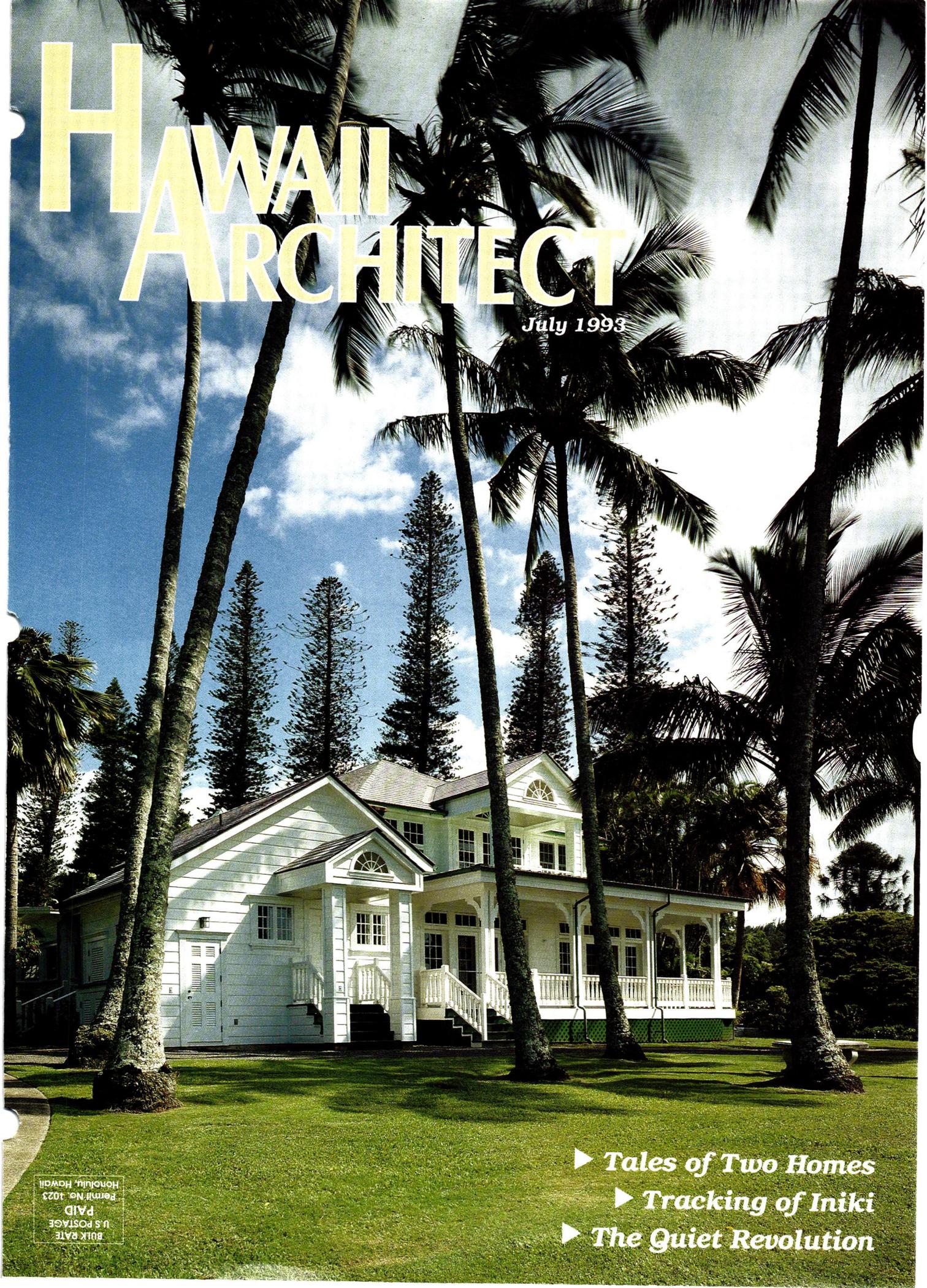


HAWAII ARCHITECT

July 1993



- ▶ *Tales of Two Homes*
- ▶ *Tracking of Iniki*
- ▶ *The Quiet Revolution*

BULK RATE
U.S. POSTAGE
PAID
Fermilab No. 1023
Honolulu, Hawaii

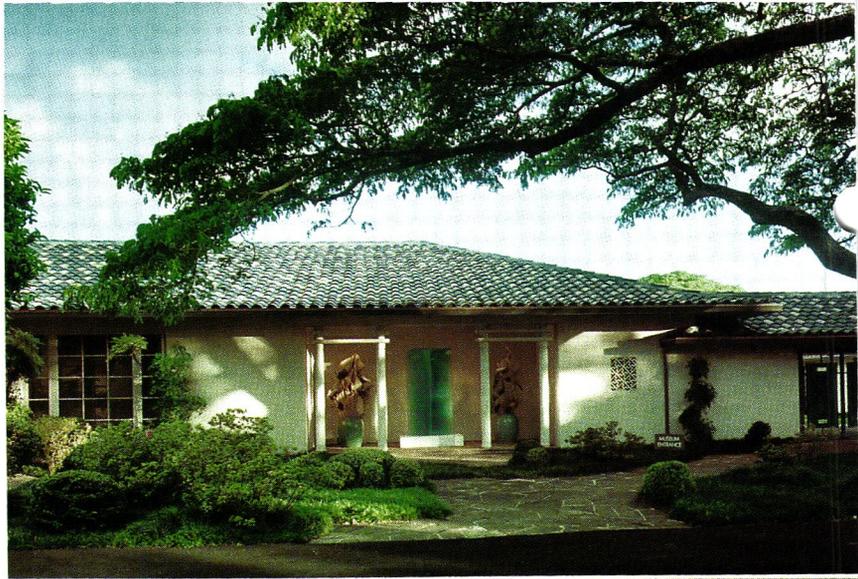
When plans call for contemporary grandeur to blend with kamaaina past

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 basement-to-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

Top it with Dimondek®!

the ideal roofing for Hawaii

*A time-tested, architecturally versatile,
efficient and practical system*



Architect: James Tsugawa and Associates

Installed by Woodtech

JORGENSEN STEEL & ALUMINUM

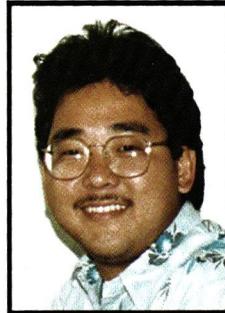
91-104 Kalaeloa Boulevard, Ewa Beach, Hawaii 96707
Phone (808) 682-2020, Neighbor Islands 1-800-352-3612

A New Generation of Leaders.

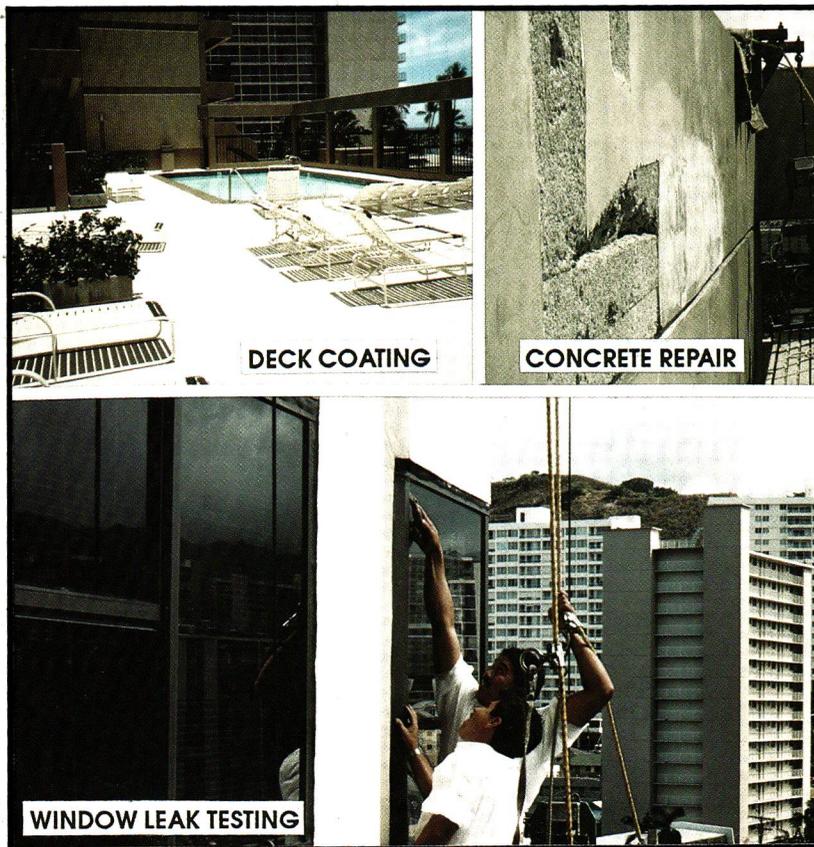


Heading a team of over 40 technicians are left to right:
Alvin Nishikawa, Ken Matsumura, John Kobayashi,
Al Gardner, Steve Kramer, and Jim Hiramatsu

Meet Alvin Nishikawa.



Alvin is Vice President of The American Coating Company. He is in charge of all field and estimating operations. Previously, Alvin was employed with an engineering firm in Chicago and Honolulu where he focused primarily on restoration and water infiltration problems. Alvin holds a M.S. and B.S. in Engineering from Purdue University.



DECK COATING

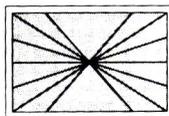
CONCRETE REPAIR

WINDOW LEAK TESTING

Rehabilitation of buildings:

- Lanais
- Water Tests
- Exterior Walls
- Waterproofing
- Specialty Flooring
- Window Leak Repair
- Concrete Repair & Restoration
- Parking & Recreation Decks
- Environmental Coatings
- Industrial Coatings
- Epoxy/Urethane
- Epoxy Injection
- Elastomerics
- Below Grade
- Roofs

ASK US ABOUT
OUR RECYCLED
PLASTIC PRODUCTS.



THE
**AMERICAN
COATING** COMPANY

850-B WILEI RD., HONOLULU, HI 96817

OAHU (808) 521-7461
FAX 526-3459

BIG ISLAND (808) 935-8863
FAX 968-8656

Leadership Message

- 6 Teaching of Classic Hawaiian Architecture Urged**
Hawaiian classic design should be taught as part of the UH School of Architecture curriculum.
by Nancy Lyman Peacock, AIA

Residential Architecture

- 7 Maui's Residences: Tales of two houses**
Recently renovated manor on Maui started as a humble plantation house 130 years ago.
by Hans Riecke, FAIA
- 10 Single-Family Housing: A quiet revolution**
In designing single-family residential units, architects must consider changing consumer trends and prevailing lifestyles.
by Nancy Lyman Peacock, AIA
- 28 'Na Pali Haweo': Designing one home at a time**
Custom-designed homes give this residential development a unique community character.
by Douglas G. Coter

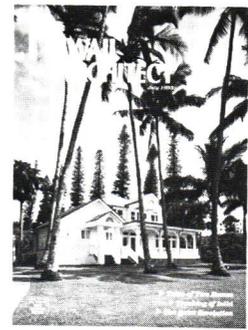
Restaurant Architecture

- 30 Furusato Restaurant: Where east meets west**
Exclusive restaurant caters to patrons from Japanese and Western cultures.

Features

- 12 Report on Kauai: Part I: Profile of a hurricane**
Events leading to the most costly natural disaster in Hawaii's history are recalled.
by Sam Monet
- 14 Concrete Repairs: Best left to the experts**
Corroded embedded steel reinforcement is a major cause of concrete delamination.
by Alvin S. Nishikawa
- 16 Masonry: Eliminating Structural wrinkles**
Family of products is used to repair concrete structures.
by Paul Sanders
- 23 Mount Olomana: An historical monument**
Perseverance and community involvement succeed in preserving Mount Olomana for future generations.
by Andrew Charles Yanoviak, AIA, CSI

- 18 News**
22 Letters to the Editor
26 HC/AIA 1992 Design Award



DANA EDMUNDS PHOTO

Residential Architecture is the main focus of this issue of Hawaii Architect; masonry is a sub-focus.

The cover features a 130-year-old residence on Maui that has been renovated and expanded many

times over the years to meet changing needs and tastes of successive owners.

Owning a home today remains a measure of personal success. Because of escalating housing, insurance and utility costs, and relatively stagnant income levels, this American dream is often not achievable, in spite of the lowest mortgage interest rates in years.

Instead, many families are adopting other housing alternatives, including doubling-up, sharing shelter with more established family members or moving into illegal Ohana units.

Computer manufacturers have, for years, heralded the coming of the computer revolution. The technology is here and some people, out of necessity, are taking advantage of it. An increasing number of self-employed professionals, including architects, are shunning prestigious downtown offices and moving business offices into their homes.

These trends are bound to affect future housing design in Hawaii. Architects have the challenging opportunity to design single housing units reflecting these trends. At the same time, they shoulder the responsibility for reconciling consumer and client needs within the confines of lagging code regulations.

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 Artists **Leonardo Henobio Jr.**
Cheryl Ruddach
Typography/
Production **Lara Prestfeldt Jaracz**
Rose Cabanlit
Office Manager **Kathy Sanders**
Accounting
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 0919-8311) 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

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

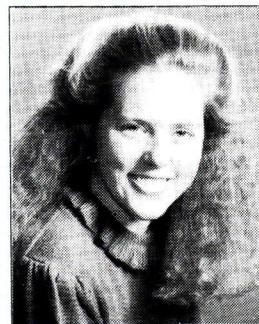
**Hawaii Island Section
President**
Ed W. Campbell, AIA

AIA 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.

Leadership Message



Nancy L. Peacock, AIA

Teaching of Classic Hawaiian Architecture Urged

Each of us living here in the islands probably has an image of what defines "Hawaiian residential architecture."

Many of us would probably agree that it includes a sense of openness and continuity between indoor and outdoor spaces. We might imagine deep lanais providing outdoor "living/dining" rooms, sheltering the indoors from the sun, and protecting the outdoor spaces from all but the most severe rainstorms. Or we might think of heavy "double-pitched" roofs, large glass doors that slide open and homes that utilize cross-ventilation to remain cool. We probably imagine understated, muted finishes that support a casual, relaxed lifestyle.

But where do these images come from? What role do they play in the design of future homes? How will all this translate into yet-undesigned island homes of the 21st century? Can young architects be "taught" how to design "Hawaiian residential architecture?"

Although I was born and raised in Honolulu, I received my architectural education at Cornell University in up-state New York. Certainly, at least in the mid-1970s, it was no place to study "Hawaiian residential architecture." While my architectural education was sound, I returned to the islands after graduation unsure of what kind of architectural career I would pursue.

How did I assimilate my understanding of "Hawaiian residential architecture?" Even though I am from Hawaii, learning the essence of Hawaiian residential architecture was a gradual process gained through my work experience and the lessons learned from

studying the works of Hawaii's great architects and, when possible, visiting their buildings.

I was most fortunate, as an intern, to have two successive jobs with architects who were catalysts in my decision to pursue residential architecture and design. The two strong role models and mentors were Norman Lacayo, AIA, and Val Ossipof, FAIA.

I also benefited from studying the works of past great architects who helped define "Hawaiian architecture," such as Bertram Goodhue, C.W. Dickey, Hart Wood and Bert Ives.

From my own personal experience, I have come to envision a special program that could be developed by the University of Hawaii School of Architecture or the AIA, or as a collaboration between the two. The focus of the program would be the study of "classical Hawaiian architecture."

Participants in the program could include senior students in the school of architecture, intern architects, design professionals and the public. The program would study the theories and classic examples of Hawaiian architecture and how to translate them into practical design concepts for the 21st century.

I believe that such a program would be quite well attended. And I also believe that the program would influence design professionals to incorporate elements of Hawaiian architectural design in future residences, as well as in the design of all aspects of our future built environment.

◆ Nancy Lyman Peacock, AIA, is president, Nancy Peacock, AIA, Inc., and past president Hawaii State Council/AIA.

Tales of two houses Maui's residences

by
Hans
Riecke

This is the story of two houses which stand less than a mile apart in rural Haiku, Maui. One of them—the manor—was built 130 years ago; the other—the maisonette—was built by a young woman in recent times. Although the manor is obviously more imposing than the maisonette at this time, the two structures are alike in many ways.

The manor was built as a modest home; and so is the maisonette. Both, today, incorporate modern appliances and amenities: the manor acquired these through several rounds of renovations/additions; the maisonette had them built in from the start. The manor was a genuine plantation home; the maisonette used the manor as a model and fits well within the neighborhood.

THE CORE OF THE MANOR was probably built around 1860 as a simple two-story home for a plantation manager and his family on a gently sloping 22-acre site on the lower slopes of Haleakala. It has changed occupants and

owners many times over the years, and each time was altered to fit the personalities or needs of the occupants. Today, it doesn't bear any resemblance to its original humble beginnings. In fact, only portions of the original structure still exist at the heart of it.

The previous owners used the manor as a religious retreat. The structure still features a wing of six hotel-like suites. The current owner, to his credit, had a large ill-planned addition built by a previous owner removed, and recently rebuilt the entire living/dining/kitchen wing. Now the house stands majestically in a park-like setting surrounded by magnificent old trees.

In contrast, the maisonette is built on a 6,000-square-foot site on a cul-de-sac, next to a pineapple field mauka of Hana Highway. The owner, a budding architect, had made a down-payment on a lot in a small division in 1988. The price tag was then \$60,000. In 1990, the developing partners began arguing and it is not until 1991 that the subdivision was finally completed and the young woman was able to purchase the lot, this time for \$100,000.

BUT THE PROBLEMS WERE just starting. Prior to closing, she was informed that the site had been a Catholic cemetery. The church directed that, should graves be excavated during construction, it was the responsibility of the owner to provide suitable grave sites.

Fortunately, no graves were excavated and she designed and built an attractive two-bedroom home. Perseverance paid off in this instance and ghosts have not materialized to haunt occupants.

In time, as the maisonette changes hands and undergoes changes to suit new owner requirements, it could well be that the maisonette will become a manor.

The "maisonette." ▼



♦ Hans Riecke, FAIA, is President, Riecke Sunland Kono Architects Ltd.



DANA EDMUNDS PHOTO

▲ The “manor’s” informal breakfast area after renovation.



© 1992 General Electric Co.

Monogram, by GE. It solves the riddle of how to integrate the appliances into custom kitchen design.

No matter what design theme you choose, the one thing you don't have to worry about nowadays is how the appliances will look.

The Monogram™ line of built-in appliances now offers such an array of models that you have virtually infinite choice and options.

This year we add the first 36" built-in refrigerator that is flush, trimless and completely cabinet friendly. And there's a new convection wall oven with new technology for faster cooking and sleek flush design.

Monogram component cooktops continue to be the only ones that can be installed perpendicular or horizontal to the counter edge to form clusters in gas, electric, updraft and downdraft.

Getting all your built-in appliances from one manufacturer simplifies the complex process of shopping and delivery. And Monogram offers the industry's most extensive network of factory service professionals.

There's also the extraordinary GE Answer Center™

service on duty 24 hours a day *every* day of the year to answer any questions you may have at 800.626.2000. Call and we'll send you a brochure and tell you where you can see the line.

Monogram, from GE. A synonym for the best in built-in appliances.



Monogram.™



Special Market Group
A Division of Servco Pacific Inc.
1610 Hart Street Honolulu, HI 96819

For the complete line of General Electric appliances call Chester Miyashiro, Roger Grande or Don Jones at Special Market Group.
Phone: 848-2411 Fax: 848-2925

A quiet revolution Single-family housing

by
Nancy
Peacock

While much attention has been directed toward designing "new towns" and "village" concepts for Hawaii's residential areas, there has been relatively little attention paid to lifestyle and work trends affecting the existing single-family residential inventory.

A quiet revolution is changing the living and working patterns of Hawaii's existing single-family residential neighborhoods. The number of people sharing living space and working out of space in single-family homes is growing.

These changes are not unique to Honolulu. They reflect national trends, and they also cut across social, ethnic and economic lines.

Census data indicate that 48 percent of Honolulu's households are "crowded," often with more than one person to a room. This reflects people "doubling-up" in single-family residences. Factors contributing to this include an increasing number of unrelated individuals sharing households and several generations of a family living together.

THE TREND TOWARD DOUBLING-UP is due to spiraling housing costs and the desirability of living in proximity to the Honolulu urban center to avoid commuting time and traffic jams. The forces driving the trend are not expected to abate. The cost of housing in Hawaii is likely to continue to outstrip growth in personal income. This is largely because we are an island community with a finite supply of developable land, and because Hawaii continues to attract international buyers who "heat up" the housing market.

The trend toward doubling-up will also continue as more families create multi-generational "family compounds." Typically, these result from the older generation realizing that they must share their properties to ensure that their children and grandchildren can afford to

reside in Hawaii.

Because of the doubling-up trend and the forces driving it, more of Honolulu's single-family residential lots are going to have second living units built on them, regardless of legalities. In light of this, the city's selected leaders should consider reinstating Ohana zoning soon.

THE OHANA HOUSING provisions of the zoning code sought to control the second living units that people had been constructing illegally for years. In the late 1980s, the city adopted floor area limitations and other restrictions intended to reduce some of the abuses associated with Ohana living unit construction. However, the City Council did not adopt the maps designating Ohana eligible areas, and the Ohana zoning provisions lapsed before the revised provisions were given a chance to work.

While there may have been room for further improvements, the lapsing of Oahu's Ohana zoning was a step backward. Since the lapsing of the Ohana option on Oahu, and with the housing crisis continuing unabated, the law of supply and demand has forced people to illegally build second living units, as they had prior to the enactment of Ohana zoning.

A second trend affecting existing residential neighborhoods is more residential renovations including traditional "office" space. For example, home office space may be developed to include a reception area, central air conditioning and computer networks.

Locally and nationally, this trend reflects more people working in their homes. These include people working part-time at home and part-time in a traditional office setting, professionals moving their offices to their homes, and household members setting up businesses in their residences. The trend will increase as people with small businesses realize that they can use the money they are paying for office rent to make their home mortgage payments.

The increase in home offices have been facilitated by affordable facsimile equipment, modems and portable computers and flexible work schedules. In the next 10 years technology will provide even greater encouragement for businesses to allow employees to work, at least part time, out of their own residences.

THERE ARE MANY BENEFITS to working at home. Commuting time to one's work place is reduced to zero. Home offices allow people to work at their own pace, and may also significantly reduce overhead. Working at home leaves more time to exercise, to be with family and friends and to pursue hobbies and non-work related interests.

Currently, zoning regulations allow home offices, with certain restrictions. On Oahu, clients can visit a home-based business but employees must reside on the premises. The employee/resident restriction is often ignored and difficult to enforce. While there is no immediate pressure to change the employee restriction,

circumstances may eventually lead to its being re-evaluated.

The trends toward more living units and home offices on single family lots has many design ramifications. Rooms need to be multi-functional. For example, a family living room could be a home office that could also convert to guest quarters. Multi-family living space and home offices can benefit from small gardens and courtyards that bring in light and air. Home office space may be designed to have a separate "public" entrance, a small reception/waiting area and a conference area.

Multi-generational living allows a family's elders to watch children. In homes with separate or semi-private living spaces, family rooms and kitchens become the center of communication and social interaction. Determining the appropriate relationship between public, semi-public and private spaces on small, tight sites maximizing Hawaiian environmental design concepts requires design skill.

As design professionals we listen

to our clients. We also need to be aware of the living and working trends affecting single-family homes.

THE MARKET IS "voting" for building second living units and home offices in single family neighborhoods.

Adapting single-family homes to serve the needs of home offices and diverse groups of occupants is a challenge worthy of the design professional.

We satisfy our client's desires within the parameters of land use and regulatory controls. When land use regulations impose unreasonable restrictions, we should work to have these regulations changed.

The AIA Honolulu Chapter and the State Council could take a lead in advocating the reinstatement of the Ohana zoning code provisions and the re-evaluation of restrictions on home offices in single-family zoned neighborhoods.

◆ Nancy Lyman Peacock, AIA, is president, Nancy Peacock, AIA, Inc. and past president, Hawaii State Council/AIA.

Not All Concrete Floors Are Created Level.

To anyone who works with concrete, the problem of a rough, uneven, out-of-level floor is all too familiar.

Luckily, there's a solution.

In fact, Gyp-Crete has a full line of underlayments that pour over concrete and correct a multitude of sins.

Dura-Cap® is a gypsum floor underlayment that smooths rough spots without dusty grinding. It dries without shrinkage cracks, accepting foot traffic within 90 minutes of application.

Level-Right™ is a cementitious floor underlayment that self levels to a smooth hard surface. With compressive strengths up to 5,500 psi, it can create a flat floor without time-consuming surface preparation or hand troweling.

For new or old concrete, over precast or slab-on-grade, let us bring our one billion square feet of experience to your next floor.

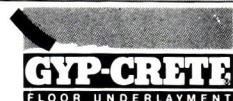
For more information, contact: **Jackson Contractors**

P.O. Box 30668, Honolulu, HI 96820

Maui, Big Island, Kauai

Ph: (808) 847-2191 Fax: (808) 845-5237

Toll Free 1-800-344-5104 (Ext. 101)



License: BC 10545

Part I: Profile of a hurricane Report on Kauai

This is Part I of a three-part article assessing Hurricane Iniki's ravages on Kauai and offering personal observations and recommendations.

by
**Sam
Monet**

On Sept. 16, 1992, five days after Hurricane Iniki slammed into Kauai, my Aloha Airlines flight entered final approach into Lihue. The impact of Iniki became evident. Felled coconut trees like broken match sticks, sheet metal from T-hangers and Chinook helicopters dotted the landscape. No Hawaiian music greeted this flight at the gate. The constant drone of portable generators became "Iniki music" over the next several weeks.

Eleven days earlier, on Sept. 5, Tropical Depression 18-E (TD 18-E) formed over warm Pacific waters about 1,450 nautical miles southwest of Baja, California (12N 135W). TD 18-E

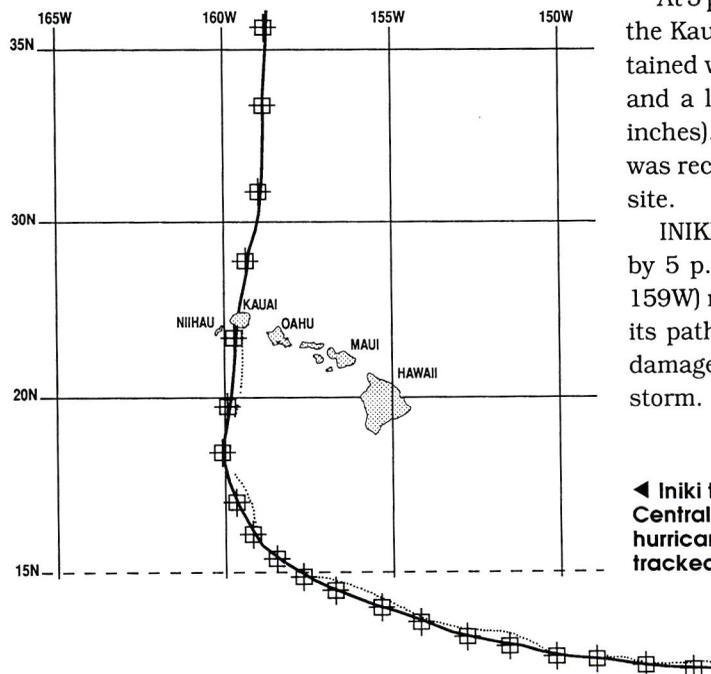
may have originated as a tropical wave off the coast of Africa, then was tracked by the National Weather Service as it moved across Central America on Aug. 28.

ON SEPT. 6, THE SYSTEM WEAKENED. By 5 p.m. on Sept. 7 (located 12N 145W), the system was upgraded to a tropical storm as it continued to intensify, moving westward at 15 mph. By 11 p.m. the storm, now located about 470 miles south southwest of Hilo, was moving west northwest at 14 mph. TD 18-E was upgraded to a hurricane and named "Iniki" (Hawaiian for Enid). On Sept. 9, when it was located 385 miles south southwest of Hilo, Iniki's winds were estimated at 100 mph, with gusts to 120 mph.

By 5 p.m. on Sept. 10, Iniki, by then located 400 miles south of Lihue (16N 160W), began to accelerate and turned northward. A hurricane watch was issued for Kauai, Niihau and French Frigate shoals, as winds of 125 mph and gusts of 155 mph were being reported.

At 3 p.m. on Sept. 11, the eye of Iniki reached the Kauai coast near Barking Sands with sustained winds of 97 mph, waves of 20 to 35 feet and a low pressure of 966.1 millibars (28.53 inches). An unofficial wind report of 227 mph was recorded on top of the Makaha ridge radar site.

INIKI CONTINUED TO ACCELERATE, and by 5 p.m., was 50 miles north of Kauai (23N 159W) moving northward at 30 mph; leaving in its path 14,350 homes on Kauai destroyed or damaged, and three deaths attributed to the storm. An estimated \$1.6 billion in damage



◀ Iniki track data published by the Honolulu's Central Pacific Hurricane Center illustrate the hurricane's destructive path. The hurricane was tracked Sept. 6-13, 1992.

would bankrupt the Hawaiian insurance industry.

The social and ecological impact of the third worst storm in American history (Hurricane Andrew, 1992, was the worst) would be felt for many years.

The shattered rear window of my Avis rental car would fit right in with the locals. The lot attendant drooled as I loaded the cooler into my car. I handed him a cold beer, his first in 5 days; "mahalo, brah" was his reply.

LIHUE, A TWISTED MESS of downed utility poles, wires and rubble heaped along the roadside, damaged cars, broken glass and caved in homes reminded me of Beirut in 1970. Kauai refugees would seek shelter in Hawaii National Guard tents and food preparation lines. Emergency utility services worked 12-hour shifts, joined by crews from the mainland. The once tropical rain forest, home to many endangered species of plants, insects and birds, was hacked away mercilessly.

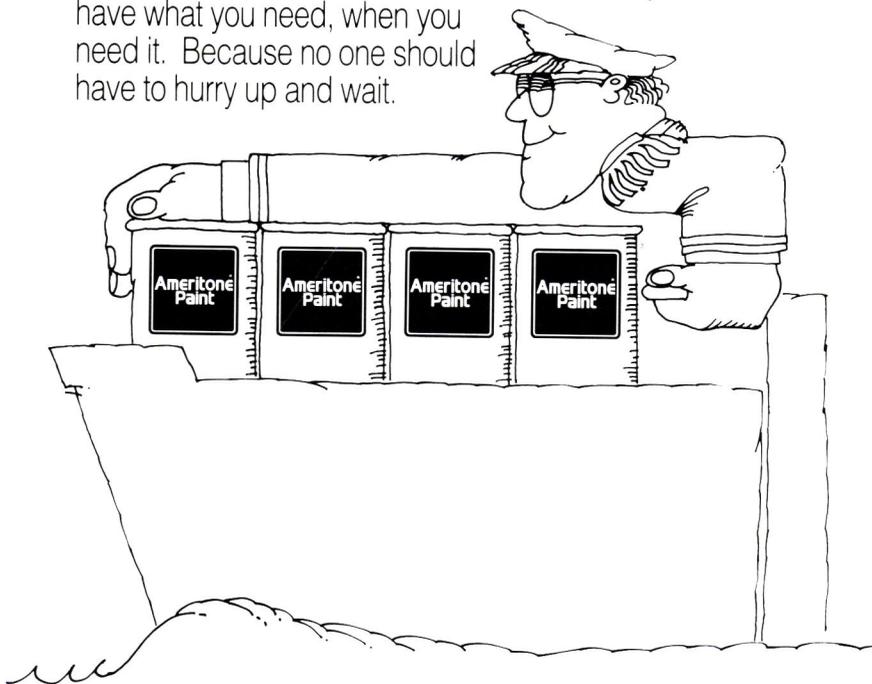
AFTER THREE HOURS OF INIKI, Kauai became a massive garbage pit. Twenty-five years of "development" were dumped into hastily conceived cane field excavations and covered up. Broken glass, treated lumber, metal roofing, electrical appliances, tires, clothing, knick knacks, surfboards, rotting food, concrete, mattresses, furniture, plumbing fixtures, plates, dolls and bicycles were piled in heaps on the roadside. Damaged electrical transformer casings, their deadly fluids leaking into the environment, littered the road sides. The blistered, bleeding hands of former waiters and office workers spoke of back-breaking hours digging out.

I met with fellow Realtors® to begin damage estimates for their clients, in the Princeville "high end" part of the island. Over the next two months, I spent weekdays on Kauai, sleeping in my tent and eating in emergency food lines, meeting with insurance adjusters, emergency services administrators, homeowners and refugees.

♦♦ Sam Monet, PB, is vice president, sales and marketing, Pacific Investors Realty Services, Inc.

In paradise you shouldn't have to wait for your ship to come in.

Waiting for the right color paint to arrive from the mainland won't make your day. So we have a huge inventory and can provide 860 existing colors in large quantities. Right here in the islands. So you have what you need, when you need it. Because no one should have to hurry up and wait.



Ameritone Paint
1353 Dillingham Blvd., Honolulu 96817
841-3693
Kapaa Paint Supply
934-A Kipuni Way, Kapaa 96746
822-1788

Ameritone Maui
140 Alamaha St., Kahului 96732
871-7734
Ameritone Maui
West Maui Center #7
910 Honoapiʻiani Hwy., Lahaina 96732
667-2614

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

Ameritone / Devoe Paints
18A Pohnaku St., Hilo 96720
935-2011
Ameritone / Devoe Paints
74-5599 Alapa St., Kona 96745
329-2766

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

 Member of Grow Group, Inc.

Best handled by experts
Concrete Repairs

by
**Alvin S.
Nishikawa**

Terms such as “spalled,” “delaminated,” “loose,” “unsound” and “deteriorated” are commonly used to describe concrete in need of repair. The terms “delamination” and “spall” are often used interchangeably, a false assumption.

Embedded steel reinforcement is a major cause of concrete corrosion. In such instances, corrosion by-products require more space than steel reinforcing itself, thereby causing tensile stresses within the concrete matrix. In fact, steel reinforcement, as it corrodes, expands considerably, generating sufficient force to split or delaminate a concrete section.

WHAT DOES THIS MEAN? Can't the steel reinforcing simply be cleaned, treated and the area patched with concrete? Shouldn't the repairs, if done correctly, last forever?

First, the source of the problem must be located, in this instance, steel. Of all the mechanisms that can trigger steel corrosion, the electro-chemical mechanism is the most prevalent in reinforced concrete structures. Simply put, corrosion results from ion flow or an electrical current.

Several methods can be used to measure potentially active corrosion. Ion content can be measured to determine whether there is sufficient corrosion to fuel the electro-chemical corrosion process. Some tests can be conducted to detect and measure active corrosion; others can measure the pH balance of the concrete matrix surrounding steel reinforcing. These standard tests can be performed to assess the condition of the concrete, and resulting data can help determine the extent of protection required.

The steel reinforcement corrosion process cannot be stopped. However, certain methods can be used to reduce the rate of corrosion and delamination.

IN HAWAII, many structures are contaminated with chloride ions at the steel reinforcing level. Treating exposed steel will not stop the corrosion process since only a small area of the steel is treated. The trick is to patch the affected area without accelerating the corrosion process. Proper preparation of the steel and concrete, and selection of coating and patch materials are critical to the successful completion of a repair project. Improper treatment or wrong selection of materials can accelerate the corrosion process.

Since an ongoing corrosion process cannot be stopped by cleaning exposed steel, treating it and patching, how can anyone estimate when the same area becomes delaminated? Nevertheless, many specification writers require warranties for concrete repairs. In my opinion, warranties over a year require close examination to ascertain the current condition of concrete. When undertaking any concrete repair project, remember that there is a big difference between manufacturers' material warranty and warranty against future delamination. Concrete delamination is difficult to assess. In fact, in many instances it cannot be visually identified. On accessible areas, such as decks, the chain-drag method is effective in locating delaminated conditions. Chain-drag surveys for repair projects are advisable. These surveys are relatively inexpensive.

Frankly, concrete repair projects and specifications are complex undertakings that are best handled by professionals with thorough knowledge of the process.

◆ Alvin S. Nishikawa is vice president, The American Coating Company. He holds a master's in engineering from Purdue University and has over 10 years experience in waterproofing, concrete repairs, epoxy injections, specifications, etc.

We let our own work pile up just so you can complete your own.

Along with our reputation for quality, the thing which made Tileco Hawaii's largest supplier of concrete blocks, is an ability to deliver. Our fully-automated production facility and a very large inventory are the reasons. Just visit our yard, you'll see how we let our own work pile up just so you can complete your own.

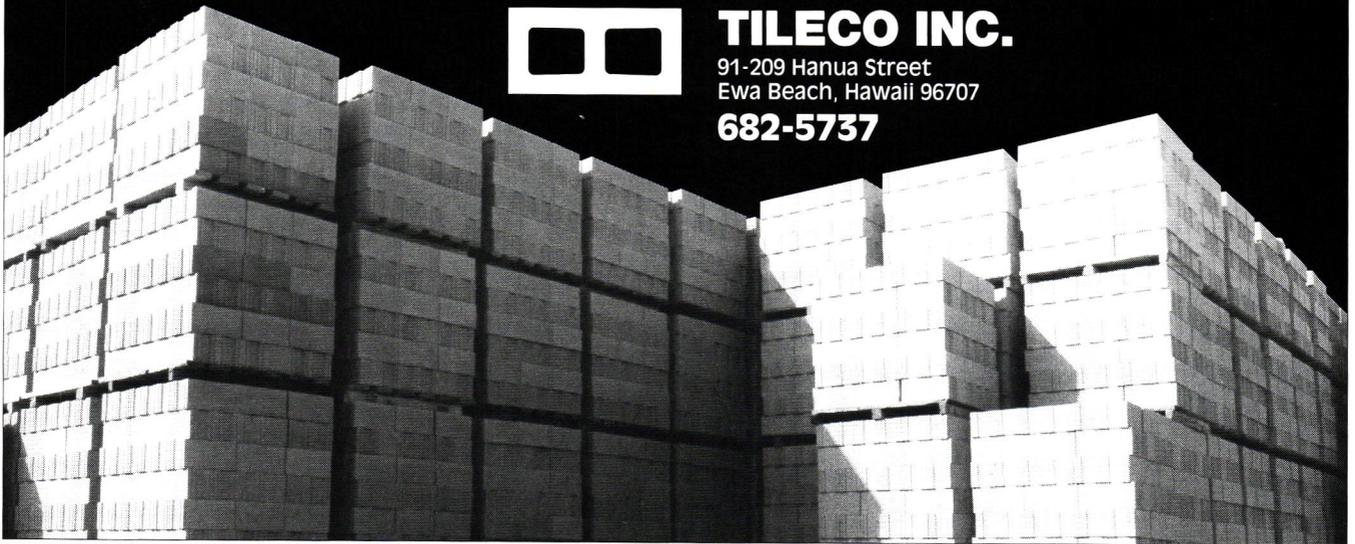
Hawaii Manufacturers of Quality Concrete Blocks.



TILECO INC.

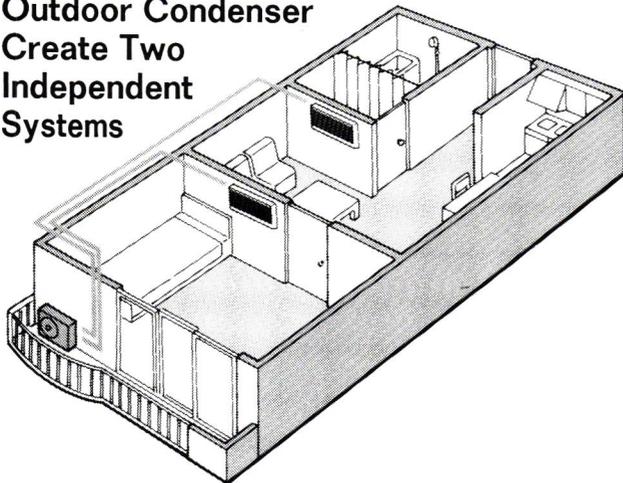
91-209 Hanua Street
Ewa Beach, Hawaii 96707

682-5737



Ductless Air Conditioners

Two Indoor Wall-Mounted Units
Connected to a Single
Outdoor Condenser
Create Two
Independent
Systems



Contact: Ernest Suzumoto

MovinCool®



It's simply a matter of good business

- Computers ■ Machine shops ■ Bakeries
- Warehousing ■ Schools ■ And many more...

Contact: Roy Shikiya

Exclusive Distributor for

SANYO /  **FISHER**
AUDIO/VIDEO

APPLIANCE & ELECTRONICS • 841-0151



A Division of SERVCO Pacific Inc. • 1610 Hart St., Honolulu, HI 96817

M Eliminating structural wrinkles Masonry

The sun, salty air, rain and the trades—the same elements that keep Hawaii lush and cool—are also responsible for etching, in time, deep wrinkles and cracks on exterior masonry.

The Sika Corporation markets quality products especially conceived to repair and give long-lasting facelifts to buildings.

Each product in the Sika family has specific applications. For instance, SikaTop 123 is a two-component, polymer-modified non-sag

patching mortar formulated for application by trowel on vertical and overhead concrete surfaces.

SikaTop 123 is routinely used as a structural repair material for parking structures, industrial plants, water/waste water treatment facilities, roads, walkways, bridges, tunnels, dams and ramps.

It provides superior bonding and abrasion resistance over conventional Portland cement mortar. SikaTop 123 is compatible with coefficient of thermal expansion of concrete and meets

ASTM C-884 specifications.

Sikadur 52 is a two-component, solvent-free, moisture-insensitive epoxy adhesive. It has a super-low-viscosity and high strength. This adhesive was specifically formulated for gravity feed or pressure injection of cracks in conformance with ASTM C-881, Type I & IV, Grade 1, epoxy resin adhesive.

Substrates include structural concrete, masonry, wood and other construction materials.

Sikaflex-1a is a one-component, polyurethane sealant which meets federal specification TT-S-00230C, Type II, Class A; and ASTM C-920, Type S, Grade NS, Class 25.

This product is applicable on vertical and horizontal joints. It is well-suited for use on small joints and fillets such as windows, door frames, reglets, flashing and can be painted.

ElastoColor not only protects building facades but also provides the "frosting on the cake" in various colors. It is a one-component, water-based, non-vapor barrier, 100 percent acrylic emulsion coating that, when applied, produces a continually flexible, damp-proofing, protective and decorative coating.

It can be brushed, rolled or sprayed on masonry, concrete and stucco.

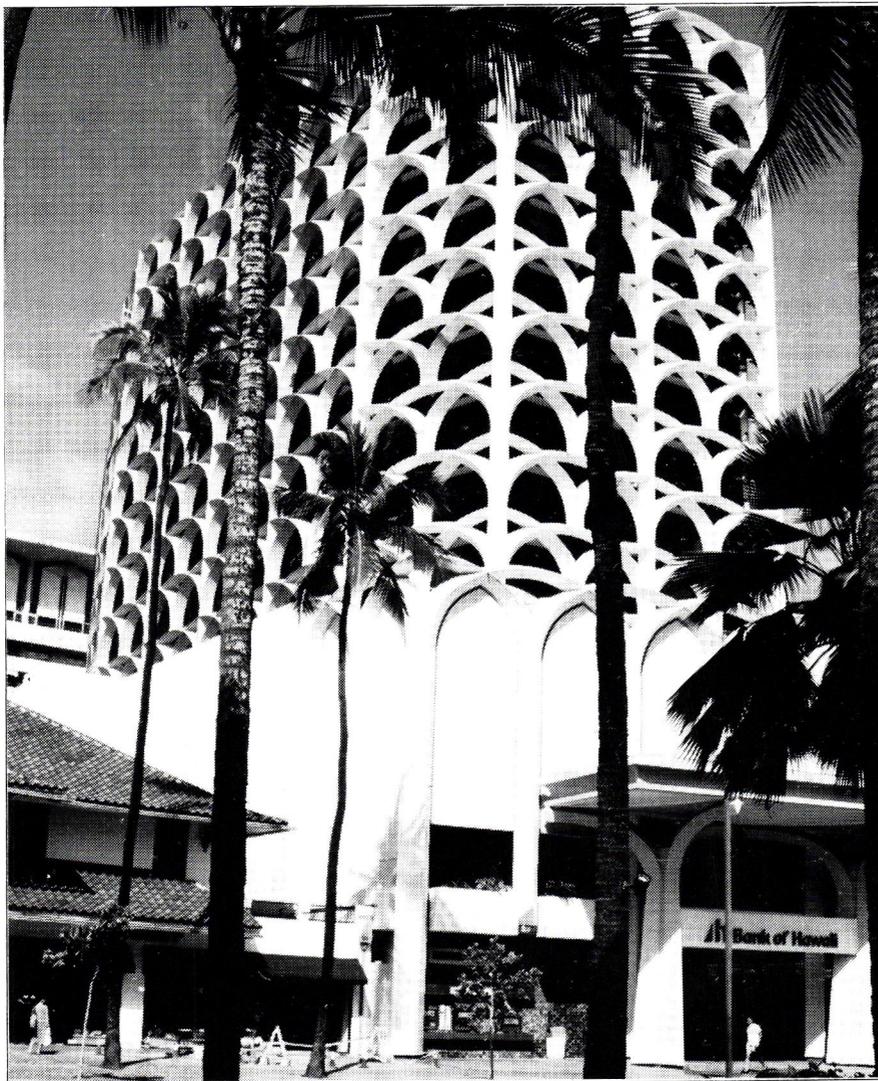
ElastoColor is ultra-violet and alkaline resistant and provides protection from the weather. It bridges hair-line cracks allowing for movement and remains permanently flexible at extremes of temperature.

These, and other products in the Sika's product line, were recently used to repair unique arched exterior concrete cladding and give the Bank of Hawaii Waikiki building a facelift. Patching repairs were done by Suda Masonry and recaulk and painting operations by JD Painting and Decorating, Inc.

The 15-story structure was originally designed in 1964 by Wimberly, Whisenand, Allison & Tong Architects, Ltd.

In Hawaii, Sika Corporation's products are carried by Hi-Tech Building Products of Honolulu, 847-5266.

◆ Paul Sanders

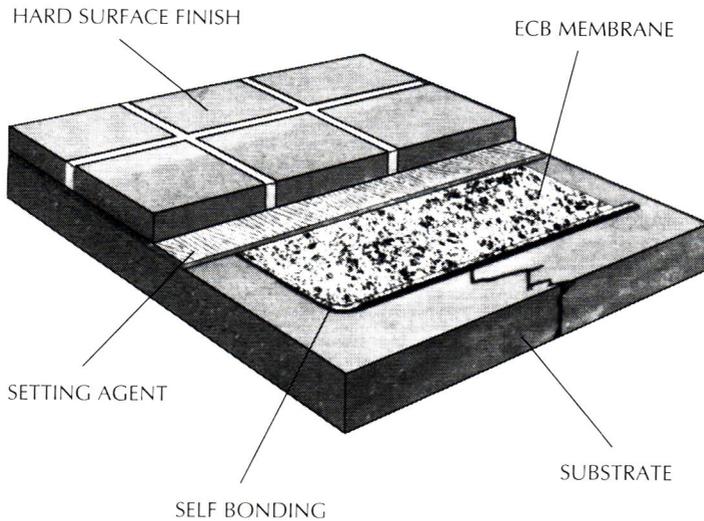


▲ Sika products were used to give the Bank of Hawaii Waikiki building a rejuvenating face lift.

POSITIVE IMAGE PACIFIC PHOTO

CRACK INSURANCE

WITH NO FINE PRINT



Movement and stress cracking of substrate can damage even the world's most durable floor and wall surfaces. Our experts can show you how ECB and Strataflex Membranes help to ensure that unavoidable cracks in the substrate level never affect the beauty of your finished project.

The membranes are easily and quickly installed and tile can be laid immediately after application. Strataflex has the added benefit of being waterproof. With both membranes allowing up to 1/4" horizontal expansion/contraction, you can be assured of your investment.

TILE MART

Central Pacific Supply Corporation

Phone: 839-1952/ 855 Ahua Street

The Blue Print Company
Since 1914

... making plans for Hawaii's future since 1914

**820 S. Beretania Street • Suite 200
Honolulu, Hawaii 96813
Phone (808) 536-6148 • Fax (808) 536-6151
Dispatch (808) 523-3595**

STEEL STUDS

From Hawaii's Largest Steel Stud Manufacturer

PLUS

- Tracks
- Angles
- Furring Channels
- Resilient Channels



- Easy Installation • Fireproof • Termite-Proof • Durable
- Consistent Product Quality • ICBO Approved

*Call Us for Custom Production
Jobsite Delivery & Excellent Service*



STUDCO OF HAWAII, INC.

Proven Dependability Since 1976

845-9311

Fax: 842-1698

224 Baker Way/Sand Island
Honolulu, Hawaii 96820

Artmobile Introduced

More than 150 guests attended the opening of two unique University of Hawaii's traveling exhibitions at Farrington High School May 28.

The two exhibits—"The Artistry and Tradition of Crafts" and "Architecture and the Built Environment"—are part of the Department of Education's successful Artmobile program at UH.

The architecture exhibit is a collaborative effort involving the Department of Education and the School of Architecture.

The exhibit was designed, built and installed by Alison E. Nakatani in partial fulfillment of the requirements for a master of architecture degree, which she received this spring.

The result of over a year's effort, the exhibit is an attempt to educate Hawaii's children about the built environment and how it affects them.

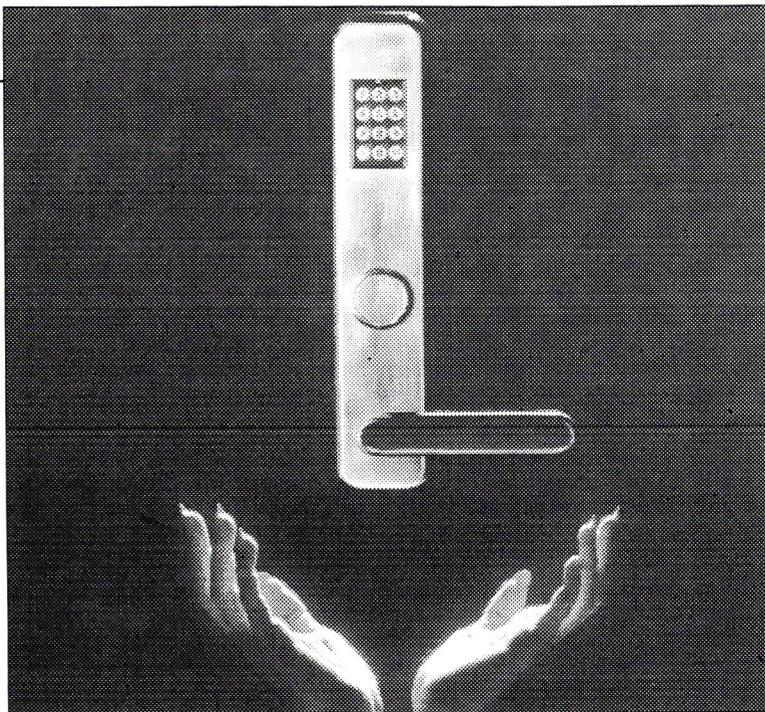
The artmobile is an innovative program first made possible by the state Legislature in 1969.

As part of the evening's program, Nakatani gave a 30-minute slide presentation about the exhibit, explaining the exhibit's objectives and thanked the professors and many other people who helped her throughout the project.

Alison, who was born, raised and partially educated in Hawaii, said this was a "neat" project for her because "it tied education and architecture." She earned a bachelor's of Education from UH in 1983; a master of education from the University of Arizona in 1985; and now a master of Architecture.

She joined John Hara Associates Inc. June 1 as an intern architect.

◆ Paul Sanders



The Key To Your Dream House Is At Your Finger Tips.

A secure, dependable locking system is a basic feature every house should have. With an Alpha Digitallock, it's now within your grasp. Our Digitallocks with microcomputers, turns any door into a state-of-the-art stronghold which can be accessed with a simple combination.



And a variety of colors and styles to match any house means you can have security without having to sacrifice any aesthetic appeal. The key to owning the latest in Digitallock technology is at your finger tips, so call us today at 524-5881.

CTS INTERNATIONAL CORPORATION

P.O.Box 15637 • Honolulu, Hawaii • 96830-5637 • Phone: 524-5881 • Facsimile: 524-5955

Golf Tourney Raises Funds

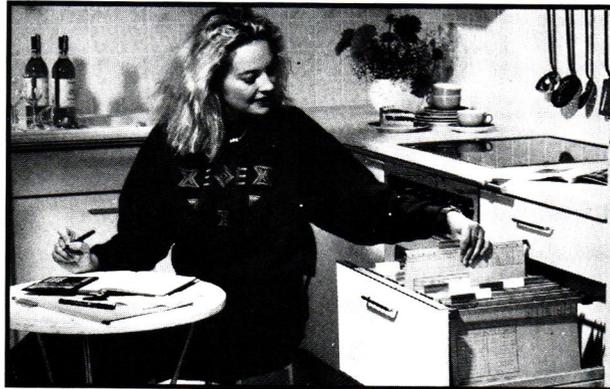
On May 15, golfers from the architectural profession, construction industry and business community joined together to support a worthwhile cause and had a fun-filled day in the process.

The sixth annual AIA Scholarship Golf Tournament, sponsored by the Maui Chapter of the American Institute of Architects and Wailea Resort Company, Ltd., was held to raise money to assist Maui students who plan to or are currently studying architecture at various universities.

The tournament began with a shotgun start at 7 a.m., with over 150 players teeing off at all 18 holes of the Wailea Orange Course.

The big winners were from the engineering office of Richard Sato & Associates, with team members Bert Toba, Michael Ishikawa and Allison Ueno, who took home trips to Las Vegas. → Clayton Nishikawa, AIA

METAFILE



A versatile hanging-file system for use with METABOX drawers or conventional file drawers.

METAFILE is easy to install and can be used in standard and lateral file applications with either letter, legal or metric sized file folders.

blum

The ultimate hardware system



KONA LAMINATES, INC.
73-5568 Kauhola Street
Kailua-Kona 96740
326-2822 • Fax: 326-2821

VISIT OUR SHOWROOM
2858 Kaihikapu Street
Honolulu 96819
833-4344 • Fax: 833-4912

MAUI LAMINATES
269 Papa Place #5
Kahului 96732
871-6500 • Fax: 871-5959

BUILT-IN VACUUM?

Beware...not all Built-In Vacuums are alike. Studies have shown that **VACUFLO** with its "true cyclonic" separation keeps the cleaning level after sustained usage. Most other brands decrease in cleaning power once their bags/filters become loaded with dirt.



Call for more information about the

VACUFLO[®]
BUILT-IN CENTRAL VACUUM SYSTEMS[™]

Home Convenience Center
JOD Enterprises, Inc.

Kailua-Kona, HI 96740
329-3356 • Fax 326-1859



products/systems/services...worldwide

Sika & JD Painting Give the Bank of Hawaii Waikiki Building a Facelift.

Quality Repairs Begin With Quality Products.

A complete system of Sika products were chosen to repair the building's unique arched exterior concrete cladding.

Call Hi-Tech Building Products. We offer a wide range of concrete restoration and maintenance products and can assist in designing a system to meet your repair needs.

- Armatac 108 - Anti-Corrosion Coating for ReBar
- Armatec 110 - Structural Bonding Agent
- Sikatop 123 - Repair & Patching Mortar
- Sikadur 52 - Super-Low Viscosity Injection Epoxy
- Sikaflex 1-A - Elastomer Joint Sealant
- Elastocolor - Elastometric Coating

819 Moowaa St., Bay 109 • Honolulu 96817 (808) 847-5266 • Fax (808) 841-7295

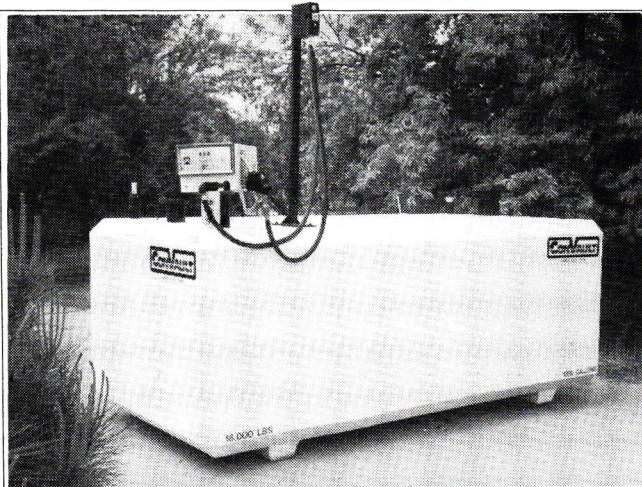


Setting the Record Straight

In reporting results of the 1993 UH Sand Sculpture Esquisse (May issue), team members of Arthur Kimball Thompson & Associates, Ltd., first place winners in this annual event with their entry, "Points of Interest," were not identified. Casters (and relief casters), included, left to right, Rifat Afeef, A. Kimball Thompson, AIA, Nhan T. Nguyen, AIA, Paul Andrew Pollock, AIA, Lalana Moe, Jerry Felrath, Ed Schroeder and Barry Peckham.



Above Ground Fuel Tanks



- ConVault is a tank double-contained in a concrete vault.
 - Primary Containment-UL listed steel
 - Secondary Containment-UL listed steel or 30 mil poly (Secondary containments are field testable)
 - 6" of reinforced concrete-2 hr. fire wall and bullet proof
- ConVault is #1 in SALES-over 6000 installation in 50 states and Canada
- ConVault is #1 in SAFETY-not a single failure in over 6000 installations
- ConVault is #1 in TESTING STANDARDS-the only AST to Fire tested as a complete assembly and has received a Listing from U.L. Canada — the only AST found to be in compliance with EPA secondary containment rules; No Diking required
- ConVault is #1 in VALUE-ConVault often costs less than 50% of the cost of an underground installation and we offer a 20 or 30 year warranty to back up your investment
- ConVaults are available from 125 gal. to 6000 gal. sizes and combinations

Consult with Willocks Construction on your specific application



Willocks Construction Corp.

P.O. Box 99, Keaau, Hawaii 96749-0099
 Phone: 982-9099 • Fax: 982-9091
 On Oahu call 259-6480

SSS SCHUBERT SANITARY SUPPLY

COATINGS ■ PROTECTANTS ■ CLEANERS ■ EQUIPMENT

MAINTENANCE • RESTORATION • CONSULTING

NATURAL STONE

- Miracle Sealants 511
- Masonry Coatings
- Abrasives
- Poultice Cleaners
- Degreasers
- Stone Wax
- Marble Conditioners

AGGREGATE

- Concrete Impregnators
- Masonry Coatings
- Urethane Seals
- Mildew Removers
- Degreasers
- Red Dirt Cleaners
- Color Additives

WOOD FLOOR

- Water Based Coatings
- Solvent Based Finish
- Abrasives
- Wood Wax & Finish
- Solvent Cleaners
- Polish Bonnets
- Dust Mops

EQUIPMENT

- Mi-T-M Pressures Washers
- Parking Lot Sweepers
- Wet/Dry Vacuums
- Floor Sanders
- Flood Extractors
- Air Vacuums
- Burnishers

WE OFFER FIELD SUPPORT & TRAINING BIA MEMBER DISCOUNTS EXPERT ASSISTANCE

SCHUBERT SANITARY SUPPLY • 727 Waiakamilo Road, Honolulu, HI 96817 • Ph: (808) 841-8063 Fax: (808) 845-5797

Convention Speaker Selected

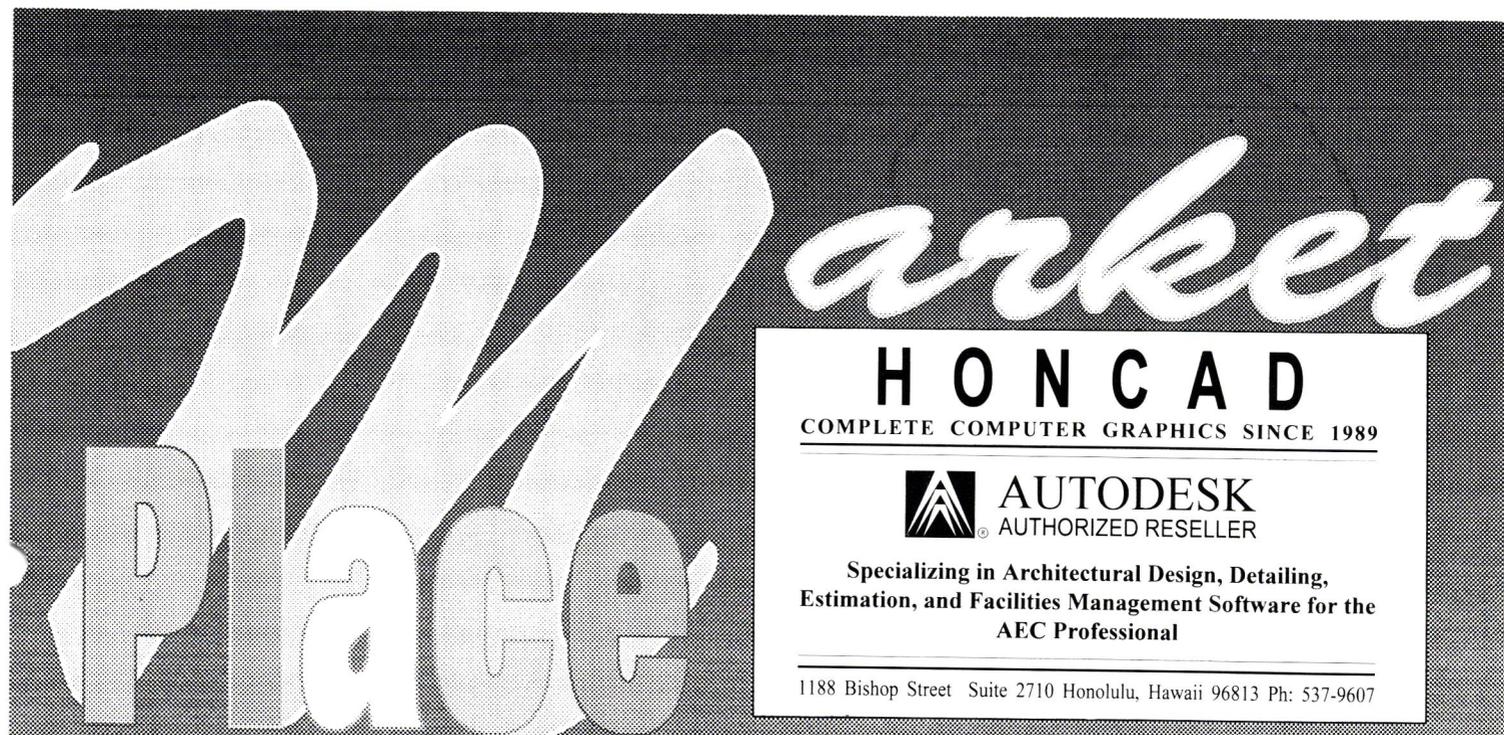
Joseph Esherick, FAIA, 1989 AIA Gold Medalist and founder of Esherick, Homsey, Dodge and Davis, AIA firm of the year in 1986, will be

the featured speaker at this year's Hawaii State Council/AIA convention.

Titled *Survival in the 90s* the convention is set for Oct. 9 and 10 at the Kamehameha Schools.

According to convention chair Ted Garduque, AIA, besides business sessions, socials, exhibits and work-

shops, panel discussions and presentations will address topics such as "Can CADD Help the Architect Survive," "Surviving Disaster," "Survival of the Architect in Practice," "Mandatory Continuing Education and Intern Development Program" and many others.



HONCAD

COMPLETE COMPUTER GRAPHICS SINCE 1989



AUTODESK
AUTHORIZED RESELLER

Specializing in Architectural Design, Detailing, Estimation, and Facilities Management Software for the AEC Professional

1188 Bishop Street Suite 2710 Honolulu, Hawaii 96813 Ph: 537-9607

PITTSBURGH CORNING
PCGLASSBLOCK®
PRODUCTS

LOCAL INVENTORY
SPECIFICATIONS AVAILABLE ON REQUEST
PRE-FABRICATED PANELS
ACCESSORIES AND SUPPLIES

Hawaii Glass Block
284 Kalihi Street 841-2565

KAHALA CONSTRUCTION

License BC 16708

**RESIDENTIAL AND
COMMERCIAL**
545-7717



General Contractor
Lic. No. B 8458

JW Inc.

Commercial Millwork & Cabinetry

James M. Watanabe, President
Known for Quality since 1976

630 Laumaka St., Honolulu, HI 96819
Phone: (808) 841-5888 • Fax: (808) 842-5941

SPECIALTY SURFACING Co.

HAWAII, INC.

"HAWAII'S #1 TENNIS COURT
BUILDER, FINISHER & SUPPLIER"
ALL ISLANDS — SINCE 1976

Tel. 682-2021 Fax: 682-0777
Lic. No. C-8322

FREE SPECIFICATIONS & INFORMATION
91-087 Hanua Street. • Ewa Beach, HI 96707

Take Politics out of Job Selection Process

Dear Editor:

The "Leadership Message" given by Dan Chun, AIA in the May issue of *Hawaii Architect* demands some further discussion. My observation is that the present system of selecting architects and engineers for public projects has resulted in but a few examples of what I would categorize as "quality public architecture." My personal experience also has been that, all denials to the contrary, political contributions and connections do make a difference in the selection process.

I have practiced in this state for 23 years. On numerous occasions politicians running for office, including incumbents, have sent me books of tickets for fund-raising events. In some cases the value of the entire book came to several thousand dollars. Most of the time I toss the books away but, sometimes, I return them with a note saying: "Sorry, I am supporting someone else." These tickets are numbered and probably tracked. I confess that I do not know how the present selection process works. What I do know is that if you are selected you are expected to contribute and that you probably qualify only for token jobs if you do not contribute.

The present system of selecting architects is flawed because it is obscure and arbitrary. I agree with Dan's point that the proposed competitive low bid process is equally flawed. The challenge is to take politics out of the process.

In Europe, design competitions are used to select architects for almost all public projects. I believe that this method has a better chance of resulting in "quality public architecture." It certainly brings the process into the open and gives hidden talents a chance.

I think the AIA should take a leadership role in acknowledging that the present selection process is flawed for three reasons:

1. Public perception is that a link exists between political connections (and contribution) and being selected.
2. The quality of public architecture could be better.
3. Politicians expect consultants who do state work to contribute to their campaigns.

To lobby against the bill which proposes the low bid selection process without offering an alternative does not improve the public image of the AIA. I would like to encourage further discussion on this matter.

**Hans Riecke, FAIA
Reicke Sunnland Kono
Architects Ltd.**

Reader defends 'Rain Forest'

Dear Editor:

In response to James J. Pappas, Chairperson, Honsador, Inc.'s response to the "Rain Forest" article:

At one time, the North American continent was a bio-diverse environment of plants, animals and insects, evolving in balance with native American cultures for over 12,000 years.

The westward migration of non-native immigrants using slash and burn, strip mining and single-crop agricultural practices left our children a polluted national water table, a bread basket that requires tons of nitrates per acre to yield fewer crops and less than 10 percent of our origi-

nal, old growth forest. Acid rain is killing the old growth on the eastern American and Canadian coast. On the west coast, old growth forest is being threatened by our national nemesis: population, ignorance and greed.

Sustainable yield is a myth, born of the idealistic 1960s and perpetuated by the forest industry in its failed forest management system. Clear cut and replanting produces a forest lacking in beauty, biological legacy and diversity that requires 30 to 50 years before it is suitable for framing or finish grade material. Old growth forest, over its "unproductive" several hundred year cycle, provides much more than lumber products for man and our threatened ecosystem that money cannot replace.

Instead of destroying our remaining virgin forest, the intelligent alternative is conservation and recycling. Project managers must be more efficient in lumber selection and carpenters must measure twice and cut once. Recycled metal studs, exposed decking of recycled auto tires and gypsum based exterior wall board must replace fir, redwood and pulp.

Building products executives should refer to "respected sources" outside their industry. The library can provide selected video material from the "Living Planet, Nova and Planet Earth" series to enlighten young and old. Shamefully, our virgin, old growth forest has gone the way of the buffalo and may soon become as common as a dinosaur.

**Sam Monet
Haleiwa**

WE'RE #1 IN SOLARIUMS!

Con.Lic.No. BC-11445



1824 Dillingham Blvd. • Honolulu 96819
CALL (808) 847-5500 or FAX (808) 847-2244

Part II:

The making of an historical monument
Mount Olomana

This is the second of a two-part article on Mount Olomana. Part I was published in the April issue.

by
**Andrew
Charles
Yanoviak**

Architect-planners can contribute to the betterment of their communities, especially from an environmental systems planning and design standpoint. Generating graphical analyses and syntheses, and assessing the positive and negative circumstances of the prevailing situation, can definitely assist decision-makers.

In 1990, the Save Mount Olomana Association (SMOA) was rejuvenated and reformulated. Mount Olomana was being assaulted on all flanks by insensitive and inappropriate development, including the state proposed massive expansion of the Women's Community Correctional Center by the Department of Public Safety. Something had to be done.

SMOA LAUNCHED A PUBLIC education

campaign using graphics, photographs and public testimony to point out infractions of codes and design standards. The fate of Mount Olomana became obvious to more than a few community leaders. The situation had to be reversed to protect Mount Olomana for future generations.

SMOA hoped the state, which owns public land up to Mount Olomana's first peak, would provide an exemplary model for private developers. However, the graphics and scenario forecast a bleak future for the landmark. Even if the state prevented development of its land holdings, Mount Olomana could, at best, retain a tiny patch of conservation on the windward side of the first peak. And perhaps, a currently closed hiking trail on the Waimanalo side of Maunawili Elementary School might be reopened by the state for public access to the first peak.

If private developers were generous, instead of going ahead with plans for residentially scaled golf course club houses or restaurants

Resolution approved by the Aloha Aina Congress

Because various governmental agencies of the City and County of Honolulu and the state of Hawaii are not adequately and appropriately protecting, preserving and nurturing our conservation lands and natural resources such as streams, waterfalls, watersheds and hiking trails on the slopes and foothills and peaks of glorious and splendid Mount Olomana ...

And because these governmental agencies and developers are participating in a land and natural resources abuse process involving desecration, degradation, and blatant destruction of our natural waters and landscapes ...

Therefore, be it resolved that the Aloha Aina Congress take immediate measures to support the efforts of the Save Mount Olomana Association in the following three areas:

1. That all of the conservation lands on Mount Olomana which are now classified by DLNR/BLNR in the 'General' subzone by their erroneous maps which do not follow our statutes, be reclassified to the 'Limited' subzone.

2. That all lands above the 200 feet elevation above sea level be designated as Conservation and Preservation lands on Mount Olomana and that the SLUC Urban District Boundary be adjusted accordingly. That all streams, perennial streams, and waterways be safeguarded with a Conservation and Preservation zoning designation for 20 feet horizontally from the high water mark.

3. That all lands, waterways, trees, vegetation, etc., on Mount Olomana which have been marred by premature development and urbanization on Conservation and Preservation lands, be fully restored and landscaped immediately, before additional erosion, sedimentation, pollution, etc. take place during the next rainy season.

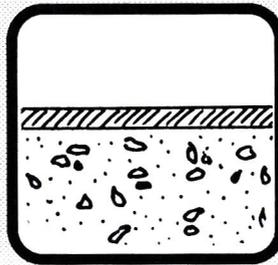
CONCRETE PROTECTION

Vulkem Coatings

- Pedestrian/traffic decks

Thermal-chem Epoxy Resins

- Epoxy injection/crack repair
- Concrete repair products



WATERPROOFING

Vulkem Membrane Waterproofing

- lanais/roofs/below grade

Jiffy Seal Sheet Membrane

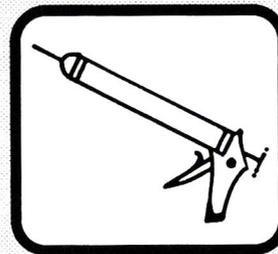
- High performance roof underlayment
- Below grade waterproofing



SEALANTS

Vulkem Construction Sealants

- Gun-grade/self-leveling
- Expansion joints
- Jet fuel resistant



COATINGS

Valspar Industrial/Maintenance Coatings

- Tank linings (NSF approved)
- Epoxy/urethane coatings

Dryvit Synthetic Stucco

- Interior/exterior wall finish systems



BREWER
ENVIRONMENTAL
INDUSTRIES, INC.
a C. BREWER company

Construction Materials Division

Hawaii's Coatings & Waterproofing Specialist

Honolulu
(808) 532-7400

Hilo
(808) 933-7800

Kauai
(808) 245-4031

Maui
(808) 244-3761

Kona
(808) 329-8094

Guam
(671) 646-4742

on the two remaining peaks, the public could end up with an extended lei of green at the very top of the mount. The only other public access trail from the Kawai Nui Marsh side of the mountain on former Castle Estates lands was closed to the public by the developer of the ongoing golf course, in violation of a provision imposed by the city Department of Land Utilization (DLU) that the trail should remain open to the public.

SMOA drafted a resolution (see inset box) which was unanimously approved by the Aloha Aina Congress consisting of representatives from all Hawaiian islands, as well as several neighborhood boards, community associations and the HC/AIA Environment Committee.

THEN, WITH SUPPORT FROM STATE legislators, city councilmembers and Governor Waihee, SMOA testimony convinced the state Department of Land and Natural Resources and Board of Land and Natural Resources to change the classification of existing Mount Olomana conservation lands from "general" to "protective" subzone, which precludes the development of new houses, clubhouses or golfcourses within the boundaries of state, city and county "preservation" lands.

The graphics and aerial photo-

Bill clears major hurdle

State Representatives Devon Nekoba, 50th District, Kailua-Kaneohe and Jackie Young, 51st District, Lanikai-Waimanalo, announced in April that a bill (H.B. No. 1370) establishing Mount Olomana as a historical monument cleared a major hurdle by passing from the Senate and Means Committee. It will next go before the full Senate for a vote.

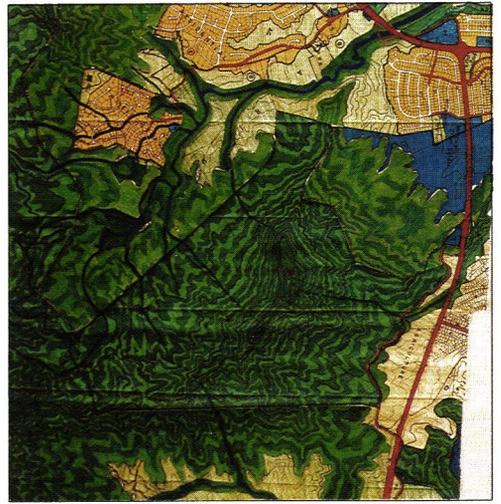
The bill, co-sponsored by Nekoba and Young, paves the way for the acquisition of approximately 370 acres of land owned by the Asahi Kanko Corp. The historical monument will be administered by the State Department of Land and Natural Resources.



◀ Blue outline delineates state-owned conservation lands; green outline delineates area to be added when Bill 1370 is finalized.

Map illustrates area the Aloha Aina Congress agreed should be designated as conservation lands. ▶

ANDREW YANOVIK PHOTOS



graphs show the impact of the ongoing golf course development on the fragile rainforest on the Pali Highway side of Mount Olomana. This unique ecosystem of five major streams and ten tributaries in the Maunawili Stream network within the Maunawili Valley watershed, is a major life support system for the state's largest wetland—Kawai Nui Marsh. Stream flows and embankments have been altered and diverted without proper government permits. As a result, the water quality of Kailua Bay has been seriously affected. No environmental impact statements were required for this massive destruction of irreplaceable natural resources. No exacting or impact fees were required from the golf course developer.

KAELUPULU POND AND STREAM have also been affected by residential development leveling deep gulches at the foothill of Mount Olomana, mauka of Kalaniana'ole Highway. The degree

of restoration and major retribution required in the immediate future to offset environmental disasters such as massive flooding and landslides will heavily impact taxpayers.

Is it any wonder then that the state legislature fully supported a bill to

declare Mount Olomana a state monument?

♦ Andrew Charles Yanoviak, AIA, CSI is chair, AIA Honolulu Committee on the Environment; president, SMOA; and president, Honolulu Chapter, Construction Specifications Institute.

Legislature Moves to Protect Olomana

State Rep. Devon Nekoba (D-50th District) issued a statement after a House and Senate Conference April 28 that resulted in agreement on the language for H.B. 1370, which allows the state to establish the Mount Olomana state monument.

Nekoba stated, "Mount Olomana will be joining the Diamond Head monument and the Mo'okini Heiau on the Big Island as only the third site designated as a state monument in Hawaii."

The measure is currently awaiting Gov. Waihee's signature.

Upon its enactment, the state Department of Land and Natural Resources will begin the process of acquiring lands for the monument.

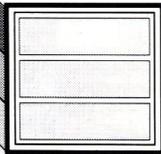
The substantial cultural and historical significance of Mount Olomana was brought to light by the rediscovery of the Kanahau Heiau on a portion of conservation land owned by Asahi Kanko, U.S.A., Inc. According to Hawaiian legend, Hi'iaka, Pele's sister, stopped at this heiau on her journey to Kauai.

SMOA Unveils Scale Model

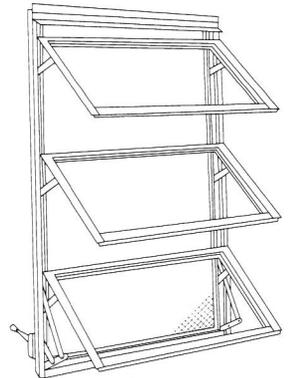
Community groups, elected officials and community representatives met May 16 at Maunawili School to call upon the Governor to sign House Bill 1370. A scale model of Mt. Olomana commissioned by the Save Mount Olomana Association, the Hawaii Trail and Mountain Club and the Outdoor Circles was unveiled and blessed.

REPLACE THOSE OLD WINDOWS!

CUSTOM CONTRACTORS, INC.
"The Awning Window People™"

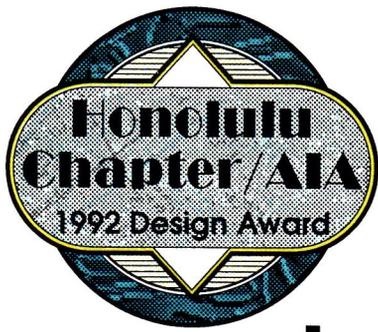


CCI



Con Lic No 14358

99-840 Iwaiwa St. • Aiea, HI 96701 • 483-0100



Award of Excellence

Single-Family Residence

Stringer Tusher & Associates, Ltd.
The Wailupe Residence

In 1987, a family of four, having recently sold their Portlock home, commissioned Stringer Tusher & Associates, Ltd. to design an equivalent home in the Wailupe peninsula community. Because of community imposed restrictions—height limitation, one level above grade construction, high water table—a unique approach was required to duplicate the program achieved in the two-story Portlock structure, while taking full advantage of the waterfront setting.

Because of changing family needs, the parents, with two daughters attending graduate school, planned more time for themselves at home, but with separate suites for the daughters or visiting guests.

The family actively entertains at home with various sized groups, both for business and personal purposes and often involving guests from the mainland.

Access to the pool from the master bedroom. ▼

DAVID FRANZEN PHOTO



Some of the design requirements included off-street parking for five vehicles, master bedroom suite and family room with fireplace, entertainment center and lounge area, living room with fireplace and mantle for display of collectibles, lanai functioning as an extension of interior spaces, strong visual relationship to the adjoining bay, incorporation of natural ventilation and elegance while retaining Hawaiian informality of life style.

The resulting design concept is a highly crafted, yet elegantly simple, residence with interconnected interior volumes, creating a modern adaptation of the Hawaiian home. The theme is further defined through the use of a pitched roof resting on horizontal coursing of copper, teak, and sand-toned plaster, creating clear story light and ventilation without sacrificing security.

The design captures the ocean experience upon arrival with views of Maunalua Bay and Diamond Head. This garden walk experience begins at a pair of custom crafted bronze gates and carved teak doors and culminates in the high central atrium with a stained glass skylight. The strong directional, paved concourse layered with planters, recessed lighting and clerestories, leads guests directly to the ocean-front entertainment areas, avoiding the private portion of the home. The atrium is central to the cruciform roof plan which organizes the four major building volumes.

Interior living zones open onto each other and the exterior through pocketing doors, louvers and screens. Large roof overhangs continue the space outward. This interior/exterior relationship is strengthened by allowing the lap pool immediate adjacency to the house, sharing the roof overhang above.

Credits:

Architect:

Stringer Tusher & Associates, Ltd

Principal in charge:

David G. Stringer, AIA

Project architect:

Kirk Potter

Mechanical engineer:

Syntech

Electrical engineer:

Darryl Itano

Structural engineer:

Martin Bravo

Landscape:

Lester Inouye

Interiors:

Mary Phillipotts & Associates

General contractor:

owner

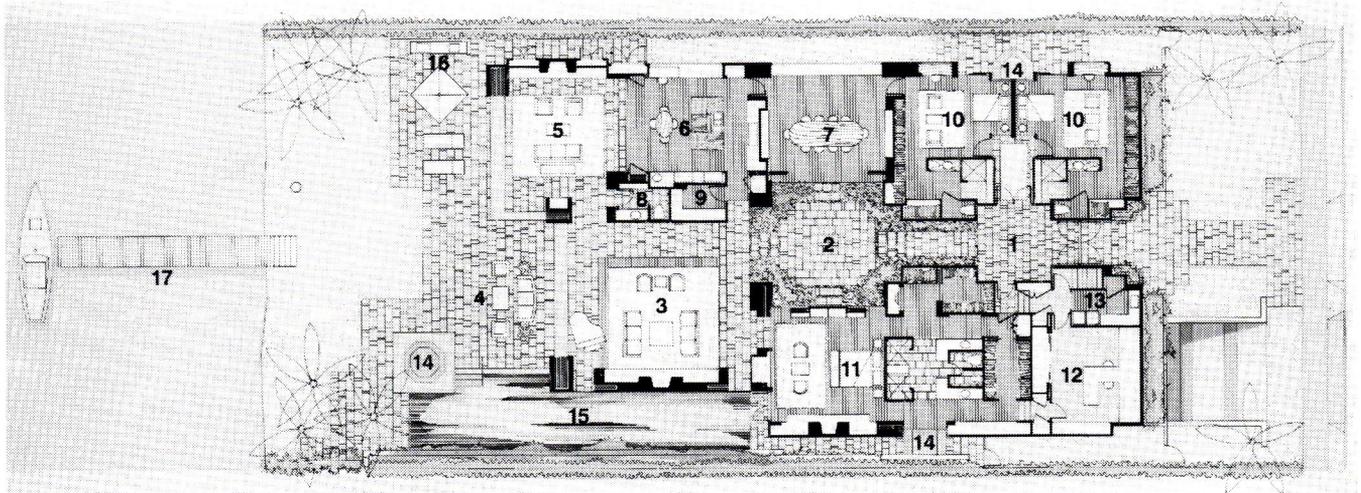
Jury's Comments:

"It was an exceptionally well detailed residence with a variety of interesting and voluminous spaces. The main interior spaces blend seamlessly with the exterior oceanfront lanais. The perfectionist's creative use of quality materials throughout provides an awesome experience upon visiting this exceptional residence."



▲ Living room with traditional hearth and mantle.

DAVID FRANZEN PHOTO



FLOOR PLAN

5' 10' 20' N ↑

- | | |
|---------------|--------------------------------|
| 1 Entry | 10 Bedroom |
| 2 Atrium | 11 Master Suite |
| 3 Living Room | 12 Office (2-car garage below) |
| 4 Lanai | 13 Laundry |
| 5 Family Room | 14 Spa |
| 6 Kitchen | 15 Pool |
| 7 Dining Room | 16 Wet Bar & Barbecue |
| 8 Powder Room | 17 Boat Pier |
| 9 Pantry | |

Designing one home at a time
'Na Pali Haweo'

by
**Douglas
G. Cofer**

Throughout history, architects have brought mankind many kinds of residences, from castles to condominiums, yet the thrill of acquiring a piece of "environment" and being able to create a custom home community is an experience without equal. Such is the case with Na Pali Haweo in Hawaii Kai.

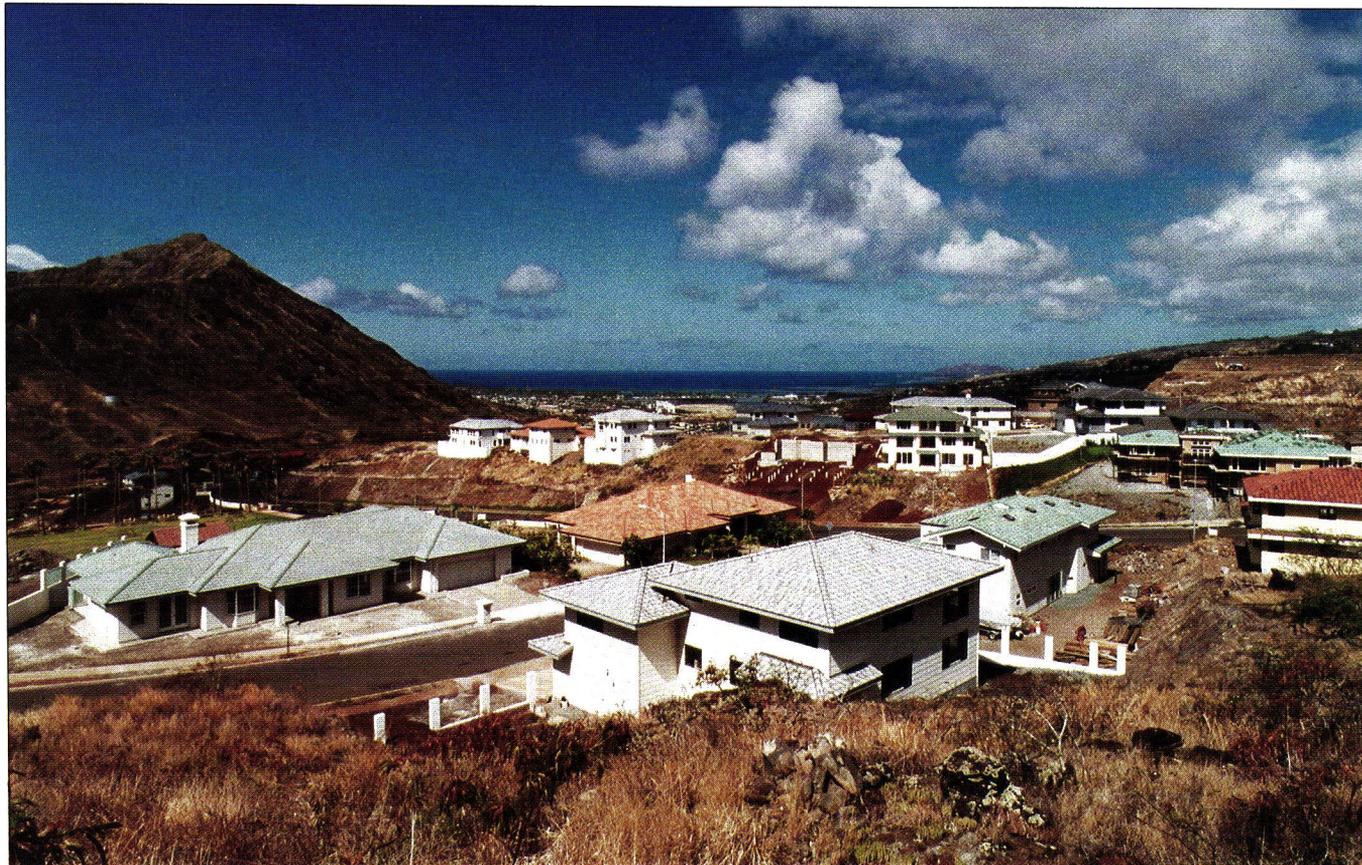
Shortly before seeking to develop Na Pali Haweo's 72 acres high atop Kamehame Ridge, we considered some basic housing issues. Geographically, this prime property was the last residentially zoned ridge in east Oahu. Its views of the Pacific, Diamond Head, Koko Head and, on a clear day, Molokai, are breathtaking. The

climate is moderate, dry, sunny and breezy.

The architectural promise of the site's natural beauty seemed unlimited. Furthermore, our market studies revealed a remarkable devotion to Hawaii Kai among upwardly mobile people who already lived there—in both the valleys and along its neighboring ridges. We saw an opportunity to tap into a prospective move-up market right there in our own backyard, by placing the dream of custom home ownership within reach of the working families and empty-nesters who wanted to move up, but who did not want to leave Hawaii Kai.

TODAY, WITH 85 ESTATE-SIZED parcels sold, 32 homes completed or in various stages of completion and 25 more approved designs at

"Na Pali Haweo" as seen from top of Kamehame Ridge. ▼
DAVID L. MOORE PHOTO



Na Pali Haweo (Cliffs of Distinction) the majority of buyers were, as we expected, already residents of Hawaii Kai. In fact, some of them were carefully tracking our infrastructure progress on Kamehame Ridge—so they could be ready with their earnest money when sales were initiated in late 1991.

Today, Na Pali Haweo is a young community that is fast developing its own special character. A variety of architectural styles are emerging that, through careful planning, avoid stylistic monotony. Each residence takes full advantage of the ridge's expansive vistas and cooling tradewinds and uses a subdued palette of colors and materials so as not to overwhelm the properties upon which they are built.

THIS IS NOT BY ACCIDENT. Pacific Homes mandated from the start that a Design Review Committee, headed by Owen Chock, senior partner at Design Partners, be created to oversee the architectural process. The five-member committee, made up of three design professionals, a Na Pali Haweo resident and one developer representative, is totally committed to the community's big picture. They see their mission as helping to "design the community," and in Chock's words, "to protect and nurture the growth of an upland single-family home community so as to capture creative consistency rather than boring uniformity."

Thus, overall design is oriented to the existing terrain, the tradewinds coming over the pali and up from the ocean, the ethnic variations found in Hawaii and to the times.

MANY BUYERS IN THE FIRST phase of upper Kamehame Ridge have opted to build open, free-flowing homes, many of them multi-storied, with light colors, painted trim, stucco, skylights, huge picture windows, glass block, marble, Monier tile and so forth. As construction progresses, a unique community character is unfolding—a character that we could not quite have predicted. In this sense, reality is creating, or at least helping to shape, the vision. Na Pali Haweo is gradually acquiring its own context.

And we have found that the "architectural palette" that is evolving at Na Pali Haweo demands that each of us—developer, designer, builder and buyer—must be part of the synthesizing force, larger than all of us, that shapes this community's adolescence. Once it became apparent that the neighborhood had defined its own design precedent, our design guidelines (initially produced by the Architectural Review Committee) were revised to further enhance the collective integrity of the homes in place

and the designs already approved.

In sum, what is being produced at Na Pali Haweo is a single-family environment now alive with humanity—and with a design magnetism that is cohesive, multi-faceted, dynamic and visually appealing.

◆ *Douglas G. Cofer is project coordinator for Pacific Homes. He has a master's degree in architecture from the Georgia Institute of Technology and an MBA from the University of Pennsylvania's Wharton School.*

CONCRETE ACHIEVEMENTS

PRESENTS THE WINNER OF THE
NEW SINGLE FAMILY RESIDENCE
AWARD FOR 1992

The PRIVATE RESIDENCE is a 12,000 square foot single family home located in Mauna Lani, Hawaii. We congratulate the following companies and their employees in the development of this structure:

Architect: Thomas Bingham and Associates, Inc.
Engineer: MKM & Associates
Owner: H. F. I.
Contractor: Starbird Construction, Inc.



**HAWAIIAN
CEMENT**

220 South King Street, Suite 1700
Honolulu, Hawaii 96813
(808) 532-3400

Where east meets west
Furusato Restaurant

East truly meets West at The Furusato Restaurant, winner of a merit award in the Renaissance '92 national contest. The restaurant was one of eight merit awards presented. Twenty-seven awards were selected out of a field of 230 entries nationwide—one project of the year, four grand awards, eight merit awards,

Waiting lounge. ▼



and fourteen honorable mention awards. The Renaissance '92 awards competition was sponsored by *Remodeling*, the National Association of Home Builders, Remodelor Council and Decorating Remodeling magazine.

The challenge in this renovation project for World Hawaii, Inc., was to create a restaurant, in the basement of the Hyatt Regency Hawaii, integrating a contemporary Western look with more traditional Japanese design elements.

THE RESTAURANT represents a metaphor for the Japanese society; a society in transition between traditional values and the values and styles of the Western world.

The renovated restaurant captures the essence of both societies and appeals not only to the older generation familiar with the Japanese reputation of the Furusato restaurants, but the younger generation as well.

To achieve the desired results, the floor plan was broken up to have several different and completely distinct dining areas.

Some of the areas are familiar to traditional Japanese observers such as the large timber construction around the traditional cooking area (*Kamado*), the raised platform dining area (*the Saziki*), as well as materials used.

A BOLD COLOR scheme reminiscent of the art deco phase of Western architectural design was used.

The renovation project, designed by Hiroshi Ebisawa and Associates of Tokyo, Japan and coordinated by Peter Hsi Associates, Inc., was executed by contractors OG Hawaii Corp. and Telos Construction, Inc.

◀ The Furusato Restaurant is divided into distinct areas, with the more traditional raised platform dining area (*the Saziki*), left, and Western style dining area, right.

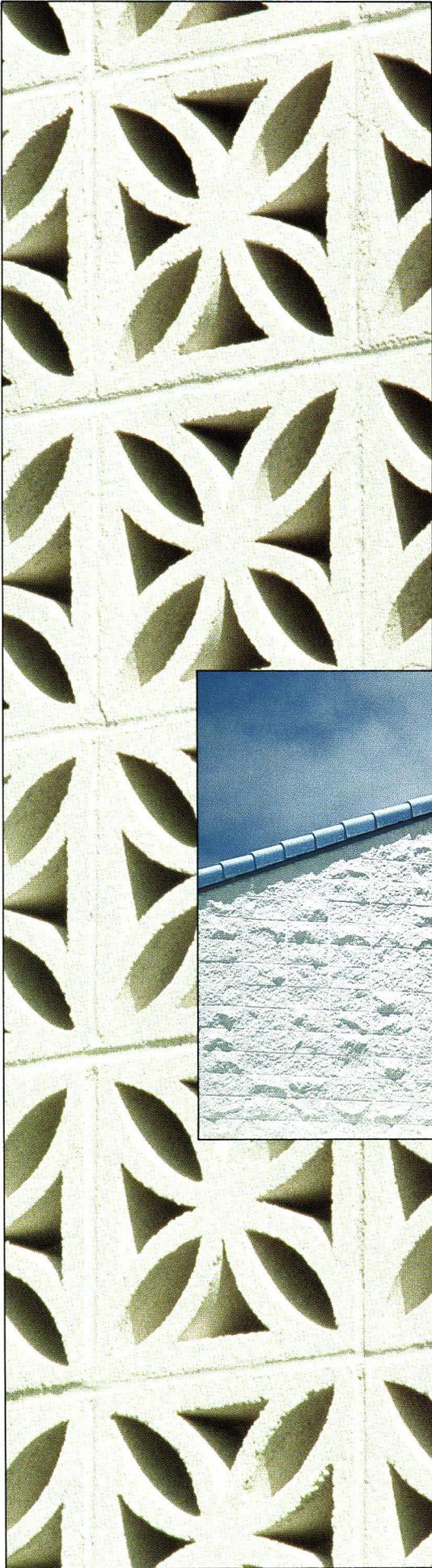


The relaxed elegance of The Hawaii Prince Hotel was ideally suited to natural stone flooring. Burlington slate, from England, was honed and polished for the entrance lobby with natural cleft slate used for the pool deck and exterior areas. Creative tile design. Fit for a Prince.

Phone 526-0467

Developer:
Jack Myers
General Contractor:
Hawaiian Dredging
& Construction Company
Architect:
Elerby, Beckett AIA,
Los Angeles

Natural



SHOO!

If you want to avoid termites, build or buy a home made with masonry. Masonry frustrates termites, regardless of how determined they are.

Big difference. **BIG difference!**



**MASONRY INSTITUTE
OF HAWAII**

Phone 833-1882



"BUILD HAWAII STRONG WITH MASONRY"