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Fast-Food Restaurants

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The site for McDonald's at Discovery Bay was originally intended for a bank. In spite of serious drawbacks, architects transformed the space into McDonald's flagship restaurant, the chain's twenty-fifth restaurant in Hawaii. Geoffrey G. Paterson & Associates AIA designed this and many other fast-food restaurants in Hawaii.
Fast-food restaurants in Hawaii have been around for a long time and are today divided between locally owned establishments and mainland controlled national or regional chains.

When I came to Hawaii in 1961, I worked for Desmond Muirhead and one of our projects was the original master plan for Hawaii Kai. We would meet once or twice a week with Henry Kaiser and if we had a successful meeting we would celebrate by having lunch at the Halekulani. More often than not there was not much to celebrate (Henry J. was a tough client), and we ate five times at K.C. for every one at the Halekulani. As it turned out, that experience was to reap dividends in later years.

Seven years later I established my own firm and was busily engaged in designing residences. After completing the drawings for John Wade's house on the seventh green at Waialae, it was time to start on the design of Maurice Sullivan's equally large house on the water at Aina Haina.

In the summer of 1968 we were completing the plan for Sully's house when I received a call to meet some people called McDonald's who were in the hamburger business. Sully was negotiating for the franchise in Hawaii but was determined to develop a building that was compatible with Hawaii rather than the typical mainland building with golden arches and exposed roof-mounted air conditioning and ventilation equipment.

The result was the Aina Haina McDonald's which featured a high-pitched fire retardant shake roof within which all equipment was concealed. Exhaust was handled by a large chimney at the peak. Early success of the first McDonald's in Hawaii generated an accelerated development of additional buildings. The same basic design was utilized for units at Dillingham Boulevard, Kaimuki, Kailua, Pearl City and Kona.

Life was much simpler in those days and I recall that for the Aina Haina McDonald's there were only two letters in the contract file. The first was a short note from Marvin Elton to Sully indicating that Nordic Construction would construct the building for a maximum sum of $100,000. At the completion of the project, a second letter indicated that McDonald's had been built for $86,000 and credit of $14,000 was enclosed. Even so I had a call from the banker who expressed shock that such an exorbitant sum could possibly be spent on a "hamburger joint."

The early buildings were geared mainly for takeout service and seating was limited to outside patios with umbrellas. As the popularity of seating increased, patios were converted to covered lanais. Much later these were completely enclosed and air conditioned.

In 1970 a larger building was developed that still retained the pitched roof, but the material changed from wood shakes to tile. Waipahu, Wai'anae and Kahului all belonged to this category. Mililani had the double distinction of being the first McDonald's to be built almost in a cane field, and the first in Hawaii to have a Monier Tile roof.

Although the high-pitched roofs became a recognizable symbol of McDonald's in Hawaii, their days were numbered. Difficulties were encountered in servicing air conditioning and exhaust systems in the cramped attic space. Buildings at Waiakamilo Road and Pearl City were modified to a mansard facade roof which concealed the equipment but provided for easier maintenance.

Two major developments over the years were the addition of drive-thru windows, and enclosure and extension of the seating area. Although both McDonald's and Burger King have always stressed their differences through commercials, it is apparent that they both adhere to almost identical criteria in development of seating packages, salad bars and, more recently, the construction of greenhouse additions.

Several years ago when McDonald's held their national convention on Kauai, security was extremely tight. In order to protect
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I had a call from the banker who expressed shock that such an exorbitant sum could possibly be spent on a "hamburger joint."

Burger King in Kapahulu was designed to fit a restricted site. It was to be a prototype for a series of future buildings. Changes in the fast-food industry subsequently required larger seating areas and kitchen modifications, rendering such prototypes nonusable.
Burger King at Atherton House YMCA is a good example of building owners and tenants working together to renovate a significant building.

The secrecy of the latest equipment, and especially the previews of television commercials, admittance to these exhibits was as difficult as penetrating the bank vaults of Fort Knox.

Not all McDonald's buildings were free-standing and in-line restaurants were developed, most notably in the Ala Moana Shopping Center and Waikiki Business Plaza. At about this time the franchise was sold back to McDonald's Corporation which took over control of the operations in Hawaii. Sully retained the real estate and a separate corporation, McDonald's of Hawaii Development Corporation, continued to acquire sites and construct buildings.

One of the more interesting projects involved the purchase of the venerable Gump Building on Lewers and Kalakaua and walking the thin line between retaining the character of the building and yet providing McDonald's with enough exposure to satisfy them without being too overpowering.

Suddenly the twenty-fifth McDonald's in Hawaii was upon us and the site was a space originally intended for a bank in Discovery Bay. Its mezzanine (planned for loan officers) and total lack of available gas, sewer and water lines were serious drawbacks. But since it was to become the flagship restaurant, no expense was spared in creating a unique McDonald's with teak, custom-designed ceilings and an incongruous grand opening that featured champagne and a string quartet in black ties, no less.

After completion of the thirtieth McDonald's at the Royal Hawaiian Center in Waikiki, it was time for a change. Leland Onekea, who had been handling most of the McDonald's restaurants, was anxious to open his own office and took over the McDonald's account.

Shortly afterward Pentagram Corporation, owners of the Burger King franchise in Hawaii, learned of the break with McDonald's. Their advertising at that time encouraged customers to "Switch to Burger King" and this architect did.

The new Burger King building in Kapahulu was to be a prototype for a series of future buildings. As so often happens in the ever-changing fast-food industry, subsequent factors such as larger seating areas, kitchen modifications and special site conditions often rendered such prototypes nonusable in other locations.

The just-completed Burger King restaurant at Atherton House YMCA is a good example of building owners and tenants working together to renovate a significant building that was desperately in need of repair. A substantial sum of money was set aside by Pentagram to be spent on repainting the building, replacing badly termite-eaten windows and completely redesigning the landscaping.

Allied Builders System has emerged as the prime general contractor in the fast-food field. Successful completion of recent Burger King restaurants has been in no small way achieved through Allied's awareness of special problems and its ability to expedite and coordinate projects with a minimum of delays and extra costs.
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The fast-food restaurant has fully emerged as a vital convenience to patrons from all walks of life.

Twenty-five years ago a fast-food restaurant was merely a handy outlet for a final snack for the family capping off a Little League game, a day at the beach, or a drive in the country. Most meals were eaten at home, where dad was the sole provider of the family's income and mom was the sole cook of the family's meals. Fast food was either a novelty or a catch-as-catch-can repast and hardly in competition with a nutritiously balanced, home-cooked meal.

This is no longer the case. With a growing number of the population electing to queue up on a daily basis for breakfast, lunch and dinner, the fast-food restaurant has catapulted into the mainstream of daily life, advancing into its rightful place as a cultural landmark.

Contributing to the fast-food restaurant's new image is a confluence of elements incorporating such features as architectural and design innovations, a greater variety of food items, expanded customer service, employment opportunities and community involvement.

In the area of architecture and design, innovations are dictated by the diverseness of the customer base which is comprised of both children and adults and representative of an assortment of occupations and lifestyles.

Appealing to children are brighter color schemes, the inclusion of cartoon- and fantasy-characters' themes, and the proportioned space assigned to play areas equipped with spiral slides, whirlers, climbers and carousels.

Combining function with fashion, adult themes are readily reflected in the implementation of atriums, curved windows surrounded by planters, stained glass treatments and wall coverings.

Spotlighting the overall interior ambiance is the metamorphosis, in style and substance, of three areas: lighting, materials and furnishings.

In lighting, a more dramatic change is effected by utilizing angled soffits, roof lights and canned fixtures. Also, areas previously dark and constricted now are protracted by windows and mirrored walls.

Although at greater construction expense, materials such as stainless steel have been augmented with marble, laminated plastic and natural woods. For example, at a cost of $250,000 for two McDonald's restaurants—at the Royal Hawaiian Shopping Center and at Discovery Bay—koa wood is prominently featured in panelling, ceilings, faux beams and railings.

In furnishings, the emphasis is on style and flexibility. Custom designs feature wood trim and upholstered finishes. Free-standing seating and tables become adaptable to varied situations, such as rearrangements for a change in appearance or table groupings to accommodate large parties.

Also becoming an integral part of the interior milieu is commissioned artwork, as opposed to ready-made, commercial art items. Murals, paintings, serigraphs and sculpture executed by local artists and reflecting local cultural themes, play a major role in enhancing the dining setting and allowing for a more elegant atmosphere. Toward artwork alone for its Royal Hawaiian restaurant, McDonald's spent $50,000 and spent another $25,000.

With a growing number of the population electing to queue up on a daily basis for breakfast, lunch and dinner, the fast-food restaurant has catapulted into the mainstream of daily life, advancing into its rightful place as a cultural landmark.
Fast-food restaurants have seen a change in lighting, materials and furnishings. McDonald's at Discovery Bay is enhanced by natural woods and custom-designed ceilings.

For the recently completed Martin Charlot mural in its Kaneohe restaurant at Windward City Shopping Center.

Besides the more refined appointments, there is additional evidence that the fast-food restaurant has transcended the moniker of "hamburger joint." A broader, more nutritious bill of fare offers a variety of selections to fill any meal of the day. A good example is breakfast. Food items range anywhere from egg, rice and meat combinations to a meal-in-a-muffin to a Danish and coffee. The introduction of these menu items and the earlier 6 a.m. business hours have resulted in breakfast being one of the most popular meals of the day. A recent survey showed a wide cross section of breakfast customers, including truck drivers, early morning joggers, school kids and graveyard-shift workers, such as nurses, computer operators, and policemen.

Lunch and dinner also offer innovations. The salad bar appears with a wide assortment of vegetables and condiments. A baked potato with a choice of various toppings makes a meal in itself. For hardier appetites, grilled steaks become the order.

Not to be less obliged is the youngster who is usually opting for the favorite Happy Meal. In a time span of three minutes or less the most discriminating palates are satisfied, and still at the most affordable prices in town.

Paralleling the greater variety of menu items is a wider range of customer services. Primarily, with the installation of extensive conveyor systems and the addition of drive-thru areas, meals throughout the day are readily available to accommodate a highly mobile society. The drive-thru traffic alone affords nearly 50 percent of a fast-food restaurant's
Another customer service appears in the no-limit coffee refills poured by friendly morning hostesses. Also, a family can request a hostess to plan a youngster's birthday celebration.

An additional area in which the fast-food restaurant projects a new image is in employment opportunities. Thirty years ago the need to earn money limited the youth to selling newspapers or working in canneries. Today, fast-food restaurants not only provide numerous jobs for youngsters, age 16 and older, but also impart to them the advantages of learning such things as the many facets of running a business, how to greet and service the public, how to work with their peers and how to follow orders from supervisors. Also part of the employment package is an extensive management training program which offers various levels of advancement.

On a final note, but not a lesser consideration, is the fast-food restaurant's contributions to the community itself. Aware that it is part of a community and not an isolated structure, the restaurant cares enough to become involved with what is going on in the neighborhood. It remains approachable and open to help in whatever capacity it can. School activities, public functions, charitable organizations, fundraising events, Special Olympics—all benefit from generous donations of food items, paper goods, juice containers and entertainment by clowns or cartoon characters.

Thus, what begins as a structure designed to attract and conduct business also extends itself to generate jobs and good-will measures to its community family.
We have the industrial revolution to thank for fast food. Complex technological developments which saw the simultaneous invention and application of steel refineries, the light bulb and elevator, in turn led to a building type called “skyscrapers.” Skyscrapers and assembly lines generated a society of people on short lunch breaks. Private enterprise took care of the rest.

Entrepreneurs discovered a need to provide convenient, speedy and economical food service. Food types compatible with this notion began to develop: the hot dog, hamburger, potato chip, ice cream cone, pizza and even chop suey, all uniquely American. Entrepreneurs found all sorts of ways to market the food from mobile carts, lunch wagons, and quick pickup deli’s.

The Hibachi Restaurant was recently completed in Wailea, Maui. A sushi bar, two tearooms and a redwood sun deck offer diners a variety of options.
The rudiments of fast-food service have not changed much. Convenience with speed and economy continue to be characteristic of fast-food operations. What is different is the sophistication of marketing and service techniques. Development of new food types that could be packaged (and therefore preserved for long-distance shipping or longer shelf life) came on the scene. Thus, fast food began to take on a throwaway packaging stigma.

Food preparation technology evolved to quick griddled or deep-fried systems. Actual food presentation at the counter became virtually nonexistent as food was mass-produced backstage and mass sold by the printed and audio-visual media. In other words, the food product was pre-sold. In most cases, customers knew what they wanted before they reached the counter.

To various Far Eastern (Oriental) cultures, fast food is not new. A specific example is a hawkers’ market in Singapore or Hong Kong where beef satay sticks, vegetable kabobs, fried bananas and all sorts of skewered seafood can be cooked on the spot at a rolling canteen. There is a place in Singapore that assembles all the food hawkers in one area, establishing a wonderful open-air carnival of fast food. Local families find this place/event a form of recreation as well as nourishment. This lifestyle may well outlast the influence of the British Empire.

What we have, then, is a model for the American invention of “food courts.” We find this type of establishment proliferating in shopping malls, and even becoming free-standing units. Food courts offer a variety of food selections and have often become the magnet for shopping centers, often outdistancing large department stores in terms of draw. It’s also good business. If the shopping center can retain shoppers longer on the premises, it is more apt to increase other retail trade.

In the November 1985 issue of Hawaii Architect, we identified a growing desire for food quality and freshness. Food appeal and sales can be increased by preparing items in an “exhibition” manner at the counter. Expedient service and choice are also paramount to increased sales.

A design concept currently employed is a “Charcuterie,” a hybrid of the buffet counter. It offers quick choice and recognition of food products, reduces queuing at cash registers by offering more points of sale, exhibits food products in an appealing manner and provides optimum flexibility for food changeovers according to market demands of the day.

Components are generally grouped into beverage banks and stations for hot food, cold food (salads and fruits), bakery goods and deli items. Graphics and messages are carefully designed for these stations. The overall design has been successful in promoting faster sales while acknowledging the sophistication and demands of the patron.

For Hawaii, the readily apparent application is in Chinese quick order and other ethnic takeout outlets, including okazu-bento counters. The Orient and Hawaii continue to provide excellent examples of cultural insight and study for fast-food operation design. The Chinese deli, complete with hanging roast duck and char siu bow being steamed at the counter, is a demonstration of food-produce exhibition. The customer can get a quick lunch plate, and order other food to take home for later. This is a fast-growing concept in other parts of the country.

Developers have recognized an opportunity to mix produce sale and shopping with food service. This concept brings us to a new level of variety and choice, and encourages a new building type and space. Design for this building type is a topic in itself and deserves examination at a future date.

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JUDY KIM
COMMERCIAL MARKETING
HARPO'S: A NEW LOOK
by Robert M. Fox, AIA
Fox Hawaii, Inc.

There is a changing mood in traditional fast-food restaurants where new design concepts are being employed. As the clientele becomes more sophisticated, restaurants are meeting the challenge by providing better designed environments. This change in design concepts is not only a desire on the part of the owners, but also a necessity for various restaurant operators to compete and capture their fair share of the market. Consequently, designs for comfortable, inviting and more sophisticated interiors for fast-food restaurants are becoming more prevalent.

One example is the new Harpo's on Kapahulu Avenue. This corner building had for many years been a Chinese restaurant with a totally enclosed and inward-looking atmosphere. The principal feature of the building was the curved form of the exterior wall. After the Chinese restaurant vacated the building, Harpo's leased the entire structure for a pizza restaurant and corporate offices. The main challenge was how to treat the enclosed interior and deal with the curved building in a sensitive manner.

The solution was to open the space by removing interior partitions and to provide a more upbeat interior to attract a young, active clientele. Although fast service for pizza and salads is the main bill of fare, it is presented in...
Harpo's on Kapahulu Avenue, a new pizza restaurant, occupies a building that formerly housed a Chinese restaurant. The space was opened by removing interior partitions and enlarging windows.

an environment that is also conducive to leisurely dining.

Traditional fluorescent lighting associated with fast-food operations was eliminated. Windows were enlarged to provide more daylight and allow for a view to the Ala Wai Golf Course. Subtle lighting provides a more intimate and cozy atmosphere in the evening.

The curved design for the building was used to maximize the space on both floors by following the curved property line. This

Ceramic tile is used in areas with heavy foot traffic and carpet is used in quiet seating areas. Walls are of wood and plaster with continuous striping that reinforces the curved forms of the space.
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In making the announcement, James P. Zweedyk, vice president of The Kitchen Center of Hawaii, said, “We are especially excited about the fabrication possibilities of Avonite®. Because it is fused together rather than bonded, built-up or “slab” effects are easily achieved without the usual bonding line being visible.”

“Avonite® also lends itself well to intricate detailing, and routing and shaping with conventional tools,” Zweedyk added.
ALLIED TEAMWORK conquers space and time

Building the Straub Family Health Center at Windward Mall shopping center took a combination of teamwork, precision and professionalism only Allied could provide.

“Giving the center a comfortable, homelike atmosphere required the skills of a perfectionist,” said architect Dennis Osato. “Allied’s fine detailing work did an excellent job in translating a complex design into reality.”

Timing was crucial, especially when substantial changes were made to the original plans. According to Straub’s Nathan Mau, “Allied’s cooperation and flexibility made this one of our smoothest projects.”

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Teamwork. Our motto. Our method.
Students in the School of Architecture challenged professional architects and student alumni teams in the ninth annual Great Hawaiian Sandcastle Event at Kailua Beach Park. Teams were given two hours to complete their designs. A jury evaluated entries on the basis of originality, beauty and craftsmanship.

Adams Design/Fine Lines received the First Place Overall award for their abstract sculpture. Architecture 201 students came in second with two giant alligators. Third place went to Media Five for their entry, “Tish.” Architects Hawaii received honorable mention for “Halley’s Comet.”
Hawaii Architect is Hawaii's window into the architectural community. Circulation of this magazine has been increasing and now copies go not only to architects and others in design-related fields, but also to legislators, city and county council members, planning and building departments, lending institutions, developers and construction-related professionals. It is important that the community be aware of our concerns and abilities so that they look to us with confidence knowing that the architect is a knowledgeable and concerned professional.

A great deal more could be accomplished if AIA members would provide articles, suggestions, photographs and ongoing input which could help make Hawaii Architect even more successful than it has been in the past. A few firms have realized the value of the magazine in terms of exposure either for their work or a particular point of view. These people have not been selected by the magazine to continue to contribute to monthly issues. They have initiated it on their own because of the value they receive from their exposure. It is up to individuals or individual firms to make the effort on their own and provide articles and other contributions in a professional and timely manner. It is a volunteer effort and members of the steering committee would like to solicit your contributions and your help in providing a wider base for the editorial content.

Another important aspect of AIA membership participation is support for the advertisers who in turn support our magazine. An effort should be made to mention to advertisers that you have seen their ad in Hawaii Architect and appreciate their support.

We hope to see you at the Waikiki Yacht Club on April 17. This month's membership meeting will be highlighted by an exciting, newsworthy slide presentation on Antarctica by Lee Davis, AIA and Joe Ferraro. Hawaii Architect's publisher, Peggi Murchison, and editor, Karen St. John, will speak briefly on the virtues and uses of our publication to enhance and project our profession into the community.
When it comes to building the best project you can, whether it’s a home, office building or any other structure, you need to depend on the labor you’re using. Depend only on licensed, bonded contractors for masonry work such as bricklaying, concrete pouring, and more. Contact the Masonry Institute of Hawaii for licensed masons you can count on! We’re licensed to build for you.

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In the January/February issue of Architectural Technology, evaluators of affordable CAD systems agreed that CAD is for all architects and the time to get involved is now.

Five years ago, CAD was inconceivable for small design firms. Only mainframes were available at a price far beyond the affordability range. Today, 80 percent of mainframe capabilities are available on microcomputers for 20 percent of the cost and the capabilities keep growing. These affordable CAD systems generally fall in the price range from $15,000 to $25,000.

A CAD system consists of hardware and software. In looking at the total cost of a CAD system, 80-90 percent of the cost is for hardware while the other 10-20 percent is for software. Ironically, even though software is a small fraction of the cost, it is a vital part that gives the system its intelligence while hardware affects performance in speed and reliability.

Many firms have determined a microcomputer-based turnkey system, featuring upgradeable hardware and software, is most appropriate. Turnkey systems give the advantage of dealing with one company for that coordinated effort from installation to maintenance of hardware and software, especially when there's a problem.

Many have asked for software that would initially get them going quickly but the kind that users can customize easily. They wanted software that provided for continuous growth and compatibility.

Anyone involved with computers knows that changes in hardware and software are constant and dynamic. The micro-CAD area is no exception.

VersaCAD ADVANCED Version 5.0 is a major new release that brings unprecedented intelligence and speed to Personal Computer CAD. It combines high speed, significant design features, complete user customization and sophisticated macro power.

Incorporating the Intel/Lotus/Microsoft expanded memory management standard, the program allows users to almost instantaneously zoom in and out of drawings and move them around on the screen, even in the middle of a drawing operation. Also, VersaCAD now draws grids 20 times faster and redraws the screen up to twice as fast.

While some other CAD programs allow the user to write out text files with a word processor that the system can use to execute simple commands, VersaCAD's macros are much more powerful and also easier to use. The user merely presses a function key to "record" his movements, both on the keyboard and on the graphics tablet, and then saves that "macro" to any key or combination of keys on the keyboard. It can also be permanently saved by name to a disk file for later playback. Dozens of macros can be collected into a visual "template" that the user can place on the graphics tablet to visually pick commands and drawing sequences. Unlike other systems in which a template must be purchased from a third party vendor, VersaCAD's macros and drawing symbols are so simple to create that anyone can customize his own CAD System for special...
Applications.

Menus are also totally programmable, allowing increased use of shortcuts as the user learns the system, and multiple menus can be combined in a single workstation as desired. Together, these “intelligent CAD” features allow VersaCAD to be completely personalized for maximum productivity.

Isometric visualization is part of the new release, enabling designers to draw plan views and then automatically convert them into an isometric, including conversion of circles to isometric ellipses. The isometric view can then be edited and “un-isoed” to incorporate the changes back into the plan views. This feature is perfect for architectural views, part visualization, client presentations, etc.

VersaCAD now features double-line wall drawing with automatic corner cleanup, and a “break” feature to bring door and window symbols cleanly into a wall.

New “cut and paste” capabilities help speed drawing editing, allowing users to select objects by designating two endpoints or drawing a rectangular fence around the section to be cut. This section can then be duplicated or “pasted” somewhere else on the drawing, where it can be scaled, rotated or quickly saved as a new library symbol.

Other features incorporated are a memory-efficient freehand sketch mode; additional fillet capabilities, multiple text fonts, new dimensioning enhancements; additional flexibility in coordinate input, such as bearing and distance; a two-way interchange of drawing files with AutoCAD and EasyCAD; and much more.

Combined with the low-cost VersaDATA module, the only integrated CAD database available on personal computers, and a greatly enhanced 3D surface modeling option, the new release of VersaCAD ADVANCED provides the next generation of “intelligent CAD” at affordable prices.
Computers have a proven track record in handling correspondence, documents, accounting, finances and record keeping. Almost every modern office has at least one. With computer technology developing so rapidly, the computer is also finding important applications in every aspect of architectural/engineering design, including lighting.

Traditionally, when the designer is faced with a new lighting design to complete, he automatically asks a number of questions. Who will be using the space? What type of work will be executed? What are the recommended light levels? What kind of luminance or exitance ratios will result? What type of atmosphere is being created? Obviously, these questions have to be answered by the designer himself. No computer can answer subjective questions. Similarly, simple calculations like
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zonal cavity method are not rigorous and thus quicker to compute by hand. What the computer offers the designer is much more detail, information and accuracy in slightly more time.

How does the designer assure himself and his client that his design will perform as planned? One method is to use tables and charts provided by manufacturers, but these design aids fail to paint an accurate picture and can be time-consuming. Using a computer program, the designer can review his design with a computer-generated gray scale rendering of the illuminated area and put to rest all skepticism.

How does the computer work efficiently and effectively for the designer? Lighting software is written by many types of companies. Many manufacturers have programs available that are useful, but usually limited to operate with luminaires from their company. In other words, a program is needed for every manufacturer specified. On the other hand, programs written by private companies are much more versatile and flexible and can work with any luminaire. For this reason, the rest of this article will focus on software from the private sector.

How do lighting programs work for the designer? First, it is necessary to develop a database that consists of photometric data from an array of luminaires. Photometrics that are used most can be compiled. (Data is available from most manufacturers.) All the photometric data is compiled by a separate database program that is usually included in the software package. A comprehensive database is one of the keys to efficient computer usage.

Next, the designer compiles a profile of the space, its users and its use. Programs usually require physical data on the space such as height, width, length, surface reflectances and work plane heights. More sophisticated programs take into consideration any critical characteristics such as a window with different reflectance characteristics that makes up half the area of two walls, oddly shaped rooms and user line of sight.

The designer inputs information that specifies the source(s). Luminaire types are selected from the database. Placement, maintenance factors of the luminaire and any special orientations are also added.

Finally, the designer selects the type of output he desires. Good programs will calculate horizontal and vertical illuminance (footcandles), exitance (footlamberts), equivalent sphere illumination (ESI), surface illuminance and visual comfort probability (VCP). Programs will also generate contour, shaded and perspective plots.

Programs provide the designer with detailed results and plots, which are then compared to the target design.

In a matter of minutes, computers can produce accurate and detailed results and renderings that clearly paint a picture of the space. A clever designer can use lighting programs to model unusual designs. An extensive lighting education is not needed to thoroughly utilize lighting software. Computer calculations and computer-generated renderings are extremely beneficial to all designers.
Ground was recently broken for five Kahala Mall theaters designed by Media Five Limited. The five theaters will have a combined seating capacity of 1,500. Features include self-service snack bars, Dolby sound and 70mm formats with 16mm capabilities available for art films. Upper deck parking level entrance is shown above, mall level lobby and ticket office are shown below, right.

Reviewing plans for the five-plex Consolidated Amusement movie theaters at the recent ground breaking at Kahala Mall are (left to right): Henry Chung, project manager for Harvis construction; Ann Matsunami, AIA, architect for Media Five Limited; C. B. "Skip" Morgan Jr., president of Harvis Construction; and Mike Murray, general manager of Kahala Mall.
AUTOMATION SEMINAR PLANNED

Well-managed design firms must understand the price tag on automation—how to finance acquisition, training and system modification and how to maximize the return on the investment. The Professional Services Management Association (PSMA) will provide detailed case studies on acquiring computers and making them pay at A/E/C Systems '86 to be held in Chicago.

Experience of firms across the country in pricing, financing, billing and recovering the cost of computerization will be presented in a half-day seminar on Monday, June 23. The session will also look at what many public agencies and private concerns are now allowing as reasonable billings for computer-assisted services. In addition, the findings of a national survey on cost recovery sponsored by PSMA will be presented for the first time.

For further information on the seminar, contact Donna Tobin, executive director, PSMA, 1213 Street, Alexandria, Virginia 22314, (703) 684-3993.

Group 70 Forms New Division

Group 70 has recently formed an interior design division to be headed by Sheryl B. Seaman, AIA, a partner in the firm.

Announcement of the division's formation was made public by managing partner Norman G. Y. Hong, AIA. Commercial and residential projects, including remodeling, will be undertaken with emphasis on space planning as well as aesthetics.

"Our firm's new three-dimensional CADD system (computer-aided design and drafting) will be utilized for maximum accuracy, speed and option evaluation by client and consultant," noted Seaman, whose professional support team includes Kathleen Saito, AIA and Barbara Hirai.

Seaman also indicated that once an interior design is complete, electronic database can be provided by Group 70 for facility management.

The firm, which is observing its 15th anniversary this year, has won several awards for its interior work, including a house on Hawaii Loa Ridge and a First Federal Savings' building.

ASLA Announces Luncheon Speakers

The Hawaii Chapter of the American Society of Landscape Architects, in cooperation with the University of Hawaii at Manoa, College of Continuing Education and Community Service, is presenting a series of "Talk-Story" luncheons. Professionals from various fields will speak on topics related to land utilization and ownership.

Luncheons will be held at the Pagoda Hotel from noon to 1:30 p.m. on Wednesdays, April 16 and May 14.

Registration at the door will be $17. A no-host bar will also be available. To register or for more information call 948-8400.

These luncheons will provide an opportunity for a free interchange between the speakers and the audience. There is no limitation on subject matter so, within each general topic, each speaker will be able to present his own convictions and opinions in any area related to his field. Speakers will be able to present new ideas on such issues as planning and design, ways to correct past errors and pitfalls in our present systems, and simplifying or eliminating red tape in the land development approval process. There will be ample time for questions and answers at each luncheon.

Wednesday, April 16
Open Space and Environmental
Impact
Speakers:
Marilyn Bornhorst
Chairman, City Council, City and County of Honolulu
George Houghtailing
President, Community Planning; Formerly, Director of Planning, City and County of Honolulu
Gail Sims
President, Lone Star Hawaii Properties
Wednesday, May 14
Land Privileges
Speakers:
David Callies
Professor of Law, William S. Richardson School of Law, University of Hawaii
George Cooper
Member of the Bar; researcher of land and environmental concerns
Tom Papandrew
Director of Planning, Belt Collins Associates
Gary L. Herald, AIA has joined Armstrong Builders, Ltd. as a project architect. Herald will be responsible for design for residential and commercial new construction and remodeling.

AICP Accepts New Planners
Four Hawaii planning professionals have been accepted into the American Institute of Certified Planners (AICP), an arm

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Concrete Creations of Hawaii, Inc., formed in 1980 by Robert Clement, produces a creative line of concrete aggregate products suited for residential and commercial uses. Among the numerous products designed by the company are furniture, table benches and stools, planters, trash receptacles, ash urns, custom-made signs and other custom-designed items. Some of the most recent designs by Concrete Creations are the sign at Crosspointe (a townhouse development) and the benches pictured above.

Kitchen Planning Is Computerized

The Kitchen Center of Hawaii has recently acquired computerized-planning capability according to James P. Zweedyk, vice president, who announced the installation of a complete computerized kitchen planning system.

According to Zweedyk, "The software program will generate floorplans, perspective drawings, complete cost estimates for all cabinetry, and precise installation schedules."

"As a tool for 'what if' planning, the program is invaluable," he continued. "What used to take
hours of laborious work over a drafting table can now be accomplished in just a few minutes. This should prove especially valuable to the architectural and design community.”

At the heart of the computerized planning function is a Tandy 1200 computer, backed by software programs specifically tailored to the cabinet lines stocked by The Kitchen Center of Hawaii. The plan and perspectives appear on the screen as the planner plots the diagram. Upon completion, the computer prints out all plan and perspective drawings for further study and reference.

Project Management Seminars Planned

Far too often in today’s design environment, at the root of those unsuccessful, incomplete projects is poor project management, according to principals, project managers and even project team members. They say technical people are being thrust into the position of project manager with neither the know-how or perhaps even the desire to manage; this is especially true when it comes to project scheduling and budgeting.

To help alleviate this problem, Professional Services Management Journal (PSMJ) will offer a series of back-to-back seminars, “Project Scheduling and Budgeting” and “Turning Technical People into Project Managers.” The programs will be held in Boston, May 12-13; Chicago, May 15-16; Los Angeles, May 19-20; Dallas, May 22-23; and Orlando, May 29-30. The sessions are tailored for those who deal with management issues in design practice on a day-to-day basis. Particular emphasis will be placed on those technical people who, regardless of their experience level, have never had management experience.

David Burstein, vice president of southeast operations for Engineering Science, Inc., will

James P. Zweedyk, of The Kitchen Center of Hawaii, uses a Tandy 1200 computer to plan kitchens in minutes.

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Hiyakumoto & Higuchi Established

The firm of Hiyakumoto + Higuchi Architects was established recently in Wailuku, Maui. Gerald N. Hiyakumoto, AIA, formerly of
A ground breaking ceremony was held recently for the Hawaii Community Development Authority’s Kakaako Improvement District 1 Project. Participants included, from left to right, Kenneth F. Brown, FAIA, businessman and former HCDA chairman; Representative Calvin Say; Senator Patsy Young; Governor George R. Ariyoshi; Kenneth Takenaka, HCDA chairman; Art Hoeffer, E. E. Black; Jim Perry, Hawaiian Dredging and Construction; and Paul Nihei, Okada Trucking. Photo by Jim Dote.

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Hawaiian Electric Company

Hiyakumoto & Co. Architects, and Calvin S. Higuchi, AIA, formerly of Riecke, Sunnland, Higuchi, Kono Architects, Ltd. are the new partners.

With more than 25 years of combined experience in commercial, industrial, institutional, and residential architecture and planning, the firm plans to continue providing a broad range of architectural services.

The office is located at 26 South Market Street in Wailuku.

Nakamura Wins Remodeler’s Award

Karen Nakamura, president of Wallpaper Hawaii, Ltd., in Honolulu, is the first woman to be named Remodelor of the Year by the National Association of Home Builders’ (NAHB) National Remodelors Council (NRC).

Nakamura, also the recipient of the NRC Remodelor of the Month award for March, 1985, is a third generation contractor specializing in interior renovation. In 1981 she and her sister bought Wallpaper Hawaii from their father and opened a new showroom in 1983.

A member of the Building Industry Association of Hawaii (BIA) since 1971, Nakamura served on the public relations committee, was elected to the board of directors, and is currently BIA president.

Also honored at the NRC event
at the annual NAHB convention was Dave Puder, Kahala Construction, a recipient of a Renaissance '85 award for remodeling and rehabilitation.

Puder's firm was recognized for residential rehabilitation of Greystones, a turn of the century mansion. Puder is chairman of the 1986 Building Industry Association-sponsored Parade of Homes.

AIA Convention Offers Workshops

A broad range of issues pertinent to successful architectural practice—from professional liability to microcomputers—will be explored during nearly 100 learning programs at the AIA 1986 National Convention, June 8-11, in San Antonio.

The convention theme, "The American Architect," will be addressed throughout the professional programs—workshops, seminars and special consultations—covering "more areas of architectural practice" than ever before offered at an AIA convention, according to Leroy Bean, FAIA, Petaluma, Calif., the 1986 convention chairman.

Nine full-day national workshops, each granting continuing education unit (CEU) credits, will examine such key issues as liability prevention and protection, computer-aided design/
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documents; profitability; design-
buid; CAD/D implementation;
mergers and acquisitions;
presentations, and promotional
materials for design firms.

In addition, the convention will
offer 44 professional development
consultations, each limited to 12
participants. These popular
learning opportunities have been
expanded from last year's
convention to provide information
on how to get published,
development as a career option,
outdoor sculptures and intelligent
buildings, as well as more sessions
on computers, marketing,
documents and liability. The
special consultations will also
encompass energy design,
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