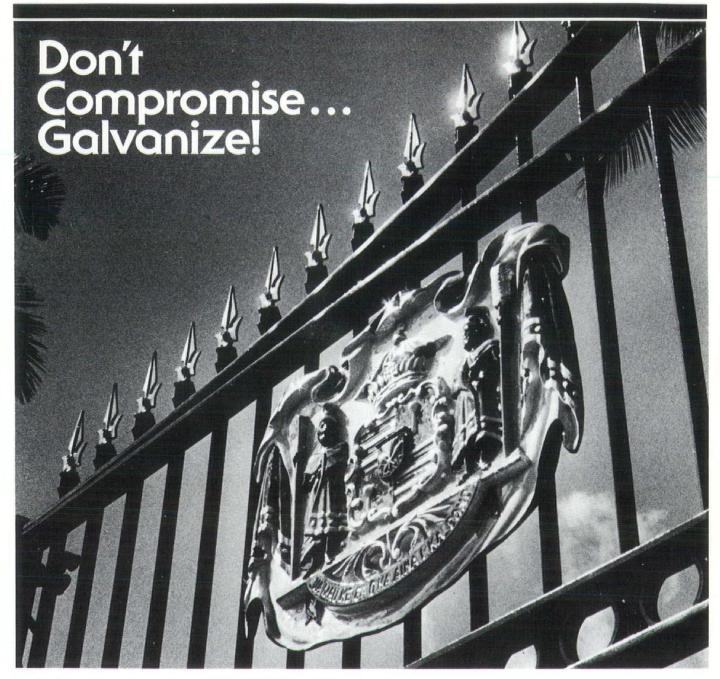
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Cover: The 60-year-old Hawaiian Electric Company Building recently underwent functional waterproofing restoration. Photo by Sandy Tottori, Trade Publishing Company

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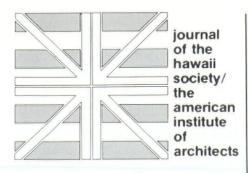
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### PRESIDENT'S MESSAGE

## Revving Up Our Government Affairs Program

by Evan D. Cruthers, AIA Hawaii Society/AIA

olicies, plans and ordinances such as land use zoning and building codes impact our practice daily. To ensure that knowledgeable decisions are made by our government

leaders, we must be active and involved in the process of

government.

Government Affairs
Commission. Chaired by Doug
Luna of CJS, with ViceCommissioner Spencer
Leineweber of Spencer Mason
Partnership, and Kenneth Brown,
FAIA, completing a triumvirate
leadership group, the mission of
the Commission is:

- To analyze planning, architecture and professional practice issues affected by the laws and regulatory policies of the federal, state and local government; develop policy positions and proposals on these issues and disseminate them to the government, the Society and the general public.
- To coordinate efforts by Society members and staff to advocate policy positions and proposals before legislative and regulatory bodies, while developing and maintaining a continuing liaison with key legislators, executives, regulatory officials and Society members.

The three commissioners provide assistance and guidance to the Government Relations



Committee, the Urban Design and Transportation Committee, and the Codes and Military Criteria Committee.

Government Relations Committee. Glenn Mason of Spencer Mason Partnership

volunteered to chair and revitalize this committee. His primary goal this year is to have it fully organized and operational, with manpower and a consensus list of issues worthy of public policy statements, well in advance of the 1988 Legislative Session.

For this session only, Glenn prepares and presents the Society position through his own testimony or formal correspondence, after coordination with the appropriate committee chairs, commissioners and Executive Committee.

The committee is now drafting the public policy position statements for consideration by the Society. Member comments will be solicited later during the year. First, through a survey process to be conducted later this spring, the committee will ask members for key legislative contacts that will provide a data base for future legislative action.

Urban Design and Transportation Committee. Chairman Bob Crone of Hickam has the largest committee, with 19 members who will remain closely involved with the cutting

(continued on page 30)

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## HISTORIC PRESERVATION

## Facelift for HECO Building

by Victor Szczepanski

ne of Hawaii's most prominent and unique commercial buildings, The Hawaiian Electric Company (HECO) Building, has just received a functional, weatherproofing facelift. Located at 900 Richards St., the HECO Building is adjacent to a number of other historic buildings in downtown Honolulu such as the Iolani Palace, Ali'iolani Hale and the Old Federal Building.

The Old Federal and HECO Buildings were both designed by the New York architectural firm of York & Sawyer, with assistance from Honolulu's architectural firm of Emory & Webb.

The Spanish-colonial style building was constructed of structural steel, concrete encased columns, walls with reinforced concrete, hollow-tile floors and steel roof supports. The exterior of the building is finished with stucco and terracotta cornices, belt courses, window sills, and churriguera style columns.

The building was constructed by Ralph E. Woolley, contractor and completed in July 1927 at a cost of \$750,000. Newspaper articles written in 1927 from The Pacific Commercial Advertiser, predecessor of The Honolulu Advertiser, stated that the building was the work of "master craftsmen" and that the Hawaiian Electric Company "spared neither expense nor effort to provide a structure adapted not only to its own need, but to the locality in which it was situated."

Over the years the stucco



The Hawaiian Electric Company (HECO) Building, completed in 1927, was erected entirely without the use of wood. (Above) Reinforced concrete, hollow-tile and ornamented metals were used as the basis for construction. Sixty years later, HECO received a functional weatherproofing facelift. (Below) Comparing both photos, note how cracks in stucco conform to joints in hollow-tile blocks. Photos courtesy of HECO Corporate Library



veneer has cracked. And even though it is solidly attached to the hollow-tile substrate, it allows rain to infiltrate into the inside of the building. The following are possible causes for this cracking:

 improper proportioning of water in stucco mix design;

 rapid hydration due to improper curing and substrate preparation;

 difference in absorption between the hollow-tile units and mortar joints.

These causes would create shrinkage cracks which at the time of construction were probably unnoticable and disguised by a coat of paint. In the course of time, because of the difference in expansion between the stucco veneer and the hollowtile substrate, the cracks opened up and now cover over 50 percent of the building, creating a waterproofing and restoration nightmare.

The alternatives for a solution to the waterproofing and

restoration were limited to three items:

 Remove existing stucco and re-stucco all cracked areas. With cement adhesives and admixtures, stucco can be strengthened to limit cracking and shrinkage. However, removal would be difficult and costly.

 Stuccoing over existing cracked stucco would surely fail with the cracks telegraphing through the new stucco.

#### HECO — A prominent and unique commercial building

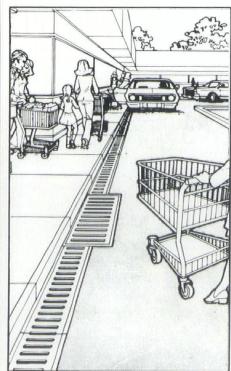
 Patch the cracks with elastomeric crack filler and coat the building with a textured (to simulate stucco texture) elastomeric coating.

This procedure does not compromise the historical integrity of the building but provides an aesthetic, long lasting alternative to painting. Simply patching and painting would not waterproof or hide the imperfections in the stucco.

The project is under progress at the time of this writing and will be completed by the end of April '87. The consultant for the project was Mr. Joseph Dupont, the contractor was Western Waterproofing Company and AmFac Distribution Hawaii was the material supplier. HA

Victor N. Szczepanski attended Lawrence Institute of Technology's Construction Engineering Program and has been involved in Historic Preservation jobs such as the "Over the Rhine" District of Cincinnati, Ohio. He is an associate member of the Cincinnati Chapter of AIA, as well as the Construction Specifications Institute. He is presently employed as a waterproofing and building restoration specialist at AmFac Distribution Hawaii Building Materials Division.

## ACO Trench Drain Quiz



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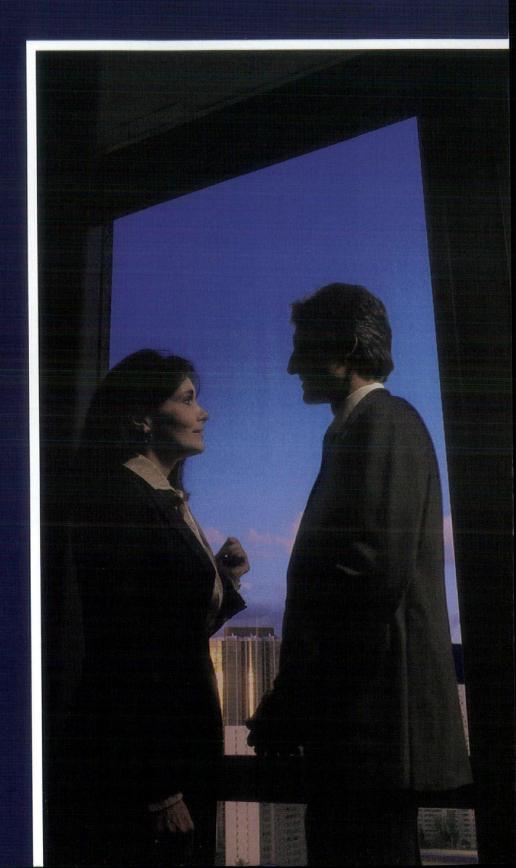
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### HISTORIC PRESERVATION

## The Natatorium

## A Question of Reverence, Relevance and Validity

by Christopher J. Smith, AIA

he decision to investigate several opportunities of preserving the Natatorium was first initiated in 1984, by the City & County of Honolulu through a grant offered by the State of Hawaii. The objective of this analysis was to offer to the Legislature various viable alternatives for their consideration—all with different designs and costs.

Taken from The Summary to the Final Preliminary Planning Report—Waikiki War Memorial Park and Natatorium, March 1985, the initial consultant assignment focused upon two parallel studies:

- Evaluation of the Natatorium's existing structural damage; and
- Evaluation of the prevailing ocean currents, and its effect upon the Natatorium.

These two "benchmarks" of facts were constantly reviewed during the design process. It became immediately clear that removing the Natatorium's sidewalls entirely would drastically endanger the adjacent beach configuration. Consequently, all plans dealt with

the design and cost for preserving all or part of the Natatorium frame.

Key findings during the structural analysis determined that the Natatorium is so severely deteriorated that much of the complex would have to be demolished and reconstructed if it were to be brought back to its original grandeur.

In summation, the three design studies are:

Scheme 1—Landscape

Peninsula—The filling of the pool with landscape elements, structural corrections-including repair of the seawall, and with the memorial arch being retained. Cost \$6.7 million

#### Scheme 2—Beach

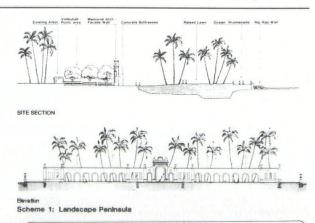
Restoration—Creation of a public beach based upon scientific oceanographic analysis, memorial arch to be retained for historic purposes. Cost \$4.6 million. Annual maintenance \$66,022

Scheme 3—Natatorium Restoration-Natatorium restored to its original condition with provisional modifications made to assist the pool circulation. Cost \$10.9 million. Annual maintenance \$167.634

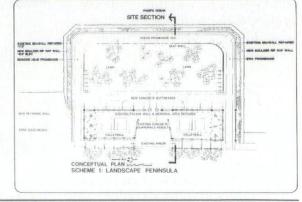
Before an answer is reached to the overlying question of what is to become of the Natatorium, several important facts have to be recognized:

- The "History of the Natatorium Study" reports accurately that "maintaining a man-made structure in a marine environment was inherently problematic.
- The report also states that poor circulation between the pool and the ocean caused water quality to approach dangerous levels. This condition, given the existing tidal actions is unlikely to change without major modification or sophisticated

(continued on page 28)



All plans dealt with the design and cost for preserving all or part of the Natatorium frame. Scheme I (at right)is one of three design schemes presented. Schemes 2 and 3 are presented on page 28.



## HISTORIC PRESERVATION

# Architectural Opportunities in Preservation

by Phyllis G. Fox, President Historic Hawai'i Foundation

ince rehabilitation surpassed new construction in dollar amounts several years ago, we have witnessed increasing opportunities for architects to become involved in preservation projects here in Hawai'i.

The best example has been the work done in Chinatown where more than half of the 80 historic buildings have been fixed up, as well as the recent announcement of plans to restore the Moana Hotel and fix up the Royal Brewery.

The work done on government buildings has also been remarkable; from the Federal Building where the downtown post office is located, to Aliiolani Hale, the Territorial Building, and now the Bethel Street Police Station.

Opportunities are beginning to increase on the Neighbor Islands as well. Under the statewide Main Street Program of Historic Hawai'i, small towns are addressing the architectural design of their downtown buildings as part of this economic development program.

In Hilo, a Design Committee made up of merchants and property owners has developed design guidelines for 14 buildings, with 17 more waiting for consideration.

Plans will include implementation of the design guidelines through cosmetic and structural approaches. Part of the funding to pay for the needed



The Old Federal Building in downtown Honolulu underwent restoration including the window grilles and Corinthian capitals. Richard G. Wood, AIA, handled the architectural responsibilities for the renovation.

architectural services will come from property owners and Housing and Urban Development (HUD) money through the Community Development Block Grant (CDBG) Program.

The Main Street communities of West Kauai and Hanapepe recently went to bid for design assistance using CDBG grants from the county to develop plans for specific buildings which need both surface and structural work.

These pilot projects will increase awareness in their communities about the ways that architectural planning works and the details of how a building can be restored, upgraded and continue to be profitably used.

Shared information will also include details on the Rehabilitation Tax Credits which survived the recent tax revisions and allow a 20 percent credit on a "certified historic structure" and a 10 percent credit on buildings constructed before 1936.

In addition to job opportunities, preservation is providing additional leadership opportunities for architects to serve on Boards and Commissions which review. guide and set preservation standards for communities.

The Hawai'i Historic Places Review Board has always had a position for an architect, established Historic District Commissions as well.

The Department of Interior recently mandated that counties become involved in the national historic preservation network by passing ordinances to establish a County Historic Preservation Commission under what is called the Certified Local Government program. This has been done on Kauai and is underway on Maui and the Big Island. The new Commissions will also have positions for architects.

The growth of rehabilitation projects in our state and the opportunities for community service reflect a change in the building environment which needs to be addressed by

(continued)

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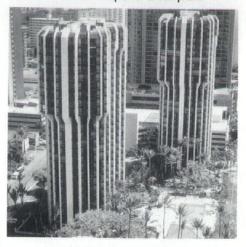
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Plans were recently announced for the restoration of the Moana Hotel (above), built in 1901, by the architectural firm of Chapman Desai Sakata Inc. (Below) Buildings along Nuuanu were renovated by First Interstate Bank and McCandless Properties.



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architectural service and by education.

As architects address older and historic buildings, there needs to be honesty. Buildings that were built years ago must continue to honestly reflect their history, and honestly meet the needs of today's tenants. Both can be achieved functionally and aesthetically as has been proven time and time again in work which has and is being done statewide.

We also need to be sure that the students of today are receiving training they need to address these changing needs in the architectural field.

Recently, we took a great step forward with the establishment of a Historic Preservation position at the University of Hawai'i.

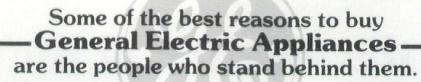
William Murtagh, Ph.D., a leader nationally and internationally in the field, is teaching a course and heading the program.

Not only is he teaching an overflow class, but also has coordinated presentations of other leaders in preservation in a town and gown series of conferences.

In their class projects, his student are addressing real problems in our community and pointing up additional need for architectural input into the county planning process, in development of Historic Districts and the expanding focus on rehabilitation in the small towns throughout our state.

The construction trend toward rehabilitation and the economical reuse of older buildings nationally is certainly evident here in Hawai'i and offers interesting opportunities for both occupational and volunteer leadership from the architectural community. HA

Historic Hawai'i is the statewide, member organization dedicated to the preservation of historic structures, sites and objects. It was founded in 1974 and has a membership of 2,000.





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### HISTORIC PRESERVATION

# Restoration of the Old Honolulu Police Station

by Fred N. Sutter, AIA
Fred N. Sutter & Associates, Inc.,
Architects

he Old Honolulu Police Station, designed by Architect Louis E. Davis and built in 1929 at the foot of Merchant and Nuuanu streets, is alive and well again. For the past five or six years, the building has been neglected and abandoned, with the exception of the annual March of Dimes Halloween forays.

To save approximately \$250,000 annual rent payments, the City and County of Honolulu intended to move and consolidate departments which were located at different areas around Honolulu. The automobile registration, driver's licensing and special licensing departments were to be part of this original plan, but were eliminated when the Downtown Business Association voiced strong objection to the potential traffic problems these departments would bring to the area. It is interesting to note that the original building was somewhat controversial back in the 1920s. The original concept included an emergency hospital, but it was left out for cost savings. (Seems not many things change.)

Our first major surprise in this restoration project was finding out the City had absolutely no blueprints, sketches or even photographs of the building! Surveying the existing structure and its components was a notable undertaking. Even though we performed a very thorough

investigation and documentation, there were still a few surprises in store for us during the construction process. Thankfully, most were good surprises, such as the discovery of the painted artwork on the second floor vaulted ceiling, which had been covered with canec. Restoration of the decorative ceiling was done

during construction by artist Shu-Po Tang.

Over the years, the basic reinforced concrete structure had undergone numerous undocumented changes and additions, and was grossly neglected. We worked with the State Historic Foundation in determining the areas that should



A main entrance view of the Old Honolulu Police Station as seen from the Merchant and Bethel streets corner. The architectural firm worked with the State Historic Foundation in determining the areas that should be restored to their original condition.

be restored to their original condition, and surprisingly, there were many still left. Some of the major significant areas were the ceramic tile, marble veneers and counters, brick floors, painted ceilings, court rooms and paneled judges' chambers. As a point of interest, 11 tons of marble were imported from France for the original building.

The existing plumbing and electrical systems were demolished and replaced with new systems throughout. The complex now has a central air conditioning system, which replaced a combination of fans, pipes, air handlers, etc., that were installed piecemeal over the years. Great care was taken to conceal ductwork, conduit and piping throughout the project, especially in the historically significant areas.

Ambient lighting was used to accentuate the hand-painted vaulted ceilings. Throughout the project, lighting fixtures were chosen to suit the building. Some of the original fixtures were rebuilt.

Achieving conformance to present building codes and agency regulations was a challenge. Exit stairways were a major problem, as the existing upper floors were served by only one exit stair. Previously, a metal ladder had been added from a top floor office, but it ended 30 feet short of the street level. A second exit was provided in the new makai addition.

The building exterior was restored, including repairing, refinishing and reglazing of the existing steel casement windows. The makai walls of the structure were very basic, with little or no architectural embellishment. Over the years, many pipes, conduits, ladders, awnings, ducts, holes, etc., had been imposed on them, in them, and over them. The Ewa end of these blighted makai walls was three-stories high, with a very rough surface and without openings. Obviously

(continued on page 31)



A view of the ewa end of the existing and new structure of the restored Honolulu Police Building at the corner of Merchant and Nuuanu streets.



## HISTORIC PRESERVATION

# The Hawaii State Library A Historic Building with a Contemporary Mandate

by Rose Cruz Churma Aotani & Associates, Inc.

rends in our society have increased demands on libraries. Libraries can no longer afford to be a repository of books and documents exclusively. It has to respond to the communication revolution that is sweeping our society, where data is expected to double every 20 months. Accordingly, the Hawaii State Library (HSL) has been providing information retrieval and collection services to the community, using current technology within the confines of a historic structure.

The present HSL building was

constructed in two phases. The first phase was designed for the Territory of Hawaii by Henry D. Witfield of New York, in association with H. L. Kerr of Honolulu. Completed in 1911, the library building was one of the thousands in the United States funded by Andrew Carnegie.

The second phase was completed during the latter part of 1929, and was designed by Honolulu architect C. W. Dickey. The highlights of this new addition were the opening of the children's Edna Allyn Room with its own entrance (from what used to be Hotel Street), a new general

reading room and the courtyard. The library also served as temporary offices for Hawaii's executive branch in 1929-30 when the Iolani Palace was being repaired.

Edna I. Allyn, head librarian in 1907-27, wrote in the library's annual report, "the library building, constructed of reinforced concrete, is Graeco-Roman in design and presents a pleasing exterior, the grey green of the concrete harmonizing with the green-tiled roof and contrasting with the dark tones of the copper doors in the portico . . . the same grey tones are



An architectural rendering of Hawaii's flagship public library, a building that is listed on both the State and Federal Registers of Historic Buildings.

carried out in walls and furniture, relieved by the dark woodwork and bronze fixtures." Although the description was meant for the phase completed in 1911, it also aptly describes the addition completed in 1929.

The library has not gained additional usable space since 1929, but its collection and services have increased dramatically since then. Its bookstock alone grew from 30,000 to 500,000 in 1986. It continues to attract one third of the State's public library users, and provides in-depth information services for the government and business sectors. The number of patrons that use the library grew steadily, and by 1986 the average weekly count was estimated at 10,000 users.

The need for additional space to adequately house the functions of the HSL has been identified as far back as 10 years ago. The site chosen for a new facility was the old Linekona School grounds. The facility was to be built behind

the historic Linekona School building, but this proposal was never approved. Since then, the library has been in a state of limbo. Alternative sites were explored, but no available site could adequately satisfy the public service functions of the library.

Finally in 1986, the State commissioned Aotani & Associates, Inc. to develop a conceptual site and building plan expansion for Hawaii's flagship public library.

At the start of the project, it was apparent that the development of an acceptable expansion scheme was affected by several factors. The building is listed on both the State and Federal Registers of Historic Buildings. The library and its immediate surroundings are also the recipient of works of art. Two bronze sculptures by Dame Barbara Hepworth occupy a corner of the rear portion of the site. Juliet May Fraser murals. which were restored in 1986.

adorn the walls of the children's Edna Allyn Room. Needless to say, the agencies mandated to preserve Hawaii's historical and artistic heritage were adamant about the retention of the building's historic ambience and artistic treasures.

The 1968 Civic Center master plan, prepared to provide the State with a practical and flexible plan to guide the development of its Civic Center also affected the HSL's expansion options. Because of the need to visually correlate the structures and spaces within the area, the plan recommends that adequate and modulated spaces be provided and unified by landscaping. It also articulates the need to preserve and protect the visual integrity of the Iolani Palace. Accordingly, the plan calls for the decentralization of parking facilities near the periphery of the Civic Center. It also discourages the use of surface parking within the center. In view of these recommendations, one of the



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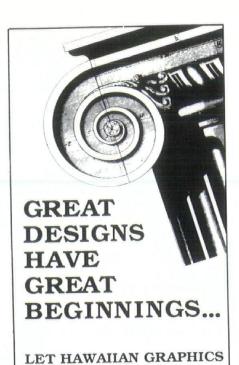


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ORDER DESK: 841-7527 TOLL FREE: 1-800-372-5524 State's long range plans is to convert Likelike Street into a pedestrian mall, thus limiting vehicular access to service vehicles.

Honolulu's Ordinance No. 3947 which established the Hawaii Capital District as "Historic, Cultural and Scenic District No. 1" also affected the HSL's renovation plans. The ordinance lists the library as a structure worthy of preservation, thus allowing changes to it only when these are necessary for public functions. Because the ordinance requires an open area of 80 percent (the existing open area is already at 65 percent) the State can either apply for a waiver, or consolidate the parcels of land occupied by the library, Iolani Palace and Likelike Street into one tax map key.

The existing structure sits toward the Capitol Mall portion of the property. The building's facade, which faces King Street, is enhanced by an expansive, tree-shaded lawn. The ambience created by the open green space and the majestic trees are highly valued by the users of the area, such that, at the initiation of the project, community groups have expressed concern regarding the proposed expansion.

The condition of the existing structure also limited its expansion potential. The first phase is a two story structure; the second phase retained the two above-grade levels of the first phase plus a basement that wrapped around the unexcavated portion below the courtyard. A special feature of the library is a two-tier metal shelving system on the Ewa-Makai wing, which has a glass plate floor mezzanine at mid-height.

A three-prong approach was used to arrive at an acceptable solution to the problem. A survey was used to determine the existing and projected needs of each section that comprise the Hawaii State Library. Early staff involvement created a climate that encouraged cooperation and



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support to direction set by the HSL Director and State Librarian, and assured a functional structure. Ongoing interviews were also conducted with all affected state, county and community groups to arrive at a consensus on how best to utilize the site. Concurrent to these, engineering consultants provided data to assist the architects in arriving at the most feasible and least costly expansion scheme. At each stage of the study, an advisory group representing the library system and the private sector analyzed the recommendations of the consultants.

". . . has not gained additional usable space since 1929 . . .

The conceptual solution developed by design architect Michael Toma called for a below and above grade addition at the Capitol Mall side of the library. The basement to second floor levels are retained, plus the addition of a third floor level. Approximately 43,000 square feet will be gained by the library, expanding the floor area by 75 percent.

In effect, the functional requirements of the library dictated the mauka-end addition. The contiguous scheme makes it easier to implement the phased expansion for each section, and provides for more efficient use of personnel, since reference desks can be centralized. Not only does the existing courtvard retain its existing ambience, it acquires an additional dimension by being the central focus of internal pedestrian traffic. The courtyard will be renovated and enclosed by skylights as required by a new air-conditioning system.

Visually, the addition constitutes only a third of the existing structure's volume. The style and proportion of the historic structure established by

the preceding architects will serve as design guides for the future addition.

The new mauka elevation faces the State Capitol and fronts the future Capitol Mall. Although it is not the library's entrance elevation, the design architect felt that it should serve as a backdrop for pedestrian activities along the promenade and should enhance the mall experience.

Recognizing the need for an improved and expanded Hawaii State Library, the consultants'

recommendations were approved by the State Comptroller's Advisory Board in November 1986 and by the Board of Education in January 1987. The funding appropriation needed to implement the recommendations are now being considered by the State's policy makers. HA

Rose Cruz Churma is an architectural programmer/ planner of Aotani & Associates, Inc. She was the project manager of the Hawaii State Library Expansion Study.



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## HISTORIC PRESERVATION

## Kamehameha Schools' Heritage Center Program

by Daniel G. Chun, AIA

istoric houses connected with historic figures serve as educational centers and repositories for many small objects which can form a larger picture of an individual. Hawaii's museum houses are skillfully restored and set within relatively undisturbed sites. They all date from the 19th century and are associated with either Hawaiian royalty or American missionary families. In every case, surviving houses were the focal points for preservation. Their interiors

were, or still are, devoid of original furnishings.

A uniquely different challenge arose in the design of the Heritage Center for the Kamehameha Schools - the sole beneficiary of the "rest, residue and remainder" of Bernice Pauahi Bishop's estate, real and personal. Over 20 pieces of historic furniture and a small collection of household objects are kept at the Schools as a reminder that a real person is at the heart of the institution. But the homes that Bernice Bishop knew have all

vanished. The Executive Center in downtown Honolulu towers over the site of her birth. The State Capitol occupies the site of the Royal School, her girlhood home. Bishop Trust Company stands at "Haleakala" where she and her husband resided for most of her married life. The Royal Hawaiian Hotel replaced her beach house. Keoua-Hale, her last home, was demolished in 1926 to build Central Intermediate School.

The building program emphasized preservation of historic furniture and objects. The second purpose was education of any visitor as to the purposes of Bernice Bishop's perpetual charitable land-based trust.

The architect's proposal was to build a new house on the Kapalama Heights campus using all of the Bishop residences as inspiration. The exterior is reminiscent of early 19th century architecture, while the majority of the rooms are designed in late 19th century style. Aikupika, the "birthplace," is suggested by the pyramid roof and furnishings "buried" deep in the building section. The name of the second house, Haleakala, is perpetuated in the pink color scheme and in the roof top ornament.

Scanty documentation made the task even more difficult. The 1831 birthplace "Aikupika," translated from Hawaiian as "Egypt," survives only as a somewhat bewildering name. The only authentic record of the first



"Haleakala," the Paki-Bishop home built in 1850, is now the intersection of King and Bishop Streets. Photo courtesy of Bishop Museum

20 Hawaii Architect May 1987

Royal School is a floor plan sketched in a letter. One engraving, a few exterior photographs, and a Hitchcock painting were saved from Haleakala, the 1850 Paki-Bishop home. No interior photos are known to exist. Mrs. Bishop's correspondence and personal papers were destroyed in the San Francisco earthquake and fire, lending credibility to her name Pauahi or "consumed by fire."

The only surviving fragment of Haleakala is the broken iron bird from the garden fountain. In their collection, the Kamehameha Schools own fragments of the cast plaster ceiling from Keoua-Hale. Around this casting of the Hawaiian royal coat-of-arms, a new house is being built to preserve historic material associated with the Kamehameha family. The past and present activities which relate to this casting are both unique and typical of historic preservation efforts.

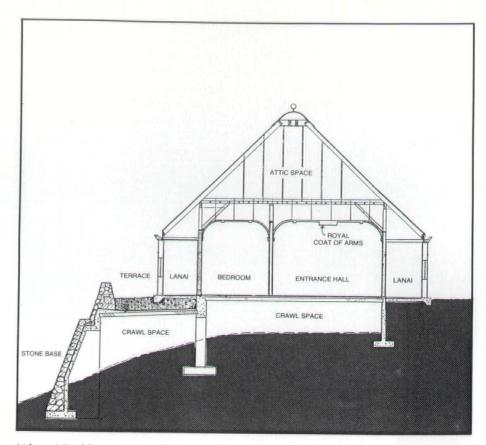
#### Keoua-Hale

Keoua-Hale came to Bernice Pauahi Bishop as part of the estate of her cousin, Princess Ruth Keelikolani. In one sentence of her one-page will, Princess Keelikolani bequeathed 80 percent of the acreage which ultimately became the foundation of the Kamehameha Schools.

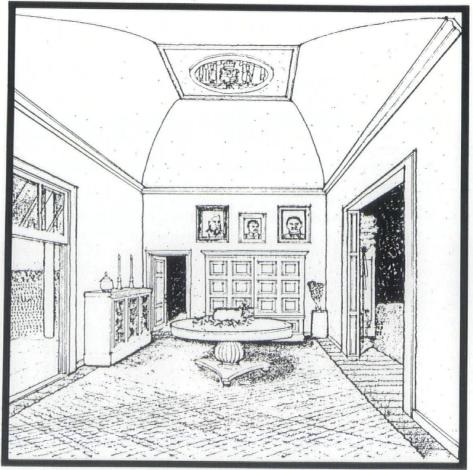
Begun in 1881, the palatial residence may have been built as an answer to King Kalakaua's Iolani Palace, Many of Hawaii's citizens are unaware that the united Hawaiian kingdom was ruled by two successive dynasties with different claims to sovereignty. Prophecy and birthright had brought the Kamehameha kings to power. Succeeding kings were elected by the legislature. This distinction between historic periods is reflected in the massive stone base and vaguely Greek-revival elements of the new house.

#### The Royal Coat-of-Arms

(continued)



(Above) Building section of the new house, due to the steep slope of the site it was not economically feasible to backfill the stone-faced walls. The floor elevation had to match that of the nearby chapel. (Below) Rendering showing the entrance hall with the Royal Coat-of-Arms on ceiling. All of the furniture for the project belonged to Bernice Pauahi Bishop.



Interior photographs of Keoua-Hale do not show ceilings. Contemporary newspaper articles by suitably-impressed reporters are the only record of the four castings which decorated the 16foot high ceiling of the drawing room. The ceiling height of the new house is 16 feet high and plastered in imitation of a groin vault to concur with these newspaper accounts.

Of the four castings, three are

known to have survived the 1926 demolition. William Bishop Taylor, the Bishop's godson, gave two castings to the Schools. The third casting is mounted in the entrance hall of Hanaiakamalama, Oueen Emma's Summer Palace. In 1984, when design efforts began on the new house, only one casting could be located at the Kapalama campus. (The second casting has since been found.)

Investigation shows that the 3foot diameter casting was not taken from the large wooden carving at the State Archives. It is not the same as plaster castings on the Iolani Palace ceilings. It differs from them in the design of the kahili (feather standard) and in the more sober design of the surrounding cloak. The surface was damaged and painted pink with red, white and blue detailing.

Due to damage and doubts about its color scheme, the Pacific Regional Conservation Center at Bishop Museum was contracted to survey and restore the casting. Subsequent analysis showed the original paint to be pale blue on a cream-colored background. The new overpainting was firmly bonded to the old surface preventing removal. In accordance with good conservation practice, it was decided to patch the damaged plaster and paint only the new infill. A plywood backing firmly attached in recent times was kept to help support the casting from the roof framing. New cast plaster moldings surround the royal coat-of-arms.

In July 1986, as part of routine construction supervision, a visit was made to the Pacific Regional Conservation Center (PRCC) laboratory. The casting from Keoua-Hale was on top of the worktable and, there, but a few feet away, was Kalakaua's throne - reminders of Hawaii's two royal houses. HA

Daniel Chun is a native of Honolulu and was educated at Punahou School and the University of Southern California. He is a partner in the firm of Kauahikaua & Chun/Architects and is project architect for the Bishop Memorial Chapel and Heritage Center at the Kamehameha Schools. His work in historic preservation has been in extended use for educational clients. Chun is currently a Director of HS/AIA and Commissioner for Public Awareness.



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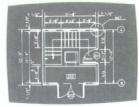
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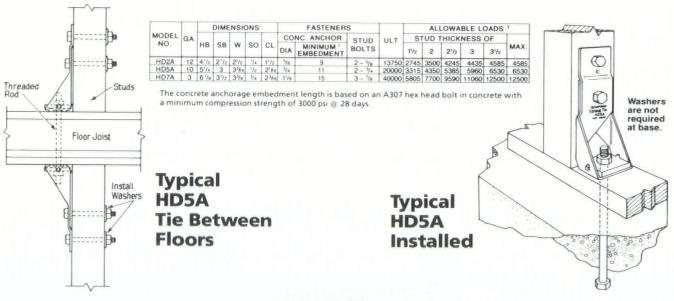
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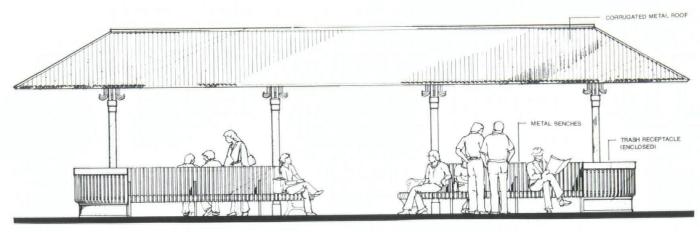
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## HISTORIC PRESERVATION

# Chinatown — Designing for Compatibility

by Michael S. Chu



## Kekaulike Bus Shelter

fter a year of planning and design, the long awaited Hotel Street Transit Mall is underway with jack hammers, barricades, backhoes and other heavy equipment ringing out the beginning of this city/federal transportation project.

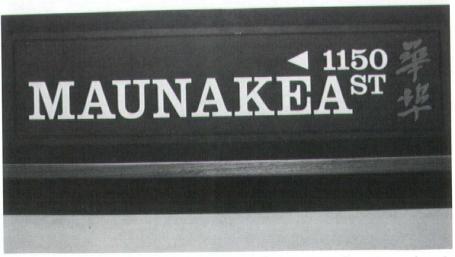
Under the guidance of Transportation Director John Hirten and the lead consulting firm of Parsons Brinckerhoff Quade & Douglas Inc., the project weaves through a mesh of underground utilities, starting at Richards Street and working its way into the historic Chinatown District.

It is here in Chinatown that several interesting urban design features were developed in the interest of the special district, the first being the Kekaulike Bus Shelter. Glenn Mason, of Spencer Mason Partnership, was commissioned to design this structure. Utilizing galvanized metal materials, ornate benches

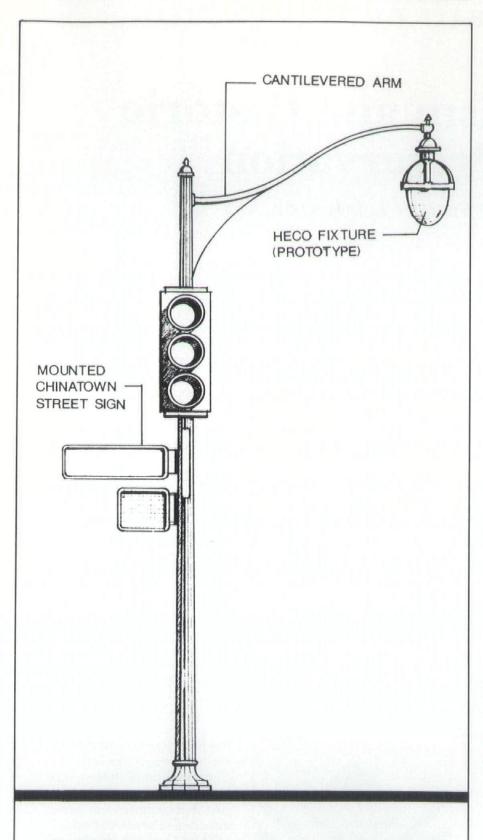
and connecting details, the architect produced an extraordinary design, simple in form yet beautifully compatible with the scale and character of Chinatown.

Accompanying the Kekaulike

Bus Shelter is the concept to break away from the traditional tall "cobra" street light standards in favor of smaller ornate fixtures reflecting the historic image and scale of the district. Old HECO poles and cantilevered light



New street signs for the Chinatown District have a unique lettering style, color palette and gold Chinese characters.



STREET LIGHT STANDARDS HOTEL STREET, CHINATOWN fixtures fronting the Hawaiian Electric Building on Richards Street served as the prototype for this design feature. Spearheaded by electrical engineer Ron Ho and Associates, these fixtures will illuminate the Chinatown section of Hotel Street.

New street signs along Hotel Street will also depart from normal city standards in favor of a unique lettering style, color palette and gold Chinese characters. Conceptualizing the initial design were members of the Chinatown Advisory Committee and Troy Smith, graphic artist.

Widening of the sidewalks will consist of the removal of existing granite blocks and lava rock curbs, and their reuse in the same general location. Other design features will include exposed aggregate concrete sidewalks with staggered rectangular scoring patterns.

Except for the granite blocks and curbs, this design package consists of all new elements to Chinatown, formulated, however, within the context of "compatibility with the area." Although less expedient, the project demonstrates the workability of special district criteria and the role public projects may play in implementing the objectives and intent of such ordinances.

Special acknowledgement is given to Project Engineer Marvin Char of the Department of Transportation Services, Deputy Director Ben Lee and the urban design staff of the Department of Land Utilization and other participants of the Citizen Advisory Committee who provided tireless input into the design process. HA

Michael S. Chu is a professional planner and landscape architect. He currently chairs the Chinatown Advisory Committee and is a member of the Hawaii Architect Steering Committee.

# Tourism and Historic Preservation

by Spencer Leineweber, AIA

he relationship between tourism and historic preservation was the topic of a recent study by the Western office of the National Trust for Historic Preservation. This study was done at the request of the western advisors to aid in lobbying efforts for additional funding and programs for historic sites. This study showed the

direct relationship between the income produced by visitors to historic sites, and yet showed the woefully inadequate direct funding to preservation programs.

Tourism was the top economic activity in five of the nine western states, namely, Arizona, California, Hawaii, Nevada and Utah. California is the number one tourist destination in the

nation with \$34 billion generated by tourist activity. In Hawaii, tourists spent \$4 billion in 1985.

Tourism development is the responsibility of the Hawaii Visitors Bureau (HVB), a private non-profit company with 78 percent of their budget coming from state government funds. In a recent HVB survey, most historic and cultural sites rated a 4 on a scale of 1 to 5, with 5 as the highest possible score.

To maintain this quality of experience, the HVB initiated a program with Kapiolani Community College "Hawaii No Ka O' Sharing the Island Experience" to help train tour guides to sensitively interpret cultural resources. However, the HVB budget is spent primarily on promotion and the actual funds for preservation of historic sites needs more attention from the visitor industry. The industry has been primarily concerned with promotion of the major attractions, and the private sector has had to be responsible for maintenance of the rest. Conservation of these special places is, at times, difficult and costly since most were never intended to serve visitors.

The adverse changes brought about by the influx of a decidedly different market base of visitors has caused many communities to evaluate the pros and cons of tourism before the resources that created the interest have been destroyed.

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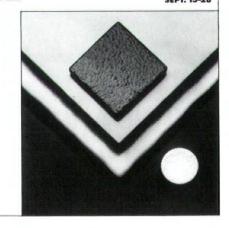
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Lahaina is a good example of whaling ships being exchanged for plastic leis and cellophane skirts. While local planning mechanisms were introduced to try to preserve the historic character, they have not been particularly effective. Traffic, backed up for miles, has threatened to cause a moratorium on all building on the west side. The carrying capacity of the infrastructure will never catch up with the overload because the planning is after the fact.

Lahaina is not alone in the state for preserving the historic structures, but loosing the sense of the lifestyle of the community. The shift, from serving residents' needs to serving primarily visitors, has eroded the quality that was once so attractive in several of our historic towns. How to prevent this from happening again and again as the tourist industry continues to

"... conflict between historic preservationists and tourism proponents."

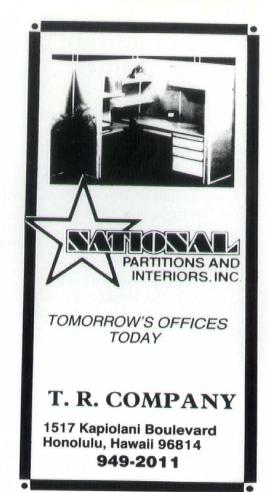
expand, has been the focus of the Hanalei Valley study and the Main Street Hawaii program.

The Hanalei Valley, on the north shores of Kauai, recently received a grant from the National Trust to partially fund a year long study to help resolve the conflict between historic preservationists and tourism proponents. The cultural resource study of the valley has been completed and will be the foundation to strategize appropriate tourism development. This study is strongly community-based with several committees working on solutions to individual problems in areas such as natural resources, taro and diversified agriculture, traffic and circulation, and economic development, to name a few.

The Main Street Program,

initiated by the National Trust for Historic Preservation in 1977 is now active in over several thousand communities nationwide. It is also a community-based program with historic preservation as the framework. Through four components of organization, promotion, design and economic restructuring, the people living and working within the community decide on the relationship of tourism to the economic and physical structure of the town.

The best historic preservation activity for tourism is still being undertaken at the community level, but the funds for this hard work are currently totally inadequate. When the tourism industry reaps many of the benefits, they should also fund more of the costs. The partnership between historic preservation and tourism must also be a direct financial one. HA



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## The Natatorium Design Studies

(continued from page 9) mechanical assistance.

• The Memorial has become a "protection" buffer for the adjacent Sans Souci Beach. Without the Natatorium seawall, it is quite unlikely that the beach would be in existence today.

Given the above data, the question becomes: What is the real validity of the Natatorium? At what price is the State willing to refurbish the Natatorium; and if done, what recreational benefit will the populace gain?

The design profession, by its very nature, has a strong

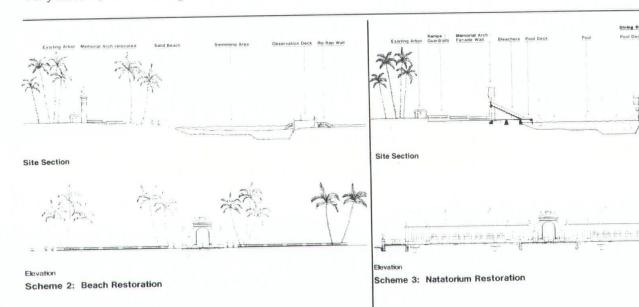
relevance to the past. Our historic body of knowledge rests with a building block of past masters. The guiding principle, when involved with restoration, is that the effort must have a tangible benefit to the public, or is economically beneficial to the client or developer. In short, the project has to make sense. The Natatorium is no exception.

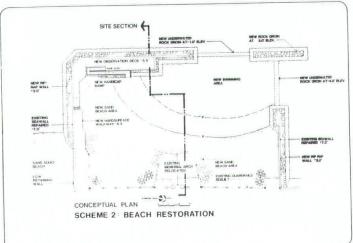
I am troubled by the lack of relevancy that has been used in arguments for saving the Natatorium and restoring it back to its original grandeur. Consideration has to be given to its ultimate usefulness to our populace. With the facts as they now exist, and with reverence to the war dead, it would be a grave injustice to spend millions of

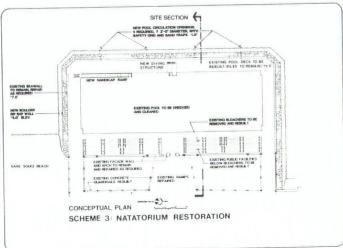
dollars to restore what could be described half jokingly as a beautiful Edsel.

The use of a saltwater pool, while relevant over 60 years ago, simply is not viable today with the advent of our freshwater aquatic centers. If a mission of the Natatorium is to honor those who gave their lives in World War I, then a responsible answer must take into consideration the contemporary needs of today. What more of a monument could one hope for than to be remembered, re-evaluated, and updated in a way that maintains reverence of the past and yet has validity today.

The beach scheme meets these important tests—reverence with validity. HA







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## Revving Up Government Affairs Programs

(continued from page 4)

issues in environment and transportation. They are presently compiling a list of community boards and committees on which there should be Society representation.

At the first Brown Bag
Seminar in March, Director of
the Department of
Transportation Services, John
Hirten; and Project Manager of
the Rapid Transit Development
Project, Jim Ball; and Chief of
Planning, Michael Schabas,
presented their work program for
the conceptual engineering of
Honolulu's Rapid Transit System.
Additional committee study is
planned on this issue for the
remainder of the year.

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The committee was also responsible for February's West Beach General Membership meeting presentation, and has been actively looking into the feasibility of a local Regional and Urban Design Assistance Team (RUDAT) to study Fort Armstrong's potential for community and urban development and waterfront usage.

Codes and Military Criteria Committee. Chairman Andrew Yanoviak is coordinating the

"... ensuring that our government has our professional input ..."

efforts of his committee members in the area of code review and close, continuous contact with code administrators.

They are working diligently on the review and analysis of the newly adopted Land Use Ordinance (LUO), and held a Brown Bag Meeting with John Whalen, director of the Department of Land Utilization (DLU). Whalen presented the basic changes adopted by the new LUO and compared it with the former code.

The committee suggests an interactive ongoing relationship between the DLU and the Society, and will plan future Brown Bag Seminars dealing with other government issues and new procedures.

The Government Affairs
Commissioners. In addition to
assisting the committees, Spencer
Leineweber also serves as the
Society's liaison with our
members on Kauai. She will
couple her business trips to that
island with informational visits to

the Society members there.

One of our newest commissioners, Kenneth Brown is very interested in the procedures used by the City and County and the State to award contracts for design services. He has therefore volunteered to be a member of an ad hoc committee to review the current process and develop a program to better acquaint the Society and the agencies involved, as well as discuss means of improving interaction and review of selection criteria.

In his third year as a member of our Board of Directors, Doug Luna has been busy with the initial determination of goals and objectives for the Government Affairs Commission and the three committees, the preparation of his commission's portion of the Society's annual budget, quarterly review and analysis of the performance of each of the committees, and his own membership on several committees. His previous experience and leadership has been of valuable assistance in accomplishing the Society's annual goals and objectives.

The Government Affairs Commission and its three committees have a vital continuing role in the successful operation of our Society, in ensuring that our government has our professional input in establishing the policies and laws that affect our environment, our community, and the practice of architecture as we know it. Our cooperation, assistance and suggestions to the commission and these committees will make a difference in the substance and quality of our government affairs programs. Let's help rev it up!

### Restoration of Old Honolulu Police Station

(continued from page 15)

it had been built up against a structure long since demolished. This wall and the makai area were perfect for the siting of a new three-story (5,500 square feet) addition. The exterior of the addition was designed to match the existing building, including fenestration, finishes and mission tile roofs.

All of the existing mission tile roofs were removed and replaced over new membranes, ties and flashings. Existing built-up roofing was completely removed and replaced with new insulation and built-up systems.

The exterior colors of the complex were chosen based on our findings after scraping through six or seven coats of paint of various colors. In a 1929 newspaper article, the original color was to be white stucco...we never found it. Graphics, colors, materials and finishes were carefully selected and coordinated to restore the character of the existing building.

To enhance and extend Merchant Street's charm. treewells will be spaced along the sidewalk. Existing coconut trees were saved and, with the addition of various trees, shrubs and ground covers, the perimeter of the new on-grade parking area will provide a pleasant appearance from Nimitz Highway, as well as the screening of the parked automobiles.

City and County schedules required construction of the project to be divided into three phases. Despite the difficulties encountered in this project, the entire team, the City and County of Honolulu, contractors, consultants, and our firm are extremely proud of the combined effort made in bringing life back to an important piece of Hawaii's past.

Architects: Fred N. Sutter & Associates, Inc.

#### Consultants:

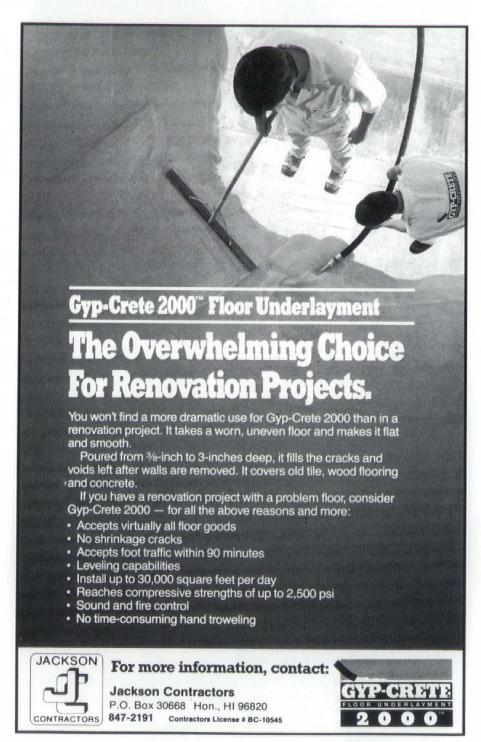
Surveyor: Wes Thomas & Associates, Inc. Soils: Ernest K. Hirata & Associates, Inc. Civil & Structural: I. Brian Hughes & Associates, Inc. Mechanical: Ferris & Hamig Hawaii, Inc. Electrical: Albert Chong Associates, Inc.

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# Designing a Waterproof Structure

by Jim Reinhardt TRB/Hawaii, Ltd.

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## MANAGEMENT CONSULTATION FOR SYSTEMS APPLICATIONS.



Jeffrey Freitas, CPA 2752 B Kalihi Street 808-847-3357 This process is basically the same as the one that takes place in designing a building. Design, engineering, construction drawings. Beyond this point, however, the industrial production sequence diverges radically from that of the construction industry.

In manufacturing, the next step is to build a prototype and test it ... "put it through its paces." Problems are observed and it's "back to the drawing board" to

WaterCheck: focus on the effects of water. . .

correct them. No one expects the first prototype to be problem free. The second generation prototype has far fewer problems; and the third has fewer still. By the time the design reaches the end user, very few defects remain. Even then, as we all know, an occasional "bug" is apt to remain.

In our industry, the first prototype is the one that the end user gets. No tests, no correction cycles, no second looks. No wonder there are problems.

How can we, the designers in the construction industry, produce products that have fewer problems? Two processes can help. The first is an evolving detail file. The second is the use of systematic drawing checking. Both of these processes are common sense, but for a number of reasons, neither seem to be commonly used.

#### **Evolving Detail Files**

We have all heard about detail files. Reuse the details from previous projects. Don't reinvent the wheel. Use "cut and paste" drafting. Save time; save money. All of this is true and valuable . . . as far as it goes.

The next step, a critical one in terms of minimizing problems, is to see how that detail worked when it got to construction. Was it straight forward and logical to build? Did all of the related parts fit into the sequence of construction in a reasonable way? Did the detail do what you were trying to do? Was it the best way to accomplish that goal? Did it leak or fall apart or look terrible after two years? After six years? Do you even know what it looked like and how well it was working after a few years?

What improvements should be made in the detail? Don't leave those observations and insights in the construction observation file. Take them back to the detail file. Revise those details. You may remember the problems of a particular detail but the drafter who actually does the drawing

doesn't and you may not pick-up his mistake. This is your prototype, test and revise process!

While this process seems perfectly obvious, it rarely seems to take place. The process requires communication between the construction observation process and the design/detailing process. It also requires that projects be monitored over a period of years. As projects have gotten more complicated, the pace of construction increased, office organization changed, and as the once close ties between architect and client have weakened, this opportunity to learn from the experiences of our past projects has been increasingly lost. Without it, we are doomed to repeat our mistakes over and over again.

#### Systematic Checking of Drawings

Many construction document checklists are available. Guidelines Publishing Co.

produces some excellent ones. ReadiCheck is a must (if you're not already using it, start immediately!). These checking systems don't focus on waterproofing, however. Designers consider the watertightness of each individual detail. After you have done that. step back and look at the overall pattern of the water on the building. Since we cannot build a prototype of each design and test it for leaks, we have to borrow an idea from the computer people and do a simulation test. Consider the completed set of construction drawings as if it were a completed building. Focus on the effects of water, as an isolated element, on your building. Call it WaterCheck.

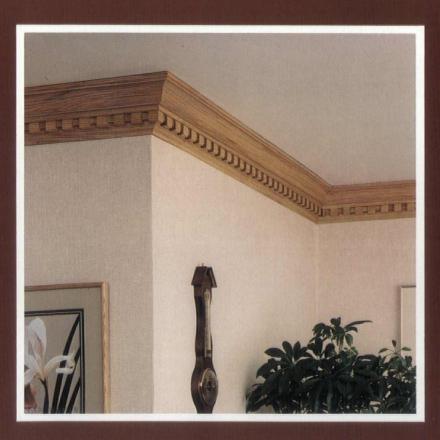
 Weather — How much rain should you expect in this location? How strong are the winds? From what direction(s)? Frequently, in construction litigation we see the results of inadequate consideration of the

localized weather conditions. Good localized climate data is available, but it may take some digging.

Start with the Hawaii Data Book. Hawaiian Electric Co. has an extensive weather monitoring system. The Weather Bureau has data gathering sites in many locations. The National Ocean and Atmospheric Administration (NOAA) is another excellent source.

The Hawaii Solar and Weather Information Pamphlet, available from the Department of Planning and Economic Development (DPED) has some data. If you're working on a rural site, the plantations have weather data for their properties. Residents of the area can be helpful. A realistic understanding of the conditions you are designing for is essential as the place to start.

• Site Conditions — What is the drainage pattern of the area? Is off-site water affecting your site? What are water retention



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characteristics of the soil?

• The Building — Follow the flow of the water from top to bottom, considering each area of the building, piece by piece. Where does the rain hit the building? Where does the water go? What makes it go there? What keeps it from going into your building? Is that where you want it to end up? Consider the effects of pressure differential

that will draw water through joints in flashings, siding, windows, etc. What is the test rating of the windows and sliding glass doors you are specifying? The Honolulu building code specifies that we design for an 80 mph wind (16 psf) for structural loads. Very few windows or door systems are rated for 50 mph (6.25 psf), much less 80 mph. The more common ones are rated for

about 30 mph (2.5 psf).

Just because a particular window is "pressure tested" doesn't mean anything. Check the test pressures to see if they are appropriate for your site. That same 80 mph wind will draw water up and over a 3" high vertical leg of a flashing. A 100 mph wind takes a 5" high flashing.

Since we can't use a prototype and test process, we have to take advantage of the information we have. The Evolving Detail File will assure that the knowledge gained from the construction of one building will find its way into the succeeding ones. The WaterCheck process will help to minimize the number of "dumb" mistakes you will make. There will always be products that don't perform the way they were supposed to and problems that occur during construction, but if you follow these procedures, many of your potential errors will be eliminated before the drawings leave your office. HA



### NEWS

## CSI in Hawaii — The First 20 Years

by Bill South

This May, the Honolulu Chapter of The Construction Specifications Institute (CSI) will be celebrating 20 years of service to the construction industry in Hawaii. Our local construction trade owes much to the hard work of CSI and its members.

The Construction
Specifications Institute was
conceived on the mainland in
1948. The organization's
founders envisioned an
organization that would serve to
improve specification quality and
promote vigorous interaction
between design professionals and
building industry representatives.

Over the last couple of decades, CSI has fulfilled this vision and has been instrumental in standardizing construction document preparation in the U.S. and Canada. CSI introduced the Three-Part Specification format and, in 1963, CSI presented the framework that evolved into the 16-division MASTERFORMAT, the document which provides guidelines for the organization of construction project manuals. In addition, CSI initiated the SPEC-DATA sheet format, a 10-part editorial style for construction product literature.

As early as 1963, specifications began to show up in Hawaii in the CSI format. The ripple effect of CSI quickly spread and within a few years there was enough interest to warrant a local chapter.

The Honolulu Chapter of CSI was chartered in the spring of 1967 with 52 professional and industry members. Of these 52 members, over a dozen are still very active with CSI, both on a local and national level. At the present, local membership is approaching 200.

In recent years the Honolulu Chapter has been stressing closer ties with the local Building Industry Association (BIA), the American Institute of Architects (AIA), and Trade Publishing Company. Starting in 1979, the Honolulu Chapter, in conjunction with Trade Publishing Company, published the first edition of "Hawaii Building Products Directory," a purchasing guide for specifiers, builders and

buyers. This yearly publication became an important source reference at a time when the large local supply companies were breaking up. The income share derived by CSI from the directory has provided funding for architectural scholarships and convention delegates.

In November 1986 the Hawaii/Pacific CIRIES (Construction Industry Research

Delegates of the Honolulu Chapter of CSI at the West Region CSI Conference in 1986.



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Information Education Services)
Group was formed as a special interim committee of CSI. It is located at the Matsuda
Technology Training and Education Center, Honolulu
Community College. Its goals are to conduct original research on building industry-related problems and to publish the results.

On the third Tuesday of each month, local CSI Chapter members gather at the Queen



Kapiolani Hotel for a dinner meeting and program. This gathering serves not only as a forum for the exchange of construction information, but provides camaraderie and direction for individuals from all areas of the construction industry. The meeting on Tuesday, May 19, will be special. It will be a celebration of the good work done, a review of where we have been and a preview of the next 20 years.

For more information about CSI, call Ron York, Membership Chairman, at 247-5500.

## HS/AIA 1987 Design Awards

The Hawaii Society/The American Institute of Architects (HS/AIA) recently announced its 1987 Design Awards Program to recognize and encourage outstanding work in architecture, urban design and interior design, as well as recognize significant contributions to the built environment.

Each entry in the Design Awards Program is judged for the success with which the project met its individual requirements. Entries are weighed individually, not in competition with each other. Size or type of a project in 36 Hawaii Architect May 1987 no way limits its eligibility, according to criteria set by the iury.

There are many standards of excellence such as environmental compatibility, urban context, creativity on a small budget, quality of space, structural ingenuity, workmanship, attention to social concerns, or, if appropriate, even pure delight.

The jury for the Design Awards Program will consist of five members, of which, at least, four members will be award winners of the previous year.

The Design Awards Program is open to all licensed architects who are HS/AIA members in good standing for architecture, urban design and interior design projects completed since January 1, 1982. An Awards Banquet is scheduled for Thursday, May 21.

## HCT Adopted By ASID/ Hawaii Chapter

The American Society of Interior Designers (ASID) / Hawaii Chapter has designated the Honolulu Community Theatre (HCT) as its community project for 1987.

According to Diane Carr, ASID chairman, the organization will help the 72-year-old theatre group by organizing refurbishments to its facility on Diamond Head. There will be upgrades to the front-of-the-house, which includes box office and lobby space, as well as improvements made to the backstage areas.

"ASID and HCT are working together to make the theatre a more viable spot for productions. We welcome contributions of furniture, wallcoverings, paint and other materials," said Carr, whose committee includes other ASID members Kathy Gurski, Susan Des Jarlais and Frank Newland, as well as Gordon Dougherty from the ASID Industry Foundation.

There are also plans to renovate the restrooms at HCT, thanks to a \$20,000 grant from Honolulu Cellular Telephone Company.

"HCT did a wonderful job raising money for its building addition a few years ago, but there have never been enough funds to complete the interior. For example, there's a splendid rehearsal hall, but there's a great need for large mirrors, which are critical for musicals and dance performances. We hope to help complete the job," Carr said.

To make a contribution of goods to the project, call HCT at 734-8763.

### Kujawa Joins Honolulu Office

Walter A. Kujawa of the Leo A. Daly Omaha office recently joined the Alfred A. Yee Division...Leo A. Daly in Honolulu as an associate architect and project manager.

Kujawa, a graduate of the Massachusetts Institute of



Walter A. Kujawa

Technology, brings seven years of architectural experience with the firm to the Honolulu office. He has specialized in design of computer rooms and hi-tech office and medical facilities. His primary responsibilities have involved assignment and/or management of architectural personnel, detail coordination and liaison among all involved disciplines.

## NEW MEMBERS

The Hawaii Society/AIA recently welcomed three new members, nine affiliate members and six student affiliates. Profiles of each new member are below.

#### **AIA Members**

Susan V. Bradley owns her own company, Susan V. Bradley, Architect and also works for Bradley Shopping Center Co. She has a master's degree in architecture from Stanford University. Projects she has worked on include Salt Lake Shopping Center, Kona Coast Shopping Center, Pirate Bully Hayes Place and other local commercial developments. She also worked in San Francisco and Phoenix. Bradley is married to



Susan V. Bradley

Ralf Graumann, ASA and they have three children.

Her hobbies are model railroading and making wooden toys for Waldorf School.

Dean H. Okamoto, of Kodama/Okamoto, Architects, has both a Bachelor of Fine Arts and Architecture degree from the University of Hawaii at Manoa. He is married and says he enjoys art and classical music.

Allan Kazumi Sawai, of CJS Group Architects, Ltd., has a Bachelor of Arts in Pre-Architecture from the University of Hawaii. He is married and enjoys swimming, bicycling and yard work.

#### Associate Members

A. J. Garza, with Franklin Wong & Associates, is married and enjoys racquet sports. His education includes a Bachelor of Architecture.

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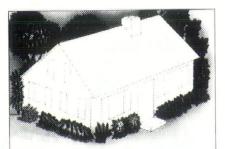
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### NEW MEMBERS

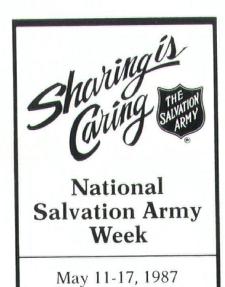
Edward T. Green, employed by Group 70, received his education at the University of California, School of Environmental Design. He is married to Rachael Davis-Green and they have two children. Playing the guitar, singing and furniture-making are his hobbies.

Alma S. McKenzie, of Wallace Y. Omori, AIA, has a Bachelor of Architecture from the University of Hawaii, Manoa. Her husband is Hugh G. McKenzie, III, and she enjoys reading and sewing.



Anthony Carpio Macawile

Anthony Carpio Macawile, employed by Maurice H. Yamasato AIA & Associates, received his Bachelor of Architecture from the University



surfing, basketball, woodworking and photography. Kent S. Saito, of Maurice H.

of Hawaii at Manoa. He enjoys

Yamasato AIA & Associates, has a Bachelor of Architecture from the University of Hawaii at Manoa. His hobbies include sports, drawing and computers.

Suzette M. Soucie, of Group 70, received her Bachelor of Architecture from Texas Tech University. She is married to A. I. Garza and enjoys photography.

Jeffrey Takata, another new associate member, is employed by Maurice Yamasato AIA & Associates.

Cynthia M. Umetsu is also with Maurice H. Yamasato AIA & Associates. She has a Bachelor of Architecture from the University of Hawaii and enjoys tennis and swimming.

Ross A. Yamamoto, of Maurice H. Yamamoto AIA & Associates, received his Bachelor of Architecture from the University of Hawaii. He is married, and hobbies include golf, softball and fishing.

Student affiliates from the University of Hawaii School of Architecture include Gran Kao, Karin M. Matsunaga, Gaylyn S. Ono, Kent Sakata and Richard W. H. Wong. Matsunaga is employed by Suzuki-Kawabata & Associates and enjoys photography and tennis; Ono is employed by Kodama/Okamoto Architects; Sakata notes that he enjoys music and guitar; and Wong, who is employed by Okita, Kunimitsu & Associates, Inc., enjoys tennis and swimming.

Jeneveh Randolph is a student affiliate from San Jose State University. Hobbies include painting, water sports, sewing, computer programming, target practice, dog show exhibitions, photography, woodworking and billiards.



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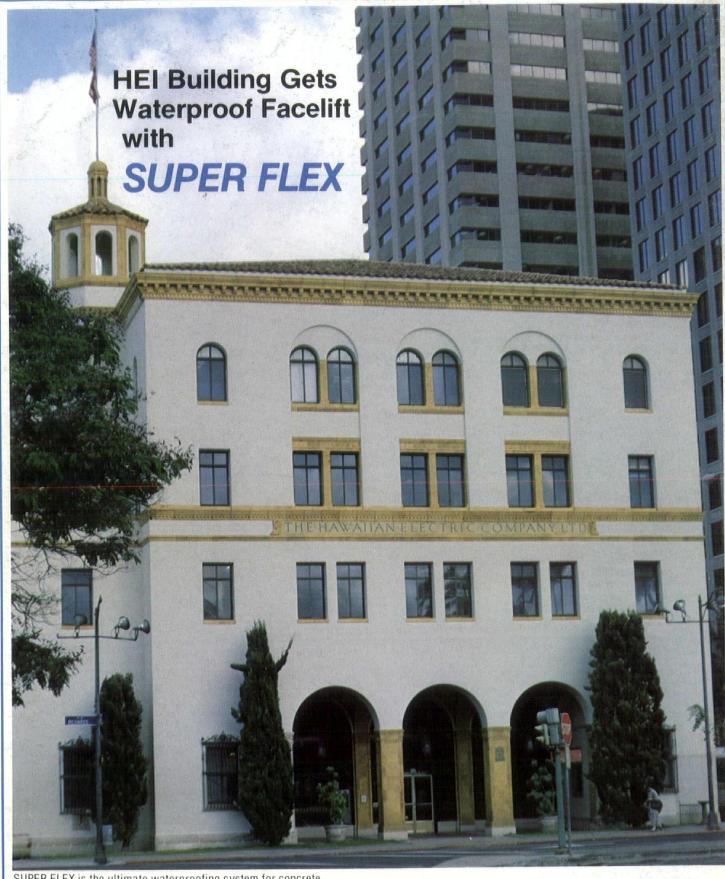


The Team: Ed Sakai (L), Project Engineer Allied Builders System Roy Sesoko, Facilities Project Coordinator, Kaiser Medical Center Philip White, Architect, White & Associates

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