero emission criteria.

Market projections indicate that as a result of existing mandates, 49,000 EVs will be sold in 1998. In addition to legislatively influenced price reductions, fiscal incentives are available to help reduce the cost of EVs. A 10 percent federal tax credit of up to \$4,000 is available as an incentive to encourage purchase of EVs. Several states and utilities are also considering tax credits for EV purchases. The Electric Vehicle Association of Hawaii has been actively sponsoring legislation, but the need for state tax revenues has made passage of such a measure difficult.

THE EFFICIENCY OF AN EV is measured in miles per kilowatt-hour (kwh) rather than miles per gallon. The EPA has developed a miles-pergallon comparison for ICEV depending on city and highway driving; no such comparison exists for electric vehicles. Each EV manufacturer rates its vehicles by kwh per mile at various speeds.

The typical ICEV has higher gas mileage on the highway than around town. This is a contradiction because the average speed in town is much lower than on the highway. On the other hand, electric vehicles use power proportional to their speed.

A typical newer EV uses .12 kwh per mile at 40 mph, .15 at 50 mph and .19 at 60 mph. An EV in Hawaii traveling optimistically at 40 mph, would use 3 kwh, based on an average daily trip of 24 miles. At a cost of 12 cents per kwh, the cost for a typical day's driving would be 36 cents. THE SIMPLE DESIGN of an EV power train, battery, controller and motor means that EV owners can forego oil changes, filter—fuel, oil and air, tune-ups, exhaust systems, radiators and overheating. In short, the operational cost of driving an electric vehicle is much less than an ICEV.

But, there's no free lunch. Batteries must be replaced 20 to 30 times during the life of a vehicle.

Current EV batteries are rated for 200 charge and discharge cycles. Depending on miles driven, batteries could be replaced every two years at a cost of \$1,000 to \$1,500. The focus of battery technology research is to improve battery life and power availability. Already, batteries have been developed with the capability of 80,000 miles before replacement. THE FEDERAL GOVERNMENT through the Advance Research Projects Agency (ARPA) has funded an Electric Vehicle Demonstration Project. This two-year project is a nationwide \$25 million effort to see i EVs are suitable for military fleets. Hawaii has been allocated \$5 million and with one-to-one matching funds, \$10 million are available to begin construction of the infrastructure and demonstrate the viability of EVs.

It is felt that because of relatively short distances traveled, high cost of fuel and concern over the environment, Hawaii is the ideal place for this type of vehicle.

➡ Ralph Dobson, Associate member, is Senior Marketing Research Engineer, Hawaiian Electric Company, Inc.

Electric Vehicles Are Coming

The Hawaii Electric Vehicle Demonstration Project (HEVDP) has been funded with over \$11 million. Thirty-seven cars and pickups, two 30-foot shuttle buses and one 40-foot transit bus are included in the program.

On Dec. 9–12, the Electric Vehicle Association of Hawaii (EVAH) will sponsor Hawaii EV '93, an electric and hybrid vehicle conference and trade show at the Hilton Hawaiian Village. Design professionals are invited to inspect and evaluate the EVs which will be exhibited.



U. S. Bovax Inc. Thanks the Architects, Builders

& Developers of Hawaii

A s the year 1993 nears its end, the first anniversary of the commercial introduction to Hawaii of HI-BOR[™] Pressure Treated Wood will be upon us. U. S. Borax Inc., acknowledges that the commercial success which HI-BOR[™] Pressure Treated Wood enjoyed in 1993 would have been impossible without the support displayed by Hawaiian architects, builders and developers. U. S. Borax sincerely thanks you for this support and what it represents.

Thank you for recognizing U. S. Borax's commitment to making certain that you will be provided with a product, HI-BOR[™] Pressure Treated Lumber, utilizing a preservative which:

- is an AWPA approved preservative
- is recognized by ICBO through Acceptance Criteria
- is approved by the Honolulu Building Code
- was tested in Hawaii
- has been used and tested worldwide for over 50 years
- can effectively treat the Hawaiian lumber of choice, Douglas Fir
- has NFPA approval for use with no requirement for strength reduction at preservative levels
- protects the lumber without incising

U. S. Borax Inc. looks forward to a long term relationship with your industry based on a mutual commitment to quality.



Mahalo



Move scheduled

Group 70 International is scheduled to move to new quarters at 925 Bethel St. in January.

In announcing the move, Sheryl B. Seaman, AIA, the firm's president,

said Group 70 will occupy the fourth and fifth floors at that location, across the street from their current office.

Firm Receives Award

Concept Design Group, Inc. was a Grand Award winner in the 1993 Building Industry Association's (BIA) Hawaii Renaissance Awards program. The firm, architect and designer for the Paxton/Kurtzman Condo remodel, won in the residential remodeling category.

Renaissance judges referred to th \$73,000 one-bedroom condo renovation as a "sophisticated compact expression of quality space planning and design execution."





Business

News

Rick Dela Cruz has been appointed Hawaii manager for Sub-Zero Distributors. Inc., the exclusive distribu-



Rick Dela Cruz

tor of Sub-Zero Built-In Refrigeration for the state of Hawaii.

A Hawaii native, Dela Cruz was raised on Oahu's North Shore and graduated from Waialua High Schooland Pasadena City College.

Dela Cruz has over 15 years of wholesale and retail experience in appliance and electronics sales in Hawaii.

He was previously with Servco, where he spent seven years as a product manager. More recently, he was sales manager at Chock's T.V. and Appliance, and for the past five years, sales manager, American Cabinetry in Aiea.

Dela Cruz is currently serving on the Remodelers Committee, the Renaissance Committee and the Parade of Homes Committee of the Building Industry Association of Hawaii. He has also served as public relations chairperson for the local chapter of the National Kitchen and Bath Association.

As Hawaii manager for Sub-Zero Distributors, Inc., Dela Cruz will call on appliance dealers, kitchen dealers, builders and architects on Oahu and the outer islands. He will also be coordinating Sub-Zero Undercounter Built-In Refrigeration sales to hotels, hospitals and government facilities throughout the state.

What makes you tan, makes your paint peel. Sun and moisture may be wonderful for the body, but not so wonderful for your house paint. So we've formulated our paints specifically for the Hawaiian climate. That way it will look better and

last longer. So when you're done with the job, you're done.

Ameritone Paint 1353 Dillingham Blvd . Honolulu 96817 941 2602 Kapaa Paint Supply 934-A Kipuni Way, Kapaa 96746 822-1788

Ameritone Maui 140 Alamaha St., Kahului 96732 71-7734 Ameritone Maui West Maui Center #7 Honoapiilani Hwy . Lahaina 96732 667-2614

Ameritone Maui South Kihei Commercial Center #206 Kihei, Hawaii 96753 875-1133



Ameritone Paint Corporation, P.O. Box 190, Long Beach, CA 90801, 1-800-669-6791

Member of Grow Group, Inc.

Recreation

Outrigger Canoe Races

by Lawrence Ho rchitecture, at its best, embraces and nurtures local culture through sympathetic design of the built environment. Participation in activities that promote our local heritage is an important avenue to comprehension and appreciation of culture for the design professional. Fortunately, Hawaii retains a rich scope of activities that provide insight and connection to the traditions of the islands. For the sportminded, outrigger canoe paddling offers a great opportunity to participate in a vital expression of Hawaiian culture. Long distance races ranging from coastal runs of a few miles to the 41mile Molokai Channel crossing are held each fall.

Like good architecture, outrigger canoe paddling links traditional practices and customs with modern knowledge and technology. While contemporary materials are in common use now, the components of the canoe retain the form and terminology dictated by tradition: A paddler from the time of the first Polynesian migration to Hawaii would feel at home in a modern Hawaiian outrigger.



We Go The Distance For Architects and Designers!



At HPM Paint And Decorating Center With Benjamin Moore and Co., We Provide:

- Complete Library of Color and Specification Materials
- Professional Representative For On-sight Job Inspection And Specification
- Video Color Planning And Color Computer Matching Service
- External Warranty Program And Much More!

Let Us Go The Distance For You!.....2 Convenient Locations

WAIAKAMILO 419 Waiakamilo 847-2444 KANEOHE 98-425 Kam Hwy. 235-3018 While modern technology obviously plays a part in today's outrigger canoe racing events, ultimately, a team of paddlers must blend their minds and bodies together as a single unit to move their craft smoothly through the ocean over long distances. This unity of purpose is described by the Hawaiian term "laulima," (many hands together).

A RACING OUTRIGGER seats 6 paddlers. A long-distance crew consists of 9 men or 12 women and uses a rotation scheme to maximize work output. Each paddler typically works on a cycle of 20 minutes of paddling at maximum intensity, followed by a 10-minute break in the escort boat. To effect a crew change, the escort boat drops fresh paddlers in the water ahead of the onrushing canoe. Those in the water must grab the wet, slippery gunwale running by them at full race speed and haul themselves into the canoe at the instant that the tired paddlers are flinging themselves out on the opposite side.

THE PADDLER must pick up the



Lawrence Ho, AIA, second from left, is a member of the Koa Kai #1 crew which competed in Outrigger canoe races. Kober/Hanssen/Mitchell Architects this year sponsored two outrigger canoe crews.

paddle, zip up a protective canvas skirt around his waist (to keep water out of the boat as much as possible) and instantly fall into the paddling beat, all within 3 or 4 seconds to keep the canoe running at race speed. Imagine cresting open ocean swells, strong winds and the tenancy of the the canoe to "huli" or flip over at the slightest miscue and you may begin to get a feel for the excite-



ment of an open ocean race underway.

The annual Bankoh Molokai Hoe represents the ultimate challenge in open ocean outrigger canoe racing. The race stretches 41 miles across the Kaiwi Channel from Hale O Lono Harbor on Molokai to Duke's Beach in Waikiki and attracts entrants from all over the Pacific Basin, America and Europe.

THIS YEAR'S MEN'S race was notable for the largest field in the history of the event (75 crews) as well as a record winning time of 4 hours, 55 minutes turned in by FAAA, an allstar team from Tahiti. Conditions in the channel were perfect for a swift crossing, with light trades, a 3- to 4foot following sea and partly cloudy skies.

One of the most rewarding aspects of the race is to participate with people from all over the world in a cultural event that is a continuum of a line cast into the future by our Polynesian forebears a thousand years ago. The sight of hundreds of men in scores of canoes surging through the dawnlit water with paddles flashing is a piece of our heritage that is an honor to help perpetuate.

→ Lawrence Ho, AIA, Corporate Associate, is Director of Computer Services, Kober/Hanseen/Mitchell Architects (KHMA). He competed in the Koa Kai #1 (Men's Open Division) crew. KHMA this year sponsored two men's crews from Koa Kai Canoe Club of Honolulu.

Reforestation Project

by Jean Dickinson andalwood Golf Course in Waikapu Valley, Maui, is the site of an unusual reforestation project—one that seeks to undo damage done more than 160 years ago. Thousands of sandalwood trees once stood in this area. But the trees prized since the time of King Solomon for their aromatic wood—fell to the axes of traders. The trees filled the holds of ships bound for the Orient, where their wood was coveted for use in furniture, incense holders and religious items.

For well over a century, weathered stumps

provided the only clue that sandalwood trees had been in the area at all. But now the trees and a host of other indigenous Hawaiian plants—are making a comeback.

Charles Lindsey is Sandalwood's facilities maintenance manager. He's also past president of the Native Hawaiian Plant Society. When the Sandalwood Golf Course was being designed, the course's owners saw an opportunity to showcase and preserve many of Hawaii's endangered plant species.

"THIS WAS A WONDERFUL opportunity to preserve some of Hawaii's native and endemic





 At Sandalwood Golf Course's 17th tee. Charles Lindsey, left, holds a sandalwood seedling while Ralph Hayashi carries a flat of the rare plants. Facility management and owners have initiated a reforestation program in an area where sandalwood trees once flourished.

species," said Ralph Hayashi, general manager of Waikapu Mauka Partners, the course's owners. "Maintaining the environment was a goal of ours in the development efforts, so the fit was a natural."

Lindsey added, "Because of pigs, cattle and insects, many species cannot propagate in the wild." In the past two years, more than 2,000 native plants have been planted on the golf course grounds.

Perhaps the most notable effort is the Sandalwood propagation project. Lindsey gathered seeds from various sources, and a growing and nurturing process is underway. "Each seed takes about nine months to a year to germinate, and trees do not reach maturity for about 25 years," Lindsey said.

Currently, 400 8- to 10-inch seedlings are growing, with a goal of at least 1,000 trees in four to five years. Eventually the trees (*Santalum haleakalae* and other species of sandalwood) will stagger the fairways of the Sandalwood Golf Course.

JUST AS NOTABLE as the sandalwood propagation is the partners' commitment to other varieties of native plants, which now line the fairways, the water hazards and landscape the site's clubhouse.

Kukui trees, varieties of portulaca, creeping naupaka, native hibiscus and nehe are now found in abundance. All were either saved by Lindsey or brought to the golf course from areas near his home in Kula. Less-rare firecracker plant, eucalyptus, paper bark trees, and bougainvillea accent the sloping Maui terrain. A colony of native hibiscus (*hibiscus brakenridgei*) was discovered at Waikapu. Also, a sandalwood tree was found growing above the project site—the only sandalwood tree known to exist naturally in the area. Enclosures were built to preserve the rare hibiscus and sandalwood tree.

↔ Jean Dickinson is account executive, Hill and Knowlton/Communications-Pacific, Inc.

orous Plus is a specially formulated product that combines the superior protection qualities of 511 Pre Treat and 511 Impregnator into a "One Step" process. Porous Plus makes very porous surfaces resistant to stains,



hardens the surface and increases the static coefficient of friction. Because **Porous Plus** is an impregnator, and not a surface coating, the treated surface retains its natural look. Dirt, water, oils, etc., are not able to penetrate deep into the substrata. Surface dirt should be re-

moved using standard maintenance procedures.



Building Maintenance Supplies and Equipment

727 C Waiakamilo Rd. Honolulu, Hawaii 96817

The Assault on Tile, Stone and Masonry Care Continues!

MIRACLE SEALANTS & ABRASIVES, WHO BROUGHT YOU 511 PRE TREAT AND 511 IMPREGNATOR PROUDLY ANNOUNCE:

POROUS PLUS "ONE STEP"

Phone (808) 841-8063 Fax (808) 845-5797

Carter Professional Center

by Philip K. White

View of the courtyard, Carter Professional Center. V LEE THOMAS PHOTO ommunication is the key to any successful team relationship. In the architectural profession, it can mean the difference between frustration and costly change orders and the rewards of a project that comes in on time and within budget.

Effective communication among the Carter Professional Center's primary project team members helped create a solid set of working drawings and winning results. This



33,000-square-foot fee-simple office complex in Waimea was completed with a minimal charge-order cost—0.6 percent of the total \$2.4 million contract amount. (The industry average is 5 percent.)

For Project Architect Marjorie Pawling, AIA, the success formula included a kama'aina client (owner/developer BP Partners) that was decisive, yet sensitive to preserving the "country" character of the Waimea community. BP Partners began with a strong desire to strike a successful balance between a high-quality product and cost-effective project. They also brought with them an appropriate regard for the bottom line.

Adding to the success was a contractor (Keauhou Kona Resort Co.) that was proactive in its requests for clarifications, and in addressing potential problem areas early.

Finally, there was a willingness on the part of all the project team members to resolve issues in a constructive, non-adversarial way.

THE WINNERS? BP Partners profits from a timely project that was completed for a costeffective \$68 per square foot. The architect and contractor score points with a satisfied client while maintaining a positive team relationship. And the community gains a commercial complex that is appropriate to its surroundings.

How do you make it happen again? The project team must be carefully assembled with special attention both to competence in their respective fields and a primary professional commitment to complete a quality project on schedule.

There is always a sense of satisfaction that accompanies the completion of a project. But the feeling is probably never so great as when the project is completed on time, on budget and on a positive note.

 Philip K. White, AIA, is president, Phillip K. White Associates.

Beauty Is More Than Skin Deep I

Appearances <u>can be</u> deceiving.

Many Hawaii homes, seemingly beautiful at first glance, suffer from some downright ugly problems. Structural weakness. Termite infestation. Dryrot. Out of level framing. Flammability.



Framing Contractor: Coastal Construction





FrameTech Opens New Steel Truss & Panel Manufacturing Plant in Kahului, Maui

The folks at FrameTech figure that every home should be beautiful to the bone.

Agreeing with this philosophy, Castle & Cooke Residential, Inc. asked us to produce strong, durable and economical components for 164 new homes in Mililani Mauka.

Which is why these houses, built with galvanized steel frame wall panels, roof and floor joists, are much more than just another pretty face.

For more information, call Sam Galante at 841-1699 (or fax your details to 841-1766)

"Changing The Way Hawaii Builds Its Homes"

If you always demand quality you're not alone.

Tileco is Hawaii's largest manufacturer of concrete blocks. We earned that position by building on a reputation for quality. In part, by running a fully automated facility with human inspectors to eliminate the rare bad block. So if you demand quality, you're not alone. We expect it ourselves, thousands of times a day.

Hawaii Manufacturers of Quality Concrete Blocks.

TILECO INC. 91-209 Hanua Street Ewa Beach, Hawaii 96707 682-5737

12/93 Hawaii Architect 29

There are some very big changes in FM testing to meet UBC wind resistance requirements.

DUE TO VERY BIG PAYOUTS by insurance companies on Hugo, Andrew, and Iniki roof damage claims, Factory Mutual (FM) has developed a much larger test apparatus for mechanically fastened single-ply roofing systems. The old test frame was 5' x 9'. The new frame is 12' x 24'. Effective July 1, 1993, all approvals on the old frame are obsolete. Only those who passed with the 12' x 24' are FM approved.

CARLISLE® EPDM roofing systems passed the new FM tests far ahead of the rest. Only one simple change was needed. Fastener spacing in the seams went from 12"o.c. to 6"o.c. to achieve an FM 1-90 approval. (CARLISLE adhered systems already meet FM 1-90.)

What's the difference now between FM 1-60 and FM 1-90? Simply stated, when the next hurricane comes—and it will:

- Buildings with FM 1-60 roofs higher than neighboring buildings will likely lose pieces of their roofs.
- Buildings in open terrain, with FM 1-60 roofs, like shopping centers and condos on golf courses, will have severe roof damage.
- Buildings with FM 1-60 roofs exposed to the open ocean may easily encounter catastrophic blowoffs.

Call to get your free copy of "How to Meet UBC Requirements for Roof

Uplift Resistance in Hawaii." It may change the way you pick roofing systems, materials and contractors.

We do not charge



Bob Hockaday

for design or product consultations. Ask for Bill South or Bob Hockaday.



Survival in the 90's

The two-day Hawaii State Council/AIA Convention held at the Kamehameha Schools Oct 9-10 was attended by hundreds of architects, members of asso ciated professions and AIA students.

The event, planned by a large committee headed by co-chairs Ted Garduque, AIA, and Bert Ymol, AIA, addressed the issues architects will face in the years ahead.



✓ Comparing notes prior to the start of the 1993 convention are, left to right, Kurt Mitchell, AIA, president, AIA Honolulu; Dan Chun, AIA, president, Hawaii State Council/ AIA; and Ted Garduque, AIA, cochair, convention committee.

Pictured with Susan Maxman, FAIA, center, national AIA president, a keynote speaker at the 1993 Hawaii State Council/AIA Convention are Janet Blakeman Martin, executive vice president, AIA Honolulu, and Dan Chun, AIA. ►





✓ Flanking convention's guests Susan and Bill Maxman are Carol Sakata, FAIA, and Ted Garduque, AIA.

Joseph Esherick, FAIA, AIA Gold Medalist, who delivered the Gus Ishihara Memorial Lecture at the convention poses with Shirley Cruthers, left, University of Hawaii and Victoria A. Wong of the AIA office. ►



Introducing the GE flush wall oven.



Now you see it.

Now you don't.

Look at a side view of our new electric built-in wall oven and you see how beautifully flush it fits with the cabinet surface. And its advantages over European competitors are evident from any angle: It's self cleaning. Electronic controls give your customers precise cooking temperatures. It comes in white-on-white. It fits into frameless construction, as well as traditional cabinetry, and it comes with the most extensive network of factory service trafessionals in the business. For more information, as well the

professionals in the business. For more information, call the GE Answer Center[®] service at 800.626.2000 any time of the day or night any day of the year.



We bring good things to life.





91-104 Kalaeloa Boulevard, Ewa Beach, Hawaii 96707 Phone (808) 682-2020, Neighbor Islands 1-800-352-3612