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Recalls Project Architect Dennis Lee, AIA, of Peter Hsi & Associates: "Both budget and schedule were concerns. Our design response was a living room like setting with kamaaina styling—using subdued lighting, koa wood and natural stone."

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In this issue ...

Retail/Commercial Development, including high-rise office buildings, is the focus of this issue of Hawaii Architect.

Robert Hale, AIA, president, Architects Hawaii Ltd, designers of the Waikiki Landmark featured in this issue, the high-rise office market is slow.

Hale reports that although the high-rise office market is lower than the national average, the Honolulu vacancy rate is higher than it has been in some time.

A number of properties in the Kakaako and Kapioi areas are coming on line in the future; the high-rise office market, however, is affected by suburban development, particularly the second city. In the immediate future, low-rise office buildings will prevail.

The only high-rise building in downtown Honolulu which is close to construction is the controversial First Hawaiian Bank headquarters.

The 1993 Hawaii State Council/AIA Convention will be held the weekend of Oct. 9 and 10 at the Kamehameha Schools. If you have not yet registered for this outstanding event, titled "Survival in the 90s," you are still in time to do so by contacting the AIA office (545-4242) immediately. Among the presenters this year are Susan Maxman, FAIA, 1993 AIA National President; Joseph Esherick, FAIA, AIA Gold Medalist and many other guests—truly an event architects cannot afford to miss.

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Toward a new urban vision

Sustainable Design

Today's urban and environmental crises are inter-connected. We cannot solve one without attending to the other, and we cannot achieve sustainable design without recycling the embodied energy of our cities. If we allow our metropolitan areas to die, we will never be able to sustain life on this planet. To me, the overriding challenge facing American architects in the 1990s is the revitalization of our urban centers.

One does not have to travel far to see the blight afflicting so many of our older industrial cities: like my hometown of Philadelphia, these urban environments suffer tremendously today. Faced with the task of feeding our nation's poor and disenfranchised, today's city officials have watched urban tax bases erode as the middle class and wealthy move to the suburbs. Fear and racial discrimination are slowly killing the urban cores that were once centers of culture, diversity, and knowledge. Rather than face these wrongs, to enhance—rather than ignore—a silence that has produced the destruction of urban centers. It has been easier and less costly as the blight afflicting so many of our older industrial cities; like my hometown of Philadelphia, these urban environments suffer tremendously today. Faced with the task of feeding our nation's poor and disenfranchised, today's city officials have watched urban tax bases erode as the middle class and wealthy move to the suburbs.

As architects, we know better. We know that it is costly—environmentally, socially, and fiscally—to ignore these urban problems. Architect Harvey Gantt, former mayor of Charlotte, N.C., and a recent Democratic candidate for the United States Senate, told the North Carolina Society of Architects, "We have been too shallow in our urban environment. We have been too timid to vigorously contribute to an improved understanding of what needs to be done to improve the plight of cities. It has been easier and less costly as design professionals to keep quiet about our complicity and naiveté in supporting suburban explosion. Our patrons' inability to see beyond immediate needs and greed has only been exceeded by our own virtual silence." Now, we are faced with the consequences of that silence, a silence that has produced the destruction of urban centers and the disintegration of our open lands and natural environment.

What can we as professionals do to right these wrongs, to enhance—rather than ignore—America's cities? We know how to design commercial centers and public spaces that act as magnets to attract further neighborhood investment. We know how to visualize and plan, in a balanced way, the appropriate use of space. We know how to recycle buildings and find alternative uses for historic structures. And we know how to design the affordable housing cities so desperately need. We architects are the visionaries—if only we choose to be.

It is my contention that for architects to grow in influence and to be truly of service to society, we must join the battle for the survival of our cities. We must lead the way, instead of following behind our former patrons, the developers. We must go beyond a single-project mentality, looking instead at the inter-connectedness of adequate housing, clean water, waste management, transportation and green space in urban areas.

A revealing book written in the late 1960s by the AIA Committee for the Study of the Future of the Profession poses a question that is still worth considering today. "Can the architect transcend the mastery of the construction of single buildings and move on to sharing in the designing of whole environments?" The committee asked this more than a quarter of a century ago. Fortunately, there are now many architects who have indeed transcended the single-building mentality, developing an interdisciplinary approach to the designing, planning and infrastructure of entire cities.

For example, by taking an interdisciplinary approach to urban problems, architect
Jaime Lerner, former mayor of Curitiba, Brazil, did more to enhance his city of one million than any of his predecessors. Lerner offered free mass-transit tokens to Curitiba's citizens as rewards for household recycling, thus encouraging conservation while discouraging the use of automobiles.

To me, one of the most sustainable recent architectural projects in the United States is Oriole Park at Camden Yards in Baltimore. The decision to locate the Orioles' new baseball stadium on recycled land downtown, where Baltimoreans can either walk or take public transportation to the games certainly represents an investment in the future of the city.

Similarly, a decision by the architect-developer team of Morris Architects to convert a downtown Houston warehouse into a prison also promotes the city, while protecting open space around it. The team convinced the city of Houston that it was more economical to recycle an existing structure than to build a new one, as had been originally proposed. The derelict warehouse was an eyesore, but its renovation included refurbishing its facade, creating a visual improvement for the city.

We cannot solve all the problems of the cities alone, but we can join planners, other design professionals, and public officials to effect a change in how and where we build in the future. Based on the notion that the most important building block after the family is the neighborhood, the AIA has taken a strong stand in lobbying for such an urban agenda. We propose assistance for physical, social, and economic improvements focused on neighborhoods in need, with assistance coordinated through neighborhood-based planning. We also propose the establishment of a civilian conservation and construction corps that would train young volunteers to carry out urban forestry, housing renovation and the rebuilding of public works.

The Philadelphia chapter of the AIA has addressed the ongoing disintegration of North Philadelphia, one of the most blighted urban areas in the country. We organized a Regional/Urban Design Assistance Team (R/UDAT) several years ago and called in a team of experts—including architects, city planners, the former mayor of Berkeley, California, and the chief of police of Cincinnati, Ohio,—to lead the five-day project. Together, these experts represented a cross section of the knowledge and skill required to solve society's most complex problems. The R/UDAT produced a civic action group of North Philadelphia citizens working to take back their neighborhood block by block. Now, two years later, Philadelphia architects are still working with this community.

Architects can make a difference. We can learn to solve problems and envision solutions in a new way. The fundamental principles of an ecologically sustainable architecture must be the basis for all architectural decision-making, theory, and practice. For architects to regain the stature we once had as a profession, we must seize the opportunity to be outspoken advocates for change in the way we plan, build and preserve our built environment. We are trained to be professional visionaries. Let's not be afraid to dream, to imagine how things should be, rather than remaining complacent and perpetuating the way things are.

Susan Maxman, FAIA, is president, The American Institute of Architects.
The mere mention of Hawaii anywhere in the world brings to mind visions of clear ocean waters, pristine beaches, lush tropical vegetation, gentle breezes, coconut trees, sunshine and water-related activities. Because the Hawaiian islands are in the middle of the Pacific Ocean, water has always played a crucial role in island culture, history, inhabitants, food staples—and in recent times the economy, particularly tourism. Therefore, it is not surprising that water pollution is a particularly sensitive issue.

WATER POLLUTION HAS been increasing at an alarming rate throughout the state. But we now have a mechanism to “freeze” water pollution—and, in time, reverse the damages already done. Water pollution affects all of us—the state, our quality of life and the local economy.

IN JULY, Gov. Waihee signed into law HB 525, a bill intended to curb nonpoint source water pollution in Hawaii. This is, in my opinion, one of the most important measures enacted by the Legislature this past year.

Nonpoint source pollution is pollution from unknown sources such as sediments, urban runoff, nutrients, oil, chemicals and pesticides from farming, industry and the private or public sector, which finds its way through seepage, lava tubes or other means, into streams, rivers, gullies, aquifers, lakes and ultimately—the ocean and beaches.

HB525 empowers the state Department of Health to develop and establish a nonpoint source pollution management and control program with “teeth.” This law gives the DOH the authority to investigate and test actual or potential pollution sources, make recommendations and fine offenders who do not comply with the law.

OFFENDERS MAY BE FINED as much as $10,000 per day. In addition, persons obstructing or denying inspection to suspected pollution sources can be fined up to $5,000 per day.

Money collected from offending entities will go into an environmental response revolving fund that will be used to clean up the environment.

The bill allocates a total of $120,000 to create two positions within the DOH to develop and maintain an ongoing statewide program to monitor and resolve the growing water pollution problem. Additional funding will be allocated as specific programs are proposed by the DOH.

WITH PASSAGE OF THIS LAW, the state is finally taking the initiative to plan our future by protecting our most valuable resource—water—rather than reacting after pollution has caused irreversible damage to the environment that may take several generations and millions of dollars to cure. Failure to act now may cost the state dearly in a few years, because we will be in violation of federal and EPA standards—resulting in loss of federal funding and penalties that ultimately affect the taxpayers.

The idea for this bill came after discussions I had with Jensen Uchida, a Legislative Reference Bureau analyst and a former classmate of mine at the University of Hawaii.

As the idea matured, “informed” sources were brought in to help with strategy and the wording of the bill.

THE BILL WAS INTRODUCED in the legisla-
ture last year, the second year of my first term in office. It passed, but was vetoed by the governor on technicalities. It was re-submitted this year and subsequently approved.

Yet, last year's rejection was beneficial because it gave us time to consult leaders in industry and agriculture.

In discussions with the Sierra Club, sugar company representatives, the federal agricultural department, unions and many others, we found that almost everyone was concerned about pollution of our vital water resources and pledged their support for programs designed to monitor and control this threat. Also discussed were the use of alternate materials, recycling and planting of native flora and other environmentally sound alternatives.

THIS BILL IS A PREVENTIVE measure and an investment in the future of this state. The bill also opens the door for the administration to find out, once and for all, through expert studies and analyses, what goes into our water, where it comes from, and what actions should be initiated. The bill also calls for educating the public through media campaigns and comprehensive awareness programs.

* Alex Santiago is a member, state House of Representatives, District 45, which covers the North Shore from Waialua through Kahuku.

---

**Bill to Protect Water Signed**

HB 525, "A Bill for an Act Relating to Water Pollution," was signed into law July 1 by Gov. John Waihee during a special ceremony at the interim state Capitol building in Honolulu.

The bill, currently in effect, was written and sponsored by state Rep. Alex Santiago, who was at the time vice-chair of the House Energy and Environmental Protection Committee. Co-sponsoring were state representatives Jackie Young, 51st District (Waianae-Kalua), Kenneth Hiraki, 25th District (Kakaako-Ala Moana), and Duke Bainum, 21st District (Waikiki-Ala Wai), chair of the Energy and Environmental Protection committee.
n addition to almost everything else, many people are now worried about health hazards associated with power lines, cellular telephones, hair dryers, computer terminals, televisions and other sources of electric and magnetic fields. Articles written on the subject often present contrasting views. Indeed, the information on the subject is inconclusive, in some cases contradictory and certainly controversial.

Nevertheless, there is enough substantial information on the subject to enable architects, interior designers and others to offer reasonable advice to clients who may be concerned about health hazards associated with electric and magnetic fields, more commonly called "electromagnetic" fields. There are also some practical steps that can be taken to reduce exposures at a minimal cost.

ELECTRIC AND MAGNETIC fields are inescapable. The human body relies on electric fields to function. The earth itself produces a magnetic field that makes even the highest power transmission lines seem small by comparison. Fields from electrical sources contribute to these natural sources and differ in one respect; that is, electrical power sources produce low-frequency fields that oscillate at 60 cycles per second as the electrical current surges back and forth in wires. Naturally-occurring magnetic fields are relatively constant.

Electric and magnetic fields are all around us, but does a hair dryer or refrigerator pose a real health risk? Typical questions health officials are often asked are: "If I buy the house near the power line, what are the health risks?" "Is the transformer near my house safe?" "I'm pregnant. Will working at my computer terminal hurt me or my baby?" Most experts will answer something like this: "We really don't know, but the risks are probably not as large relative to the risks we choose to ignore or take for granted."

The data on possible adverse health effects, such as cancer, from exposure to low-frequency electric and magnetic fields are inconclusive. Some recent studies of human populations suggest a relationship between living near power lines and certain cancers. However, information from these studies is not adequate to determine a level of exposure that may be harmful, and there is no established causal relationship between electric and magnetic fields and cancer or other diseases.

Due to the controversy and the need to address these concerns, the state of Hawaii Department of Health has developed a "prudent avoidance" policy. In short, this means that actions should be considered to reduce exposure when they are practical.

THE STRENGTH OF A MAGNETIC or electric field is directly related to the distance from the source. Exposure studies have demonstrated that in most situations exposure to electric and magnetic fields from household appliances is far greater than power lines. The following are some practical means of reducing exposure:

- If you use an electric blanket or water bed heater, unplug them before sleeping (magnetic fields disappear when the electric current is switched off but electric fields may exist as long as a blanket is plugged in); and
- Do not stand close to sources of EMFs, such as microwave ovens, while in use. Standards are in place to limit microwave emissions; however, the electric power consump-
tion by a microwave oven results in magnetic fields that are high close to the unit. The same is true for other appliances.

MAGNETIC FIELDS FROM video display terminals (VDTs) have been of particular concern because of the length of time workers spend in close proximity to equipment in their homes or work places. To minimize exposure from these devices:

- Sit at arm’s length from VDTs (magnetic fields fall off rapidly with distance) and switch (the screen) off when not in use; and
- Locate VDTs in the work place so that work stations are isolated from the fields from neighboring VDTs (fields will penetrate partition walls, but do fall quickly with distance).

The decisions made in implementing a prudent avoidance approach to reducing risk are based on judgement and individual values. These actions can be taken even if the risks are uncertain and even if the safety issues are unresolved. Until the health risks are clearer, it is entirely up to the individual to decide if they wish to take actions that may or may not reduce any potential health risks.

TOO LITTLE IS KNOWN presently to determine where or what rules would provide useful protection. Several states have established standards for electromagnetic fields at the edge of the right of way for power lines. These standards are simply levels intended to keep field levels from going any higher, because of the existing uncertainty about health risks. They have no health risk basis.

Everyone seems to agree that more careful and extensive study of the health effects resulting from exposure to electric and magnetic fields is needed. When there is adequate data to determine what levels, if any, may be harmful, appropriate standards can be established. In the meantime, it is prudent to reduce exposures that can easily be avoided without changing the way we live or spending large amounts of money.

Bruce S. Anderson, Ph. D., is Deputy Director for Environmental Health, State of Hawaii Department of Health.
Projecting a sense of place and purpose

Building Renewal

Class "A" commercial buildings abound today in downtown Honolulu and along the Kapiolani corridor into Waikiki. These centrally located, high- and mid-rise structures give our island a growing sense of modern grandeur and scale once seen only in the metropolitan centers of the U.S. mainland.

A continuing need still exists locally, however, for the so-called Class "B" structures in downtown Honolulu's fringe areas of commercial activity—from Kakaako to Iwilei and the harbor to Nuuanu. After all, not every small business owner can afford the higher rents commanded at the pricier buildings, while many entrepreneurs want to lease space below the minimums offered by the "As." Like many of us in business, they want an address that is comfortable, safe, attractive and efficient—a facility they can enjoy working in and proudly open to clients and suppliers.

Owners of existing older buildings have major concerns to be considered here also, primary among them being to protect their assets and continue to turn a profit. Thanks to the rise of sophisticated CADD integrated asset management programs, there has never been a better time for landlords to evaluate aging properties. Among the key considerations are building code requirements, the Americans with Disabilities Act (ADA) guidelines, the ratio of income to expense and life extension of the property.

Building owners and prospective tenants benefit by remodeling and restoration work, and as economics today slow down new construction, architects are turning more and more toward design solutions in the "rehab" arena.

A THIRD ELEMENT is also served when older commercial centers are restored and given modern enhancements, and that is the community itself. Obviously, there is the visual appeal of improving and enhancing the beauty of these older buildings, but the benefit is actually more tangible than that. You have only to walk through "new" Chinatown during any weekday lunch hour to see how many people—downtown workers and visitors alike—enjoy being there now. Quickly disappearing is the "red light" image of the war years. Instead, this is a gathering spot with its own sense of place.

And place, as well as purpose, is very important to building renewal if we are to stop the erosion of Hawaii's precious heritage and special cultural environment. It means being sensitive to the value of these buildings and being more creative in our design by bringing state-of-the-art techniques indoors while preserving the historic character on the outside.

A case in point for Group 70 International is our building on Bethel Street, for which we were our own client in the 80s. Instead of abandoning the aging Friend Building which turned 100 years old in 1987, we chose to carefully rehabilitate this headquarters. Once the home of Honolulu's first periodical, The
Friend of Temperance & Seaman, founding father, the Rev. Samuel Damon, would most likely quite approve of its rebirth.

ANOTHER RENOVATION project which we now have underway in Chinatown, at the corner of Maunakea & King, is the Kwai Chan Trust Building. The effort here is a bit different, but the goal is the same. The existing building is outside the character of the district, but it will be in harmony with the turn-of-the-century Chinatown theme when remodeling work is completed next year. Inside, the Kwai Chan will be energy efficient, ADA approved, structurally rehabilitated—and a pleasing work space for its tenants.

Office remodeling not only mitigates aging and gives us more building inventory, it diversifies our options and brings more people back to central Honolulu's daytime population. And when accomplished with sensitivity to both purpose and place, it enhances the look and enjoyment of our downtown community.

James I. Nishimoto, AIA, is vice president. Group 70 International.

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10/93 Hawaii Architect 13
The owner's charge to the team of architects who designed the high-rise office building at 1100 Alakea Street was quite simple—"spare nothing in designing a building that achieves 'international' status for Honolulu." The design solution reflects this simple quest.

From the onset we visualized this building as a holistic piece of urban sculpture. By utilizing pristine geometry, quality materials and a uniquely simple site plan, we developed a building that can compete with the finest office structures in the world.

The placement of the building at 45 degrees to the intersection proved to be the seminal thought in the creation of a large entry park on an otherwise small site. This tree-shaded, granite-paved courtyard serves as an elegant entree to the building entrance. When viewed with the open spaces of the other three sites which form the corner of Hotel and Alakea, one has a feeling of standing in a large urban plaza.

The simple exterior of the building belies the complexity of the structure and its technological advancements. The five-level parking structure and most operational and maintenance
As 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.

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facilities are underground, thereby preserving the street level for pedestrians.

THE SPACIOUS EXTERIOR entry is reinforced by a three-story interior entry lobby. This entry volume, with its cascading granite slabs, is penetrated by ascending escalators transporting visitors to the sunlit elevator mezzanine. The views from the elevator mezzanine embrace the entire entry plaza and street intersection to the south and the Koolaus to the north. From the mezzanine level the elevator rises above Honolulu in whisper-quiet, high-speed elevators.

The tower is configured with small footprint individual floors. Each floor user can create a unique identity for the entire floor. Access to each floor can be set for unrestricted access, employee-only access, or complete security by barring elevator access.

Each floor is also provided with segregated mechanical and air-conditioning equipment so each half of the floor can operate independently during off-hours without incurring a penalty for firing up a building's entire mechanical system. This offers a huge advantage over existing rental space within Honolulu.

HIGH-TECH ELECTRONIC systems abound throughout the building. Provisions have been made to accommodate direct satellite communication or teleconferencing to remote locations.

Card access security systems can be programmed to restrict building and tenant space access by any of the following criteria: hours of access, classification of employee, area of access or elevator activation and floor access control. Air conditioning and lighting systems can be remotely activated from a car, a home or the beach. Infrared sensors automatically activate faucets and controllers. These features, plus many others, make 1100 Alakea a building of the 21st century.

Consistent with the urban sculpture theme, the normally awkward mechanical equipment and elevator stacks on the roof top are shielded by a chiseled glass face which was incorporated as part of the building's total design.

The secret to this building's elegant simplicity lies in the owner's commitment to excellence. We were fortunate to have an investor so dedicated to quality community investment.

* Jim Hayes Architectural Illustration

116 Kaluamoo St 808-261-0081
Kailua, Hawaii 96734 PH & FAX

David Stringer, AIA is president, Stringer Tusher and Associates.
A matter of priority

Worksite Safety

With the constant stream of pedestrian and vehicular traffic in downtown Honolulu, and the numerous construction projects currently underway in the area, safety is a big concern. Fletcher Pacific Construction, one of the state’s largest contractors, has initiated programs on its projects, most recently 1100 Alakea, intended to keep safety in the workplace at the forefront.

In addition to the safety measures taken on the worksite, Fletcher Pacific recently completed its “Safety and Health Week” program for employees in July. Some of the week’s highlights included a safety leadership workshop, a children’s safety poster display and tips for safety slogan contests.

On the recently completed 1100 Alakea project, on the corner of two of the busiest streets in downtown—Alakea and Hotel—the company made safety a priority. Utilized were two safety features: waist-high safety nets which served as a barrier around the perimeter of each floor and nets that protrude beyond the floors of the building to catch falling objects.

Commented Harry Galer, Fletcher Pacific’s director of environmental safety and health, “Although safety is a priority at all of the company’s job sites, the location of the 1100 Alakea project has resulted in site-specific safety measures.”

Other safety measures taken on 1100 Alakea include what the company calls its “craft safety representatives” program. Members representing each craft engaged on the project (i.e., masonry, iron work, carpentry, etc.) held weekly meetings with the project manager and superintendent to dis-
cuss potential safety hazards. In addition committee members wore green hard hats as visual safety reminders.

"A big part of our program is to keep job safety at the forefront of everyone's mind," continued Galer. "In addition to weekly meetings and visual reminders, our foremen verbalize safety precautions to their crews on a daily basis, whether it be as simple as reminding them to wear their safety glasses or pointing out the things that are being done right."

NEW PROGRAMS THAT ARE currently being developed by Fletcher Pacific include annual safety week programs for employees and their families, an expansion of its drug testing program, and a partnership with Hawaii Occupational Safety & Health, in which HIOSH works as a consultant with the company.

The national average accident rate on construction sites is 15.3 for every 200,000 labor hours, compared with Fletcher Pacific's rate, 6.0 injuries for every 200,000 labor hours.
This is what happens

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Dr. Michael Chun, President, The Kamehameha Schools. A dynamic leader and visionary. He has a keen sense of Aloha for the tradition and history of the Kamehameha Schools campus. Trained as an engineer, he understands the importance of proper planning and education. Dr. Chun will host this convention.

Joseph Esherick, FAIA, AIA Gold Medalist. Practicing since the 1930s, he is the founder of the 1986 AIA Firm of the Year, Esherick, Homsey, Dodge and Davis. Esherick will deliver the University of Hawaii’s Gus Ishihara Memorial Lecture. Known internationally as a sensitive architect and educator, his firm’s work has been published widely and has consistently won national design awards.

Susan Maxman, FAIA, 1993 AIA National President. The AIA’s first woman president, she is energetic and has passionate views concerning the architect’s role in the community. She has won many national design awards and is principal of a 14-person firm. An outspoken proponent for environmental responsibility, she represented the profession in the International Earth Summit at the 1992 UN conference in Rio de Janeiro, Brazil.

Don Chun, AIA, 1993 Hawaii State Council/AIA President. Co-founder of the firm Kauhiakaua and Chun. Chun will lead the day’s events and report on the legislative activities by the Hawaii State Council. His firm designed the award winning chapel at Kamehameha Schools and the Heritage Center.

Kurt Mitchell, AIA, 1993 Honolulu Chapter/AIA President. President of Kober/Hanssen/Mitchell Architects. Mitchell is active in the community. He has served on neighborhood boards and participates in critical civic issues. He will lead the Honolulu Chapter election of officers and conduct the annual business meeting.

Raymond Yeh, FAIA, Dean, School of Architecture, University of Hawaii, Manoa. Yeh, comes to us from Oklahoma. He served as department head of Cal Poly, San Luis Obispo and as chair of the National AIA committee of Architects in Education. He is past president of the Oklahoma Chapter/AIA.

The Kamehameha Schools campus, site of this year’s Hawaii State Council/AIA Convention, was established in 1887. The Kamehameha Schools is the sole beneficiary of the estate of Bernice Pauahi Bishop, the last descendant of the royal line of Kamehameha.

Located today on Kapalama Heights, the campus covers 600 acres, 210 of which are in forest preserve. The campus features 68 major buildings, seven miles of roads and seven athletic fields. Facilities include a performing arts complex, dining hall/student activities center, industrial arts complex, computer labs, television studio, three learning centers and an Olympic size swimming pool. The campus buildings total about two million square feet serving approximately 3,100 students in preschool through grade twelve, boys and girls.

Plans for the current school were developed in 1928 by the New York architectural firm of Bertram Goodhue Associates, with assistance from C.W. Dickey, Architects to ensure a local influence.

Three major buildings will be used for main convention activities:

1. Princess Ruth Keʻelikolani Performing Arts Complex — Designed by C.W. Dickey and Associates. The 700-seat auditorium was completed in 1937. In 1986 plans were begun to create a performing arts complex around the auditorium.

Survival Hawaii State Council/AIA Convention Oct. The Kamehameha Schools campus, site of this year’s Hawaii State Council/AIA Convention, was established in 1887. The Kamehameha Schools is the sole beneficiary of the estate of Bernice Pauahi Bishop, the last descendant of the royal line of Kamehameha.

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1. Princess Ruth Keʻelikolani Performing Arts Complex — Designed by C.W. Dickey and Associates. The 700-seat auditorium was completed in 1937. In 1986 plans were begun to create a performing arts complex around the auditorium.
2. Akahi — This dining hall facility was dedicated in June 1985. It has a seating capacity of 850 and the kitchen occupies the top floor of this multi-level building.

3. Konia — The main classroom building located on the former Kamehameha School for Girls was completed in 1950.

W.H. Raymond Yeh, FAIA
Saturday, Oct. 9, 9:45–10:15 a.m.
"Vision for Survival and Thriving on it"

This is no easy time for architects in Hawaii, and in most places in the United States, due to the economic downturn. We may feel it more since Hawaii has been largely dependent upon the Japanese economy, which is in a dire state at this time. However, we are in the Asia Pacific region, which is "where the action is" as far as global and architectural opportunities are concerned. For Hawaii architectural offices, this is the time to transform the practice to compete in this arena.

The current state of architectural design in the region can be summarized as the...
wholesale importation of technology and images from the West, particularly from the United States, in a dominance of developer projects with short-term economic objectives. This is done in the context of lack of planning and infrastructure support in the major cities and lack of development goals and policies.

To serve the region effectively, architects in Hawaii need to have ready access to information on local business practice, appropriate technology, code requirements and to have a new method of providing professional service which is in a long-distance mode and a cross-cultural context. Architects need to have more linguistic skills and cultural understanding. Most importantly, architects, more than ever, need to be more sensitive to the various aspects of user needs.

The UH School of Architecture is restructuring its professional curriculum to prepare its graduates for practice in this region. In a parallel effort, the school is setting up a research center to further the understanding of Asia Pacific architecture as a derivative of the cultural ideas of the region. This center will bridge the historical and theoretical elements and the practical architectural design considerations of cities, landscapes and buildings in the Asia Pacific region.

The school, working closely with the architecture profession can make Hawaii a hub for architectural expertise in the Asia Pacific region and effect a more sensitively designed environment for the entire region.

**Dennis Neely, AIA**
Saturday, Oct. 9, 1:15-2:10 p.m.
"Can CADD Help the Architect Survive?"

The practice of architecture is in the midst of an electronic revolution. The use of CADD and electronic information is dramatically changing the practice of architecture. In a time span of 15 years (1985-2000), the practice of architecture will change from a hand-drawn, paper-based technology to an electronic information, computer-aided design technology. This new technology will change the practice of architecture dramatically.

It is critical that architects understand the current state of computer technology and what will be available in the future.

**E. Alan Holl, AIA, CSI**
Saturday, Oct. 9, 1:15-2:10 p.m.
"Doing Things Right the First Time"

Today's architectural project is an information-gathering, decision-making, documentation-monitoring process.

The design process creatively evaluates information, decisions and documents.

Construction documents translate design decisions into specific instructions for those who build the project.

What decisions are needed when? Who will make these decisions? Are the appropriate decisions being made at the appropriate point in project development? In an era of limited budgets, what is an effective decision/documentation process? How is it implemented and maintained?

This workshop will cover specific strategies and provide models to help participants develop an effective project delivery process—doing things right the first time.

**E. Alan Holl, AIA, CSI**
Evan D. Cruthers, AIA
Saturday, Oct. 9, 2:20-3:05 p.m.
"Intern Development Program—Its Myths and Realities"

What is it? Why is IDP mandatory in more than half of the licensing jurisdictions? How does it work? What impact does it have on the profession? On the office? On the intern? Should we advocate mandatory IDP in Hawaii?

This portion of the workshop will seek to provide the information necessary to enable architects to differentiate between IDPs' myths and its realities.
Preliminary Schedule*

1993 Hawaii State Council/AIA Convention

Saturday, Oct. 9

7:30-8 a.m. Pre-Opening and Exhibit Set-up
8-8:30 a.m. Registration and Refreshments
9-9:45 a.m. Dan Chun, AIA, HSC/AIA President
Opening Remarks
Dr. Michael Chun, President, Kamehameha Schools
Imua address
Susan Maxman, FAIA, President, The American Institute of Architects.
Keynote Address
Raymond Yeh, FAIA, Dean, School of Architecture, University of Hawaii at Manoa
"Vision for Survival and Thriving on it:
A new role for the School of Architecture"
10:15 a.m.-12:15 p.m. Honolulu Chapter/AIA Annual Meeting
Kurt Mitchell, AIA, President
Honolulu Chapter/AIA
Concurrently with
Maui Chapter/AIA Component Meeting
Tom Cannon, AIA, President, Maui Chapter/AIA

12:15-1:15 p.m. Lunch at the Akahi Dining Hall
1:15-2:10 p.m. Presentation 1: Auditorium
Dennis Neeley, AIA, President, ASG
"Can CADD Help the Architect Survive?"
Concurrently with
Presentation 2
E. Alan Holl, AIA, CSI
"Survival of the Architect in Practice:
Doing It Right the First Time Around"
2:10-2:20 p.m. Break
2:20-3:05 p.m. Presentation 3: Auditorium
Rob Hale, AIA
"Surviving Disaster: What we have learned?"
Presentation 4
Evan D. Cruthers, AIA
E. Alan Holl, AIA, CSI
"Intern Development Program"
3:05-3:35 p.m. Free Time: Visit the Exhibits
3:35-4:20 p.m. Presentation 5: Auditorium
Francis Oda, AIA, AICP
"Architects As Keepers of the Culture"

4:20-4:30 p.m. Presentation 6
E. Alan Holl, AIA, CSI
"Mandatory Continuing Education"

4:30-5:15 p.m. Break
4:55-6:15 p.m. University of Hawaii, School of Architecture-Auditorium
Joseph Escherick, FAIA, AIA Gold Medalist
"The Gus Ishihara Memorial Lecture"
5:15-6:30 p.m. Hosted Reception/Light Music Entertainment
Heavy Pupu, Sponsor/Exhibitor Recognition, Door Prizes

6:30 p.m. Cleanup and breakdown of exhibits and displays

Sunday, Oct. 10

8:30-9 a.m. Church Services at the Chapel
Chaplain: David Koku
9-9:10 a.m. Tour Bus Loading at the Chapel
9:10-11:10 a.m. Tour of Kamehameha Schools with
Dr. Michael Chun, President,
Kamehameha Schools
Heritage House
Chapel
Upper Campus
11:10-12 Noon Refreshments at the Heritage Center
Noon Closure

* All Exhibits Open to Public.
All times and sessions subject to changes.
All main events to be held at the Princess Ruth Ke'elikolani Auditorium unless otherwise noted.

Convention Planning Committee
Ted Garduque, AIA, co-chair; Bert Ymol, AIA, co-chair; Carol Sakata, FAIA, advisory; Chris Smith, FAIA, special events; Stan Gima, AIA, directory; Doug Luna, AIA, finance and budget; Bottina Menert, associate programs; Bill Sakaguchi, AIA, reception; Beverly McKeague, Honorary AIA, Hawaii State Council/AIA; Janet Blakeman-Martin, executive vice president, Honolulu Chapter/AIA; Bob Lazo, AIA, directory; Alan Neimoff, AIA, facilities and audio visuals; Bob Ramsey, facilities manager, Kamehameha Schools; Cheryl Gima, AIAS, students; Puuani Maunu, AIAS, students/host; Dennis Kamai, facilities; Pono Lunn, graphics; Charito Alcontra, graphics.
A building to remember

Waikiki Landmark

Webster defines "landmark" as a "structure (as a building) of unusual historical and aesthetic interest ..." and this is exactly what developer Sukarman Sukamto wanted to achieve in 1992 when he selected Architects Hawaii Ltd. to design "Waikiki Landmark."

The developer envisioned a unique condominium structure that would be an expression of Hawaii that tourists would remember over the years as vividly as they would remember Diamond Head and Waikiki.

TO REALIZE THIS VISION, we knew from the start that the project, to avoid anonymity, had to be a bold statement that amplified its name—unique and perhaps controversial, but not forgotten.

The project had to withstand the test of time and remain a symbol of Waikiki into the 21st Century.

The original solution proposed by Architects Hawaii consisted of two hexagonal towers approximately 75 feet apart—a modern Arch of Triumph—with the top five penthouse floors spanning the two towers as well as the void between towers, resulting in a total 38-story structure with the bottom of the bridge 33 floors above grade.

SEVERAL PERMUTATIONS of this original proposal were necessary to accommodate street widening and open space requirements. The final tower design is triangular in format with rounded corners, in harmony with the triangular shape of the site.

The pedestrian experience was a prime consideration; therefore, no vehicle access was allowed from Kalakaua or McCully streets—entry is off Ala Wai Boulevard. All three corners of the site plus other open areas, representing 64 percent of the 2.8-acre site, consist of luscious landscaped mall areas and water features.

A high groundwater table at the site dictated construction of an 11-story parking structure above grade. Care, however, was taken to ensure each level of the parking structure is aesthetically softened on the outside by planters filled with flowering bougainvillea and blue clariss blossoms. In addition, along Kalakaua Avenue, the parking structure is fronted by two levels of attractive retail shopping arcade of approximately 30,000 square feet. Extensive recreational facilities, including a large two-level swimming pool and jacuzzis, are an integrated part of the parking structure’s roof.

The towers are bridged at the 33rd floor by steel trusses interspersed with mechanical areas. The five stories of the penthouse units are left as loft spaces to be custom designed and built by individual condominium owners. The penthouse design element is articulated from decorative columns and water features enhance the pedestrian experience.
the main mass of the towers and serves as a strong design element that is achieved through the volumetric shaping of exterior elements as well as use of blue-green and pink glass.

PROVEN MATERIALS were used throughout the building—particularly various types of granites and marbles.

Granite was used extensively on exterior facades because of its durability and, unlike many "modern" materials, ages gracefully thus giving the structure an aura of permanence.

Each tower leg of the 196-unit condominium building is serviced by two elevators; the top five floors of the penthouse units are served by three additional exclusive glass elevators.

Alex Weinstein, AIA, is principal, Architects Hawaii, Ltd.

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**Project Team**

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<tr>
<th>Owner/Developer:</th>
<th>Walkiki Landmark Partners</th>
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<tr>
<td>Architect:</td>
<td>Architects Hawaii Ltd.</td>
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<tr>
<td>Principal in Charge:</td>
<td>Alex Weinstein, AIA</td>
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<tr>
<td>Project Architect:</td>
<td>Lloyd T. Arakaki, AIA</td>
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<tr>
<td>Design Team:</td>
<td>Ernest Shimizu, AIA</td>
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<td></td>
<td>Tom Young, AIA</td>
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<td></td>
<td>Flor Felipe, AIA</td>
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<td>David Poe, AIA</td>
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<td></td>
<td>Kendall Ellingwood</td>
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| Structural:      | Martin & Bravo, Inc.     |
| Electrical:      | Douglas V. MacMahon, Ltd.|
| Mechanical:      | Syntech, Ltd.            |
| Civil:           | Richard M. Sato and Assoc.|
| Contractor:      | Charles Pankow Builders, Ltd.|
| Construction Administrator: | Alan Atkinson, AIA |
| Landscape:       | Mike Miyabara Associates |

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Working closely with Hawaii’s builders and developers over the past eight months, Robert P. Riggs, the company’s president and CEO, has restructured local distribution so that it will be responsive to customers and market needs.

Riggs has more than 20 years of independent distribution experience representing major appliance manufacturers. He has received national recognition for achievements in the industry, serves on the board of several companies and community service organizations.

He is a member of the Building Industry Association of Hawaii, the National Kitchen and Bath Association, the Construction Specifications Institute and the AIA.

Current staff in Hawaii includes Yvonne Rockwell, sales coordinator; John Garofoli, regional sales manager; and Rick Dela Cruz, Hawaii manager.

“Rick was born and raised on Oahu and has more than 15 years of retail and wholesale experience,” said Riggs. “He will be our key salesperson.”

“Sub-Zero has been an industry leader in built-in refrigeration for nearly 50 years. The company is known for the design, technology and handcrafted quality of its products,” Riggs pointed out. “But it still takes the right people, determination and hard work to ensure a product’s continued success. Hawaii’s customers cannot be effectively served by telephone or fax. A distributor must have a presence in the markets served. This means a long-term commitment and a substantial investment in funds, facilities and people—without which we couldn’t possibly provide the level of service our Hawaii customers deserve.”

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Opening a shopping center

Kapolei

The Kapolei Shopping Center and Campbell Square are the first commercial structures to open and operate in the new city of Kapolei. The center forms the beginning of the commercial district for the city of Kapolei. The 132,000-square-foot retail center anchored by Safeway and Longs Drugs was designed by Kober/Hanssen/Mitchell Architects and follows the urban design guidelines created for the new city by Group 70 Ltd.

THE CHALLENGE WAS to integrate the practical realities of a community shopping center with the concept of a "garden city comprising Hawaiian architectural features and detailing" specified in the plan.

"Traditional shopping center design requires that the project layout be developed to focus on the tenant and ease of shoppers," said Kurt Mitchell, Kober/Hanssen/Mitchell president. "Safe and convenient pedestrian and vehicular circulation formed the basis of our layout."

In addition, the center is designed in phases to correspond with changing demographics. Because the timing of the second phase was unknown at the planning stage, the first phase was designed to appear complete in and of itself. However, it can readily accept a second phase as a natural extension of the design.

"TYPICAL COMMUNITY center design requires a rather linear, single store layout," notes Mitchell. "Our aim was to retain the integrity of the layout while breaking up a 900-foot-long stretch of frontage." This was accomplished by roof articulation and placement of the major tenants in relation to the in-line stores. Gable roof and protruded double column entry features were incorporated into the overall design to call attention to the large stores' entry locations within the center.

To comply with the intent of the urban
design guidelines, the predominant roof form is double pitched, with clay tiles in cool, blue/green hues to reflect a "Hawaiian influence."

Building materials were selected based on their ease of construction, maintenance qualities and durability in light of the climate and high pedestrian use. Large, covered walkways provide shade from intense sunshine and act as a UV protector for storefronts and merchandise.

LANDSCAPING WAS ALSO designed to provide shade while not obstructing store fronts when trees and plants were fully grown. In the parking area, the plan called for shade trees to break up the overall size of the lot without impeding vehicular circulation.

"Shopping centers are usually developed in areas where there is a residential market available. Kapolei Shopping Center was developed to serve and enhance the future residential market," said Mitchell. Demographic projections show that by the year 2010, 126,000 people are expected to live in Kapolei.

"The shopping center is 90 percent leased and the reaction of tenants and users alike has been very enthusiastic," said Synthia King, Campbell Estate's Manager, Commercial/Office Properties. "Several owners have expressed surprise at the broad market Kapolei attracts."

"Not only do we have shopping center customers and employees, but we are also getting regulars from neighboring construction sites and James Campbell Industrial Park," said Laurent Basse, Subway franchisee. Young Chu, operator of Alpha Video store says his customers are coming from as far as Waianae.

The development intent of Kapolei Shopping Center was to be an initial catalyst to the formation of the new city—it seems intent has been met.

Makenna Perkins is Marketing Coordinator, Campbell Estate's Hawaii Development Division.

Center Celebrates Grand Opening

On Saturday, Oct. 30, in the spirit of Halloween, Kapolei Shopping Center will celebrate its opening from 10 a.m. to 4 p.m. Families are encouraged to come in costume and have their complimentary picture taken by Longs Drugs.

In conjunction with this celebration, shopping center tenants will sponsor activities including mask making, face painting, cookie decorating, ice cream eating contests and day-long entertainment featuring music, Hawaiian dance and other acts.

Those who get their "Passport to Trick or Treat Street" stamped at each of the new businesses become eligible for prize drawings every hour, with a grand prize winner announced at the end of the day.

And Design Partners, architects for Malanai at the Villages of Kapolei, will demonstrate their talents carving pumpkins at the Watt Hawaii "Pumpkin Patch."

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10/93 Hawaii Architect 29
Reducing air pollutants

Electric Vehicles

This is Part I of a two-part article on electric vehicles, technology and the environment.

Electric vehicles (EV) have been in use in Hawaii for many years. The Hawaii Natural Energy Institute has had up to 10 vehicles converted to battery operation; also, Hawaiian Electric Company (HECO) currently has a full-sized van that is battery powered.

In the past, electric vehicles did not gain public acceptance because of lack of range, low top speed and acceleration, lack of infrastructure and high cost. However, the future of EVs looks brighter, thanks to improved technology and growing concerns of the deleterious effects internal combustion vehicles (ICEV) have on the environment.

THE SUCCESS OF EVS is essential to reduce pollution produced by ICEVs and America’s dependence on foreign oil. The technological improvements in EVs can have a positive effect on the environment, reduce dependence on foreign oil and overcome performance limitations.

Studies by the Sacramento Municipal Utility District and the Southern California Air Quality Management District show that EVs are beneficial to the environment. An electric vehicle does not produce tailpipe emissions. However, to form a fair comparison, we need to look at the full fuel-cycle accounting. Fuel-cycle accounting considers EV emissions produced by the charging energy source. This ranges from zero, if solar photovoltaic panels are used, to a finite amount depending on the fuel mix used to generate the power.

Assuming the recharging power comes from the utility grid, emissions would be those of the electric generating plants. Government agencies (in Hawaii it’s the Clean Air Branch of the Department of Health) control generating plant emissions. The controls are much stricter than those mandated for ICEVs by the Environmental Protection Agency (EPA) and are more closely monitored. Additionally, in Hawaii, generating plants are usually located away from urban areas so their emissions do not add to the curbside pollution of ICEVs. ICEVs produce their worst pollution when idling in stop-and-go traffic; effectively, they are getting zero miles per gallon.

When an EV is stopped, it does not use energy. It only uses energy when moving. Newer EVs also use regenerative braking that takes the energy used to stop the car and puts it back into the battery. One way to compare pollution from EVs and ICEVs is to see how many miles it takes to put 1 pound of pollutant in the air. A typical ICEV will produce 1 pound of carbon monoxide (CO) every 40 miles, or about two average days of driving in Hawaii. Based on figures derived from HECO’s fuel mix, an EV
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HECO ARCHER 138
Architect: Architects Hawaii

FOOD BANK
Architect: Hiromichi Asaoka

2828 Paa Street, Suite 3137
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Phone: 839-6517
The inverter under the hood of this GM vehicle transforms DC to AC electricity, which drives the motor. This car has a range of 90 miles on one battery charge.

It would take 4,350 miles to produce the same 1 pound of CO₂, about six months of driving. When it comes to the effect on the environment, the electric vehicle wins handily.

THE AMOUNT OF OIL imported in the United States is approximately equal to the amount of oil that is used for transportation—planes, trains and automobiles. Reducing the amount of oil used for vehicle fleets and personal automobiles will go a long way in reducing dependence on foreign oil. Hawaii imports all of its oil, about 15 to 20 percent of which is used for automobiles. The Hawaii Data Book 1992 shows that an average car on Oahu uses 444 gallons of refined fuel per year. HECO generates its power from a mixture of fuels: oil, coal, municipal waste, bagasse (sugar cane residue) and wind. A trip of 1,000 miles in an EV will use 13.1 gallons of oil, 45 pounds of coal and 45 pounds of waste; a typical ICEV getting 28 miles per gallon, will use 35.7 gallons of oil.

The EV saves 22.6 gallons of oil for every 1,000 miles or 45 days of driving. EVs will have a profound influence on our oil imports and concern for the politics of third world countries half way around the globe.

Ralph Dobson, Associate, is senior marketing research engineer, Hawaiian Electric Company.

Architects Lead EV Design Competition

Earlier this year, architects were either principals or team leaders in the AIA-supported National Planning and Design Competition titled "The Electric Vehicle and The American Community." The competition asked for the creation of a "vision of a future infrastructure which will provide excellent support for electric vehicles (EVs) and help improve the quality of life in an American community."

The $20,000 Grand Prize winner, "The Odyssey Team," devised an EV infrastructure for Cambridge, Mass. Members of the team concluded that an effective system must involve "a linked framework of policies and technologies;" no single element will be enough. Infrastructure must be built to recharge the vehicles, public policies adopted to encourage EVs and public awareness increased.
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Sophisticated miniature contact and motion detectors, strategically located throughout a home not only can immediately detect intruders or smoke/heat but also alert residents.

During fires, the system simultaneously turns off the air-conditioning, calls the nearest fire department and turns on stairway and entry lights to show the shortest way to safety.

A person can interactively seek, via telephone, changes in temperature, lighting and security settings and obtain system status reports.

The system's unique "vacation" feature keeps a constant watch on a residence while residents are at play. Vacationers can establish contact with the system, inquire about its operational status and order sweeping setting changes.

TotalHome will also allow viewing of arriving guests and unexpected visitors from any TV in the house and a night vision sensor permits residents to see their driveway and other key locations outside the home even in total darkness.

A wall-mounted emergency button in the master bedroom, when depressed, switches on outdoor lights and relay a silent message to police.

On a lighter side, the system can be instructed from a vehicle in rush-
hour traffic, via cellular phone, to regulate air conditioning units, bring water in an indoor spa or jacuzzi to the desired temperature or even turn on the stereo system and load a favorite cd.

In the Hawaiian islands, Honeywell's TotalHome security system is distributed by Smart Homes of Hawaii, Inc.

** by Paul Sanders

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### Home Automation System Displayed

The new TotalHome security system can be evaluated at Kaala at The Bluffs from 10 a.m. to 5 p.m., during the remaining BIA Parade of Homes weekends, Oct. 2–3 and 9–10.

It was installed by Smart Homes of Hawaii, Inc. in collaboration with the Royal-Clark Development Company, the Kaala at The Bluffs developers.

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### JUNK WARRANTIES

Just the other day an architect asked if a certain EPDM roofing was equal to CARLISLE® single-ply. We said, "Yes, pretty much the same material, but do you want a real warranty or a junk warranty?" He asked, "What's the difference?" We told him, "They both cost about a dime a foot. The real one will remain in effect on your project until 2008. The junk warranty you're considering is probably worthless inside of a year." How can that be?

CARLISLE sells real warranties. With roofs in service more than 30 years, there is a huge reserve fund to backup the promises. Warranty inspection is the toughest in the industry. The roof is made "by the book" or it won't be warranted, and the roofer is out of the program.

How can you tell a junk warranty?

- Not enough reserves for possible claims on present projects.
- Owner must inspect frequently. If he doesn't, warranty lapses.
- Representative charges for his inspections and requires repairs.
- Warranty is void if there is ponding.
- Owner must maintain flashings on rooftop equipment.
- Sealants not covered by the warranty.
- Not transferrable to new owners.
- High wind damages not covered.

Call to get your free copy of "Why Bad Roofing Practices Survive While Good Practices Struggle." It may change the way you pick materials and contractors.

We do not charge for design or product consultations. Ask for Bill South or Bob Hockaday.

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### It's a Job for Concrete!

The builders of Hawaii—above the ground and under it—have long prized the strength and endurance of concrete. For roads, bridges, tunnels, waste disposal plants, reservoirs, for almost everything we need in our daily lives, concrete is one of the reasons Hawaii's lifestyle is the envy of the nation.

But, as climate helps make Hawaii the world's Paradise, it can also require our infrastructure to resist such things as floods, hurricanes, and erosion. Few of man's inventions have served so well so long as concrete.

It will serve Hawaii far far into the future. It's the job it was made for.

For information on concrete and masonry construction and on the latest state-of-the-art technologies available and working for Hawaii now, simply call the CCPI Research Library at 833-1882.

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### H-3 Freeway


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Bob Hockaday

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See these products at the upcoming Pacific Interiors Expo '93, Oct. 7 at the Hawaii Prince Hotel. Call 833-4344 for details.

UH Appoints Shirley Cruthers
Dean Raymond Yeh of the School of Architecture, UH-Manoa, has named Shirley Cruthers assistant to the dean for special projects, a new position. Among Cruthers' responsibilities will be assisting the development of a year-long lecture series, coordinating annual giving and public relations. Cruthers was formerly executive vice president of the Honolulu Chapter/AIA.

Peter Calthorpe Featured
Architect Peter Calthorpe, a leader in the movement to rethink the nature and quality of growth and to redesign the American Dream, will present his design philosophy at an all-day workshop Charette, Oct. 22, Tokai University. Contact Alex Neuhold, AIA, 263-0671 or Ramona K. Mullaney, APA, 533-0777 for information.

Maui Students Receive Awards
Robert Enriquez, a Saint Anthony graduate, and Dennis Harmon, a Lahainaluna graduate now attending the University of Oregon, are the recipients of the sixth annual scholarship awards co-sponsored by the Maui Chapter/AIA and the Wailea Resort Company, Ltd. Awards, amounting to over $5,000, were presented July 22.

Funds for the scholarships were raised during a golf tournament May 15, an annual event held to assist Maui students currently studying architecture at various universities.
1001 Bishop's lobby demanded an attractive entrance encompassing durability and ease of maintenance. The answer lay in Walnut and Roman beige hues of Travertine, a classic yet practical Italian marble import. Walls, escalators, floors and balcony areas reflect its beauty and versatility. Marble. There's 1001 uses for it.

Phone 526-0467
Halloween Treat Street
The fourth annual Halloween Treat Street will be returning to Bishop Museum on Oct. 31 from 5:30 to 8 p.m. This is a community-focused activity organized by the American Institute of Architecture Students (AIAS), UH-Manoa Chapter.

This event includes the design, construction and erection of building facades by the architecture students. Halloween night AIAS students dress in costumes and pass out treats from the building facades. This event is free and open to the public. All ages are invited to attend.

Steel Framing Covered
Steel framing is quickly becoming the most popular alternative to wood in the residential construction industry. To help optimize quality performance, the American Iron and Steel Institute has published the Residential Steel Framing Manual for Architects, Engineers and Builders. For information, call the AISI's Steel Home Hotline at (800)-79-STEEL.
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