# REVISED (EMAL) ENVIRONMENTAL IMPACT STATEMENT for the Proposed KALAKAUA COMMERCIAL COMPLEX AUGUST 1976

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SUMMARY

Project Description. Helumoa Land Company, Inc. proposes to construct a multi-level shopping complex within a 6.25 acre parcel on the makai side of Kalakaua Avenue bounded by Lewers Street and the Outrigger Hotel. The proposal provides for a total of approximately 275,000 square feet of gross leasable area, of which approximately 165,000 square feet will be provided in the first phase and 110,000 square feet in the second phase. The development will consist of 3 low-rise buildings, two of 4 stories and one of 3 stories. There will also be a 10-story parking structure providing parking for approximately 600 cars at the Lewers Street end of the project just mauka of the Sheraton garage. The makai-Diamond Head corner is within the Special Management Area (Ordinance No. 4529), and the entire site is within the Waikiki Special Design District (Ordinance No. 4573), Resort Hotel Precinct.

Existing Site Conditions. The site is presently occupied by several one- and two-story commercial structures with appurtenant walkways and planted areas, some of which contain a number of trees. Portions of the site are paved and are being utilized as parking areas. Numerous utility lines traverse the site. The site is relatively level.

Physical Environmental Impacts. Construction of the project will create disruptions in traffic and produce noise and fugitive dust. Long-term effects will include an increase in surface water runoff and air emissions. However, impact on both the receiving waters and ambient air, respectively, are not anticipated to be significant. Although the visual appearance of the subject site will alter this portion of the Waikiki district, the developers feel that the proposed landscape master plan and the project's low-rise atmosphere will be an improvement over the current configuration of shops and storefronts on the site. Minimal impact on the ground level view planes by pedestrians is expected, since the present structures on the site already obstruct the makai view.

Impact on Governmental Services and Facilities. There will be an increase in demand on public services and subsequently, an increase in government expenditures necessary to support them. These specifically include additional sewage loads, additional water runoff into the present drainage system, and possibly mass transit (due to increased bus ridership). However, existing services and facilities are available to the site and these additional demands can be primarily absorbed by already built facilities.

Socioeconomic Impact. There will be a temporary loss of sales and income by present tenants who would be displaced by the project. Approximately 140 employees are expected to lose their jobs temporarily. However, the long-term impact of the project would be to generate additional sales, clerical and office jobs due to the increase of commercial space and more activities. Property tax revenues would also increase.

The proposed shopping complex will enrich property values. Presently, 3 acres of the project site are occupied by a total of 45 (Table 3) shops, offices, food service, etc. The proposed project calls for the removal of these existing commercial structures. The total annual sales could not be fully determined due to the confidential nature of data; however, the amount would exceed \$7,490,000. The gross leasable area is about 78,000 square feet. The proposed shopping complex is expected to increase the total amount of leasable area to 275,000 square feet for an increase of (more than  $3\frac{1}{2}$  times) the present GLA. Annual sales are expected to increase based on the increase in the leasable area. The proposed shopping complex is expected to provide nearly 4 times as many jobs over the present level.

<u>Technical Reports</u>. During the course of evaluating impacts of the proposed project, several technical reports were prepared. These included:

"Interim Report of Geotechnical Investigation Proposed Kalakaua Commercial Development, Kalakaua Avenue and Lewers Street, Honolulu, Hawaii for Helumoa Land Co., Inc.", prepared by LeRoy Crandall and Associates, July 31, 1975.

"Helumoa Traffic Report," prepared by Henry Tuck Au, March, 1976.

"Socioeconomic Impact of the Proposed Kalakaua Commercial Complex," prepared by Evaluation Research Consultants.

"Air Quality Impact Study, Kalakaua Commercial Complex, prepared by Environmental Communications, Inc., June 1976.

"Noise Impact Study for the Proposed Kalakaua Commercial Complex, Honolulu, Oahu, prepared by Dr. Iwao Miyake, June 29, 1976.

#### I. PROJECT DESCRIPTION

#### A. Project Location

The site for the proposed Kalakaua Commercial Complex is located in Waikiki, Honolulu District, Island of Oahu. The site lies approximately 2.8 miles southeast of downtown Honolulu. More specifically, the project fronts Kalakaua Avenue (on the makai side), between Lewers Road and the Outrigger Hotel. Figures 1 and 2 shows the location of the project site as it relates to the island and region, respectively.

The project site is identified by Tax Key: 2-6-02: 18, 19, 22, 23, & 24.

#### B. Statement of Objectives

Due to its central location, the site for the proposed Kalakaua Commercial Complex is among the most desirable sites in Waikiki for commercial use. The property is located in the heart of Waikiki's commercial area and is entirely surrounded by high-rise hotels, and office structures. It will be within walking distance of virtually all the 22,000+ hotel units in Waikiki.

An economic feasibility study conducted by Real Estate Research Corporation (RERC)<sup>1</sup> indicated that commercial space in Waikiki was "acutely" needed. A more recent study prepared in April, 1976 by Evaluation Research Consultants<sup>2</sup> analyzed the latest data on commercial projects in Waikiki (since 1973 several commercial projects have been constructed or are underway). This latest study concluded that the Kalakaua Commercial Complex along with the other projects are not expected to create adverse economic effects.<sup>3</sup>

The development objective is to build a high quality, profitable shopping complex.

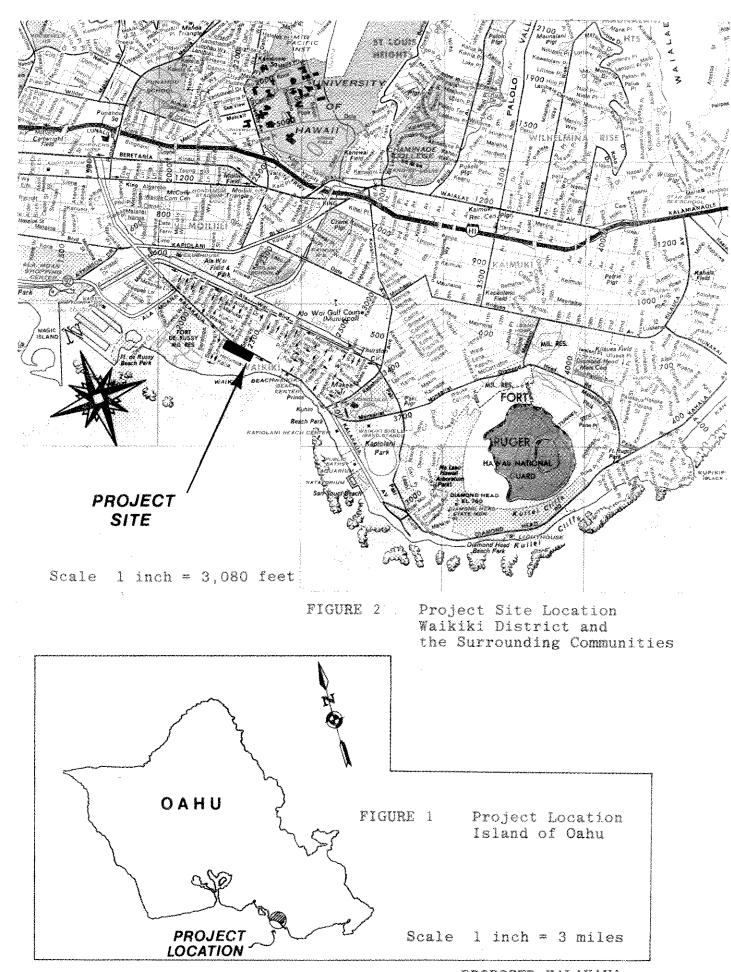
### C. Project Description

Helumoa Land Co., Inc. proposes to construct a multi-level shopping complex within a 6.25 acre parcel on the makai side of Kalakaua Avenue bounded by Lewers Street and the Outrigger Hotel. The proposal provides for a total of approximately 275,000 square feet of gross leasable area, of which approximately 165,000 square feet will be provided in the first phase and 110,000 square feet in the second phase. The development will consist of 3 low-rise buildings, two of 4 stories and one of 3 stories. There will also be a 10-story parking structure providing parking for approximately 600 cars at the Lewers Street end of the project just mauka of the Sheraton garage. (See Figure 3, Site Plan.)

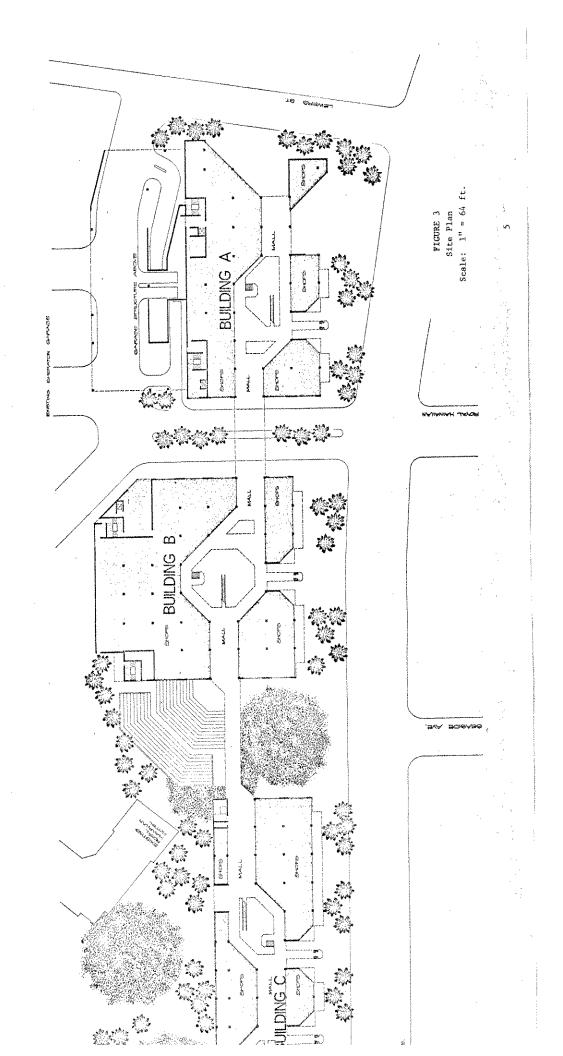
<sup>3</sup> Ibid. Page 12.

<sup>&</sup>lt;sup>1</sup> "Technical Memorandum #3", prepared in February, 1973.

<sup>&</sup>lt;sup>2</sup> "Socioeconomic Impact of the Proposed Kalakaua Commercial Complex".



PROPOSED KALAKAUA COMMERCIAL COMPLEX



The project comprises 3 buildings having approximately 275,000 sq. ft. of Gross Leasable Area (GLA). Each building will be a multi-level shopping complex organized around a court that is open to the sky. A tier of terraced balconies rings each court providing a maximum of visual and physical accessibility to the shops at all levels.

The average building height will be restricted to tree top level. This height will be approximately 40'-0" for buildings on Kalakaua Avenue and about 55'-0" for structures containing shops and offices makai of the mall. There will be a 10-story structure providing parking for approximately 600 cars at the Lewers Street end of the project just mauka of the Sheraton garage. The low-rise character mandates that the highly visible roof plane be considered a finished area, properly landscaped and maintained, and with proper screening for rooftop mechanical appurtenances.

Landscaping is intended to provide a major visual impact. The project will be extensively planted, with medium height canopy trees supplementing the coconut trees now lining the sidewalk at the Kalakaua Avenue boundary of the property.

The Kalakaua sidewalk will be transformed into a broad promenade with a minimum depth of 30'-0''. This increases at various entry areas to depths in excess of 90'-0''. Numerous entryways link the internal mall with the Kalakaua sidewalk to create a generous and varied pedestrian promenade.

A high proportion of the ground floor area is planned to be devoted to public spaces such as malls, promenades or landscaping. The scale and proportion of all elements will be consciously sized to the pedestrian. Overwhelming massiveness will be avoided.

Between Buildings B and C and opposite Seaside Avenue, a 120'0" wide open area will be reserved for programmed activities. The area of this landscaped open space will be approximately 21,000 sq. ft. Some mature tree planting is anticipated to achieve a shaded gathering place in the early phases of the project.

A central spine will link all buildings in the complex. The principal mall occurs at ground level. The pedestrian will enter the open central mall from the Kalakaua and Lewers sidewalk promenades through a series of primary and secondary openings that are related to vertical transportation points.

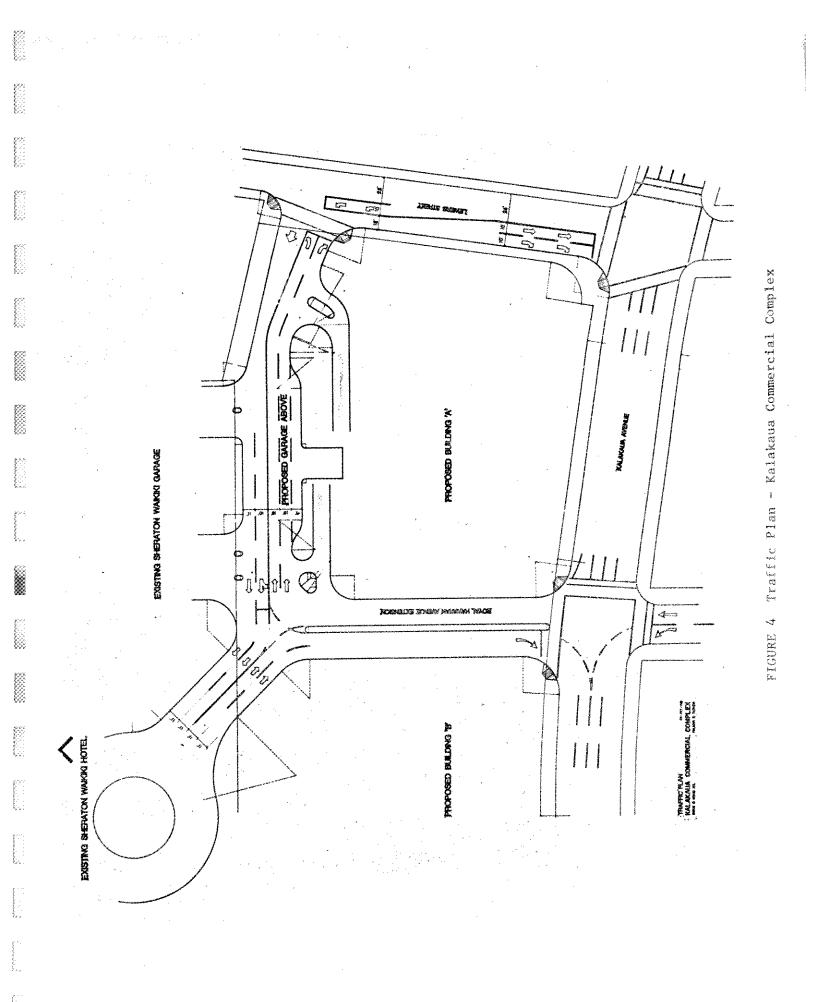
Design of tenant spaces will recognize that many shops will be of modest size. Spaces must be easily divisible and mechanicals will be designed accordingly. The complex may be finished as several tenant groupings, each grouping having a distinct theme or design motif. Spatial quality will vary between groupings to avoid the appearance and feel of a monotonous strip mall.

Tenant locations will be dictated by objectives of a leasing master plan prepared by the project leasing consultants. A balanced mix of retailers offering a broad range of merchandise and services at various levels is in the best interests of all.

- 1. <u>Height and setback requirements</u>. The project will take into consideration the following setback and height restrictions which apply to the property:
  - (a) A minimum 30'-0" setback along Kalakaua Avenue.
  - (b) A minimum 20'-0" setback from the Lewers Street frontage.
  - (c) No side and rear yard setback requirements.
  - (d) Location of Property: Kalakaua Avenue, Waikiki
     Tax Map Key: 2-6-02: 18, 19, 22, 23, 24
  - (e) Approximate Acreage: 6.25 acres
  - (f) Existing and Requested Uses:

Present Use:	Commercial and Resort
Existing Plans Governing the use of the Property:	General Plan, Detailed Land Use Map and Development Plan
Detailed Land Use Map Designation:	Resort
City & County Zoning:	H-2
Waikiki Special Design District:	Resort Hotel

- <u>Vehicular access</u>. The design program establishes a vehicular access connection from the Sheraton Waikiki to Kalakaua opposite Royal Hawaiian Avenue. First phase construction will start from Lewers Street and progress in a Diamond Head direction. As soon as the Royal Hawaiian Avenue roadway connection can be opened to traffic and the existing Sheraton driveway deactivated, the balance of Phase One, which comprises Buildings A and B, will
   proceed (see Figure 4). Gross Leasable Area developed during the first phase would be approximately 165,000 sq. ft.
- 3. Land clearing activities will include:
  - (a) Demolition and removal of existing buildings and structures;
  - (b) Other areas on the site will be cleared prior to structural, roadway or utility excavations;
  - (c) Only minor grading will be undertaken to construct the driveways, utilities, and adequately drain the site. Otherwise, new improvements will be built on the existing ground;
  - (d) Land clearing will be done in three increments similar to the construction phasing; and



(e) Mature trees will be retained wherever feasible. The nurserymen working on the project have made a detailed examination of the trees on the site (August, 1976). This examination indicates that less than one dozen coconut palms need to be removed. The trees were found to be unhealthy due to moisture rot, and if allowed to remain or be relocated, these trees would, within a few years, constitute a safety hazard to pedestrians. The other coconut palms will remain or be relocated. The Chinese Banyan tree will not be removed. Other trees located within the project site in the specific site of the structures will be cleared. These trees include the more common type of trees (e.g. octopus tree) which can be more economically replaced than relocated.

## 4. Off-site work includes:

- (a) Storm drainage system: A new 24-inch reinforced concrete drainage pipe will be extended across Kalakaua Avenue to connect with the existing 2' x 6' concrete box culvert in the Seaside Avenue intersection.
- (b) Sanitary sewer system: A new 6-inch vitrified clay sewer line will be extended about 30 feet into Kalakaua Avenue with manhole connection to an existing 12-inch sewer main near the Diamond Head boundary of the project site.
- (c) Water system: Two connections will be made to the existing 8-inch water main located under the makai sidewalk area of Kalakaua Avenue near the Seaside Avenue intersection. The service connections for 6-inch domestic water system and 8-inch fire protection line will be extended under the sidewalk to the property line. Because of the congestion of existing utilities in the sidewalk area, the meters for both water service lines will be installed in the ten-foot setback area immediately in back of the existing sidewalk.
- (d) Roadway system improvements include the following: Lewers Street will be widened by 20 feet along the boundary of the project site extending from Kalakaua Avenue to the existing driveway serving the Sheraton buildings. The work will include demolition and removal of the existing sidewalk, curb and gutter on the Sheraton side of Lewers Street, widening of the existing asphaltic concrete pavement by 20 feet (total of width to be approximately 44 feet wide), and reconstruction of concrete curb, gutter and sidewalk. Existing manhole, handholes, and utilities will be adjusted to the new finish grades.

The existing driveway off Kalakaua Avenue at the Diamond Head end of the property will be relocated to clear the proposed 15-foot wide public beach right-of-way. This will entail extending the existing ramp-type driveway by about ten feet in the Ewa direction. The proposed work in the ten-foot wide area includes reconstruction of the existing curb and sidewalk to a ramp driveway apron with adjustment of existing manholes, handholes and utilities.

(e) Electric and telephone system: Existing electric and telephone facilities which are affected by the proposed widening of Lewers Road and reconstruction of driveways on Kalakaua Avenue will be relocated and adjusted to the new conditions. These include pullboxes and manhole frames and covers.

(f) Street light, traffic signal control and fire alarm system: Again, existing facilities which are affected by the proposed widening of Lewers Street and reconstruction of driveways on Kalakaua Avenue will be relocated and adjusted. In addition, street lighting will be increased on Lewers Street and at the new driveway on Kalakaua Avenue. Also, traffic signal equipment and controls will be relocated and reconstructed on Kalakaua Avenue to accommodate the new driveways. In addition to manholes, pullboxes and handholes, a fire alarm pull station will be relocated and adjusted to the new conditions on Kalakaua Avenue.

#### 5. On-site work includes:

- (a) Storm drainage system: A new drainage system consisting of concrete drainpipes from 6-inch to 24-inch diameter, catch basins and manholes will be constructed on-site. The new system will collect storm runoff from the roof of the new buildings and the new Kalakaua Avenue driveway as well as intercept existing drains which service the Royal Hawaiian Hotel. The new system will be connected to the new offsite 24-inch drain in Kalakaua Avenue which is described above.
- (b) Sanitary sewer system: A new sewer system consisting of 8-inch and 10-inch vitrified clay pipes and manholes will be constructed on-site. The new system will collect sewage from Building "B": and portions of Buildings "A" and "C" as well as intercept existing sewer lines which presently service the Sheraton and Royal Hawaiian Hotels. The new sewer system will connect to an existing 10-inch sewer within the property. That existing sewer is connected to the City's 12-inch main in Kalakaua Avenue.

An existing 6-inch sewer main near the Diamond Head end of the project will be realigned to coincide with the driveway. The total length of the realigned sewer is 160 lineal feet of which 30 feet extends into Kalakaua Avenue and is described in the off-site work.

(c) Water system: The existing private water system (from wells on the Princess Kaiulani Hotel property) which presently cross the project area to service the Royal Hawaiian Hotel will be relocated. The existing 2-inch and 4-inch water lines will be intercepted on the Sheraton property between the Royal Hawaiian Hotel and Building "C" to a connection with the existing incoming water lines. All work will be done on-site with connections being made within the ten-foot setback area immediately in back of the sidewalk on Kalakaua Avenue,

On-site extensions of the domestic water and fire lines for the proposed development are the responsibility of the mechanical engineer, Giovanni Chung. For service to the new commercial development, Community Planning, Inc. is responsible only for connection and metering in Kalakaua Avenue as described in the off-site work.

(d) The on-site roadway system plans include: A new driveway to be constructed between proposed Buildings "A" and "B" from the intersection of Kalakaua and Royal Hawaiian Avenues to a connection with the existing circular driveway located in front of the Sheraton Hotel. The new driveway will also have connection to the existing driveway which is located between Building "A" and the Sheraton parking structure and which has access to and from Lewers Road. This existing driveway will also be reconstructed. The new and reconstructed driveways will have an asphaltic concrete pavement of about 50-feet width and concrete curbs and sidewalks.

The proposed 15-foot wide beach right-of-way along the Diamond Head boundary of the project site will consume a portion of the existing driveway at that end. Consequently, that driveway will be reconstructed with concrete curbs, sidewalk and asphaltic concrete pavement of approximate 24-foot width.

The existing Kalakaua Avenue driveway located between Seaside and Royal Hawaiian Avenues will be demolished.

- (e) Electric and telephone system: Electric and telephone connections to existing off-site sources as well as all other on-site utility work are the responsibility of the architect's electrical engineer, Mr. Kawabata of Nakamura and Kawabata. Community Planning, Inc. is responsible only for relocation work required by construction of driveways on Kalakaua Avenue or widening of Lewers Road. Details are explained in the above-mentioned off-site work.
- (f) Gas system: Gasco will be responsible for extending their system to serve this new development. However, Giovanni Chung will be coordinating this work.

## D. Use of Public Lands and Funds

No public lands and/or funds will be utilized for the proposed subdivision. Governmental role will be limited to the review of applications for various land use approvals, permits and certification of plans prior to site work.

## E. Phasing and Timing

The developer expects to initiate construction shortly after obtaining all the necessary permits and approvals required. Construction is anticipated to take 21 to 24 months including demolition, off-site, and on-site work.

#### F. Project Background

The chronology of the project since January, 1973, is as follows:

- -- Wong and Wong application for General Plan Amendment dated March 16, 1973.
- Various governmental agency reviews in connection with General Plan change during 1973.
- -- Public hearing by Planning Commission regarding General Plan change on July 10, 1974. Unanimous approval.
- -- Enactment of a moratorium on development in Waikiki beginning April, 1974.
- -- Helumoa Land Company was incorporated on July 29, 1975.
- -- Processing by City Council of Special Design District legislation.
- -- Enactment of Waikiki Special Design District and end of moratorium on April 1, 1976.
- -- Various governmental and private agencies contacted by Environmental Communications, Inc. (retained Environmental Impact Statement consultants) requesting comments on the Environmental Impact Statement Preparation Notice on May 21, 1976.
- -- June 23, 1976 end of 30-day review period for comments requested on May 21, 1976.
- -- Environmental Impact Statement for Kalakaua Commercial Complex submitted to the Environmental Quality Commission for processing on July 6, 1976.
- -- Deadline for comments on the Kalakaua Commercial Complex Environmental Impact Statement set by Environmental Quality Commission: August 7, 1976.
- -- Submittal of revised Environmental Impact Statement for Kalakaua Commercial Complex, August 23, 1976.

#### **II. DESCRIPTION OF THE ENVIRONMENTAL SETTING**

#### A. Physical Geography

- 1. <u>Site Conditions</u>. See Figure 5. The site is occupied by one- and two-story commercial structures with appurtenant walkways and planted areas, some of which contain a number of trees (see list of trees, Table 1). Portions of the site are paved and are being utilized as parking areas. Numerous utility lines traverse the site. The site is relatively level.<sup>4</sup>
- 2. Soils. The report entitled, "Interim Report of Geotechnical Investigation, Proposed Kalakaua Commercial Development, Kalakaua Avenue and Lewers Street, Honolulu, Hawaii, for Helumoa Land Co., Inc." provides the following description of the soil conditions:<sup>5</sup>

"Existing fill soils, up to five feet in thickness, were encountered in the exploration borings. The natural soils beneath the site consist of sand, silty sand, silt, clay, coral, and varying amounts of gravel. Water was encountered in the borings at depths ranging from five to seven feet below the existing ground surface."

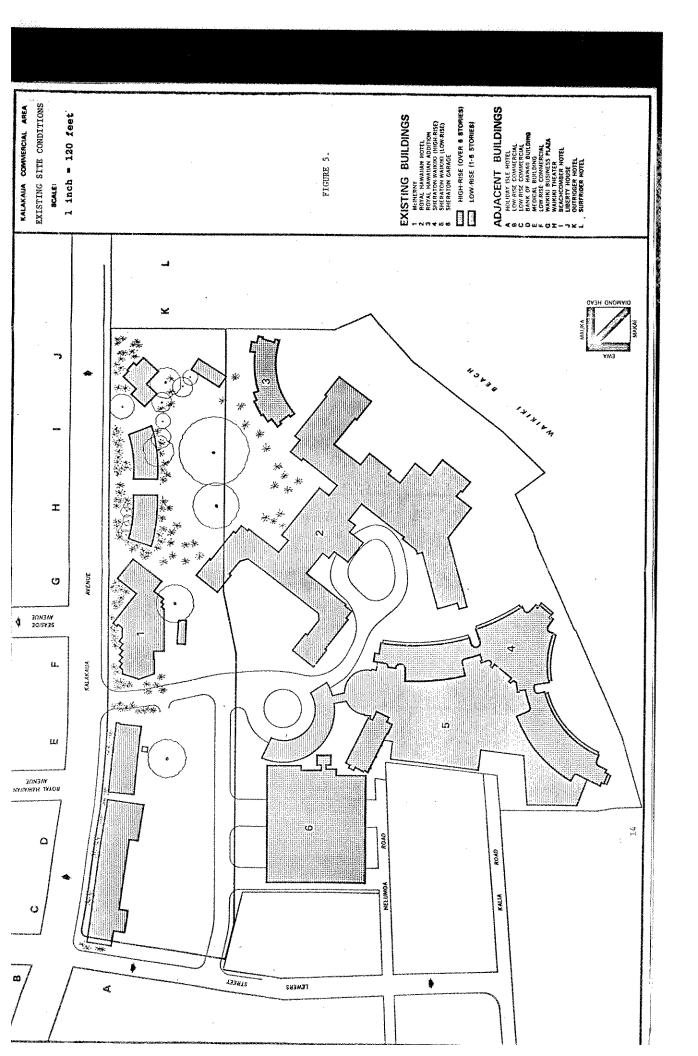
3. <u>Microclimate</u>. The microclimate in the Waikiki area is considered to be dry, mild and uniform. The annual average rainfall for Waikiki is approximately 20 inches. The temperature, much like the rest of the island, is mild and uniform, ranging from 60°F (January - mean low temperature) to 85°F (mean high temperature) in the summer months.

The observed surface winds<sup>6</sup> show that the predominant wind direction and higher wind speeds are from a north, north-east, and east direction (66.7% of the time), and averages 11.2 knots per hour. Although 13% of the time winds blow from the north to west quadrant, these winds have lower wind speeds, 5.75 knots. The yearly mean wind speed is 9.7 miles per hour.

5 Ibid.

<sup>&</sup>lt;sup>4</sup> LeRoy Crandall and Associates, "Interim Report of Geotechnical Investigation, Proposed Kalakaua Commercial Development, Kalakaua Avenue & Lewers Street, Honolulu, Hawaii for Helumoa Land Co., Inc., July, 1975.

<sup>6</sup> It should be noted that surface wind data is recorded at a limited number of stations on Oahu. In relation to other stations, the Honolulu International Airport is the nearest to the site. It was determined that wind conditions at the project site would most likely be represented by the data recorded at the Honolulu International Airport due to the similarly observed wind directions of the site.



#### TABLE 1

## TREES PRESENTLY WITHIN THE PROJECT SITE\*

Common Name

Scientific Name

Norfolk Pine Araucaria Excelsa African Tulip Spathodea Campanulata Akee Blighia Sapida Banyan Ficus Benghalensis Octupus Plant Brassaia Octinophyllia Breadfruit Artocarpus Incisus Bamboo Actinophlocus Yokewood Catapa1 Date Palm Phoenix Dactylifera Coconut Cocos Nucifera Indian Rubber Tree Ficus Elastica Hala Pandanus Odoratissimus Hau Hibiscus Tiliaceus Jacaranda Jacaranda Mimosaefolia Kukui Aleurites Moluccana False Kamani Terminalia Catappa Kiawe Prosopis Chilensis Monkey Pod Samanea Saman Mahogany Swietenia Mahogoni Mango Mangiferindica Opiuma Pithecellobium Dulce Palm Loulu Eupritchardia Martii Plumeria Plumeria Obtusa Plum Cordia Dichotonia Paper Bark Tree Melaleuca Leucadendra Poinciana Delonix Regia Shower Tree Cassia Javanica or Cassia Fistula Soap Berry Mencle Sapindus Saponaria Sea Grape Coccolobis Uvifera Wiliwili Erythrina Sandwicensis E. Monosperma

\*Appendix II provides an inventory of trees on the proposed project site.

4. <u>Flora and Fauna</u>. Based on site observations and review of literature relating to location and identification of flora and fauna, it was determined that the subject parcel does not serve as a habitat or feeding area for any rare or endangered birdlife. Common species of birdlife such as the mynah, cardinal, sparrow, and dove seen throughout the island, are found in the area.

The flora presently existing within the site consists of various trees and ornamental plants in the landscaped area directly makai of the existing buildings. Table 1 identifies these trees.

No rare or endangered species of flora and fauna are known to inhabit the project site.

- B. Infrastructures and Support Services
  - 1. <u>Water system</u>. An existing public 8-inch main is located in both Lewers Road and Kalakaua Avenue which are adequate for the proposed development.
  - 2. <u>Sewer system</u>. Three separate public sewer systems serve the existing project site:
    - (a) An 8-inch sewer main located in Lewers Road and extending to the Fort DeRussy pump stati on;
    - (b) A 12-inch sewer main located in Kalakaua Avenue between Seaside and Royal Hawaiian Avenues extends to the Beach Walk pump station; and
    - (c) A 12-inch sewer main located in Kalakaua Avenue at the Diamond Head end of the project site extends also to the Beach Walk pump station.

Both existing sewer mains located at the extreme mauka end of the project site and described above as (a) and (c), are presently flowing at capacity. The City will allow continued use of these lines provided the sewage flow from the new development does not exceed the amount discharged under present conditions. The other main in Kalakaua Avenue and described above as (b) has sufficient capacity for the proposed increase in sewage from the new development.

During the consultation period, the County's Department of Public Works was contacted;<sup>7</sup> their response (see page 68) indicated: "Flows entering the existing 8-inch Lewers Road sewer should be diverted to the Seaside sewer on Kalakaua since the former is experiencing some capacity problems."

3. <u>Drainage system</u>. Presently the storm runoff of the project site is conveyed from the area in the following manner: Areas on the

<sup>7</sup> Requesting comments on the Environmental Impact Statement Preparation Notice.

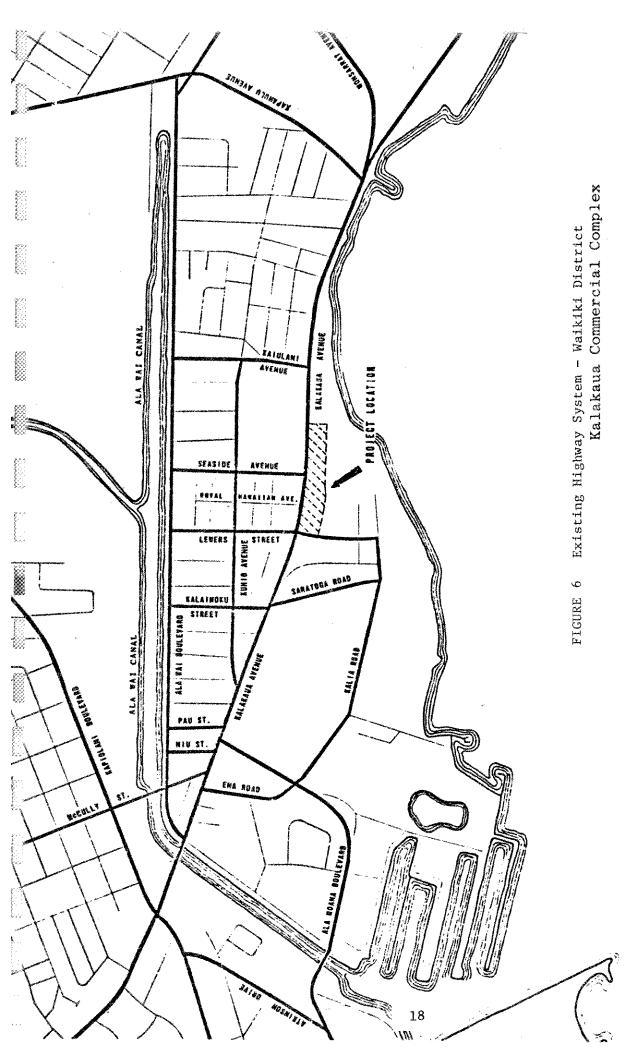
Ewa side of the property including the access driveway runoff into Lewers Road gutters and flows makai to catch basins and a new box culvert drain system located about 300 feet away.

Areas on the Diamond Head side of the property run off onto Kalakaua Avenue and then into an existing catch basin in front of the adjoining property. The majority of the project site presently runs off into Kalakaua Avenue to an existing catch basin near Seaside Avenue. Runoff to this catch basin is conveyed by box culvert to the Ala Wai Canal.

- 4. <u>Police services</u>. The Honolulu Police Department has regular police "beats" in Waikiki. It is anticipated that this will continue. Additionally, the shopping complex will employ or retain security officers in order to provide routine protection and security functions for the shopping complex.
- 5. Fire protection. The Waikiki Fire Station is located less than .4 mile away from the site. Should there be an outbreak of fire, it is anticipated that this fire station would be the first to answer the emergency call and would arrive in approximately 3 minutes. Fire alarms, hydrant, and fire fighting devices and/or equipment will be installed and inspected by the Fire Department in accordance with the existing regulations and procedures.
- 6. <u>Solid waste</u>. Because of the commercial nature of the shopping complex, a private refuse collection and disposal firm will be retained.
- C. Transportation Considerations.<sup>8</sup>
  - 1. The existing highway system. The existing highway system serving the Waikiki District is shown on Figure 6. The streets in light lines are local streets primarily for access to abutting properties and are intended for local traffic. The local streets have been included to relate its effect on the major highway system and its impact at the local level. However, with the conversion of the street system to a one-way operation, the traffic load is spread over more streets, and these local streets assume the role of major collector streets. Their impact on the transportation system caused some adverse environmental effects.

Except for Ala Moana Boulevard, a Federal-aid highway, the existing highway system is administered by the City and County of Honolulu. As shown on the plan, the major highway system consists of Ala Moana Boulevard, McCully Street, Kalakaua Avenue, Kuhio Avenue, Ala Wai Boulevard and Kapahulu Avenue.

<sup>8</sup> Quoted from the "Traffic Impact Statement for Kalakaua Commercial Complex, Kalakaua Avenue, Waikiki," prepared by Henry Tuck Au, Consulting Engineer, March, 1976.



- 2. Future highway system. The future highway system proposed the widening of several streets and the extension or construction of additional new facilities. Streets proposed for widening include Kalia Road, Kalakaua Avenue, Ala Wai Boulevard and Kapahulu Avenue. Kuhio Avenue from Kaiulani Avenue is proposed to be widened and extended to connect with Kapahulu Avenue. A major Waikiki by-pass route\* along the mauka side of the Ala Wai Canal is proposed to connect Ala Moana Boulevard and the H-1 Freeway to reduce the through traffic. Thus, the major highway system to serve the Waikiki District has already been planned, providing the District with a workable and well integrated system.
- 3. <u>Traffic volumes</u>. Traffic volume information and data were obtained from the report "Traffic Summary, Island of Oahu 1973" of the State Department of Transportation and from traffic volume counts collected by the Department of Transportation Services of the City and County of Honolulu.

The "Traffic Summary" is a digest of current and historical data relative to vehicular traffic and travel, and includes a tabulation of the average daily traffic counts at selected stations. Traffic volumes are collected annually making it possible to compare and analyze the growth trends of traffic on the various sections of the highway system.

Table 2 shows the past and present traffic volumes on the major streets of Waikiki at the Lewers Street Screenline for the years 1963 to 1975. Very few traffic counts were taken prior to 1967. In 1967, the average daily traffic on Kalakaua Avenue, then operating as a two-way street, was 37,729. Upon conversion of Kalakaua Avenue and the street system of Waikiki into one-way operation in 1971, the traffic volume on Kalakaua Avenue showed a considerable reduction from the 1967 volume of 37,729 to 30,061 in 1971, a decrease of 7,668 vehicles or 20.3 percent. One year prior to the conversion, the traffic volume on Kalakaua Avenue in 1970 was only slightly lower than the 1967 traffic volume. In effect, the one-way operation distributed the traffic load over more streets and diverted the Ewa bound traffic of Kalakaua Avenue to Kuhio Avenue and Ala Wai Boulevard, primarily Ala Wai Boulevard. Whereas, in 1967, the traffic volume on Ala Wai Boulevard was only 69 percent of the traffic volume on Kalakaua Avenue, in 1975 the traffic volume on Ala Wai Boulevard represented 83.2 percent of the traffic volume on Kalakaua Avenue. This redistribution of traffic illustrates the fact that there are alternatives to the solution of the traffic problems without major physical improvements of the highway system.

\* The State Department of Transportation (letter to Environmental Communications, Inc., dated August 3, 1976) stated that, ". . . while the by-pass is on the current, endorsed long-range transportation system plan for Oahu, it would require further alternative analysis especially in light of section 4(f) requirements before the segment can be implemented." Table 2

## 24 Hour Traffic Volumes Lewers Street Screenline

Year	<u>Ala Wai Blvd</u> .	Kuhio Avenue	<u>Kalakaua Ave</u> .	Total Screenline Count
1975	30,351	22,647	36,473	89,471
tion with character				nalasa manga sakata kakita tahun katita
1973	30,816	19,725	33,493	84,034
	waare paden Manini Ananin Adami. Sadar			vitae alaka, dataka ditapa takan
1971		15,413*	30,061*	
1970		15,118	36,648	
	spine space solar space same projet		nganga apapat najimi anagan anatan najimi	uljum uljuši sljajd uljuša dolat sljano
1967	26,024	17,146	37,729	80,899
	AND ANY ROL WAS TANK			0022 -040 306- 0406 0004 www.
1963	16,070			

#### \* Converted to one-way operations

Unlike most urban or rural highways, the travel pattern on the streets of Waikiki does not depict two distinct peak travel periods, usually one in the morning and one in the afternoon. Instead, the duration of the peak travel period extends for a longer period of time. For Kalakaua Avenue, the peak travel period may be said to begin at 8:00 a.m. and extend over the entire period until 6:00 p.m. in the afternoon. In fact, the morning peak hour does not occur until midday, between 12:00 noon and 1:00 p.m. This longer period represents not only travel to and from home or the hotels but also non-home based travel to Waikiki.

This special characteristic is of greater importance in determining the ability of the streets to accommodate an increased volume of traffic without exceeding the capacities of the streets. The significant difference in peak hour characteristics would result in an equalization and spacing of the traffic load. Resort facilities to accommodate primarily the tourists, therefore, will cause only a mild traffic impact on the highway during the peak commuting hours. Typically, the peak commuting hours on a highway are hours of subdued activity at a resort facility. The peak hour of activities at a resort facility occurs during the daytime between the peak commuting hours of a highway or during the evening hours, with the daytime peak hour being a higher percentage of the evening peak hour.

4. <u>Parking</u>. Presently there is no parking area available to customers of the present commercial facilities which occupy the site. Parking is available, however, in private parking lots nearby. Hourly rates at these parking lots range from \$.50 to \$.75.

The Waikiki District has a high dependency in walking to activity centers within the neighborhood. There are very few automobiles owned or driven by the visitors and tourists for general activities or needs, including shopping. The pedestrian dependency factor is of considerable importance in the district and relates to the need and the ability of the visitors to walking for general activities or needs.

5. <u>Public transportation</u>. Public transportation, available via the County's "The Bus" system serves the Waikiki area. The average headway is approximately two minutes during the peak and off-peak periods.

#### D. Socioeconomic Considerations

1. <u>Socioeconomic characteristics</u>. The Waikiki district consists of the area bounded by Ala Wai Canal on the north and west, and Kapahulu Avenue on the east. This .7 square mile area is renown as a resort area where a majority of the visitors on Oahu stay during their visits. It is characterized by many high rise hotels, shops and restaurants, featured entertainment areas, and of course, Waikiki Beach.

It is difficult to determine the de facto population of Waikiki since it differs depending upon the time of year, and time of day. One of the most recent estimates<sup>9</sup> indicates that approximately 42,500 visitors temporarily live in the Waikiki district at one time. In addition to this number, 23,000 people in the district are permanent residents<sup>10</sup> of the State. In total, there is estimated to be approximately 65,500 persons living in the Waikiki district. (This would exclude businessmen, employees, etc., working in the Waikiki district.)

As indicated by the statistics given above, the Waikiki district has one of the highest densities in the State. With 65% of its population visitors, the Waikiki district caters to the needs of the visitor industry. Because of this unique socioeconomic

<sup>&</sup>lt;sup>9</sup> Establishing a Sound Future for Waikiki Through Density and Planning Controls, Robert H. Freilich and Martin L. Leitner, July 25, 1974.

<sup>&</sup>lt;sup>10</sup> Permanent residents in the Waikiki district are located primarily along the periphery of the district, such as the areas north of Ala Moana Boulevard, and immediately makai of Ala Wai Boulevard.

profile of Waikiki (as based on <u>visitor industry</u>), the paragraphs below limits its review of existing socioeconomic conditions to the project site, rather than the total community.

Tables 3 and 4, identifies the present tenants on the project site, and their leasable area, total annual sales, and current number of employees. In summary, the present site is occupied by 45 tenants having a total of 489 employees (391 full-time and 98 part-time). A total of 78,000 square feet is being leased to these shops. The total annual sales for food services, apparel and other retail is \$7,490,000. Other business sales (commercial office spaces, services, and outdoor concessions) were not quantified.

Presently, a great majority (over 80%) of the patrons are estimated to be visitors who walked, rode buses or taxis to the shopping area.

It is also emphasized that the broad definition of socioeconomic considerations overlaps into other subsections of this report, especially Section VII. Alternatives to the Proposed Action, and on discussions involving the feasibility and economic impact of the project.

2. Assessment and real property tax.<sup>11</sup> The records of the State Department of Taxation indicate that the subject Kalakaua Commercial Area, area 272,215 square feet, is comprised of certain tax parcels and portions of others. At present it includes portions of the site of the Royal Hawaiian Hotel and the Sheraton Waikiki Hotel. The first 110-foot width of the lands along Kalakaua Avenue is assessed as being in the B-5 Resort Commercial District while that abutting on the makai side is in the H-2 Hotel District.

For purposes of this study and appraisal, the subject site was assumed to be entirely in the B-5 Resort Commercial District. Based on the valuations for 1975-76 and the tax rates as set for the fiscal year 1974-75 the assessed valuation and real property tax were estimated as follows:

		Estimated Assessed Value	1974-75 Tax Rate	
-	15 S.F. 99 S.F.			
202,5	)6 S.F. @ \$	60 \$12,150,360	\$18.87	\$229,275
Improvements @ 50% of (	Cost	13,850,000	13.21	343,465
Total		\$26,000,360		\$572,740

11 Source: Helumoa Land Co., Inc.: "Assessment and Real Property Tax".

# TABLE 3

Section 1

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# EXISTING TENANTS AND PRIMARY USE

Tenancy No.	Tenant	Primary Use
2345	APCOA	Parking Lot
2346	Leilani Gift	Hawaiian Wear
2347	Pomare Tahiti	Hawaiian Wear
2348	Island Fashions	Hawaiian Wear
2349	Aloha Airlines	Ticket Office
2350	Surfside Camera	Camera Shop
2351	Trisha's	Hawaiian Wear
2352	American Savings	Savings & Loan
2353	Elsie Krassas	Hawaiian Wear
2354	Spencecliff	Restaurant
2355	Meanani	Hawaiian Wear
2356	Pioneer Federal	Savings & Loan
2357	K. Isoshima	Hawaiian Wear
2358-A	Crater Corporation	Jewelry
2359	Stewart's	Drug Store
2360	Rainbow Plant	Plant Shop
2361	Shari's	Fast Foods
2365	U. S. State Department	Office
2366	Photog. Consult.	Office
2368	U. S. Army Recruiters	Office
2369	T. Kanoelehua	Lei Stand
2370	Budget Rent-A-Car	Car Rental
2371	Mike Muller	Super Shirts
2372	Western Airlines	Ticket Office
2373	Gray Line	Transportation
2374	Ming's, Inc.	Jewelry
2375	Hawaii Visitors Bureau	Office
2376-A	Raku Leathers	Leather Wear
2377	K. Suehiro	Jewelry
2378	MacKenzie	Travel Agent
2379	Island Holidays	Travel Agent
2380-A	M. Khemlani	Batik Clothes
2382	Pana Enterprises, Inc.	Office
2384	Olsen Rent	Office
2385	E. Noguchi	Office
2386	Pacific Connection, Inc.	Jewelry
2387	L. Kreitzman	Jewelry
2389	S. Mason	Importer
2391	McInerny	Retail Store
2392	Snack Shop	Restaurant
2392-A	Ron's	Ice Cream
2393	Hotel Service Center	Gym
2394	Leone's Seeds	Seeds & Shells
2395	L. Sniffen	Leis
2413	Mara Mossman	Jewelry
2416	Hawaiian Monarchy	Office

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Table 4 Current Tenants

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Use category	Number of tenants	Gross leaseable area (sq. ft.)	Total annual Sales	Average sales per sq. ft.	Current number of employees
Food services Apparel	4 4	15,000 24,000	\$2,250,000 3,880,000	150 160	164 107
Miscellancous retail Traval & hanking	6	17,000	1, 360, 000	80	105
services Offices	0 S	11, 000 4. 000	ононын 1997-ты	тилин	77 25
Outdoor concessions Total	s 45	78,000		390	11 489
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Note: Columns may not add up due to independent rounding.

Source: Evaluation Research Associates, April, 1976.

Since 1964 the total assessed value of real estate in Hawaii has been increasing at an average annual rate of 15.5%. For the future, we may expect a continuing increase but at a more moderate rate. Greater government services such as police and fire protection will have to be provided. New schools, parks and highways will have to be built. The burden of providing the funds will fall heavily on real estate.

## E. <u>Historical and Archaeological Considerations</u>

The only known historical site within the parcel or its immediate vicinity is the Royal Hawaiian Hotel located on .66 acre of the project site. The Royal Hawaiian Hotel (address 2259 Kalakaua Avenue) was built in 1927 and is described as:

"Probably the most famous landmark in Waikiki. Known as the 'Pink Palace', it serves as a reminder of the gracious elegant days of the past. Baroque style adapted to Hawaiian climate."12

On June 21, 1971, the Hawaii Historic Review Board placed the hotel in the "valuable" category.

The proposed project is not expected to adversely affect the existing Royal Hawaiian Hotel. As part of the concept of a "garden setting" shopping center, the landowner, Bishop Estate, through its trustees, outlined the policies on which this shopping complex would be constructed and operated. The overriding policy was to maintain, and whenever possible, enhance the environs of the Royal Hawaiian Hotel. Its historical importance and world-renown setting was recognized and the architect provided for measures which would assure a continuation of the Royal Hawaiian Hotel's views and grounds. In this respect, we have incorporated into the project design and plans, a set of design features, many of which were suggested by the staff of the Department of Land Utilization, in which special treatment of the Royal Hawaiian Hotel is insured.

At the present time, the shopping complex permits two view planes or vistas into the Royal Hawaiian Hotel's interior garden. These are located at the driveway entry (110' wide) and at the entry to the Royal Hawaiian (35' wide). Upon completion of the project, the following view corridors will be completed:

- -- new realigned driveway into the Sheraton-Waikiki entry (88' wide) aligned with Royal Hawaiian Avenue.
- -- new view plane aligned with Seaside Avenue (120' wide).
- -- three view openings into the Royal Hawaiian gardens, each approximately 30' wide.
- 12 Department of Land and Natural Resources, State of Hawaii, <u>The Hawaii</u> <u>Register of Historic Places</u>, 1974.

Comments from the Outdoor Circle (see page 79) also indicated that "The Outdoor Circle is very concerned about the trees involved."

## F. <u>Recreational Considerations</u>

Presently, the recreational use of the project site is primarily the passive walking through and enjoyment of the landscaped area makai of the existing buildings by hotel guests (which fronts Kalakaua Avenue). This landscaped area is relatively small and not located in the vicinity of Royal Hawaiian Hotel.

The shoreline is approximately 850 feet makai of the project site and is well utilized by beachgoers. Because many of the beachgoers are visitors, they walk from their hotels to the beach. Presently there are two corridors through which beachgoers can go to the shoreline area makai of the site. The first corridor is a 15 to 20 feet pathway cutting through the present buildings and passing the Royal Hawaiian and Sheraton Waikiki hotels. The other corridor which can be utilized is the existing roadway to the Sheraton Waikiki Hotel. This roadway is located 500 feet Diamond Head of Lewers Road.

## III. THE RELATIONSHIP OF THE PROPOSED ACTION TO LAND USE PLANS, POLICIES, AND CONTROLS FOR THE AFFECTED AREA

## A. The Proposed Land Use is Considered to be Appropriate<sup>13</sup>

Because of its central location, the proposed site is among the most desirable sites in Waikiki for the type of development which is contemplated. The property is located in the heart of Waikiki's commercial area and is entirely surrounded by high-rise hotels, and office structures. It will be within walking distance of virtually all the 22,000 hotel units in Waikiki. The desirability of the project is compounded by the complementary factors which will be exerted by the close proximity of the large hotels in its immediate vicinity, e.g. the Royal Hawaiian, the Sheraton Waikiki, the Outrigger, the Holiday Isle, etc.

Bishop Estate trustee Richard Lyman has expressed the feeling that low-rise development of the land near the Royal Hawaiian will set a quality tone for the area and can be the key for revitalization of Waikiki.

In conjunction with this sentiment the objectives of the project were established. They include:

- (1) Creation of a high quality commercial center for the existing and expected tourist population of Waikiki.
- (2) Generation of high-revenue commercial ventures, with concomitant rentals for the owner.
- (3) Preservation and enhancement of a Hawaiian character within and around the complex.
- (4) Provision of opportunities for innovative retailing practices and for activities which will continue a high level of interest in the center.
- B. The Need for Commercial Uses in Waikiki<sup>14</sup>

In 1960 there were 7,151 units in Waikiki and Ala Moana, in 1972 there were about 22,000 existing and planned units in Waikiki and Ala Moana. This is a 300 percent increase in hotel units, with a concomitant visitor increase of 367 percent. Meanwhile, the total acreage devoted to commercial use in 1960 and 1970 remained about the same.

<sup>13</sup> Quoted from, "Application for an Amendment to the General Plan of the City and County of Honolulu", May 16, 1973. Applicant: The Trustees, Estate of Bernice Pauahi Bishop; Agent: Wong & Wong/Palmer & Turner, Architects.

<sup>14</sup> Ibid.

The need for commercial space is irrefutable, especially since shopping is one of the favorite activities of many tourists. Over half of the 1,216 respondents to the Real Estate Research Survey were in the area to shop or to browse; 25 percent were there for dining and entertainment. Other reasons for being in the area included work (9 percent); beach (4.2 percent); and returning to hotel or home (5 percent). One out of every three persons interviewed purchased merchandise on the day of the interview. Over half spent more than \$25. If, as is expected, the recreational patterns of tourists continue, a significant unsatisfied potential for additional commercial space will occur.

Experience has shown that no single store or group of stores in any shopping complex can expect to obtain all of the unsatisfied potential of any given area for a significant length of time. Previous sections of the discussion outline demonstrated that the magnitude of the potential market is more than adequate to accommodate the Kalakaua Commercial Complex, for Waikiki is expected to manifest an unsatisfied potential of over \$100 million dollars by 1980. This is more than large enough to accommodate a project of the proposed size. Of this total the Kalakaua Commercial Project can be expected to attract about \$9 million in 1975 and \$37 million by 1980.

Conversion of the estimated sales volumes to approximate store sizes indicates that Waikiki will require an additional 180,000 s.f. of commercial space by 1978. The demand will have doubled to 380,000 s.f. of retail space by 1980.

In addition to the demand for retail space, a substantial unsatisfied potential for office space is anticipated for Waikiki by 1980. This demand will occur especially in the following four categories: 1) Transportation, Communication and Utilities Service Offices; 2) Finance, Insurance and Real Estate; 3) Other Business Services, including Advertising and Employment agencies; and 4) Professional and Semi-Professional Services.

Among these four categories it is anticipated that the types of offices which will primarily be attracted to the Kalakaua Commercial Complex will be those who benefit from the cosmopolitan atmosphere which it can offer, e.g. travel agencies, tour companies, and airlines.

# C. <u>The County's General Plan<sup>15</sup></u>

The Waikiki Special Design District doesn't require a General Plan change. The General Plan designates approximately 3 acres of the project site (about 50% of the total site) for resort. These 3 acres are zoned for hotel (H-2). The remaining acreage is zoned for resort-commercial use.

<sup>15</sup> Quoted from "Application for an Amendment to the General Plan of the City and County of Honolulu", May 16, 1973. Applicant: The Trustees, Estate of Bernice Pauahi Bishop; Agent: Wong & Wong/Palmer & Turner, Architects.

## D. <u>The Waikiki Special Design District (WSDD) - County Ordinance</u> No. 4573.

The Waikiki Special Design District (WSDD) was established by Ordinance No. 4573 in March, 1976. The WSDD sets forth requirements relating to land uses, design controls, a circulation plan, urban design guidelines, and height, setback, and density regulations. (See Figures 7, 8, and 9.)

After obtaining the Shoreline Management Permit (required via Ordinance 4529), the developer must also obtain a Development Conformance Certificate indicating conformance (and in some cases exemption of specific items) to the Waikiki Special Design District.

#### IV. THE PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT

## A. Impact on the Site's Physical Geography

Because of the present urbanized nature of the project site, it is not felt that the construction of the Kalakaua Commercial Center will adversely alter the land use and nature of the area. As previously indicated, the height and subsequent number of stories proposed would increase the floor space, however, the commercial use of this area will be retained.

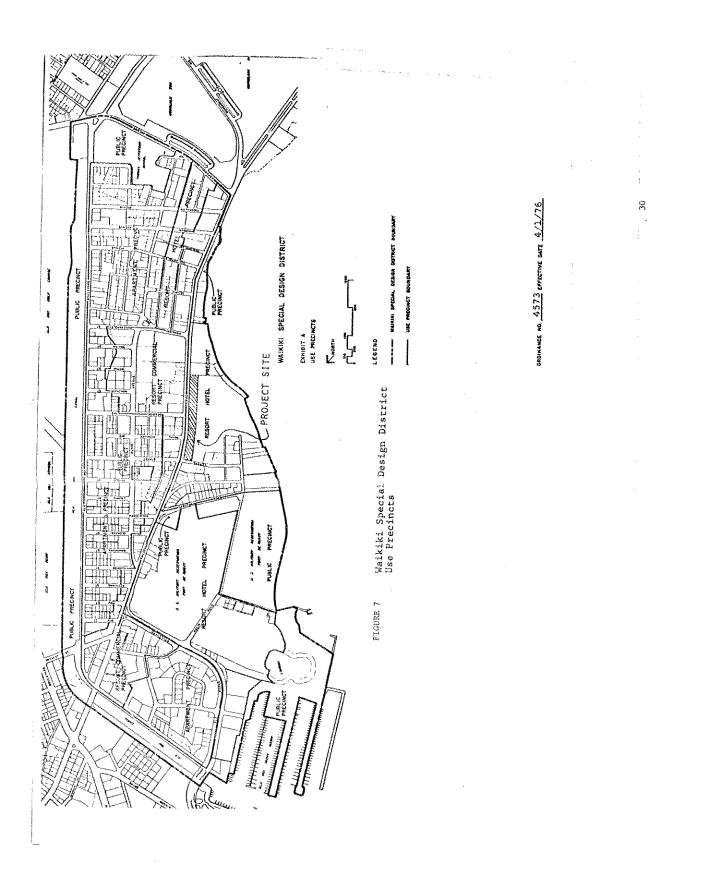
An exception to the urbanized portions of the project site is the landscaped area in the vicinity of the Royal Hawaiian Hotel. This "court garden" type atmosphere is planned to be reserved and the mature trees (which are found to be healthy) will be retained. Coconut trees along the perimeters of the site will also be retained.

The project plans also stress the landscaping and "garden" atmosphere of the complex. A set of renderings and the proposed floor plans will be available for review at the Office of Environmental Quality Control<sup>16</sup> for public review.

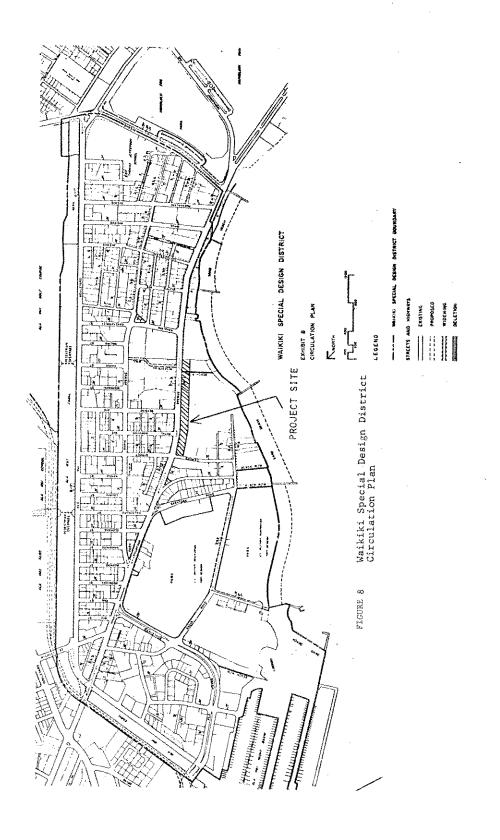
The avifauna is not expected to be adversely affected. Construction and site work activities will normally cause avifauna to temporarily relocate, however, it is felt that upon operation of the shopping complex the avifauna will reappear. As previously stated, the avifauna is exotic and consists of common species seen throughout the island.

Environmental impacts such as water quality, aesthetics, air and noise are discussed in subsection G of this section.

<sup>16</sup> Located at 550 Halekauwila Street, Room 301.



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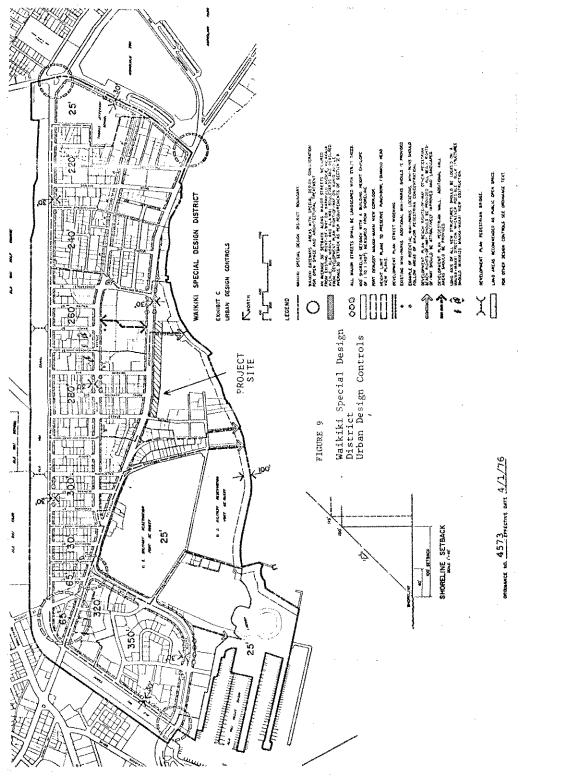
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#### B. Impact on Infrastructures and Support Services

- <u>Water system</u>. As previously indicated, the existing 8-inch main is adequate to serve the project.
- 2. Sewer system. During the consultation period, the County's Department of Public Works provided the following recommendation in regards to the sewer system:17 "We recommend that wastewater from the entire proposed commercial complex be served by the two (2) 12-inch sewer mains on Kalakaua Avenue. Flows entering the existing 8-inch Lewers Road sewer should be diverted to the Seaside sewer on Kalakaua since the former is experiencing some capacity problems."

Although this project will result in the increase of sewage, such an increase should be minimal due to the commercial use of the complex. No significant adverse impact on the existing sewer system is anticipated.

3. <u>Drainage system</u>. The existing drainage system was described on pages 16 and 17.

The Seaside Avenue drain is adequate for the project. Storm runoff from the buildings, as well as new catch basins at the intersection of the new driveway and Kalakaua Avenue, will be conveyed to the box culvert in Seaside Avenue. The storm runoff to Lewers Road and Kalakaua Avenue at the Diamond Head side of the project will be reduced significantly.

In addition, the Department of Public Works' recommendation (quoted below) will be followed through by the retained engineering consultant.

"The design of the proposed off-site drainage line across Kalakaua Avenue should be coordinated with the Drainage Section of the Division of Engineering. We recommend that the crossing be located at the existing Kalakaua Avenue driveway between Royal Hawaiian Avenue and Seaside Avenue (between E and F on Figure 3, page A-3) so that other local drainage improvements can be tied in."18

4. <u>Police services</u>. No adverse or significant impact on police services are expected. This is due to the private security system which will be retained for the shopping complex. Additionally, the Police Department noted: 19 "We do anticipate

<sup>17</sup> A copy of the Department of Public Works' response of June 7, 1976 is found on page 71.

<sup>18</sup> Ibid.

<sup>19</sup> See letter from Police Chief Frances Keala, Police Department, (June 18, 1976), pages 84.

that with a development of the type planned, an increase in called-for services will be generated for this Department. Present services provided will be able to handle the anticipated increase".

5. <u>Fire services</u>. No adverse or significant impact is anticipated in this category. Fire protection devices and measures will be incorporated as required by the Fire Marshall and the applicable codes and standards.

The Fire Department<sup>20</sup> provided this comment: "Fire protection facilities in the location described are adequate, and the Fire Department does not know of any conflict that may arise out of your proposal."

6. <u>Solid waste collection and disposal</u>. Since city refuse collection does not afford the flexibility of a private operation with respect to points of pickup, volume and frequency, private refuse collection is planned. The refuse will be compacted.

Recognition will be made of the necessity for screening service and refuse areas from view.

C. Impact on Transportation

1. Impact on the highway system.<sup>21</sup> For the Waikiki District only, traffic counts obtained from various traffic surveys conducted by the Department of Transportation Services of the City and County of Honolulu show that traffic crossing the Lewers Street Screenline extending from Kalakaua Avenue to Ala Wai Boulevard increased at a low rate of 1.32 % per year for the period from 1967 to 1975.

With the establishment of the Waikiki Special Design District regulating land use and growth, traffic crossing the Lewers Street Screenline should be considerably lower than the present rate of 1.32% per year. With a 66.9% reduction in hotel rooms than is permitted under existing zoning, the rate of growth of traffic should not exceed 0.44% or less than one-half % per year. The 0.44% increase per year is equivalent to an increase of only 8.8% or 7,873 vehicles crossing the screenline within the 20 year period from 1975-1995.

To assure that a sufficient margin of safety is built into the analysis, the present and higher rate of growth of 1.32% per

<sup>&</sup>lt;sup>20</sup> See letter from Acting Fire Chief Anthony S. Lopez (dated May 27, 1976), pages 61.

<sup>21</sup> Source of analysis: "Traffic Impact Statement for Kalakaua Commercial Complex, Kalakaua Avenue, Waikiki".

year will be used so that this rate of growth will still be valid for the future. At the rate of growth of 1.32% per year, the traffic volume crossing the screenline will increase by 26.4% or 23,620 vehicles within the 20 year period from 1975 to 1995 for a total screenline volume of 113,091 vehicles. Assuming the worst situation whereby the increase in traffic will be equally distributed between Kuhio Avenue and Ala Wai Boulevard, the capacities of these streets will be able to accommodate the additional traffic volumes

The existing capacities of the major streets in Waikiki may be considered to be equal to its peak hour volumes. The 1975 peak hour volumes at the intersections are as follows:

#### Peak Hour Volumes - 1975

<u>Ala Wai Blvd</u> .	Kuhio Avenue	Kalakaua Avenue	Total
1,913	1,345	2,200	5,458

These capacity figures, however, are conservative when compared to the maximum observed traffic volumes recorded as early as 1961 on similar classifications of highways throughout the United States. On four-lane one-way highways, (Ala Wai Boulevard, for example) the highest hourly volumes ranged from 653 vehicles per lane to 958 vehicles per lane. These are average volumes per lane, so that the total hourly volumes for the four lanes ranged from 2,612 vehicles to 3,832 vehicles. On five-lane one-way highways, the highest hourly volumes ranged from 477 vehicles per lane to 619 vehicles per lane for a total hourly volume ranging from 2,385 to 3,095 vehicles. It may be pointed out that one of the major streets in the United States reporting the highest hourly volume in 1961 on a five-lane oneway highway is South King Street in Honolulu, Hawaii. In 1961, South King Street recorded an average volume of 619 vehicles per hour per lane and an ADT of 30,000 vehicles. From traffic counts conducted by the Department of Transportation Services of the City and County of Honolulu in 1972, South King Street recorded a total peak hour volume of 3,521 vehicles for an average volume of 704 vehicles per hour per lane, and an ADT of 37,387 vehicles.

There is justification to assume that the actual capacities of the major streets in the Waikiki District will be within the range of 653 to 958 vehicles per hour per lane as observed in 1961 on similar classifications of highways throughout the United States. That the existing capacity is very conservative and the actual capacity will be considerably higher is substantiated by past and present traffic volumes. It must also be emphasized that traffic volumes used for establishing the numerical values of the different types of roadways were determined from studies of many highways under a variety of conditions. Thus, it would be impossible to state that the volume measured or calculated is the absolute maximum that could be carried, inasmuch as maximum volumes observed at different times at one point will show a range of values. The capacity values obtained should, therefore, be considered as the <u>average</u> maximum volume and need to be adjusted to actual roadway conditions inasmuch as there are too many variables.

Assuming the 26.4% increase in traffic volume will occur by 1995, the peak hour volume at the screenline will rise from 5,458 to 6,899. With equal distribution between any two combinations of streets, Kalakaua Avenue and Kuhio Avenue or Kuhio Avenue and Ala Wai Boulevard, each street must be able to accommodate a peak hour volume of 3,450 vehicles. Inasmuch as all the major streets are or can be converted to a four-lane one-way street, their actual total capacities for each street will range from 2,612 to 3,832 per hour, based on the assumption that the actual capacities of the major streets in the Waikiki District will be within the range of 653 to 958 vehicles per hour per lane as observed in 1961 on similar classifications of highways throughout the United States. The existing highway system, therefore, will be able to accommodate the present as well as the future traffic volumes, with no consideration being given to the beneficial consequences resulting from the establishment of the Waikiki Special Design District.

The future highway system will mitigate at a future time any possible undesirable traffic congestion. Other factors also will influence and mitigate at a future time any possible undesirable traffic congestion. These include the following:

- (a) Should visitor arrivals exceed the capacity of the ultimate number of hotel rooms limited by the Waikiki Special Design District, much of the living units occupied by permanent residents will be converted to tourist use. Tourists own or drive very few automobiles.
- (b) Since traffic seeks its own level, much as water, the motoring public will find its own alternate route and avoid the Waikiki district.
- (c) Higher energy costs will encourage the trend towards smaller cars and the use of public transportation.

A traffic study was conducted by the Department of Transportation Services of the City and County of Honolulu on Wednesday, March 18, 1970 from 3:00 p.m. to 6:00 p.m. to determine the proportion of traffic passing through Waikiki. The study indicated that of the 22,300 vehicles that crossed the Ala Wai Screenline entering and leaving Waikiki during the three-hour study, only 2,600 or 12% were through traffic. Furthermore, 71% of the vehicles that entered the area did not exit within 20 minutes and vehicles that entered and exited Waikiki over the Ala Wai Canal constituted only 14% of the total. Thus, the majority of the vehicles had origins and destination within Waikiki. Through traffic, therefore, was not a major problem, contrary to common belief.

Figure 4 on page 8 shows traffic circulation patterns.

2. <u>Transportation difficulties and disadvantages</u>.<sup>22</sup> The tourists have transportation difficulties and obtaining adequate transportation is a growing concern since this has special problems in serving their needs. Many of the tourists are elderly people and they have fewer alternatives available in selecting travel modes than the general population. Some modes of travel require physical actions that are beyond the physical capacity of many elderly or disadvantaged people, such as driving cars or mounting bus steps. Some modes such as taxis or private autos now are too expensive.

Elderly people account for about 10% of the population and they are increasing in number faster than the rest of the population. A reduction in overall physical capacity causing difficulty in moving about is common for people over age 65. These physical disabilities present transportation problems and affect the travel modes they use. Services and facilities and activity centers, therefore, should not be beyond walking range, even though suitable mass transportation is available. The proposed Kalakaua Commercial Complex will be better able to support their needs and remedy the special transportation problems of the elderly to a great extent.

3. <u>Parking</u>.<sup>23</sup> Parking studies which have been conducted in the past indicate that Waikiki has a critical parking problem. On-street parking facilities are over-taxed and there is inadequate off-street parking. Nevertheless, these studies also indicate that the total Waikiki parking space supply slightly exceeds the area's generalized demand. The problem comes from a deficiency of parking spaces in the core zone of Waikiki.

Parking requirements based on 300,000 square feet gross leasable area indicate that according to the CZC, the project will require 1,006 stalls. Under provisions of the Waikiki Special Design District, this requirement can be reduced by 50%, if justification for such reduction is accepted by the Department of Land Utilization.

23 General Plan Application, previously cited.

<sup>22</sup> Source of analysis: "Traffic Impact Statement for Kalakaua Commercial Complex, Kalakaua Avenue, Waikiki".

Of the 1,234 persons interviewed in the Real Estate Research Corporation survey, 93% of the people in Waikiki for shopping, browsing, entertainment, or dining did not park in the area. Of the remaining 7%, 3% were workers who parked in the area, and the rest were either residents or visitors staying outside of Waikiki.

Since slightly over 90% of the Kalakaua Commercial Complex patrons will not park in the area, the number of parking spaces required by the CZC appears excessive.

It would be unaesthetic, costly and wasteful of valuable land to provide too many spaces. Yet traffic congestion and failure of the shopping complex to reach its sales potential will result from too few spaces.

The Comprehensive Zoning Code mandates 1,200-1,300 parking stalls. The Waikiki Special Design District permits that total to be reduced 50% to 600-650 parking stalls. Because of these code limitations, the applicant plans to build 600-650 stalls. If this requirement can be reduced, the applicant will agree to reduce the size of its garage accordingly.

 Public transportation. The present bus service to the Waikiki area is adequate to meet the additional ridership demands. No significant or adverse impacts are anticipated in this area.

#### D. Impact on Socioeconomic Aspects<sup>24</sup>

Table 4 displays some of the key characteristics of the present tenants. These figures were prepared from records maintained by the rental agent for the property as well as from personal interviews with all but four of the present tenants. The primary purpose of the survey was to gain further information about the plans of the tenants.

All of the tenants interviewed realized the possibility of having to vacate within the coming year. Their plans for the period following the anticipated dislocation were varied, ranging from going out of business to immediate relocation. Based on the likelihood that the tenants themselves are the best source of knowledge concerning what may become of their businesses when the current buildings are demolished, the future possibilities derived from these expectations are shown in Table 5. Of the 45 tenants, 25 believed they would be able to relocate quickly in available space in Waikiki (or elsewhere if the Waikiki location was not vital). This was particularly true of branch stores or offices that were part of a larger business concern, for the costs involved in setting up their operation elsewhere could be absorbed by the parent company. Twenty-eight of the present

<sup>24</sup> Analysis from Evaluation Research Associates, cited previously.

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Use category	Number of tenants	Number expected to relocate quickly	Number expected to relocate in the proposed project	Number expected to close permanently
Food services	ŝ	0	ŝ	0
Apparel	11	Ś	7	اسع
Miscellaneous				I
retail	6	0	4	0
Travel & banking				\$
services	10	ω	7	0
Offices	S	ιΩ	ς Ω	- 0
Outdoor concessions Total	45	25	<u>4</u> 28	2

Note: Columns may not add due to independent rounding.

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Source: Evaluation Research Consultants

tenants expected to eventually relocate in the proposed project, provided rental prices were competitive. Somewhat surprisingly, only five of the present felt that the dislocation would result in a permanent termination of their businesses. (Two of the five proprietors would retire.)

Virtually all the firms interviewed cited the extreme scarcity of comparable retail locations in Waikiki, and many feared that problems in obtaining any space at all might substantially delay their temporary or permanent relocation, with adverse effects on their sales and employees. There was apprehension that very substantial amounts (over \$25,000) of "key" money would be required by lessors of prime Waikiki commercial space. Many of the tenants had approached the leasing agents for the Hemmeter Center for retail locations, but tenants complained that the lease rates were considered extremely high.

Evaluation Research Consultants estimate roughly about one-third of the present tenants (mostly smaller businesses) will incur severe financial hardships resulting from the dislocation, but that no more than 4 or 5 would be forced to completely terminate their business activities. Several others seem to be in unstable financial positions, and may close, irrespective of problems with dislocation.

Another major impact is loss of jobs resulting from the dislocation. Table 6 summarizes the findings in this respect. Less than 30% of the present employees in the existing complex are likely to have to look for jobs with another firm. The rest are expected to be placed in positions elsewhere by their employers, with little or no delay. The 140 who are likely to be laid off should be considered more of a social problem than an economic problem per se, for most will likely be able to find similar positions elsewhere in the expanding tourism sector of Oahu's economy. In other words, the negative impact will be the very real costs (financial loss, frustration, and anxiety) involved in finding new employment. No way is known to estimate with useful precision the magnitude of these costs.

Partly balancing these adverse impacts would be the number of jobs and sales (nearly 4 times the present levels) involved in the proposed project upon its completion. However, it would be incorrect to say that the project would create that many jobs, for the levels of expenditures by tourists are the real source of such increases. The key question is whether the government should (1) encourage that these expenditures be made centrally in the Waikiki District in an atmosphere very conducive to such spending, (2) force tourist purchasing activities to be increasingly crowded into commercial space that is not expanding with tourist volume, or (3) encourage the tourists to increasingly spread into perimeters of existing commercial areas in Waikiki. From the point of veiw of economic growth, the first alternative seems most workable, for the expenditure levels are likely to be higher.

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Table 6. Impact on Employees

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	Number of	Current nur	nber of jobs	<b>Fstimated</b> num	Estimated number of lay-offs
Use category	tenants	full-time	full-time part-time	full-time	part-time
Food services	đ.	150	14	42	6
Appa rel	yaand yaand	64	43	11	18
Miscellaneous					
rctail	6	77	28	59	23
Travel & banking					e I
services	10	72	ŝ	10	0
Offices	ŝ	20	S	0	0
Outdoor concessions	6	æ	Ś	. <b>ს</b> ე	
Total	45	391	<u>98</u>	102	38

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Source: Evaluation Research Consultants

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#### DELETE:

#### "E. Impact on Historical and Archaeological Sites

No adverse impact is expected on historical or archaeological sites to occur due to the implementation of this project. The Royal Hawaiian Hotel (identified in the Historic Register) will not be affected by this project. Nor will the landscaped area fronting the hotel be significantly altered. No other substantiated or known historical site is known to exist in the affected area."

#### REPLACE WITH THE FOLLOWING:

#### "E. Impact on Historical and Archaeological Sites

Improvements to the existing site for commercial development of any type will have impact on the Royal Hawaiian Hotel. The proposed design was selected to minimize to the greatest extent possible, any negative impact on the Royal Hawaiian Hotel. As the result of the Design Competition held in 1972 when 16 designs were submitted, the design program covered by this EIS application represents a synthesis of concerns that relates among others, to the Waikiki core, building aesthetics, adjoining tenancies and economic viability. The design presently under consideration, represents the best combination of lowrise configuration consistent with the Design Competition criteria, and economic viability.

This design has in turn received considerable review by concerned agencies and as a result, has been further refined to reflect specific points of concern. It is felt that at this time the reviewing agencies have considered the proposed design and via their comments, have indicated that the potential impact on the Royal Hawaiian Hotel has been reduced to acceptable levels.

It is anticipated and understood clearly by the applicant that further and more definitive design review will take place during the Waikiki Special Design District review process. At this more appropriate time, the details of the project's impact can be specifically covered."

Insert to the Revised Environmental Impact Statement for the Proposed Kalakaua Commercial Complex, August 1976.

#### E. Impact on Historical and Archaeological Sites

No adverse impact is expected on historical or archaeological sites to occur due to the implementation of this project. The Royal Hawaiian Hotel (identified in the Historic Register) will not be affected by this project. Nor will the landscaped area fronting the hotel be significantly altered. No other substantiated or known historical site is known to exist in the affected area.

#### F. Impact on Recreational Activities

Access to the beach area (850 feet makai of the site) will be provided, via a 15-foot public right-of-way. No adverse longterm impact on public access to the beach area is anticipated.

However, some inconveniences and lack of a public right-ofway will occur during the construction period. The likely "closing off" of the area (during certain times of construction) must be done to safeguard public safety and is unavoidable.

#### G. Impact on Environmental Quality

- 1. Water quality. The project is not anticipated to create water pollution.<sup>25</sup> This is based on the recognition that the sewage generated by this project will be conveyed in the County's sewage system to the Sand Island Sewage Treatment Plant (when completed) and the treated effluent discharged in the ocean. Drainage will be conveyed via the County's drainage system and again, eventually discharged to sea. Surface water run-off will increase as a result of increased hard surfaces, however, because the amount of hard surfaces will not increase greatly, nor would surface runoff.
- 2. <u>Aesthetics</u>. The shopping complex is planned to be landscaped according to a landscape master plan. The plan envisions a shopping complex with a multitude of plantings within and along the perimeter of the project site. These plantings and wide mall areas are expected to provide an attractive physical plant in which patrons can enjoy their shopping and/or business trips.

In comparison to the existing commercial area, this proposed shopping complex will have slightly greater height (at the most 2 additional stories over the present structure, for a total of 4 stories) and a more attractive appearance. No obstruction of views are expected since a majority of the

This is a general statement. It is recognized that man's activities, regardless of the working, shopping or dwelling environment will create some form of pollution. However, it is felt that outside of the creation of indirect sources of water pollution, "freak" accidents, or unique circumstances, indirect impact on the surrounding water body (ocean) will be unavoidable, and in terms of visible or noticeable pollution, minimal.

buildings in the area are of a high-rise nature (15+ stories) and their lower floors do not have extensive view planes.

Although aesthetics is dependent upon an individual's point of view, the project developers believe that the atmosphere and low-rise nature of this project will be a significant improvement over the present commercial facilities.

3. <u>Noise</u>.<sup>26</sup> Noise measurements were taken at three locations along the proposed Kalakaua Commercial Complex on June 10 and 17, 1976 between 7:00 a.m. and 11:00 p.m. Noise measurements were taken at the following locations:

Station 1. On Don Ho Lane, near Sheraton Hotel Parking Garage.

Station 2. On Kalakaua Avenue, near Leilani Gift Shop.

Station 3. Behind McInerny store and 30 ft. from the mauka east wing of Royal Hawaiian Hotel.

Stations 1 and 3 were on or near the boundary between the proposed commercial complex and the hotels.

The lowest noise level recorded at Sheraton Waikiki Hotel (Station 1) was 59 dba. The highest was 80 dba. The 7:00 a.m. to 11:00 p.m. average noise level was 64.6 dba. The lowest noise level recorded at Royal Hawaiian Hotel (Station 3) was 54 dba and the highest was 75 dba. The 7:00 a.m. to 11:00 p.m. average noise level was 60.2 dba. As expected, the noise level on Kalakaua Avenue (Station 2) was loudest. The lowest reading was 60 dba and the highest was 90 dba. The 7:00 a.m. to 11:00 p.m. average noise levels of the three locations will show that the 7:00 a.m. to 11:00 p.m. noise level at Station 3 (Royal Hawaiian Hotel) is 9 db lower than the 7:00 a.m. to 11:00 p.m. average level at Station 2 (Kalakaua Avenue), and 5 db lower than the average level at Station 1 (Sheraton Waikiki).

This reduction is due mainly to the shielding effect of the McInerny building. The shielding effect of any sound barrier such as a building, wall, or earth berm depends on the height of the barrier and the angle it subtends at the receiver of the noise.

It is true that the proposed commercial complex will increase the pedestrian traffic in this area. It is also true that the automotive traffic on Kalakaua Avenue will increase as more hotels and business centers are erected. Ordinarily, we would expect the over-all noise level to increase with the increase in pedestrian and automotive traffic. This, however,

<sup>26</sup> Source: Dr. Iwao Miyake's study on noise impact of the Kalakaua Commercial Complex.

may not happen within the next ten years because the Federal and State laws require a progressive lowering of the noise produced by automotive vehicles beginning 1977. This may be enough to offset any increase in pedestrian noise.

The design of the new commercial building, with the pedestrian mall flanked by a 50 feet high building on the makai side and a 40 feet high building on the mauka side, helps to prevent most of the pedestrian and automotive traffic noise from reaching the hotel area. The shielding effect of the 50 feet tall building will reduce the noise level along the makai boundary to less than 60 dba.

The buildings will be air conditioned and sufficiently sound proofed to prevent the noise generated inside the building from escaping.

To keep the noise level at the boundary less than 60 dba, as required by the State Board of Health Regulation, Chapter 44B, the noise escaping from the parking garage, the air conditioning mechanical system, and the outdoor amphitheater must be controlled. The air conditioning mechanical system must also comply with the City and County Comprehensive Zoning Code (CZC) on noise as specified in Ordinance No. 3234. The noise from all of the above sources can be reduced to comply with all applicable noise regulations by incorporating noise attenuation techniques in the design of the facilities.

As witnessed by other construction sites in Waikiki during construction, noise from this project will become a source of annoyance for nearby hotels and businesses. This noise for the most part, is unavoidable due to the function of the equipment. In some cases, noise from heavy vehicular equipment can be lessened by the installation of special mufflers. Otherwise, the confinement of loud levels of noises to week-day working hours will be normally practiced. The noise generated during construction will be short-term and regulated by codes, regulations, and standards established by the City, State, and Federal (OSHA) agencies.

- 4. <u>Air quality</u>. As part of the Environmental Impact Statement preparation, and Air Quality Impact Study<sup>27</sup> was prepared. The findings of this study were:
  - (a) The project's air quality levels are in compliance with the State's Ambient Air Standards, see Table 7.
  - (b) The estimated air pollutants that would be generated from the proposed commercial development will be from vehicles. An estimate of air emissions from vehicular sources indicates that these emissions will be insignificant. See Table 8.

<sup>27</sup> Prepared by Environmental Communications, Inc., March, 1976.

Pollutant	State Ambient Air Standardsl (ug/m <sup>3</sup> )	Estimated Ambient Air Quality <u>ug/m<sup>3</sup> (1977)3</u>
Carbon Monoxide	5000 ug/m <sup>3</sup> 8 - hour period	225.7 ug/m <sup>3</sup> 24 - hour period
Hydrocarbons	100 ug/m <sup>3</sup> 3 - hour period	36.2 ug/m <sup>3</sup> 24 - hour period
Nitrogen Oxídes	150 ug/m <sup>3</sup> 24 - hour period	28.8 ug/m <sup>3</sup> 24 - hour period
Particulate Matter	100 ug/m <sup>3</sup> 24 - hour period	3.2 ug/m <sup>3</sup> 24 - hour period
Sulfur Oxídes	80 ug/m <sup>3</sup> 24 - hour period	1.3 ug/m <sup>3</sup> 24 - hour period
* Estimated air volume	- 16.07 x 10 or 160,700,000,000 cubic meters	, st
<pre>1 Source: Department of Heal     Quality Standards.</pre>	of Health's Public Health Regulations, Chapter 42, andards.	ter 42, Ambient Air
2 Based on Computations estimated to	s #1, #2, and #3 in Appendix I, including the vehicular emissions o occur with the operation of the proposed project.	he vehicular emissions project.

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#### Table 8

### AVERAGE DAILY EMISSION FOR PROJECTED VEHICULAR TRIPS GENERATED BY

THE PROPOSED KALAKAUA COMMERCIAL COMPLEX

Pollutant	Vehicular Miles	Average Emission Factors (g/mi)	(grams) Total Projected <u>Emissions</u>
Carbon Monoxide	13,500	48.3	652,050
Hydrocarbons <sup>2</sup>	13,500	7.2	97,200
Nitrogen Oxides	13,500	4.6	62,100
Sulfur Oxides <sup>3</sup>	13,500	.22	2,970
Particulates <sup>4</sup>	13,500	.54	7,290

#### ASSUMPTIONS:

- 1. Average speed of vehicles 19.6 mph.
- 2. Total of 600 parking spaces.
- 3. Assuming an average parking turnover of 6 from 9:00 a.m. to 9:00 p.m. for a total of 3,600 trips (trips to and from the complex within the air basin).
- 4. Between 9:00 p.m. to 9:00 a.m. there is an average parking turnover of 1.5 or 900 trips (trips to and from the complex within the air basin).
- 5. Each vehicular trip is 3.0 miles; that is, 1.5 mile to the complex and 1.5 mile from the complex (within the air basin).
- 6. Using 1977 calendar year average emission factor.

- <sup>2</sup> Includes the exhaust, crankcase and evaporation.
- <sup>3</sup> Fuel sulfur levels may be reduced in the future. It so, sulfur oxides emissions will be reduced proportionately.
- 4 Includes exhaust and tire wear.

Source of emission data: "Supplement No. 5 for Compilation of Air Pollutant Emission Factors", Second Edition, U.S. Environmental Protection Agency, Office of Air and Waste Management, Office of Air Quality Planning and Standards, December 1975.

#### Table 9

ESTIMATED EXISTING AMBIENT AIR QUALITY PROPOSED PROJECT (1977 EMISSION FACTORS)

Pollutant	$ug/m^3$
Carbon Monoxide	229.8
Hydrocarbons	36.8
Nitrogen Oxides	29.1
Particulate Matter	3.2
Sulfur Oxides	1.3

 $ug/m^3$  = micrograms per cubic meter.

#### DELETE:

- "(c) After the project is implemented, the observable air quality in the vicinity of the site should remain unchanged. Pollutants will slightly increase. However, no adverse affects are foreseeable. See Table 9.
  - (d) The implementation of the proposed project will not cause the air quality to exceed the present ambient air quality standards."

#### REPLACE WITH THE FOLLOWING:

"The proposed project may increase the air pollution at street level by about four percent but will have no significant effect on the number of times that the State Air Quality Standards are exceeded. The air quality within the garage is anticipated to be well within the applicable OSHA requirements. The exhaust of the garage ventilation system will have no significant detrimental effect on the air quality in the adjacent high-rise structures." (Sunn, Low, Tom & Hara ADDENDUM TO THE ENVIRONMENTAL IMPACT STATEMENT FOR THE KALAKAUA COMMERCIAL COMPLEX - AIR QUALITY EFFECTS report dated October 18, 1976, page 14 Summary.)"

Insert to the Revised Environmental Impact Statement for the Proposed Kalakaua Commercial Complex, August 1976.

Page 48, Revised October 18, 1976.

- (c) After the project is implemented, the observable air quality in the vicinity of the site should remain unchanged. Pollutants will slightly increase. However, no adverse affects are foreseeable. See Table 9.
- (d) The implementation of the proposed project will not cause the air quality to exceed the present ambient air quality standards.
- 5. Flood and tsunami inundation. According to the published information from the Oahu Civil Defense Agency, the project site is totally within the tsunami inundation zone. Additionally, we note that the U.S. Army Corps of Engineers made the following comments regarding the tsunami inundation area and flood limits in their letter of June 22, 1976 (see page 85):

"a. The proposed site is within the potential tsunami inundation area and flood limits of the Manoa-Palolo drainage system as shown on the draft flood insurance map. A copy of the flood insurance map showing potential flood limits at the proposed site location is enclosed. The project site lies in the 100-year flood inundation limits, Zone A, although these limits are not shown in the project vicinity, and also lies in the 500-year and 100-year tsunami inundation limits, Zones BV and V15, respectively. The flood insurance map will be used by the Federal Insurance Administration, Department of Housing and Urban Development for determining flood insurance rates."

#### V. ANY PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

At this time, no major or long-term adverse environmental or socioeconomic impacts caused by this proposed action are foreseen. It is recognized that some impact on air quality due to increased vehicular traffic will occur. However, as indicated on Tables 7, 8, and 9, these increases will be minimal and will not allow the ambient air quality standards to be exceeded. Additionally, some short-term noise annoyances may occur, but noise is unavoidable and will be limited to the week days and regular working hours.

In addition, the temporary displacement of employees and businesses can also be defined as an adverse impact. As detailed in the previous section, this temporary adverse socioeconomic impact will be compensated to some degree by the creation of long-term increased business and employment opportunities.

#### VI. ALTERNATIVES TO THE PROPOSED ACTION

#### A. Hotel Development 28

The impact which an additional 280 foot apartment or hotel

28 Quoted from General Plan Application (previously cited).

could have on Waikiki in general and the immediate vicinity specifically are negative from any point of view. The Waikiki hotel inventory (existing and proposed units) already equals that recommended for 1980 by the Waikiki Improvement Association. Furthermore, an additional high-rise to supplant one of the few remaining low profile areas in Waikiki would only aggravate conditions which have been criticized in national periodicals, e.g. lack of privacy, blocking of views, and an increase in noise and heat levels.

#### B. Recreational Use

If the property is put into a green open space use<sup>29</sup> the present economic value of the land and its revenue to the private businesses and the State and County will be lost. Additionally, jobs and the revenue to the developer will be lost or drastically reduced. Pragmatically, such an alternative cannot be considered feasible in view of the present value of the parcel.

The project site is owned by the Kamehameha Schools/Bishop Estate, a perpetual trust established to provide funds for the operation of the Kamehameha Schools. By the very nature of their responsibility, the Trustees must act to obtain a reasonable return on this land and cannot allow it to be used at a lower potential. To date, no governmental agency has undertaken condemnation proceedings to acquire the site for public purposes. This inaction is of course due to the high value of the site.

It is also pointed out that the subject parcel will provide the landscaping and total atmosphere which will accentuate the "Hawaiian character" within and around the area.

#### C. <u>No Action</u>

Should no action be taken, the existing commercial structures would continue to deteriorate, creating increased maintenance costs to the landowner which in turn could lead to loss of tenants and income.

#### VII. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Both the short-term and long-term benefits derived from this proposed shopping complex are anticipated to be the same. Economically, the property will increase in value, therefore, adding to the real property taxes to the County. Jobs will be created especially for salespersons, office workers, and restaurant workers. Sales made at the shopping center will increase revenue into the State, (based on visitors'

29 Suggested by the Outdoor Circle response of June 14, 1976, page 79.

xpenditures) as well as generate a 4% sales tax on merchandise. Additionally, the multiplier effect on employees' payrolls is normally in the range of 1:1 or 1:1.5.

Land rents will be generated for use by the Kamehameha Schools/ Bishop Estate.

In addition to these economic benefits, it is felt that the existing urban use of the land will not infringe upon other uses (such as residential, agricultural, or conservation). The appearance of the land will alter to reflect a low-rise attractive environment which will add to the experiences of visitors to the island.

The use of the land for this purpose, does, however, foreclose the land future options. It is rare to downgrade the use of the property once the infrastructures and structures are built. (The investment in these improvements will result in increased property value, and therefore, the withdrawing the land from an urban use has limited economic appeal.) Therefore, the land is committed to this use or, in the long-term future a higher usage.

#### VIII, MITIGATION MEASURES PROPOSED TO MINIMIZE IMPACT

During construction a number of conventional methods are available and will be employed by the contractor to alleviate short-term adverse effects. Specifically, these methods would serve to mitigate erosion problems, fugitive dust, noise, siltation, and solid waste. The following statutes, regulations, and legal requirements must be complied with:

- a. Grading permit pursuant to Ordinance 3968, City and County of Honolulu.
- b. Erosion Control Plan, pursuant to the Grading Ordinance.
- c. Applicable building, fire, plumbing and electrical codes pursuant to the adopted uniform codes and regulations, Building Department, City and County of Honolulu.
- d. Public Health Regulations, Chapter 37, Water Pollution Control, State Department of Health.
- e. Public Health Regulations, Chapter 37-A, Water Quality Standards, State Department of Health.
- f. Public Health Regulations, Chapter 42, Ambient Air Quality Standards, State Department of Health.
- g. Public Health Regulations, Chapter 43, Air Pollution Control, State Department of Health.
- h. Public Health Regulations, Chapter 44-A, Noise Control for Oahu, State Department of Health.

i. Public Health Regulations, Chapter 44-B, Community Noise Standards for Oahu, State Department of Health.

Items c through i also apply to the operational long-term mitigation measures for the shopping complex.

#### IX. ANY IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES THAT WOULD BE INVOLVED IF THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

It is anticipated that the construction and/or restoration of the shopping complex will commit the necessary construction materials and human resources (in form of planning, labor, landscaping, designing). Some of the construction material could be reused when the complex is demolished, however, at the present time and state of our economy, it is felt that the reuse of much of these materials would be restricted. The human resources expended for this project, however, will not be retrievable. The primary human resource, labor, can be compensated, and in the case of this project, it is expected that labor will be a continual commitment in form of employment in the businesses and shops. Additionally, the services and merchandise sold in the commercial complex can also be considered resources which will be consumed or utilized by the purchasers or others.

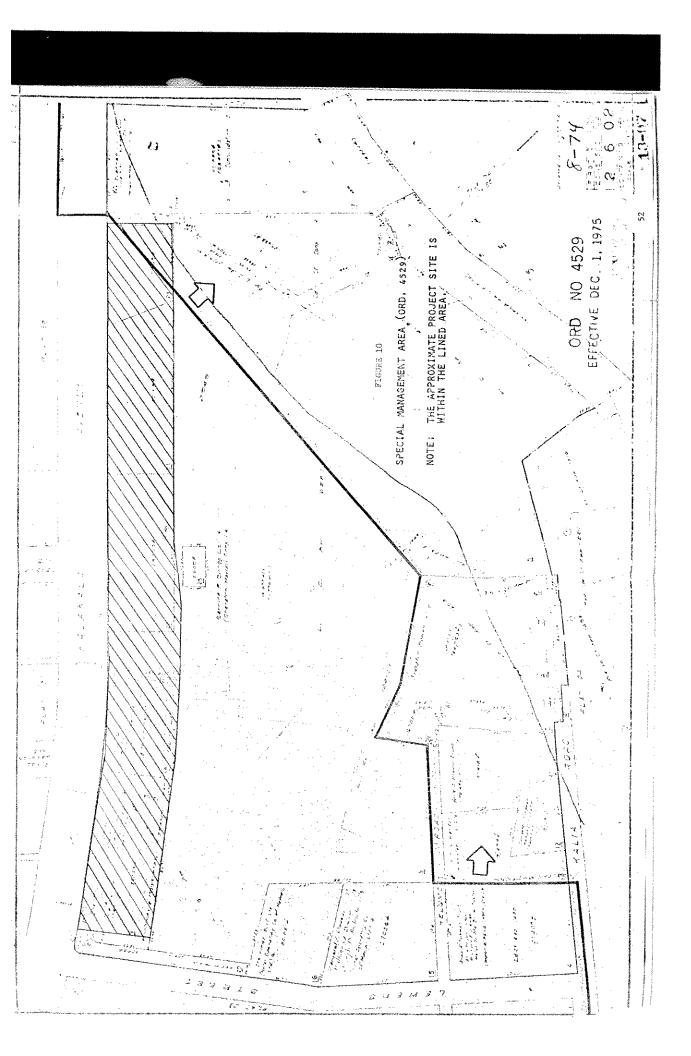
Therefore, it is felt that there will be some commitment of resources (largely man-made items or human resources) however, such resources will be normally utilized and renewed, and in the case of labor, compensated.

#### X. AN INDICATION OF WHAT OTHER INTERESTS AND CONSIDERATIONS OF GOVERNMENTAL POLICIES ARE THOUGHT TO OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION

Of primary concern here is the stated City policy relating to the shoreline protection district. Ordinance No. 4529 sets forth the Special Management Policy (Section 3), as well as Review Guidelines (Section 4) for the Council in the review of developments proposed in the special management area (shoreline). Because this small portion of the project (see Figure 10) lies within the shoreline protection district and this EIS is being prepared as part of the set requirements under Ordinance 4529, a careful evaluation was made to determine if the project was consistent with the established policy and review guidelines for the shoreline areas.

It was determined that the project is consistent with the policy and guidelines as stated in Ordinance 4529, due to the following reasons:

- 1. There are no known competitive uses of the site for a recreational, scenic, educational or scientific use.
- 2. No adverse impact or depletion of a natural resource is foreseen.
- 3. A public right-of-way to the beach front is being provided.



- 4. The sewage treatment and disposal system will be conveyed to a County sewage system and no adverse impact is expected.
- 5. No flooding to the project site and adjacent areas is anticipated. An approved Erosion Control Plan will be prepared by the project engineer and followed by the contractor.
- 6. The project will not involve any dredging, filling or other alterations to the shoreline.
- 7. The development will not detract from the line of sight toward the sea from Kalakaua Avenue. Presently this line of sight is not available because of the surrounding high-rise structures.
- 8. It is not anticipated that the project would cause major change to the drainage runoff quantity or quality.

#### XI. ORGANIZATIONS AND PERSONS CONSULTED

The following governmental and private agencies were contacted by correspondence dated May 21, 1976 for comments on th Environmental Preparation Notice on the Proposed Kalakaua Commercial Complex:

City and County of Honolulu	Honolulu Fire Department Honolulu Police Department Board of Water Supply Department of General Planning Departmentof Parks and Recreation Department of Transportation Services
State of Hawaii	Department of Education Department of Health Department of Land and Natural Resources Department of Planning and Economic Development Office of Environmental Quality Control
University of Hawaii	Environmental Center Hawaii Environmental Simulation Control Water Resources Research Center
Federal	U.S. Corps of Engineers
Private Organizations	American Lung Association Hawaii Hotel Association League of Women Voters Life of the Land Oahu Development Conference Outdoor Circle Waikiki Community Center Waikiki Improvement Association Waikiki Residents Association

#### XII. COMMENTS AND RESPONSES MADE DURING THE CONSULTATION PERIOD

The deadline for responses was set at June 23, 1976. Agencies commenting within this time period include the following:

#### Organization

#### Date of comments

Oahu Development Conference	May 24, 1976
Department of Education	May 26, 1976
Environmental Center	May 27, 1976
Honolulu Fire Department	May 27, 1976
Department of General Planning	June 1, 1976
American Lung Association of Hawaii	June 2, 1976
Water Resources Research Center	June 2, 1976
Department of Public Works	June 7, 1976
Board of Water Supply	June 8, 1976
Waikiki Improvement Association, Inc.	June 10, 1976
The Outdoor Circle	June 14, 1976
Department of Parks and Recreation	June 18, 1976
Honolulu Police Department	June 18, 1976
U.S. Corps of Engineers	June 22, 1976
Department of Health	June 22, 1976
Office of Environmental Quality Control	June 23, 1976
Department of Transportation Services	June 24, 1976

Copies of these comments along with the response (if needed) by Environmental Communications, Inc. are provided on the following pages.

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# OAHU DEVELOPMENT CONFERENCE

119 MERCHANT STREET - HONOLULU, HAWAII 96818 - TELEPHONE 537 5271

May 24, 1976

Mr. F. J. Rodriguez President Environmental Communications, Inc. P.O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Thank you for your letter concerning our possible comment on the Kalakaua Commercial Complex EIS.

We appreciate you informing us of this matter, but have no comment at this time.

Very truly yours,

William A. Grant Associate Director

#### OFFICERS AND BOARD OF DIRECTORS

CHAIRMAN OF THE BOARD HE PRESIDENT VICE-PRESIDENT VICE-PRESIDENT VICE-PRESIDENT SECRETARY-TREASURER

HERBERT C. CORNUELLE AARON LEVINE WILLIAM C. ROWLAND FRED B. SMALES CLIFFORD YEE

PETER C. RUSSELL

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June 15, 1976

Mr. William A. Grant Associate Director Oahu Development Conference 119 Merchant Street Honolulu, Hawaii 96813

Dear Mr. Grant:

SUBJECT: Proposed Kalakaua Commercial Complex

This will acknowledge receipt of your letter indicating that at this time the Oahu Development Conference has no comments to make. We will make a request to the Environmental Quality Commission that the Conference should receive a copy of the Environmental Impact Statement when circulated. Your continuing interest and concern are appreciated.

Very truly you migu J. Rodriguez

cc: Helumoa Land Co., Inc. Department of Land Utilization Community Planning, Inc. Wong, Wong & Peng, Inc.

F. J. RODRIGUEZ, PRESIDENT



#### STATE OF HAWAII

#### DEPARTMENT OF EDUCATION

P. O. BOX 2360 Honolulu, Hawaii 96804

OFFICE OF BUSINESS SERVICES

May 26, 1976

Mr. F. J. Rodriguez Environmental Communications Inc. 225 Queen Street Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

Subject: Proposed Kalakaua Commercial Complex

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Thank you for your letter of May 21, 1976, informing us of plans for the subject commercial complex.

We anticipate that the proposal would have no effect on existing or planned Department of Education activities.

Sincerely,

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KOICHI H. TOKUSHIGE Assistant Superintendent Office of Business Services KHT:JEE:yk

cc: Honolulu District

ENVIRONMENTAL COMMUNICATIONS INC.

June 15, 1976

Mr. Koichi H. Tokushige Assistant Superintendent Office of Business Services Department of Education P.O. Box 2360 Honolulu, Hawaii 96804

Dear Mr. Tokushige:

F. J. RODRIGUEZ, PRESIDENT

SUBJECT: Proposed Kalakaua Commercial Complex

Thank you for your letter of May 26, 1976 regarding the proposed Kalakaua Commercial Complex. We will incorporate your response into the Environmental Impact Statement for this project. Thank you again for your interest and cooperation on this matter.

Very truly you migu F. J. Rodriguez

cc: Helumoa Land Co., Inc. Department of Land Utilization Community Planning, Inc. Wong, Wong & Peng, Inc.



# University of Hawaii at Manoa

Environmental Center Crawford 317 • 2550 Campus Road Honolulu, Hawaii 96822 Telephone (808) 948-7361

Office of the Director

27 May 1976

Mr. F.J. Rodriguez Environmental Communications, Inc Harbor Square, Town Towers, 7-F 225 Queen Street Honolulu, HI 96813

Dear Fred:

#### Kalakaua Commercial Complex

We have received your EIS preparation notice and environmental assessment on the above project in both the Environmental Center and HESL. Although we do not plan to review the matter at this stage, you should not assume, as indicated in the third paragraph of your letter of 21 May that we may not have significant comments on the EIS during the public review phase. The Environmental Center does not contribute to the EIS consultation process so as not to appear to be in competition with consulting firms such as yours.

Sincerely,

Doak C. Cox Director

\*

cc: HESL

ENVIRONMENTAL COMMUNICATIONS INC.

F. J. RODRIGUEZ, PRESIDENT

June 15, 1976

Dr. Doak C. Cox Director, Environmental Center University of Hawaii 2550 Campus Road, Crawford 317 Honolulu, Hawaii 96822

Dear Dr. Cox:

Thank you for your response regarding the Kalakaua Commercial Complex. As per the normal review process, the Environmental Quality Commission will provide a copy of the Environmental Impact Statement to the Center for review and comments. We hope that at that time when more extensive data will be incorporated in the Environmental Impact Statement, the Center can provide their comments on the EIS. It has been our experience in the past that many comments provided by the Center have been useful in subsequent revisions of the EIS, we continue to look forward to such responses.

Very truly yours stige J. Rodriguez

cc: Helumoa Land Co., Inc. Department of Land Utilization Community Planning, Inc. Wong, Wong & Peng, Inc. FIRE DEPARTMENT

## CITY AND COUNTY OF HONOLULU

P. 0. BOX 3085 HONOLULU, HAWAII 96802

FRANK F. FASI Mayor



May 27, 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

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Dear Mr. Rodriguez:

We have reviewed the Environmental Impact Statement Preparation Notice and the Environmental Assessment for the proposed Kalakaua Commercial Complex.

Fire protection facilities in the location described are adequate, and the Fire Department does not know of any conflict that may arise out of your proposal.

Very truly yours,

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8. K. AIU

CHIEF

ANTHONY J. MOPEZ Acting Fire Chief

AJL:sb

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ENVIRONMENTAL COMMUNICATIONS INC.

June 15, 1976

Mr. Anthony J. Lopez Acting Fire Chief Fire Department City & County of Honolulu P.O. Box 3085 Honolulu, Hawaii 96802

Dear Mr. Lopez:

F. J. RODRIGUEZ, PRESIDENT

SUBJECT: Proposed Kalakaua Commercial Complex

Thank you for your letter of May 27, 1976 regarding the proposed Kalakaua Commercial Complex. We will incorporate your response into the Environmental Impact Statement for this project. Your interest and cooperation are appreciated.

Very truly yours, migy J. Rodriguez F.

cc: Helumoa Land Co., Inc. Department of Land Utilization Community Planning, Inc. Wong, Wong & Peng, Inc. DEPARTMENT OF GENERAL PLANNING

## CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET HONOLULU, HAWAII 96613

FRANK F. FASE Mayor



ROBERT R. WAY CHIEF PLANNING OFFICER

DGP5/76-1193(JB)

June 1, 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

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Dear Mr. Rodriguez:

Environmental Assessment for the Proposed Kalakaua Commercial Complex

This will acknowledge receipt of your letter dated May 21 concerning the above captioned. The outline and basic information as presented in the assessment report appears satisfactory. We have no other comments to offer.

Sincerely,

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ROBERT R. WAY Chief Planning Officer

RRW: ak

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ENVIRONMENTAL COMMUNICATIONS INC.

June 15, 1976

Mr. Robert R. Way Chief Planning Officer Department of General Planning City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Way:

F. J. RODRIGUEZ, PRESIDENT

> Thank you for your letter of May 27, 1976 regarding the proposed Kalakaua Commercial Complex. We will incorporate your response into Environmental Impact Statement for this project and continue to provide all current information on this project. Your interest and assistance are appreciated.

Very truly yours Migu J. Rodriguez

cc: Helumoa Land Co., Inc. Department of Land Utilization Community Planning, Inc. Wong, Wong, & Peng

# AMERICAN E LUNG ASSOCIATION of Hawaii

June 2, 1976

Mr. F. J. Rodriquez Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriquez:

Subject: EIS Preparation Notice for the Proposed Kalakaua Commercial Complex

Thank you for your May 21, 1976 letter seeking our comments on the subject project. Normally, in participating in the consultation phase of EIS preparation, we offer suggestions as to how we feel the air quality impact of a given project should be analyzed. We have therefore included such suggestions in the following paragraph. However, we have noted that your firm has already prepared an air quality study for the proposed project. If you would care to send us a copy of the report, we would be pleased to review it.

We are sure you recognize that the principal impact of this project on air quality will be due to the increase in motor vehicle traffic which may occur as a result of the development. Thus, an evaluation of the impact of traffic along Kalakaua Avenue and other access streets should be evaluated. The proposed parking structure is a potential source of air pollution and its impact should also be quantified. The analysis should include the numbers and types of motor vehicles attracted to this proposed indirect source, their temporal and spatial distribution (by access road and gates, as appropriate), their major emissions and their impact on local ambient air quality (microscale analysis). The following two publications would probably be useful in conducting this impact assessment.

Compilation of Air Pollutant Emission Factors (2nd Ed.) with Supplement 5. U.S. Environmental Protection Agency. (1973)

Guidelines for Air Quality Maintenance Planning and Analysis Volume 9: Evaluating Indirect Sources. U.S. Environmental Protection Agency. (1975)

Sincerely yours, James W. Morrow, Director Environmental Health

JWM:ct

cc: Dr. Richard E. Marland Mr. George Moriguchi ENVIRONMENTAL COMMUNICATIONS INC.

F. J. RODRIGUEZ, PRESIDENT

June 16, 1976

Mr. James W. Morrow, Director Environmental Health American Lung Association 245 North Kukui Street Honolulu, Hawaii 96817

Dear Mr. Morrow:

Your comments on June 2, 1976 are appreciated and have been analyzed by our staff and confirmed with the State Department of Health, Environmental Health Division. The impact on the ambient air quality that would result from the proposed project will in all probability, decline to some degree. It is understood, however, that the compliance levels established by the Department of Health would not be exceeded since the measurable air basin involved is considered adequate to assimilate the increased emissions.

With regards to your suggestion of how to analyze the traffic increase and attendant air pollution increase, we recognize the need to perform such an evaluation. However, due to the unavailability of acceptable diffusion models, we elect at this time to analyze the potential impact using the emission inventory system. Our reason also to pursue this methodology is that the entire procedure of indirect source review is currently under revision by the Federal government and until such time that approved regulations and guidelines are completed and made available to states, we are selecting this method.

Your comments and concern are appreciated and we are plaesed to provide you with a copy of the air quality study which we have prepared.

. Konlige J. Rodriguez

cc: Helumoa Land Co., Inc. Mr. Paul Aki, DOH Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

# UNIVERSITY OF HAWAII

Water Resources Research Center

Office of the Director

June 2, 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

The Water Resources Research Center of the University of Hawaii (WRRC) has no specific projects, areas, or policies which will directly conflict with the proposed Kalakaua Commercial Complex; however, we do have several comments and suggestions which we feel should be given consideration during preparation of the EIS for this project.

First of all, it was virtually impossible, using the prepared Environmental Assessment document, to visualize the placement of various structures, open areas, beach right-of-ways, etc. referred to in this document (p. 2, 5, 6 for example) because no map showing proposed improvements is provided. Such a map would be extremely desirable, even at this preliminary stage. The "site plan" in Figure 3 appears to show only existing structures, and none of the proposed new structures.

Secondly, of specific interest to WRRC will be the sections of the EIS dealing with provisions for handling surface runoff and sewage, and also requirements for water use. In order to properly assess whether existing sewerage and storm drain facilities are sufficient to handle the increased loads which will be imposed by this proposed new complex (as stated in the Environmental Assessment document of April 1976) it is imperative that adequate data for water use, and sewage and surface runoff generation be included in the EIS. This is especially important for the case of storm runoff, as portions of Waikiki in which the proposed development is to be located are notorious for storm flooding problems.

Finally, in the section of the Environmental Assessment dealing with Affected Environment (p. 13-16) several items which should be addressed are not even mentioned. In the section on Potential Major Impacts, no mention at all is made of impact on the Royal Hawaiian Hotel. Most certainly this proposed project will create a very significant visual impact, namely, it will largely obstruct the view of the Royal Hawaiian from the mauka direction. It is not clear from

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Mr. F. J. Rodriguez, President Page 2 June 2, 1976

the Environmental Assessment document what other effects might be as no usable site plan for the new complex was included. In the section on Alternatives, two possible alternatives of interest to many persons are not considered; namely, (1) recreation/park use, and (2) no development at all.

Sincerely, mh L.

Frank L. Peterson Acting Asst. Director, WRRC

FLP:jmn

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June 15, 1976

F. J. RODRIGUEZ, PRESIDENT

> Mr. Frank L. Peterson Acting Assistant Director Water Resources Research Center University of Hawaii 2540 Dole Street Honolulu, Hawaii 96822

Dear Mr. Peterson:

Thank you for your comments regarding the proposed Kalakaua Commercial Complex Environmental Impact Statement Preparation Notice. We have reviewed your comments and provide the following dispositions:

- 1. The Environmental Impact Statement will include a figure (Figure 2) which shows the proposed development plan for the Kalakaua Commercial Complex.
- 2. At this time the retained engineering consultant, Community Planning, Inc., is preparing data relating to water use, sewage and surface runoff quantities to be generated by the proposed project. This material will be appropriately incorporated into the Environmental Impact Statement.
- 3. a. The Royal Hawaiian Hotel is not anticipated to be affected by the building of the proposed Kalakaua Commercial Complex. It is anticipated that the area around the Royal Hawaiian Hotel will be properly landscaped to provide a visual screen from the project.
  - b. Alternative: Recreation/park use. At this time the property is privately owned. Realistically, the present zoning and income gained from this property is substantially greater than a recreation/park use. The cost of acreage from a public acquisition standpoint would be tremendous and would curtail the generation of potential employment from this parcel.
  - c. No development at all: The alternative of no development at all would allow the existing commercial building to remain in its present state. It is felt that at this time that there is a proven need for additional commercial space in Waikiki. The option for no development at all is not consistent with the City and County General Plan designation for the parcel.

Mr. Frank L. Peterson June 15, 1976 Page Two

Your comments of a non-water resources research center nature are refreshing and appreciated very much. Thank you for your interest and concern on this proposed project.

Very truly yours, rours, F. J. Rodriguez

cc: Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc. DEPARTMENT OF PUBLIC WORKS

# CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET HONOLULU, HAWAII 96813

FRANK F. FASI Mayor



KAZU HAYASHIDA DIRECTOR AND CHIEF ENGINEER 4

ENV 76-244

June 7, 1976

Mr. Fred J. Rodriguez Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Subject: Environmental Assessment for the Proposed Kalakaua Commercial Complex

We have reviewed the environmental assessment for the subject proposed project and have the following comments.

- The design of the proposed off-site drainage line across Kalakaua Avenue should be coordinated with the Drainage Section of the Division of Engineering. We recommend that the crossing be located at the existing Kalakaua Avenue driveway between Royal Hawaiian Avenue and Seaside Avenue (between E and F on Figure 3, page A-3) so that other local drainage improvements can be tied in.
- We recommend that wastewater from the entire proposed commercial complex be served by the two (2) 12-inch sewer mains on Kalakaua Avenue. Flows entering the existing 8-inch Lewers Road sewer should be diverted to the Seaside sewer on Kalakaua since the former is experiencing some capacity problems.

Very truly yours,

KAZU HAYASHTDA

Director and Chief Engineer

cc: Dept. of Land Utilization Div. of Engineering Div. of Sewers

F. J. RODRIGUEZ, PRESIDENT

June 15, 1976

Mr. Kazu Hayashida Director and Chief Engineer Department of Public Works City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Hayashida:

Thank you for your response of June 7, 1976 regarding the Environmental Impact Statement Notice for the proposed Kalakaua Commercial Complex. At this time the retained engineering consultants, Community Planning, Inc., are preparing drainage and sewage plans consistent with applicable building code for the commercial complex. Community Planning, Inc. will be working with the various branches in your department in obtaining a plan suitable for the needs of the commercial complex and workable within the existing drainage and sewage systems. It is anticipated that the EIS will summarize the proposed preliminary plans.

ery truly yours. frige F. J. Rodrigues

cc: Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

#### BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

630 SOUTH BERETANIA

POST OFFICE BOX 3410

HONOLULU, HAWAII 96843



FRANK F. FASI, Mayor

STANLEY S. TAKAHASHI, Chairman YOSHIE H. FUJINAKA, Vice Chairman KAZU HAYASHIDA EDWARD F. C. LAU TERESITA R. JUBINSKY E. ALVEY WRIGHT

EDWARD Y. HIRATA Manager and Chief Engineer

June 8, 1976

Mr. F. J. Rodriguez Environmental Communications Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

SUBJECT: Consultation Process Prior to Filing the EIS for the Proposed Kalakaua Commercial Complex

We have reviewed the submitted report on the proposed project and have the following comments:

- We do not object to the enlarging of the existing water lines, however any change in the pumping capacity of the existing Princess Kaiulani Hotel's well (Well No. 1749-19) will require a well modification permit from us.
- Additional fire hydrants to attain a 250 feet minimum spacing will be required along Kalakaua Avenue to meet present fire protection requirements.
- 3. The construction plans should be coordinated with us.

Please contact Mr. Lawrence Whang at 548-5221 if further information is needed.

Very truly yours EDWARD Y.

Manager and Chief Engineer

June 16, 1976

Mr. Edward Y. Hirata Manager and Chief Engineer Board of Water Supply City and County of Honolulu P. O. Box 3410 Honolulu, Hawaii 96843

Dear Mr. Hirata:

Thank you for your response of June 8, 1976 regarding the Environmental Impact Statement Notice for the proposed Kalakaua Commercial Complex. At this time the retained engineering consultants, Community Planning, Inc. are preparing utility plans consistent with applicable building code for the commercial complex. Community Planning, Inc. will be working with your staff in obtaining a plan suitable for the needs of the commercial complex. We will be sure to coordinate all construction plans according to applicable codes.

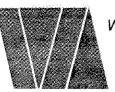
Thank you again for your concern in this matter.

Very truly yours, migu F. J. Rodriguez

cc: Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

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F. J. RODRIGUEZ, PRESIDENT



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WAIKIKI IMPROVEMENT ASSOCIATION, INC.

SUITE 1410 + 2222 KALAKAUA AVE. + HONOLULU, HAWAII 96815 + TEL. 923-1094

DONALD A. BREMNER, AIP, Executive Vice President

ROBERT E. MacGREGOR, President DEAN T.W. HO, First Vice President VERN WALDO, Second Vice President PHILIP F. THAYER, Secretary

GULAB WATUMULL, Treesurer

Board of Directors:

Officers

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JOHN G SIMPSON President Hawaii Visitors Bureau CLEMENT R. JUDD Executive Vice President Hawaii Hotel Association Mr. Fred J. Rodriquez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Re: EIS for Helumoa Land Project on Kalakaua Avenue

Dear Mr. Rodriquez:

We have reviewed your proposed EIS for the above project and find that our comments at this time can be summed up by the enclosed resolution adopted by the Waikiki Improvement Association Board of Directors on September 12, 1974.

June 10, 1976

The only possible change since then deals with the direction of traffic flow on abutting streets. Since your EIS makes no reference to the flow pattern on abutting streets, we assume the project is designed to fit into the existing flow pattern. We concur with that also and would be concerned with any proposal to alter the direction of traffic flow on abutting streets.

Our only other comment is that the project, hopefully, will move forward with alacrity so that the duration of vacancy, demolition and construction, can be held to a minimum. We trust that government officials will help in this by handling their processing expeditiously also.

Very truly yours,

cenne-1 , Aler Donald A. Bremner

Executive Vice President

DAB/dt

enc.

6/14/76

# IMPROVEMENT ASSOCIATIO

SUITE 1410

. HONOLULU, HAWAII

TEL 923-1094

Recommendation from the Design Review Committee

2222 KALAKAUA AVE.

RE: BISHOP ESTATE REDEVELOPMENT - Kalakaua Avenue

The project covers the area along the makai side of Kalakaua, from Lewers to the Outrigger Hotel. It would be a commercial complex devoted to shops, offices and restaurants, housed in a  $3\frac{1}{2}$  story structure with interior courts.

Underground parking is provided. Setbacks along Kalakaua would be greater than now exist and extensive landscaping dominates the project. Coconut trees to be removed would be replaced. The theory is to de-emphasize the architecture and heavily emphasize the landscaping. Proposed densities are about one half of what is possible, producing about 300,000 square feet of floor area and this is well below the proposed densities in our re-zoning. A central open area - street to sea - is required to preserve views into, and eventually, beyond the Royal Hawaiian Hotel. This is located about opposite Seaside Avenue. It is our hope that no obstruction will be introduced in this area at eye level.

The project has many pluses for Waikiki - it is low-rise - it is superb aesthetically, heavily landscaped, it is low-density in nature, and it has underground parking. It will tie down the main focus of Waikiki at this centrally geographic location and upgrade the entire street frontage.

On this basis, we recommend active endorsement of the project and commend Bishop Estate for its enlightened and sensitive approach to development and to Waikiki's healthy future.

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Minutes of the WIA Board of Directors September 12, 1974 Page Two

#### IV DESIGN REVIEW

a. Asahi Development - Royal Kuhio Apartment - Kuhio Avenue

The Design Review committee reported its findings after review of this project. (see attached copy) On a motion by P. Thayer, seconded by V. Waldo, the recommendations were adopted.

b. Bishop Estate - Redevelopment Project - Kalakaua Avenue

The Design Review also reported on its review and recommendation of the proposed project by Bishop Estate. (see attached copy) On a motion by L. Johnson, seconded by P. Thayer, the committee report was adopted.

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#### V MAYOR'S TAX APPEAL

A proposed letter to the Board of Tax Review, stating WIA's position on the Mayor's tax appeal on properties in Waikiki was presented and discussed.

On a motion by C. Doran, seconded by P. Thayer, the proposed letter was approved as WIA's position to be promulgated to the Tax Review Board. (copy attached)

#### VI REZONING

Mr. Bremner presented a status report on the Council's proposal to rezone Waikiki. It looks as though things are beginning to move ahead on this matter. The Council will invoke a three month "moratorium" on building permits in Waikiki, to give itself time to enact actual rezoning ordinances.

Mr. Bremmer explained some proposed revisions that were needed to the Council proposals to make them completely responsive to the problem and to meet the desire of putting an ultimate limit on the growth of Waikiki. (see attached copy)

Following discussion, the proposed revisions were adopted on a motion by G. Talbott, seconded by P. Thayer.

#### VII CAPITAL IMPROVEMENT PICTURE

Mr. Bremner reported that the Governor had taken a firm stand on Waikiki Improvements and would resist any further attempts by the City to delay by additional "planning". It is expected that this position will be carried into

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F. J. RODRIGUEZ, PRESIDENT

June 16, 1976

Mr. Donald A. Bremner Executive Vice President Waikiki Improvement Association, Inc. 2222 Kalakaua Avenue, Suite 1410 Honolulu, Hawaii 96815

Dear Mr. Bremner:

Thank you for your Association's response dated June 10, 1976 on the proposed Kalakaua Commercial project. All of the concerns expressed have been forwarded to the developer and the retained consultants to be incorporated wherever feasible. The concern over the traffic flow patterns on abutting streets will be discussed with Mr. Henry T. Au who will be reviewing this particular problem and its relationship to the overall project efficiently.

The demolition, construction, and government processing is a concern which we also share with you and your organization and appreciate your interest. Thank you for your resolution and we will continue to maintain contact with you and your organization on this project.

Very truly yours, 7. 1. Knige F. G. Rodriguez

cc: Helumoa Land Co., Inc. Mr. Henry T. Au



THE OUTDOOR CIRCLE 200 No. Vineyard, Honolulu, Hawaii 96817

### June 14. 1976

Mr. F. J. Rodriguez, President Environmental Communications Inc. P. O. Box 536 Honolulu, Hawali 96809

Consultation Process Prior to Filing the EIS Subject: for the Proposed Kalakaua Commercial Complex

Dear Mr. Rodriguez:

On June 8, 1973, The Outdoor Circle wrote to Mr. Robert R. Way, Director of Planning Department, regarding the same area of concern. At that time we said:

"The Outdoor Circle is aware that under the existing zoning additional development could be built. However, we find it difficult to accept any proposal that would destroy the only green open space in the heart of Walkiki.

This area of Waikiki was once the seat of Hawaiian government and King Kamehameha I resided there half of each year. Princess Bernice Pauahi inherited it and she left it to her husband, Charles R. Bishop, who deeded it back to the Bishop Estate Trust.

The proposed site for general plan change includes the remnant of "The Kings Grove" where 10,000 coconut trees flourished in his time. As far as we can ascertain, the proposed development would eliminate the remaining historic trees . . .at irreparable loss to Waikiki." .

The Outdoor Circle is very concerned about the trees involved. Is there any plan to move them if they will not be utilized in the new development plans?

As Mrs. Alice Spaulding Bowen said in Hawaii Architect, May 1974 In her "Design for Living in Hawaii: Waikiki" article:

" . . . Our green space can be thought of not only as our 'natural beauty' but as our climate control. just as mechanical as the built-in air conditioner-more, because it purifies as well as cools . . ."

KANEONE SUTODOR CHRCLE KONA OUTDOOR CIRCLE BON THE KANCORE HAWAE BOTAL BOX 96- NA CUANONA, MAWAN 96740

KAGALOL

LARAINA HAWAII 9676

LAHAINA OUTDOOR CIRCLE LANDKAILUA OUTDOOR CIRCLE BOX 2011-10天(10天) 网络约天门 马利兰30

WARMOME OUTDOOR STRELE

MAUL OUTDOOR CIRCLE BOX 402 -- AAMELED HANAL BOILD BOX 821- 1: 79 95766

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She then gives some history of the area and concludes:

"...That trusting princess would be the first to protest such mutilation of her land and l respectfully suggest that her trustees dedicate to her memory and give to her people that frontage strip of green--and award their prizes to a competition for its landscape design.

With that impetus to the restoration of Waikiki, we would indeed hold a heritage from Hawaii's most revered monarchs, and through our mistakes of the past, build again with new wisdom, a fitting heritage for Hawaii's morrow."

We feel that the environment will be seriously affected if we lose more trees and The Outdoor Circle sincerely hopes that every effort will be made to preserve the trees, the small green oasis and the open space around The Royal Hawaiian Hotel.

Sincerely,

- H. Hummer

S.

Mrs. John T. Humme President

JHH:kl

cc: Bishop Estate Helumoa Land Co. Inc. Department of Land Utilization Mrs. Alice Spaulding Bowen

June 18, 1976

Mrs. John T. Humme President The Outdoor Circle 200 North Vineyard Street Honolulu, Hawaii 96817

Dear Mrs. Humme:

F. J. RODRIGUEZ, PRESIDENT

Thank you for your letter of June 14, 1976 expressing concern over the proposed Kalakaua Commercial Complex project and the affected landscaping. Discussions with the client, Helumoa Land Co., Inc. and Belt, Collins & Associates indicate that they are prepared to meet with you and your group to discuss the future plans to retain the coconut trees on the project site. In addition, meeting with the retained landscape consultant could also assuage any fears you might have in regard to the future landscaping plan that has been developed.

Thank you again for your interest and concern and please feel free to call me or Mr. Ray Cain at Belt, Collins & Associates for more specific information regarding the landscaping plans for the Kalakaua Commercial project.

Very truly yours " migu J. Rodriguez

cc: Helumoa Land Co., Inc. Belt, Collins & Associates: Attn: Mr. Ray Cain Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc. DEPARTMENT OF PARKS AND RECREATION

# CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET HONOLULU, HAWAII 96813

FRANK F. FASI Mayor



YOUNG SUK KO

June 18, 1976

Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Attention F. J. Rodriguez

Gentlemen:

SUBJECT: ENVIRONMENTAL ASSESSMENT - KALAKAUA COMMERCIAL COMPLEX, TMK 2-6-02:18, 19, 22, 23, AND 24

We have reviewed the environmental assessment of the proposed Kalakaua Commercial Center and found it to be generally adequate.

Our primary concern is the 15-foot public right of way that is to be located at the Diamond Head end of the project site. With the heavy use of our public beaches, this right of way is needed without delay and should be developed concurrent with the proposed project.

Sincerely,

Janny fuck Ko YOUNG SUNKO, Director

June 22, 1976

Mr. Young Suk Ko
Director, Department of Parks
 and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawali 96813

Dear Mr. Ko:

J. RODRIGUEZ. RESIDENT

> Thank you for your letter of June 18, 1976 regarding the proposed Kalakaua Commercial Complex project. The specific items of concern expressed in your letter are being addressed by the applicant and will be finalized concurrently with the completion of the required governmental review process and receipt of all necessary permits.

We share your concern over the public's access to the beach frontage and will take all necessary steps to provide this badly needed rightof-way to the public beach area. The retained engineering and architectural consultants will be coordinating with your staff on the location and timing of the indicated beach access at the appropriate time.

Thank you again for your expression of concern and please advise if there is anything that we can provide you on this project.

Very truly yours,

F. J. Rodriguez

cc: 'Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

HARROR COULDE TOWN TOWERS T.F . . . . . . . STREET

POLICE DEPARTMENT

# CITY AND COUNTY OF HONOLULU

HONOLULU, HAWAH 96814

FRANK F. FASI Mayor

RICHARD K. SHARPLESS MANAGING DIRECTOR

OUR REFERENCE RK-FP

YOUR REFERENCE

June 18, 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Thank you for the opportunity to review the proposed Kalakaua Commercial Complex being planned by Helumoa Land Company, Inc.

We do anticipate, that with a development of the type planned, an increase in called-for services will be generated for this Department. Present services provided will be able to handle the anticipated increase.

A review of the proposed plans reveal several areas of concern as they might prove to be problematical.

- 1. Noise level and traffic congestion during the initial phases of construction.
- 2. The planned amphitheater in close proximity to the Royal Hawaiian Hotel.
- 3. Noise levels of vehicular and pedestrian traffic after the completion of the project.
- 4. Permitting access to the upper floors of the complex after hours.

Hopefully, these areas can be minimized with proper advanced planning and adherence to the various regulations dealing with noise standards.

The widening of Lewers Road and the relocation of the main driveway are commendable and should minimize problems of ingress and egress to the complex. Tying into the present traffic





FRANCIS KEALA

CHIEF

EUGENE FLETCHER

DEPUTY CHIEF



Mr. F. J. Rodriguez

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June 18, 1976

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lighting system and reevaluation of pedestrian crossing patterns should be considered to further facilitate traffic flow in the area.

This Department will continue to evaluate problem areas and plan for additional services if required.

Sincerely, Trans ele FRANCIS KEALA Chief of Police

June 23, 1976

Chief Francis Keala Police Department City and County of Honolulu Honolulu, Hawaii 96814

Dear Chief Keala:

: POORIGLES Florent

> Thank you for your letter of June 18, 1976 regarding the proposed Kalakaua Commercial Complex. The points of concern that your office has raised are being evaluated by the retained noise consultant, Dr. Iwao Miyake who will be conducting noise tests to establish an ambient noise level which the proposed project will be working against. In addition, Dr. Miyake will be recommending mitigating measures that can be taken to reduce wherever possible, the noise levels that can be considered in excess of existing code as regulated by the State Department of Health under Public Health Regulations, Chapter 44-A (Vehicular Noise) and 44-B, (Community Noise).

> All final site plans for traffic ingress and egress will be provided to your staff for review at the appropriate time so that traffic flow can proceed with a minimum of disruption. Pedestrian crossing patterns will also be evaluated so that upon completion of the proposed project, the flow will move in an orderly manner.

Thank you again for your comments and please be assured that the retained consultants for the applicant will be in contact with your office.

Very truly yours,

F. J. Rodriguez

cc: Dr. Iwao Miyake

Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

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DEPARTMENT OF THE ARMY U. S. ARMY ENGINEER DISTRICT, HONOLULU BLDG. 230, FT. SHAFTER APO SAN FRANCISCO 96558

PODED-P

22 June 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P.O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

We received the Environmental Impact Statement Preparation Notice and Environmental Assessment for the proposed Kalakaua Commercial Complex on 24 May 1976, and offer the following comments.

a. The proposed site is within the potential tsunami inundation area and flood limits of the Manoa-Palolo drainage system as shown on the draft flood insurance map. A copy of the flood insurance map showing potential flood limits at the proposed site location is inclosed. The project site lies in the 100-year flood inundation limits, Zone A, although these limits are not shown in the project vicinity, and also lies in the 500-year and 100-year tsunami inundation limits, Zones BV and V15, respectively. The flood insurance map will be used by the Federal Insurance Administration, Department of Housing and Urban Development for determining flood insurance rates.

b. The EIS should address the possible adverse effect of the proposed action blocking the view of the Royal Hawaiian Hotel from casual sight. Described as "probably the most famous landmark in Waikiki," and action encasing this architectural attraction within walls of concrete, with the view from the sea restricted to a limited few, could be termed a severe adverse impact on this National Historic Place. We suggest that the State Historic Preservation Officer be consulted to advise on this matter.

c. Related to this, the sentences beginning "On June 21, 1971..." on page 10, paragraph A.4.e, of the Environmental Assessment are, we believe, incorrectly attributed to Footnote 2.

Thank you for the opportunity to provide comments.

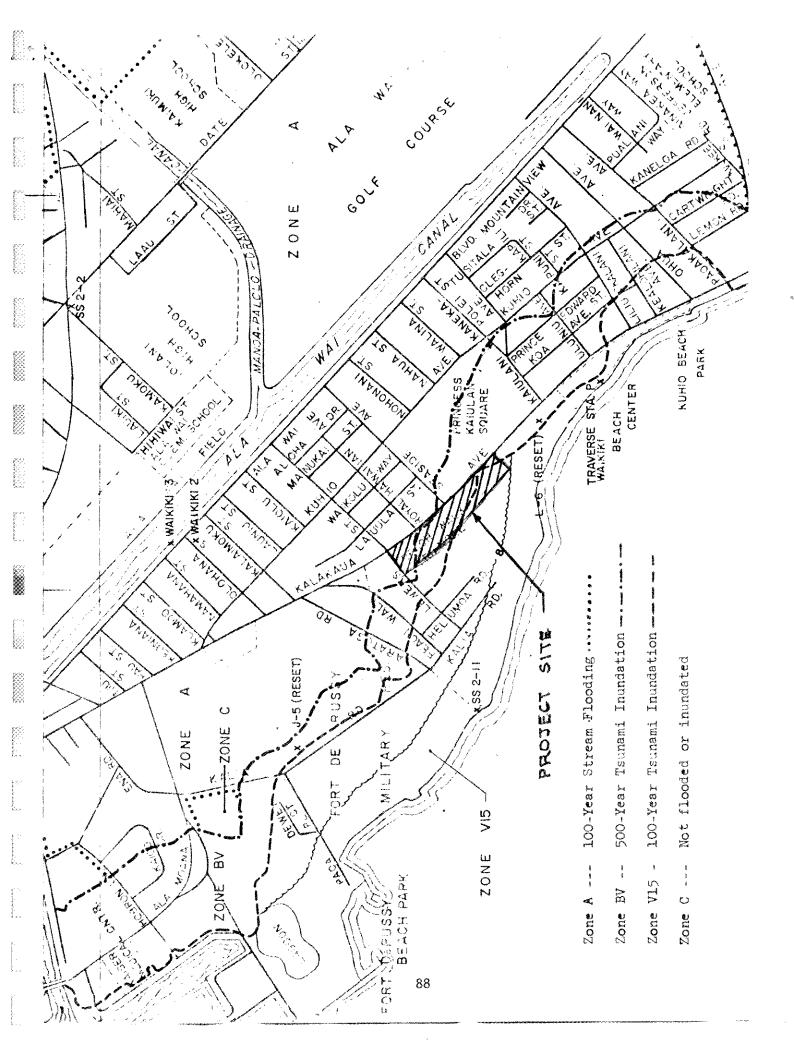
Sincerely yours,



Acting Chief, Engineering Division/43W

l Incl As stated

87



June 23, 1976

Acting Chief William J. Matthews Engineering Division Department of the Army U.S. Army Engineer District, Honolulu Building 230, Fort Shafter APO San Francisco 96558

Dear Chief Matthews:

F & RCORIGUES PRESIDENT

> Thank you for your letter of June 22, 1976 regarding the proposed Kalakaua Commercial Complex. The references to the potential tsunami inundation area and flood limits of the Manca-Palolo drainage system have been provided to the retained engineering consultant, Community Planning, Inc., who will be developing with the applicant, the necessary criteria required to meet flood insurance provisions. The applicant will also be evaluating the various alternatives available to them in terms of structural protection against the 100 and 500 year tsunami inundation limits. As these final recommendations are developed, your office will be able to evaluate the mitigating measures being considered.

The architectural consultant will be advised of your office's concern over the potential view plan impairment to the Royal Hawaiian Hotel. It should be pointed out that there is at the present time, very little existing view potential in a mauka direction. The intent is to enhance the existing view amenity by landscaping the proposed commercial complex from the Royal Hawaiian Hotel so that the structures will not be as prominent and also to provide a "garden like" setting for the hotel guests.

The comment regarding the incorrect footnote reference will be corrected.

Thank you again for your expressions of concern and we will be providing your office with further opportunities to review our environmental documentation as it becomes finalized.

Very truly yours,

F. J. Rodriguez

cc: /Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

WASSONS ------

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GEORGE R. ARIYOSHI GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF HEALTH

E O Box 3378

HONOLULU, HAWAII 96801 June 22, 1976 GEORGE A. L. YUEN DIRECTOR OF HEALTH

Audrey W. Mertz, M.D., M.P.H. Deputy Director of Health

James S. Kumagai, Ph.D., P.E. Deputy Director of Health

Henry N. Thompson, M.A. Deputy Director of Health

Mr. F. J. Rodriquez Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriquez:

Subject: Request for Comments on Proposed Environmental Impact Statement (EIS) for Kalakaua Commercial Complex, Waikiki

Thank you for allowing us to review and comment on the subject proposed EIS. Please be informed that we have no comments or objections to this project at this time.

Staff comments are as follows:

- 1. The statement does not relate the impact of noise to the environment and, therefore, an evaluation in regard to noise cannot be made.
- 2. The impact statement must consider all noise emission factors, such as:
  - a. Construction activities.
  - b. Traffic noise during construction.
  - c. Stationary noise sources air conditioning, etc.
  - d. Other noise sources refuse collection activities, etc.

We realize that the statements are general in nature due to preliminary plans being the sole source of discussion. We, therefore, reserve the right to impose future environmental restrictions on the project at the time final plans are submitted to this office for review.

Sincerely,

SHINJI SONEDA, Chief Environmental Protection & Health Services Division

This Is Re

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June 24, 1976

Mr. Shinji Soneda Chief, Environmental Protection & Health Services Division Department of Health P. 0. Box 3378 Honolulu, Hawaii 96801

Dear Mr. Soneda:

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> Thank you for your letter of June 22, 1976 regarding the proposed Kalakaua Commercial project. Your comments relative to noise and its impact have been forwarded to the retained consultant, Dr. Iwao Miyake, who is preparing a special study on this problem.

> Please be assured that all point sources of noise will be dealt with according to the regulations promulgated by your department and compliance will be met with existing noise standards.

Thank you for your comments on this preliminary evaluation and we look forward to working with you and your staff on the actual EIS document when it is circulated.

Very truly yours, F./- Kristing

F. J. Rodriguez

cc: Dr. Iwao Miyake Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

GEORGE R. ARIYOSHI GOVERNOR



RICHARD E. MARLAND, PH.D. DIRECTOR

> TELEPHONE NO. 548-6915

### STATE OF HAWAII OFFICE OF ENVIRONMENTAL QUALITY CONTROL OFFICE OF THE GOVERNOR

550 HALEKAUWILA ST. ROOM 301 HONOLULU, HAWAII 96813 June 23, 1976

Mr. Fred J. Rodriguez Environmental Communications, Inc. P.O. Box 536 Honolulu, Hawaii 96809

'Dear Mr. Rodriguez,

This Office has reviewed the environmental preparation notice for the proposed Kalakaua Commercial Complex. We offer the following comments for your consideration:

We feel the Environmental Impact Statement for the Kalakaua Commercial Complex should include drawings and figures depicting the layout, size and shape of the proposed buildings and the site's circulation system. Analysis of the relationship between the project and the surrounding environment could then be facilitated.

The traffic and air pollution impacts should be of prime concern and carefully documented in the statement. Will traffic enter the project from Kalakaua Avenue or Lewers Street? Would the remainder of Lewers Street have to be widened due to the implementation of this project?

Thank you for the opportunity to review this environmental impact preparation notice. We will look forward to receiving the environmental impact statement.

SAncerely, Richard E. Marland Director

June 24, 1976

Dr. Richard E. Marland Director, Office of Environmental Quality Control 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

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Dear Dr. Marland:

J ACORIGUES FRES:CENT

Thank you for your letter of June 23, 1976 regarding the proposed Kalakaua Commercial Complex project. The comments expressed relative to the project's relationship to the adjacent existing areas are well taken and will be included in the actual EIS which is being prepared at the present time.

We also will be providing for your office's review, the traffic, air quality, and noise impact sections so that all contributing factors to the Kalakaua sectors affected can be reviewed in total.

Thank you for your comments and we look forward to working with your office on this project.

Very truly yours (ra-je

F. J. Rodriguez

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cc: /Helumoa Land Co., Inc. Community Planning, Inc. Department of Land Utilization Wong, Wong & Peng, Inc.

DEPARTMENT OF TRANSPORTATION SERVICES

### CITY AND COUNTY OF HONOLULU

HONOLULU MUNICIPAL BUILDING 650 SOUTH KING STREET HONOLULU, HAWAII 96813

FRANK F. FASI Mayor



GEORGE C. VILLEGAS DIRECTOR

TE5/76-1039

June 24, 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

### Subject: Review of Environmental Assessment for the Proposed Kalakaua Commercial Complex

We submit the following comments following review of the subject Environmental Assessment.

We are in agreement with the Environmental Assessment that motorists on Kalakaua Avenue will be inconvenienced during construction of the commercial complex. Traffic control devices necessary to minimize this foreseen adverse effect should be fully utilized.

To better assess the overall traffic problem surrounding the commercial complex, plans showing the proposed improvements, together with the traffic impact study, should be included in the exhibits for our review.

Very truly yours, am

GEORGE C. VILLEGAS Director

June 25, 1976

Mr. George C. Villegas Director, Department of Transportation Services City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Villegas:

J RCORIGUES

Thank you for your letter of June 24, 1976 regarding the proposed Kalakaua Commercial project. We will be providing for your staff's review, the traffic impact study conducted by Mr. Henry T. Au and also the proposed traffic improvements being considered by the applicant to minimize traffic congestion attributable to the proposed project.

Thank you again for your concern and we will be maintaining communication with you and your department.

Very truly yours, Rining F. J. Rodriguez

HILL GAMMAN COSTS

### XIII. COMMENTS RECEIVED ON THE

### ENVIRONMENTAL IMPACT STATEMENT AND DISPOSITIONS

The deadline for responses was set for August 7, 1976. Agencies commenting within this time period include the following:

Organization	Date of Comments
City & County of Honolulu	
Department of Public Works Department of Housing and Community	July 12, 1976
Development Board of Water Supply Department of General Planning Department of Land Utilization Department of Transportation Services	July 13, 1976 July 14, 1976 July 19, 1976 July 27, 1976 August 4, 1976
State of Hawaii	
Environmental Quality Commission Department of Social Services & Housing Department of Defense Department of Agriculture Department of Land & Natural Resources Department of Transportation Office of Environmental Quality Control	July 7, 1976 July 9, 1976 July 12, 1976 July 15, 1976 August 3, 1976 August 3, 1976 August 5, 1976
University of Hawaii	
Water Resources Research Center Environmental Center	July 9, 1976 August 6, 1976
Federal Agencies	
Fish & Wildlife Service, U.S. Department of Interior Soil Conservation Service, U.S. Department of Agriculture	July 9, 1976
Department of the Army, U.S. Army Engineer Division Department of the Air Force Department of the Army	July 12, 1976 July 15, 1976 July 15, 1976 August 5, 1976
Private Agencies	
The Outdoor Circle American Lung Association	July 13, 1976 August 5, 1976

Copies of these comments, along with the disposition (if needed) by Environmental Communications, Inc., are provided on the following pages

ENV 76-310

### July 12, 1976

MEMORANDUM

- TO: MR. GEORGE S. MORIGUCHI, DIRECTOR DEPARTMENT OF LAND UTILIZATION
- FROM: KAZU HAYASHIDA, DIRECTOR AND CHIEF ENGINEER DEPARTMENT OF PUBLIC WORKS
- SUBJECT: ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED KALAKAUA COMMERCIAL COMPLEX

We have reviewed the subject EIS and have no additional comments to offer.

Director and Chief Engineer

cc: Environmental Communications, Inc.

### July 13, 1976

MEMO TO: OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: WILLIAM BLACKFIELD, DIRECTOR

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED KALAKAUA COMMERCIAL COMPLEX

The Department of Housing and Community Development has reviewed the "Environmental Impact Statement for the Proposed Kalakaua Commercial Complex." We have no comments to make relating to this agency's program or workload. We are returning the copy of the EIS for your further use.

Thank you for the opportunity to review this matter.

WILLIAM BLACKFIELD

DATE MAILED

WILLIAM BLACKFIELD Director

cc: Department of Land Utilization Environmental Communications, Inc.

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BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU



July 14, 1976

Mr. George Moriguchi, Director Department of Land Utilization City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Moriguchi:

SUBJECT: Environmental Impact Statement for the Proposed Kalakaua Commercial Complex

We have reviewed the proposed project and do not have any additional comments to those mentioned on page 70.

Please call Mr. Lawrence Whang at 548-5221 if further information is needed.

Very truly yours,

All the standing the

EDWARD Y. HIRATA Manager and Chief Engineer

cc: Mr. F. J. Rodrigues Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

### CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET HONOLULU, HAWAH 96813

FRANK F. FASI Mayor



ROBERT R. WAY CHIEF PLANNING OFFICER

DGP7/76-1622(JB)

July 19, 1976

Mr. F. J. Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Kalakaua Commercial Complex Draft Environmental Impact Statement

We have examined the above-captioned and have no suggestions for modifications of the statements as presented in the report. Thank you for the opportunity to participate in the review process.

Sincerely,

ROBERT R. WAY Chief Planning Officer

RRW:fmt

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET HONOLULU, HAWAII 96813

FRANK F. FASI Mayor



July 27, 1976

GEORGE 5. MORIGUCHI Director

76/SMA-69(JW)

Mr. F. J. Rodriguez Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Environmental Impact Statement Kalakaua Commercial Complex

Our review of the above has found that important features of an acceptable EIS are either missing or inadequate. The major deficiencies are as follows:

- No plot plan or elevation for the proposed development is 1. provided. Drawings were made available at the Office of Environmental Quality Control, but this method of disclosure is not suitable for a project of this scale and significance, particularly when individual reviewers made specific requests for such plans. Without these exhibits it is virtually impossible to evaluate the impact of the project on the Royal Hawaiian Hotel and its environs. One reviewer, the Waikiki Improvement Association, appeared to be quite confused about significant features of the project and offered its praise to a design which has only partial resemblance to the one proposed. We note that the response to their comment made no attempt to correct their mistaken impression. We do happen to have a set of drawings in this office, and it is on inspection of these that we take issue with the contention that the project will have "no impact" on the Royal Hawaiian.
- 2. References are made throughout the EIS to adjunct studies and reports commissioned by the applicant to support certain conclusions regarding environmental impact. As the approving agency for this EIS and the staff agency for evaluating the Shoreline Management Permit and the Waikiki SDD applications, we should be provided a copy of these reports as soon as possible. These should also be made available to other reviewers, if requested.

Mr. F. J. Rodriguez Page 2

The discussion of alternatives (pages 42-46) is misleading 3. and incomplete. Three alternatives were presented. The description of the "hotel use" alternative gives the impression that a "350-story" (we presume this means "350-foot") building would be permitted along the length of Kalakaua Avenue. fact, this is a gross inaccuracy. The maximum building height for this location is 280 feet. In order to build to this height, the applicant would have to provide substantially more setbacks and open space than required of a lower structure. The EIS gives no consideration to the wide range of design alternatives available to the applicant under the Waikiki Ordinance which would require neither decrease in floor area nor change in use from the applicant's proposal. This is a very serious omission, particularly in view of the sensitivity of the site and the value of the Royal Hawaiian Hotel as a historic site and visual attraction.

We have numerous other more specific comments and suggestions which are listed below:

1. <u>Ref. p. 5</u> - "The Kalakaua sidewalk will be transformed into a broad promenade."

Comment: How will this differ from the existing situation, particularly in front of the Royal Hawaiian Hotel? How can this be evaluated without a basic proposed plot plan to look at?

2. Ref. p. 8 - "Mature trees will be retained wherever feasible."

Comment: This is a meaningless statement. There are indications that the project would destroy 60 to 70 coconut palms.

3. <u>Ref. pp. 19-20</u> - Parking

40

Comment: If it has been assumed that approximately 80% of the anticipated patrons of the commercial facility would be pedestrians, why are 600 parking stalls planned? What is the nature of Bishop Estate's lease agreement with Sheraton Hotels, and why should this affect parking facilities for the proposed project?

4. Ref. p. 20 - Tax Assessment

<u>Comment</u>: The estimated revenue from the project assumes assessment at pre-downzoning levels. What income would the project be expected to generate given the new zoning classifications? Mr. F. J. Rodriguez Page 3

5. <u>Ref. p. 23</u> - ". . .the landscaped area is small and not located in the vicinity of the Royal Hawaiian Hotel."

<u>Comment</u>: The location of this area is a mystery to us because all the landscaped portions of the site are near the Royal Hawaiian.

6. Ref. p. 39 - Beach Right-of-Way

<u>Comment</u>: Why is just one beach right of way provided when the EIS itself acknowledges that the neighboring beach area is very heavily used and that two rights-of-way are presently available?

7. Ref. p. 39 - "No obstruction of views are expected. . ."

<u>Comment</u>: If the applicant insists on maintaining this position, documentation should be provided in the form of photo montages showing the "before and after" views looking makai at the pedestrian level from various points along the mauka side of Kalakaua Avenue.

8. <u>Ref. p. 41</u> - ". . . noise escaping from. . . the outdoor amphitheatre must be controlled."

<u>Comment</u>: No solution is offered for this problem. Plans indicate that the amphitheatre would be located almost directly under the windows of Royal Hawaiian Hotel rooms. How does the applicant propose to resolve this probable nuisance to hotel guests?

As this document is presented, it is far from being an adequate fulfillment of Chapter 343, HRS, requirements. We suggest you arrange a meeting with our staff, either Mr. Carl Smith or Mr. John Whalen, at your earliest convenience if you wish to discuss this further.

Very truly yours, Albert GEORGE S. MORIGUCHI Director of Land Utilization

GSM:1s

cc: Helumoa Land Co., Inc.

ENVIRONMENTAL COMMUNICATIONS INC.

August 4, 1976

Mr. George S. Moriguchi Director, Department of Land Utilization City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Moriguchi:

F J PODRIGUEZ PRESIDENT

We have carefully reviewed your comments dated July 27, 1976 regarding the Environmental Impact Statement for Kalakaua Commercial Complex. Below we have provided a disposition to these comments:

<u>Page 1, Item 1</u>: The plot plans and rendering of the proposed Kalakaua Commercial Complex were not included primarily because of the physical size and bulk of these plans. It should be noted that when such items are bulky and difficult or too numerous to include, the Environmental Quality Commission does allow for submission of these plans as a detached appendices or an addendum. We have, upon every agencies' or individuals' requests, provided plot plans and feel that this method of transmittal to these concerned agencies has been adequate to serve their reviewing purposes.

In regards to the Waikiki Improvement Association's response, please note that on several occasions Mr. Donald Bremmer of the Waikiki Improvement Association has been contacted, and we feel that he has been appropriately apprised of the project plans and thus disagree with your statement that the Waikiki Improvement Association is confused about the significant features of this project.

Your comment in regards to the no impact statement on the Royal Hawaiian Hotel also was carefully reviewed by not only this organization, but the architect and developer. It is noted that the concept of this project was based on a "garden setting" shopping complex.

As part of this concept, the landowner, Bishop Estate, through its trustees, outlined the policies on which this shopping complex would be constructed and operated. One of the overriding policy was to maintain, and whenever possible, enhance the environs of the Royal Hawaiian Hotel. Its historical importance and world-renown setting was recognized and the architect provided for measures which would assure a continuation of the Royal Hawaiian Hotel's views and grounds. In this respect, we have incorporated into the project design and plans, a set of design features, many of which were suggested by your staff, in which special treatment to the Royal Hawaiian Hotel is identified. These design features are part of an ongoing review procedure with members of your staff that have been closely involved with the project's architect and the applicant since February 1976. The initial Environmental Assessment was started in March 1976 subsequent to the improvements which resulted from this review process. Mr. George S. Moriguchi August 4, 1976 Page Two

> Page 1, Item 2: We have transmitted to the Office of Environmental Quality Control one complete set of the supportive studies prepared for the Environmental Impact Statement on Kalakaua Commercial Complex. Your agency has also been provided with this set of reports. Additionally, in the Environmental Impact Statement we have incorporated in the summary a list of these supportive studies and their availability to reviewers through either Environmental Communications, Inc. or the Office of Environmental Ouality Control.

<u>Page 2, Item 3</u>: The EIS summarized three alternatives in addition to the concept submitted. Of the four alternatives, hotel development and commercial use have been seriously explored in the last decade. In 1967, a proposal was tendered to the Bishop Estate for a massive hotel/commercial development on the subject property. For reasons enumerated in the EIS with respect to hotel use, the Trustees elected instead to engage a consultant to investigate an entirely commercial alternative. In 1971, the consultant's recommendations formed the basis of an international design competition for development of the property. Approximately 20 design concepts were submitted.

While many of the submittals pursued the consultant's recommendation for a 16-story office tower at Lewers and Kalakaua and a 9-story block (2 levels retail - 7 levels parking) adjacent to the Royal Hawaiian Hotel and gardens, the Trustees and their advisors chose to investigate a low-rise, garden oriented complex. The trade-offs between open space, massing, view corridors, landscaping, accommodation of existing buildings, pedestrian and vehicular traffic, and scale were all evaluated in judging the wide range of design alternatives proposed in the competition.

Page 2, Item 1, Ref. p. 5: At this time the pavement measured from Kalakawa Avenue to the various shops is as follows:

	Minimum	Maximum	Average
Watumull Block	10"-0"	10'-0"	10'-0"
McInerny	10'-0"	75'~0"	30'-0"
Snack Shop	25*-0"	50'-0"	50 <b>'-</b> 0''
Sheraton Shops	20"-0"	35'-0"	30"-0"

The Kalakaua Commercial Complex will have three major buildings and the setbacks will be as follows:

	Minimum	Maximum	Average
Building A	20'-0"	58'-0"	40'-0"
Building B	40'-0"	40'-0"	40'-0"
Building C	20'-0"	90'-0"	30'-0"

(Building C has the least setback in order to minimize intrusion into the existing Royal Hawaiian Gardens.) Mr. George S. Moriguchi August 4, 1976 Page Three

> In terms of urban impact, two other considerations must be evaluated together with street frontage setback. They are open and arcade space, and amount of open space in landscaping.

#### COMPARATIVE ANALYSIS OF OPEN SPACE & LANDSCAPE IN SETBACK AREA

	Existing Development	Proposed Development	Area <u>Gain</u>	% <u>Gain</u>
*Open space in sq. ft.	32,440	53,123	+ 20,683	64%
Arcade space in sq. ft.	7,500	9,500	2,000	26%
Landscaped area in sq. ft.	12,920	21,000	8,080	62%

\*All space fronting Kalakaua Avenue to a depth of 100'-0".

Page 2, Item 2, Ref. p.8: All trees considered of an age or condition that can be retained will be relocated upon completion of construction. The 60-70 coconut trees are both older (40-60 years old) and suffer from moisture rot from the spike marks left by tree trimmers who, in accordance with OSHA requirements, use spikes for climbing. Those coconut trees, which in the opinion of the professional landscape consultant, are not suitable because of the condition, will be replaced.

Page 2, Item 3, Ref. pp. 19-20: The Comprehensive Zoning Code mandates 1,200-1,300 parking stalls. The Waikiki Special Design District permits that total to be reduced 50% to 600-650 parking stalls. Because of these code limitations, the applicant plans to build 600-650 stalls. If this requirement can be reduced, the applicant will agree to reduce the size of its garage accordingly.

The agreement between Bishop Estate and Sheraton Hawaii is not applicable to this matter.

Page 2, Item 4, Ref. p. 20 - Tax Assessment: It should be pointed out that it would be presumptuous for the owners, developers, or anyone to assume a reduction in tax assessment. Although adequate testimony was presented at the public hearing on WSDD ordinance that the passage of that bill would result in the lowering of real property values, there was no recommendation for the tax relief contained within the ordinance which was passed. Regarding the income projection expected to be generated given the "new zoning classifications", these are considered highly speculative in nature and due to their unpredictable nature, cannot be responded to unless provided by the applicant.

Page 3, Item 5, Ref. p. 23: This statement is in error and the word "not" should have been omitted. This has been corrected in the Final Environmental Impact Statement text.

Mr. George S. Moriguchi August 3, 1976 Page Four

> Page 3, Item 6, Ref. p. 39 - Beach Right-of-way: On page 23 reference was made to two existing corridors which beachgoers cut across to reach the beach area. However, it should be made clear that these existing corridors are, by no means, public right-of-ways. The developer, through negotiations with the Department of Parks and Recreation, City and County of Honolulu, has incorporated into the design a 15 ft. public right-of-way to be located at the Diamond Head end of the project site. In addition, Lewers Street, located at the Ewa end of the project site will still act as a corridor through which beachgoers can walk to the beaches via the public beach rightof-way available along Kalia Street adjacent to the Halekulani Hotel.

Page 3, Item 7, Ref. p. 39: At the present time, the shopping complex permits two view planes or vistas into the interior garden. These are located at the driveway entry (110' wide) and at the entry to the Royal Hawaiian Hotel (35' wide).

Upon completion of the project, the following view corridors will be completed:

- 1. New realigned driveway into the Sheraton-Waikiki entry (88' wide) aligned with Royal Hawaiian Avenue.
- 2. New view plane aligned with Seaside Avenue (120' wide).
- 3. Three view openings into the Royal Hawaiian gardens, each approximately 30' wide.

Page 3, Item 8, Ref. p. 41: Upon consultation with the retained noise expert, Dr. Iwao Miyake, the feelings were that should noise develop from the proposed amphitheatre, the applicant would respond by rescheduling any offending public events to a time more conducive to the hotel guests.

At this time we also would like to point out that we find your last paragraph relating to the Environmental Impact Statement to be incorrect. We feel that this document does represent an adequate study which attempts to objectively review and analyze the impacts which Kalakaua Commercial Complex will have on the environment. The document was prepared to comply with the requirements of Chapter 343, HRS, as well as the Environmental Impact Statement Rules and Regulations. Additionally, we note that in discussing these comments with Mr. Carl Smith, he felt that the document was inadequate only from a standpoint of the omission of discussion on the impact of the Royal Hawaiian Hotel. Based upon this conversation, we hope that you will reconsider this statement and more clearly specify the inadequacy within certain sections rather than the implication that the total statement was inadequate.

Thank you for your comments and we hope that our disposition and revisions to the Environmental Impact Statement will satisfactorily answer your comments.

Very truly yours, 7./ 201.30

F. J. Rodriguez

cc: Mr. Richard Wong - Helumoa Land Co. Mr. Howard Wong - Wong, Wong & Peng DEPARTMENT OF TRANSPORTATION SERVICES

## CITY AND COUNTY OF HONOLULU

HONOLULU MUNICIPAL BUILDING 650 SOUTH KING STREET HONOLULU, SAWAH 96813

FRANK F. FASI Mayor



GEORGE C. VILLEGAS Difietor

TE7/76-1406

AUG 4 1976

Environmental Quality Commission 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

Gentlemen:

### Subject: Review of Environmental Impact Statement . for the Proposed Kalakaua Commercial Complex

Following our review of the Environmental Impact Statement for the Proposed Kalakaua Commercial Complex, we offer the following comments:

- 1. On page 19 on Public Transportation, the average headways should be corrected to read "less than two minutes during peak and off-peak periods."
- 2. To minimize any adverse impact on the public transportation system, the developer/contractor should keep existing bus stops fronting projects clear and usable during construction. The developer should consider area around bus stops for benches, litter containers, and shelter during and after construction.

Thank you for the opportunity to present additional comments on this subject Environmental Impact Statement.

Very truly yours,

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GEORGE C. VILLEGAS Director

cc: Dept. of Land Utilization Environmental Communications, Inc.



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TELEF-ONENO 548-6915

STATE OF HAWAII ENVIRONMENTAL QUALITY COMMISSION OFFICE OF THE GOVERNOR

550 HALEKAUWILA ST ROOM 301 HONOLULU, HAWAII 96813

July 7, 1976

George Moriguchi, Director Department of Land Utilization City and County of Honolulu 650 S. King St. Honolulu, Hawaii 96813

Dear Mr. Moriguchi.

SUBJECT: Environmental Impact Statement for the proposed Kalakaua Commercial Complex, Waikiki, Cahu

Copies of the EIS were officially filed on July 5, 1976. Fursuant to Chapter 343, Hawaii Revised Statutes, we have sent copies of the statement to the agencies and organizations indicated on the attached distribution list. To allow for a 30-day public review period, deadline for comments is August 7, 1976. All written comments will be directed to your agency with a copy to Environmental Communications, Inc.

If you should have any questions regarding this matter, please contact Rick Scudder of OEQC at 548-6915.

> Sincerely, Takemoto Albert Q /Y. Chairman

Attachment

cc: Environmental Communications, Inc. w/out attach.



STATE OF HAWAII DEPARTMENT OF SOCIAL SERVICES AND HOUSING P.O. Box 339 Honolulu, Hawaii 96809

July 9, 1976

Environmental Quality Commission 550 Halekauwila Street, Room 301 Honolulu, Hawali 96813

Gentlemen:

We are returning our copy of the Kalakaua Commerical Complex EIS for your further usage.

We feel that the proposal complex will be of both esthetic and economic benefit to the City and State.

alarway. Director

cc: Department of Land Utilization City and County of Honolulu

Environmental Communications, Inc.

Sicle of Howall DEPARTMENT OF DEFENSE OFFICE OF THE ADJUTANT GENERAL Fort Ruber, Honolule, Hawaii 96816

NEG

12 JUL 1976

Dr. Albert Tom, Chairman Environmental Quality Commission 550 Halekauwila Street Honolulu, Hawaii 96813

Dear Dr. Tom:

#### Kalakaua Commercial Complex and Central Maui Water Transmission System

Thank you for sending us copies of the Environmental Impact Statements for the proposed "Kalakaua Commercial Complex" and "Central Maui Water Transmission System". We have received the publications and have no comments to offer.

We are returning the Environmental Impact Statements for the proposed projects per your request.

Yours truly,

## signed

WAYNE R. TOMOYASU Captain, CE, HARNG Contr & Engr Officer

Enclosures

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Bart Contraction ContractionAdda, E. Martin Communication

> YUKIO FITAGAWA DEPUTY TO THE CHAIRMAN

## STATE OF HAWAII DEPARTMENT OF AGRICULTURE 1428 SO. KING STREET HONOLULU, HAWAII 96814

July 15, 1976

MEMORANDUM

To: Environmental Quality Commission

Subject: Kalakaua Commercial Complex Environmental Communications, Inc. TMK: I - 2-6-02:18,19,22,23,24 Waikiki

The Department of Agriculture has reviewed this Environmental Impact Statement (EIS) and finds no agricultural impact.

The copy of the EIS is returned for your further use.

Thank you for the opportunity to comment.

Chairman, Boath of Agriculture

JK:d:d

GEORGE R. ARIYOSHI GOVERNOR OF HAWAII



CHRISTOPHER COBB, CHAIRMAN BOARD OF LAND & NATURAL RESOURCES

> EDGAR A. HAMASU DEPUTY TO THE CHAIRMAN

#### STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621 Honolulu. Hawah 96809

August 3, 1976

CONVEYANCES FISH AND GAME Forestry Land Management State Parks Water and Land Development

DIVISIONS:

Mr. F. J. Rodrigues Environmental Communications Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriques:

#### Subject: EIS for Proposed Kalakaua Commercial Complex

From the information presented in the Kalakaua Commercial Complex EIS we find it impossible to make a determination concerning the impacts of the proposed project on the adjoining National Register site; the Royal Hawaiian Hotel.

We suggest that your impact statement address, or contain the following items:

1. Site plan showing the project in measured scale with building masses deliniated so that the architectural plan can be understood.

2. Complete project elevations

3. Landscape plan.

When these items are included it will be possible to evaluate the effects of the project.

Sincerely yours,

Jane L. Silverman Historic Preservation Officer State of Hawaii

cc: Land Utilization City and County of Honolulu

5/7/76

ENVIRONMENTAL COMMUNICATIONS INC.

August 13, 1976

Ms. Jane L. Silverman Historic Preservation Officer Department of Land and Natural Resources P. O. Box 621 Honolulu, Hawaii 96809

Dear Ms. Silverman:

Thank you for your comments of August 3, 1976 relating to the Environmental Impact Statement for the proposed Kalakaua Commercial Complex. We would like to address your comments and clarify our impact findings regarding the Royal Hawaiian Hotel.

We regret not providing the plot plans and rendering of the proposed Kalakaua Commercial Complex. They were not included because of their physical size and bulk. It should be noted that when such items are bulky and difficult or too numerous to include, the Environmental Quality Commission does allow for submission of these plans as a detached appendices or an addendum. We have, upon every agencies' or individuals' requests, provided plot plans and feel that this method of transmittal to these concerned agencies has been adequate to serve their reviewing purposes. Because you have indicated that a site plan, project elevation plan, and landscape plan are necessary to evaluate the effects of the project on Royal Hawaiian Hotel, we are attaching these plans for your review.

Your comment regarding the impact on the Royal Hawaiian Hotel by the proposed project should be clarified by your review of the site plans and the following information:

- 1. As part of the concept of a "garden setting" shopping center, the landowner, Bishop Estate, through its trustees, outlined the policies on which this shopping complex would be constructed and operated. The overriding policy was to maintain, and whenever possible, enhance the environs of the Royal Hawaiian Hotel. Its historical importance and world-renown setting was recognized and the architect provided for measures which would assure a continuation of the Royal Hawaiian Hotel's views and grounds. In this respect, a set of design features have been incorporated into the project design and plans, many of which were suggested by the staff of the Department of Land Utilization, in which special treatment to the Royal Hawaiian Hotel was insured.
- 2. At the present time, the shopping complex permits two view planes or vistas into the Royal Hawaiian Hotel's interior garden. These are located at the driveway entry (110' wide) and at the entry to the Royal Hawaiian (35' wide). Upon completion of the project, the following view corridors will be completed:

PRESIDENT

F. J. RODRIGUEZ.

Ms. Jane L. Silverman August 13, 1976 Page Two

- a. New realigned driveway into the Sheraton-Waikiki entry (88' wide) aligned with Royal Hawaiian Avenue.
- b. New view plane aligned with Seaside Avenue (120' wide).
- c. Three view openings into the Royal Hawaiian gardens, each approximately 30' wide.

We hope that these site plans and the discussion of the concept and design plans for the Kalakaua Commercial Complex will satisfactorily address your comments. If we can provide further information or should you find that this matter would be more adequately addressed in a discussion, please contact us at 521-8391.

Very truly yours, 7. 1- K-1. 37

F. J. Rodriguez

Attachments

cc: ∕Helumoa Land Co., Inc. Wong, Wong & Peng Department of Land Utilization

E. ALVEY WRIGHT

DEPUTY DIRECTORS

WALLACE AOKI RYOKICHI HIGASHIONNA DOUGLAS S. SAKAMOTO CHARLES O. SWANSON

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION 669 PUNCHBOWL STREET HONOLULU, HAWAII 96813

August 3, 1976

IN REPLY REFER TO. STP 8.3763

Mr. Fred Rodriguez, President Environmental Communications, Inc. P. O. Box 536 Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Subject: EIS for Kalakaua Commercial Complex, Waikiki, Oahu

While we found the assessment generally adequate we suggest that the statement on page 17 relative to the by-pass be footnoted. The note should indicate that while the by-pass is on the current, endorsed long-range transportation system plan for **O**ahu, it would require further alternative analysis especially in light of section 4(f) requirements before the segment can be implemented.

We also suggest that the applicant identify the state highway referred to on page 50, item 7.

Thank you for the opportunity to review the impact statement.

Sincerely,

5. alway Wright

E. ALVEY WRIGHT Director ENVIRONMENTAL COMMUNICATIONS INC.

August 13, 1976

Admiral E. Alvey Wright Director, Department of Transportation 869 Punchbowl Street Honolulu, Hawaii 96813

F J RODRIGUEZ.

PRESIDENT

Dear Admiral Wright:

This is in regards to your August 3, 1976 response to the Environmental Impact Statement for the proposed Kalakaua Commercial Complex. We have reviewed your comments and have made the following changes in our text:

 We have footnoted the statement on page 17 in regards to the major Waikiki by-pass route along the Mauka side of Ala Wai Canal. This footnote states:

> The State Department of Transportation, in their letter of August 3, 1976, stated that, '. . .while the by-pass is on the current, endorsed long-range transportation system plan for Oahu, it would require further alternative analysis especially in light of section 4(f) requirements before the segment can be implemented'".

2. The roadway referred to on page 50, item 7, has been identified. The statement has been revised to read:

> "The development will not detract from the line of sight toward the sea from Kalakaua Avenue. Presently, this line of sight is available because of the surrounding high-rise structures."

Thank you for your comments and we hope that our revisions will satisfactorily answer your comments.

Very truly yo T. J. Fringe

cc: Helumoa Land Co., Inc. Wong & Wong Associates, Inc. Department of Land Utilization

ENVIRONMENTAL COMMUNICATIONS INC.

August 19, 1976

Admiral E. Alvey Wright Director, Department of Transportation 869 Punchbowl Street Honolulu, Hawaii 96813

Dear Admiral Wright:

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F. J. RODRIGUEZ. PRESIDENT

> This is in regards to our response of August 12, 1976 regarding the Environmental Impact Statement for the proposed Kalakaua Commercial Complex. In error we misquoted the statement identified in Item 2 of our letter. The statement referred to on page 50, Item 7 has been revised to read:

"The development will not detract from the line of sight toward the sea from Kalakaua Avenue. Presently this line of sight is not available because of the surrounding high-rise structures."

Very\_truly yours, Lage

F. J. Rodriguez

cc: Helumoa Land Co., Inc. Wong & Wong Associates, Inc. Department of Land Utilization

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TELS/HONE NO. 548-6915

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#### STATE OF HAWAII OFFICE OF ENVIRONMENTAL QUALITY CONTROL OFFICE OF THE GOVERNOR 550 HALEKAUWILA ST. ROOM 301

HONOLULU, HAWAH 96813

August 5, 1976

George S. Moriguchi Director Dept. of Land Utilization City and County of Honolulu

SUBJECT: Environmental Impact Statement for the proposed Kalakaua Commercial Complex, Waikiki.

Dear Mr. Moriguchi,

This Office has completed its review of the subject EIS. Please find attached comments received by EQC concerning this EIS. We wish to offer the following comments:

During the consultation phase of the EIS process for the proposed project, this Office, and other agencies recommended the inclusion of drawings and/or figures that visually depict the proposed project. This would include the orientation, size and shape of the proposed buildings, the parking structure, and the site's circulation system. The figures in the EIS, at present, do not portray this information. The sentence on Page 26 states, "A set of renderings and the proposed floor plans will be available for review." To date, this Office has not received these renderings and floor plans. Instead, we feel that the applicant should provide this information in the EIS document, as required by Section 1:43 of the EIS Regulations. Analysis of the potential impacts for the proposed project on the Royal Hawaiian Hotel, an historic site, and potential changes in the aesthetics of this Waikiki area cannot be adequately determined from the information provided in the statement.

What are the lengths and widths of the proposed buildings and the parking structure? How do they relate to each other and the Royal Hawaiian Hotel?

Will traffic enter the site from both Kalakaua Ave. and Lewers St. or will it be a one-way system? Will the remainder of Lewers St. be widened due to the implementation of this project? A traffic count for Lewers St. should be provided. Will this volume change significantly? Page 2

Page 23. What evidence exists to support the statement that the proposed project would not affect the existing Royal Hawaiian Hotel? The aesthetic impact of walling in the hotel from the mauka direction might be considered an impact of this project.

Page 32. We believe that South King Street was two way in 1901.

Page 41. <u>4. Air Quality (b)</u>. What proposed residential development is this paragraph relating to?

Page 42. Alternatives. We believe the phrase "350-story apartment or hotel" should be "350 foot." Would a 350-foot structure be permitted on this site under the new Waikiki Special Design District ordinance?

Thank you for the opportunity to review this environmental impact statement.

Sincerely,

#### /S/ Richard E. Marland

Richard E. Marland Director

cc: Environmental Communications Inc. P.O. Box 536 Honolulu, Hawaii 96809

Attachments

ENVIRONMENTAL COMMUNICATIONS INC.

August 17, 1976

Dr. Richard E. Marland Director, Office of Environmental Quality Control 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

Dear Dr. Marland:

We have reviewed your comments of August 5, 1976 regarding the Environmental Impact Statement for the proposed Kalakaua Commercial Complex. Below, we have provided dispositions to your comments:

- 1. Several agencies pointed out the need to provide drawings and figures showing the proposed site plans, location and size of the parking structure, and the anticipated traffic circulation pattern. Therefore, we are incorporating these figures into the revised EIS. We also note that it was our oversight that no maps or renderings were sent to your office. To rectify this, we are sending a complete set of the floor space plans, site plans, and other available plans to your office for reference and availability to review agencies and individuals. The supporting technical studies prepared for the EIS were transmitted to your office on July 28, 1976.
- 2. The developer, architect, and we, as the environmental consultants, have determined that there will be no adverse impact on the historic Royal Hawaiian Hotel. In order to elaborate on this determination, we offer these additional background information:
  - a. As part of the concept of a "garden setting" shopping center, the landowner, Bishop Estate, through its trustees, outlined the policies on which this shopping complex would be constructed and operated. The overriding policy was to maintain, and whenever possible, enhance the environs of the Royal Hawaiian Hotel. Its historical importance and world-renown setting was recognized and the architect provided for measures which would assure a continuation of the Royal Hawaiian Hotel's views and grounds. In this respect, we have incorporated into the project design and plans, a set of design features, many of which were suggested by the staff of the Department of Land Utilization, in which special treatment to the Royal Hawaiian Hotel was insured.
  - b. At the present time, the shopping complex permits two view planes or vistas into the Royal Hawaiian Hotel's interior garden. These are located at the driveway entry (110' wide) and at the entry to the Royal Hawaiian (35' wide). Upon completion of the project, the following view corridors will be completed.

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F J. RODRIGUEZ. PRESIDENT Dr. Richard E. Marland August 17, 1976 Page Two

-- new realigned driveway into the Sheraton-Waikiki entry (88' wide) aligned with Royal Hawaiian Avenue.

-- new view plane aligned with Seaside Avenue (120' wide).

- -- three view openings into the Royal Hawaiian gardens, each approximately 30' wide.
- 3. Plans for the proposed parking structure are enclosed. The parking structure is planned to be approximately 272 feet by 120 feet. It will be approximately 90 feet high.
- 4. The traffic consultant, Henry T. Au, reviewed your office's comments regarding traffic and provided the following disposition:

"Traffic will enter the site from both Kalakaua Avenue and Lewers Street. This will allow for distribution of the traffic so that there will not be any significant congestion at any one entrace or exit.

No change is proposed or contemplated in the direction of the traffic flow on abutting streets. The project is designed according to the existing one-way flow pattern and, therefore, the remainder of Lewers Street need not be widened due to the implementation of the project."

- 5. (Page 23.) Please refer to item 2 above, as well as the set of floor space plans (showing the planned view corridors).
- 6. The traffic impact statement did not clearly indicate the section of South King Street that was a five-lane one-way highway in 1961. The section referred to is South King Street in the Civic Center between Richards Street and Kapiolani Boulevard Extension. The street was converted to one-way operation long before 1961.
- 7. (Page 41. 4. Air Quality (b).) Reference to the "proposed residential development" is incorrect. The statement is revised in the EIS to read:

"The estimated air pollutants that would be generated from the proposed commercial development will be from vehicles. An estimate of air emissions will be insignificant."

8. (Page 42. Alternatives.) The letter from the Department of Land Utilization (DLU), dated July 27, 1976, states that the maximum building height for this location is 280 feet. (Such a height, as pointed out by DLU, would require substantially more setbacks and open space than the proposed structure.) Dr. Richard E. Marland August 17, 1976 Page Three

Thank you for your comments, we hope that we have satisfactorily answered these comments.

Very truly yours, F. J. Rodriguez

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Enclosures

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cc: Helumoa Land Co., Inc. Wong & Wong Associates, Inc. Department of Land Utilization

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#### MEMORANDUM

July 9, 1976

MEMO TO: Environmental Quality Commission

FROM: Reginald H. F. Young H. J. Asst. Director, WRRC

SUBJECT: EIS for Proposed Kalakaua Commercial Complex

We have reviewed the subject EIS and have no further comments on the proposed Complex. The EIS is returned for your further use.

RHFY:jmn

Enclosure



## University of Hawaii at Manoa

RE:0207

Environmental Center Crawford 317 • 2550 Campus Road Honolulu, Hawaii 96822 Telephone (808) 948-7361

Office of the Director

6 August 1976

Mr. F.J. Rodriguez, President Environmental Communications, Inc. P.O. Box 536 Honolulu, Hawaii 96809

#### Kalakaua Commercial Complex

Dear Mr. Rodriguez:

The Environmental Center has been assisted in the review of the above cited Environmental Impact Statement by John Burgess (Mechanical Engineering); Anders Daniels (Meteorology); and Robert Kerr, Doak C. Cox, Margaret Stanzione and Leonard Wilson (Environmental Center).

In general the draft EIS addresses most of the areas of significant impact which will be generated by this project. With regard to specifics we have the following comments:

#### Project Description and Site Plan (pages 3 - 7)

In addition to the site plan which shows the existing and adjacent buildings (Figure 3), a site plan of the proposed buildings, facilities, and right-of-way should clearly be included. Because of the importance of design in the crowded Waikiki area, we suggest that the architectural design and materials of proposed structures be discussed.

The description in the EIS is vague; buildings B and C are referred to with no corresponding diagram. No indication of how much of the open space presently existing will remain after construction because there are no diagrams indicating the extent of surface area to be consumed by the structures. It is difficult to evaluate the visual impacts of the project without this information.

#### Energy Considerations (page 10, page 41)

Energy considerations and commitment of resources should be discussed further in the final EIS. What will be the energy requirements for the

completed structure? How much electricity and gas will be utilized? If the design of the shopping area includes open malls, can natural ventilation be considered in lieu of air conditioning for the shops facing the mall?

#### Transportation Considerations (pages 15 - 19)

A map showing the traffic circulation patterns should be included in the final EIS.

Traffic projections for Lewers Street, Kalia Road and Helumoa Road should be included since they will be affected by traffic to and from the parking garage.

#### Parking Garage (page 19, page 34)

The impacts of the parking garage have not been fully discussed. A tenstory structure does not seem compatible with two and three story "low-rise" structures.

Page 73, Recommendation from the Design Review Committee submitted by the Waikiki Improvement Association, endorses the project with the underground parking facility. The underground parking facility is not even mentioned in the EIS. What became of the original plan? Underground parking, if feasible, seems to be a better alternative than a ten-story parking structure.

Will all ten stories be above ground? Will the parking structure be visible from, or block the views of, any of the adjacent hotel rooms in the area? Will the parking structure be available for use by the general public and if so what will the charges be?

Since 90% of the patrons will not be parking in the area (p.35) and a great majority (over 80%) of the patrons are estimated to be visitors who walk, ride buses or taxis to the shopping area (p. 20), is it necessary to have such a large parking structure? Would it not be better to encourage the use of mass transit and provide amenities associated with riding The Bus, such as benches, chairs, and water fountains. Vehicle traffic should be discouraged in the Waikiki District.

Air quality in relation to the parking structure should also be addressed in the final EIS.

#### Historical and Archaeological Considerations

It is claimed that the project will probably not have a negative impact on the aesthetic value of this portion of Waikiki since the project is one of a "low-rise" nature. We are concerned, however, with the impact that the project may have on the nearby Royal Hawaiian Hotel. Specifically, to what extent will the views of and from the Royal Hawaiian be obstructed?

#### Recreational Considerations (page 23, page 39)

Since the area presently contains the only open space in this section of Waikiki, the garden-environment makai of the Kalakaua commercial structures, the removal of this open space would seem to have a significant impact on recreational activities. Simply landscaping commercial structures is not a substitute to the natural garden-environment with mature trees that is now present. Since enjoyment of this natural setting is an activity of visitors, and since this is Hawaiian in character, mention should be made as to the project's impact on this type of recreational activity. It is recognized that the "court garden" type atmosphere (p. 26) is planned to be reserved. Where and how? The court garden areas should be included in the map of the site plan.

- 3 -

#### Air Quality (page 41 - 46)

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The estimation of the air pollution effects (pp. 41 - 45) of the project is quite unsatisfactory because a totally inadequate "box model" was used. As indicated in Appendix 1, it is assumed that the daily emissions of vehicles in a portion of Waikiki (Ala Wai to the beach), having the cross-wind dimension of the project area, are distributed uniformly in space and time in a "box" of airspace having a width of 1060 m (about 3/5 mi., equal to the above cross-wind dimension), a height of 305 m (about 1000 feet), and a length of 497 km (about 300 mi.), extending out to sea. The length is supposed to represent the normal wind travel for a day (assuming a normal wind speed of about 13 mph). The height is supposed to represent a minimum temperature inversion height.

The use of a minimum inversion height would tend, as is indicated in Appendix 1, to result in maximizing the air pollutant concentration estimates. However, several other assumptions tend to result in underestimation of concentrations in relation to standards:

a. No allowance is made for pollutants emitted upwind from Waikiki.

b. State 24-hour air quality standards relate to maximum pollutant concentrations averaged over the worst day in a year (Federal standards to the second worst). In any year several days are likely to occur with average wind speeds much less than that assumed in calculating the length of the "box".

c. The uniform mixture of pollutants with height to the inversion is quite unrealistic. Pollutants would have to travel about  $2\frac{1}{2}$  mi. (i.e. out to sea) before reaching the 300 m height.

d. The estimated 24-hour concentrations are compared on page 43 with the 8-hour standard for CO and 3-hour standard for hydrocarbons.

That the model is quite inadequate for the purpose intended may be indicated in a crude way from the records of CO concentrations at the Department of Health building at the corner of Punchbowl and Beretania Streets, where traffic densities and wind conditions are similar to those in Waikiki. Critical CO concentrations, those for 1-hour periods, have reached 40 mg/m<sup>3</sup> (40,000  $\mu$ g/m<sup>3</sup>). To account for this concentration, nearly 180 times what is predicted by the box model under the Appendix 1 assumption, the assumed inversion height would have to be reduced to less than 2 m., which of course is absurd.

"Box models" have their place in meteorology but are unsuitable for the purposes of this EIS. Suitable diffusion models are available whose use would not require undue effort.

#### No Action Alternative (page 46)

The only aspect of the "no action" alternative mentioned is building maintenance and deterioration. No previous mention has been made as to the condition of the present structures.

The existing structures are low-rise in nature and do not appear to be deteriorating. How much maintenance is required on the existing structures? Presumably the new buildings will also deteriorate and require maintenance. Could not a feasible alternative to this project be the renovation of the existing structures? Included in the "no action" alternative should be the preservation of the existing natural setting.

Irreversible and Irretrievable Commitments of Resources (page 48)

If mature trees are considered resources then there should be mention of which mature trees would be removed. Permanent removals of such trees would constitute irretrievable commitments of resources.

We appreciate the opportunity to review this EIS.

Yours very truly,

Jacob Come

Doak C. Cox Director

cc: Dept. of Land Utilization

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ENVIRONMENTAL COMMUNICATIONS INC.

August 17, 1976

Dr. Doak C. Cox, Director Environmental Center Crawford 317, 2550 Campus Road Honolulu, Hawaii 96822

Dear Dr. Cox:

F U RODRIGUEZ. PRESIDENT

> We have reviewed your comments of August 6, 1976 regarding the Environmental Impact Statement for the proposed Kalakaua Commercial Complex. We are addressing these comments on an item-by-item basis below:

1. Project Description and Site Plan, pp. 3-7: Several agencies indicated the need to provide drawings and figures showing the proposed site plan, location and size of the parking structure, and the anticipated traffic circulation. Therefore, we are incorporating these figures into the revised EIS. For your additional information, we are providing the description of the architectural design of the project as provided by the architect, Wong & Wong Associates, Inc. Maps and floor space plans for the Kalakaua Commercial Complex are also included for your reference.

In regards to the existing open space in relationship to the proposed open space, we note that the following areas will be provided. Please refer to the table below:

	Existing Development	Proposed Development	Area <u>Gain</u>	§ Gain
*Open space in sq. ft.	32,440	53,123	+ 20,683	64%
Arcade space in sq. ft.	7,500	9,500	2,000	26%
Landscaped area in sq. ft.	12,920	21,000	8,080	62%

\*All space fronting Kalakaua Avenue to a depth of 100'-0".

- 2. Energy Considerations, pp. 10 & 41: The electricity load estimates for the proposed shopping complex is attached. Natural ventilation is considered to be unacceptable in today's merchandising strategy. Retail merchants insist upon an air-conditioned environment for the convenience and comfort of their clientele.
- 3. Transportation Considerations, pp. 15-19: As mentioned in Item 1 above, we are including in the revised EIS, a map showing traffic circulation patterns. Our traffic consultant, Henry T. Au, has indicated that:

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Dr. Doak C. Cox August 17, 1976 Page Two

> "The peak hours of activities at the parking garage will occur during the evening hours and the traffic generated by the parking garage will not significantly affect the peak hour volume on Lewers Street. So long as the peak hour volumes on these streets do not exceed their capacities, and these are indicated in the current traffic counts, the traffic projections do not serve a useful purpose.

The most significant factor that will change the peak hour volumes on these streets is a change in the direction of the traffic flow on any one of these streets. Any change in the direction of the traffic flow will render useless the traffic counts, existing or projected, for any of these streets."

4. Parking Garage, pp. 19 & 34: The Comprehensive Zoning Code mandates 1,200-1,300 parking stalls. The Waikiki Special Design District permits that total to be reduced 50% to 600-650 parking stalls. Because of these code limitations, the applicant plans at the present time, to build 600-650 stalls. If this requirement can be reduced by waiver of code requirements, the applicant has agreed to reduce the size of its garage accordingly.

We also note that after further investigation, it was found that an underground parking facility was not feasible due to the physical geography and economic constraints of building such a facility. A minimum of three times construction costs for underground parking has been estimated. The visibility of the parking structure and its impact on aesthetics is supported by reviewing the site plans which are enclosed. At this time, the policies in regards to the parking structure available to the general public and the charges are in negotiation with various parking facility concessionaires who will advise their interest to manage and operate the facility.

The air quality in the parking structure was not addressed because the detailed design characteristics have not been completed. It is noted that only upon completion of the parking facility can the air quality in the parking structure be accurately determined by a Gaussian model or other similar models. If air pollution levels exceed allowable limits, measures to ventilate and improve air quality will be taken. (As an example, we note that the Ala Moana Shopping Center improved their air quality primarily through improved ventilation.)

- 5. Historical and Archaeological Considerations: The developer, architect, and we, as the environmental consultants, have determined that there will be no adverse impact on the historic Royal Hawaiian Hotel. In order to elaborate on this determination, we offer the following additional information:
  - a. As part of the concept of a "garden setting" shopping center, the landowner, Bishop Estate, through its trustees, outlined the policies

Dr. Doak C. Cox August 17, 1976 Page Three

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on which this shopping complex would be constructed and operated. The overriding policy was to maintain, and whenever possible, enhance the environs of the Royal Hawaiian Hotel. Its historical importance and world-renown setting was recognized and the architect provided for measures which would assure a continuation of the Royal Hawaiian Hotel's views and grounds. In this respect, we have incorporated into the project design and plans, a set of design features, many of which were suggested by the staff of the Department of Land Utilization, in which special treatment of the Royal Hawaiian Hotel is insured.

- b. At the present time, the shopping complex permits two view planes or vistas into the Royal Hawaiian Hotel's interior garden. These are located at the driveway entry (110' wide) and at the entry to the Royal Hawaiian (35' wide). Upon completion of the project, the following view corridors will be completed:
  - -- new realigned driveway into the Sheraton-Waikiki entry (88' wide) aligned with Royal Hawaiian Avenue.
  - -- new view plane aligned with Seaside Avenue (120' wide).
  - -- three view openings into the Royal Hawaiian gardens, each approximately 30' wide.
- 6. Recreational Considerations, pp. 23 & 39: It is anticipated that the revised EIS will include a preliminary landscape master plan. The plan will be made available for review upon finalization. Additionally, we note that the table provided under Item 1 above indicates the existing and proposed open, arcade, and landscaped areas.
- 7. Air Quality, pp. 41-46: There are personal biases as to which method is better and all methods have advantages and disadvantages. The key to deciding what model to use is - what information is needed and the time and money available.

Basically there are three general types of dispersion models that can be used relating to the pollutant emissions to air pollution concentrations.

- a. <u>Box Models</u> The least sophisticated and provides the least detail. This type of model is useful in making preliminary decisions, especially in the area of defining the tolerance of a given area. The mathematical calculations are simple and easily understood by anyone.
- b. <u>Gaussian Plume Models</u> A higher level of sophistication and provides very detailed information. This type of model is useful as an evaluative tool to consider alternative land use and transportation plans in terms of the impact on the air quality. This method requires the use of a high speed digital computer along with comprehensive emissions and meterological data. It is expensive

Dr. Doak C. Cox August 17, 1976 Page Four

> and time consuming. It is necessary to make assumptions, therefore, care must be taken in analyzing and evaluating the results.

c. <u>Numerical Simulation Models</u> - The most sophisticated and still in a formative stage. They provide detailed two and three dimensional pictures of the spatial patterns of pollutant concentrations and, therefore, most applicable to determining air quality impact of individual sources. This type of model is useful in the design and placement of large individual sources of air pollution. These models require the use of a high speed digital computer.

Generally, for EIS the box model is widely used because of its simplicity and provides adequate information in defining the tolerance of an area toward receiving additional pollution. Based on existing air quality levels, allowable pollutant concentration increases are transformed into allowable increases in pollutant emissions through the use of a box model analysis.

We do recognize that a box model is a type of dispersion model.

General steps in defining the tolerance of an area to additional pollutant emissions through use of a box model.

Equivalent Annual Average Air Quality Standards	Annual averages are used because 1, 3, 8 and 24 hour standards re localized and the level of detail data is insuf- ficient to generate meaningful air quality information.
Calculate Allowable Increases in Concentration	Utilizing available existing air quality data and proportional model as described in Federal Regulations (4DCFR51; 36 FR 22398, Nov. 25, 1971).
Is Allowable Increase Less than or Equal to Anticipated Increase?	$\frac{A-C}{A-B} \times 100 = \text{percent reduction needed}$ $A = \text{Existing air quality}$ $B = \text{Background concentration}$ $C = \text{Standard}$
	Negative percentage = Maximum allowable increase (Non-degradation requirements and other consideration will reduce percentage.)
Box Model Analysis	<pre>Volume = (A) (B) (C) in meters<sup>3</sup> A = Project cross section to trades (M) B = Height (M) C = 24-hr. travel distance (M/hr) (24 hr) B &amp; C are critical parameters subject to</pre>

Dr. Doak C. Cox August 17, 1976 Page Five

> challenge, therefore, need justification. Volume can be greatly affected. All available meteorological data must be obtained and analyzed closely to substantiate the use of a particular mixing.

In cases where there is a lack of relevant data (and there will be many) assumptions must be made and these assumptions should be qualified. Depending on what type of people are doing the analysis or for what purpose the analysis is being done - assumptions can vary to a large degree. For example, for those wanting to stop a project or show large concentrations, assumptions can be ridiculously low and vice versa.

Transformation of emission estimates into ambient air quality estimates is done for all three types of models. The box model transforms emission extimates into ambient air quality by relating the amount of emissions to a volume of air as defined by wind direction, wind speed and atmospheric stability (inversion height).

Standard definitions include:

Emissions - Effluents into the atmosphere in terms of weight per unit time.

Ambient Air Quality - Concentration levels in ambient air for a specified averaging time within a given geographic region.

Concentration - A measure of the average density of pollutants specified in terms of pollutant weight per unit volume of air (micrograms/cubic meter) or in terms of relative volume of pollutant per unit volume of air (parts/million).

8. No Action Alternative, p. 46: The developer has informed us that at this time the maintenance cost of the project property, especially those buildings on the Lewers Street end of the project site, are increasing to the point where these costs can exceed the amortized value of the improvements. We have also been informed by the developer that renovation of the existing structures would be impractical due to the high cost of renovation versus the relative cost of construction per square foot. It was noted in the alternatives that "preservation of the existing natural setting or commitments to the land in other open spaces for recreational use" had not been discussed. The response is a legal one and consists of the mandata established by law which expressly states that the Bishop Estate and its subsidiaries are in operation to generate revenues for the Kamehmeha Schools. Under this mandate, the non-productive use of Bishop Estate lands would be against the law.

The EIS summarized three alternatives in addition to the concept submitted. Of the four alternatives, hotel development and commercial use have been seriously explored in the last decade. In 1967, a proposal was tendered to the Bishop Estate for a massive hotel/commercial development on the subject property. For reasons enumerated in the EIS with respect to hotel use,

Dr. Doak C. Cox August 17, 1976 Page Six

> the Trustees elected instead to engage a consultant to investigate an entirely commercial alternative. In 1971, the consultant's recommendation for a 16-story office tower at Lewers and Kalakaua and a 9-story block (2 levels retail - 7 levels parking) adjacent to the Royal Hawaiian Hotel and gardens, the Trustees and their advisors chose to investigate a low-rise, garden oriented complex. The trade-offs between open space, massing, view corridors, landscaping, accommodation of existing buildings, pedestrian and vehicular traffic, and scale were all evaluated in judging the wide range of design alternatives proposed in the competition.

9. Irreversible and Irretrievable Commitments of Resources, p. 48: The identification of the loss of mature trees on the project site will be incorporated into this section. We have been informed by the nurserymen working on the project that at this time less than one dozen mature coconut trees would be removed (due to moisture rot). The banyan trees and other coconut trees will remain or be relocated. It is also expected that common trees such as the octopus trees, which are replaceable, will be removed.

We appreciate your comments and hope that we have adequately addressed them. Please contact us if we can be of further assistance in elaborating upon our disposition or materials in the EIS.

Very truly yours,

F. J. Rodriguez

Enclosures

cc: Helumoa Land Co., Inc. Wong & Wong Associates, Inc. Department of Land Utilization

# United States Department of Concernor

Reference: ES

FISH AND WILDLIFE SERVICE Division of Ecological Services 821 Mililani Street Honolulu, Hawaii 96813

July 9, 1976

Interim Director Environmental Quality Commission 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

Dear Sir:

We have reviewed the environmental impact statement concerning the Kalakaua Commercial Complex and have no comments to make at this time.

The environmental impact statement has been returned to your office as requested, under separate cover.

Sincerely yours, maurice H. Jaylet. Maurice H. Taylor

Maurice H. Taylor Field Supervisor

cc: ARD, AE



440 Alexander Young Building, Honolulu, HI 96813

July 12, 1976

Department of Land Utilization City & County of Honolulu 650 S. King Street Honolulu, HI 96809

Gentlemen:

2...

Subject: Draft Environmental Impact Statement for Kalakaua Commercial Complex

We have reviewed the subject dEIS and have no comments to offer.

Thank you for the opportunity to review this document.

Sincerely,

Call and the second of the second second

Francis C. H. Lum State Conservationist

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Environmental Communications, Inc. P. O. Box **6**36 Honolulu, HI 96809



#### DEPARTMENT OF THE ARMY

U. S. ARMY ENGINEER DIVISION, PACIFIC OCEAN BLDG. 230, FT. SHAFTER APO SAN FRANCISCO 96558

15 July 1976

Director Department of Land Utilization City and County of Honolulu 650 South King Street Konolulu, Hawaii 96813

Dear Sir:

We received the Environmental Impact Statement for the Proposed Salakaus Commercial Complex on 6 July 1976. We have no comments at this time.

Sincerely yours,

KISUN CHEUNG Chief, Engineering Division

Cy Furn:

Chairman, Savironmantal Quality Commission, State of Hawaii 350 Halekauwila Streat, Boom 301 Honolulu, Hawaii 96813

Ar. F. J. Rodrigues, President Environmental Communications, Inc. F. C. Box 536 Honolulu, Hawaii 96809



DEEE (Mr. Nakeshima, 4492158)

15 JUL 1976



SUBJECT: Environmental Impact Statements

Environmental Quality Commission 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

1. This Headquarters has no comment to render relative to the Environmental Impact Statement for the following projects:

a. The Proposed Honouliuli Interceptor Sewer System, Oahu, Hawaii

b. The Proposed Kalakaua Commercial Complex, Oahu, Hawaii

c. Central Maui Water Transmission System, Waiehu to Makena, Maui, Hawaii

2. We greatly appreciate your cooperative efforts in keeping the Air Force apprised of your development projects throughout the State and the opportunity to review the statements.

BEN DY KOSA Dep Dir of Civil Engineering

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DEPARTMENT OF THE ARMY HEADQUARTERS UNITED STATES ARMY SUPPORT COMMAND, HAWALL APO SAN FRANCISCO 96558

AFZV-FE-EE

05 AUG 1976

Environmental Communications Inc P.O. Box 536 Honolulu, Hawaii 96809

Gentlemen:

Reference is made to the Environmental Impact Statement for the Proposed Kalakaua Commercial Complex.

We have reviewed the EIS and have no comments to offer.

Thank you for the opportunity to review this document.

Sincerely yours,

P. RODOLPH Colonel, CE Director of Facilities Engineering

CF: OFC OF ENVIR QUALITY CONTROL







#### THE OUTDOOR CIRCLE 200 No. Vineyard, Honolulu, Haudi 96817

#### July 13, 1976

Mr. F. J. Rodriques Environmental Communications Inc. 225 Queen Street Honolulu, Hawali 96813

Dear Mr. Rodriques:

The Outdoor Circle thanks you for your courtesy in arranging a viewing of the model for the proposed Kalakaua Commercial Complex. We appreciate your answering our questions and clarifying the picture for us.

The development of this historic area, with its unique opportunity for preserving and enhancing Walkiki's appearance, is of great importance to Waikiki's future. We are concerned that the new plan covers more ground and of the impact of the newly proposed nine-story parking structure.

We continue to be deeply concerned with the impact of the loss of 60 to 70 coconut trees that are in the way of the construction in this historic area. What other treas will be affected? What will happen to them? Walkiki needs all of its trees to preserve its atmosphere.

We thank you for the opportunity to further express our concerns.

Sincerely,

Mrs. John T. Humme President

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cc: Helumoa Land Co.

Environmental Quality Commission Department of Land Utilization

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ENVIRONMENTAL COMMUNICATIONS INC.

August 17, 1976

Mrs. John T. Humme President, The Outdoor Circle 200 North Vineyard Street Honolulu, Hawaii 96817

Dear Mrs. Humme:

F. J. RODRIGUEZ. PRESIDENT

Thank you for your response of July 13, 1976 regarding the Environmental Impact Statement for the proposed Kalakaua Commercial Complex.

In our meeting of July 13, 1976, we did discuss the appearance of the development, including the parking structure. To reiterate, the parking structure will be consistent with the size and design of the existing Sheraton-Waikiki parking structure. No significant or adverse impact on present view planes are expected. The architect stated that the location and design of this structure was planned to have minimal impact on view planes and the surrounding uses.

Additionally, we have been recently advised by the nurserymen working on the project that a detailed examination of the trees on the site, indicate that less than one dozen coconut palms need to be removed completely. These trees were found to be unhealthy due to moisture rot, and if allowed to remain or be relocated, these trees would, within a few years, constitute a safety hazard to pedestrians. The other coconut palms will remain or be relocated. The Chinese Banyan tree will not be removed. Other trees located on the project site in the specific site of the structures will be cleared. These trees include the more common type of trees (e.g. octopus tree) which can be more economically replaced rather than relocated. For your further information, we are providing you with a set of the landscape plans.

Very truly yours

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F. J. Rodriguez

Enclosures

cc: Helumoa Land Co., Inc. Wong & Wong Associates, Inc. Department of Land Utilization

# AMERICAN CLUNG ASSOCIATION of Hawaii

August 6, 1976

Mr. John Whalen Department of Land Utilization City & County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Dear Mr. Whalen:

Subject: Environmental Impact Statement for the Proposed Kalakaua Commercial Complex

We have reviewed the subject EIS and our detailed comments are attached. In summary, we had two major findings:

- 1. The regional impact methodology employed for the air quality analysis severely underestimates the impact of the project on local air quality. In fact, the 1977 estimates for carbon monoxide are 1/20 of the concentrations which can be measured along Kalakawa Avenue at the present time. To assist in assessing the impact of this project we have provided as an attachment a preliminary analysis based on an EPA screening procedure as well as recent (July, 1976) measurement data.
- 2. The lack of a local or microscale air quality impact analysis may be due in part to the lack of a detailed traffic impact analysis in the immediate vicinity of the proposed complex. The lack of both of these may be attributable to an apparent uncertainty about the project's design, in particular relating to the parking facility. Several reviewers of the EIS Preparation Notice pointed out the lack of a site design plan (EIS, pp. 64, 89, 91). Such a plan was not included in the final EIS either. The Waikiki Improvement Association's Design Review Committee passed a resolution supporting the project and mentioned underground parking although the EIS describes a 10-story parking structure (EIS, p. 5). In telephone conversations with the environmental and engineering consultants (who we might add were very cooperative), we were unable to ascertain such information as the locations of the entrances and exits to the parking facility. We were advised to contact the architect which we attempted, but our calls were not returned. The question, of course, is how can the air quality impact of the complex be properly assessed without firm design data to work with.

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Mr. John Whalen August 6, 1976 Page 2

Aside from the technical review, we cannot help but wonder why so many parking stalls are required by the City & County or requested by Helumoa Land Company when the complex is apparently aimed at tourists and "slightly over 90% of the Kalakaua Commercial Complex patrons will not park in the area..." (EIS, p. 35). Considering the clientelle the complex is intended for, there appears to be little need for the parking garage.

We trust that the shortcomings of this environmental impact statement will be rectified before it is accepted.

Sincerely yours,

James W. Morrow, Director Environmental Health

JWM:lp Att.

cc: Dr. Richard Marland Dr. James Kumagai Mr. George Villegas Dr. Frank Peterson

## AMERICAN **S** LUNG ASSOCIATION of Hawaii

Review of the Environmental Impact Statement for The Proposed Kalakaua Commercial Complex

- 1. Page 2. Typographical error. Table 2 should be Table 3.
- 2. Page 6, par. 2. The text describes the layout of the proposed project and refers to Figure 3, but that figure provides no details at all about the project design. This was noted by Marland (Office of Environmental Quality Control), Peterson (Water Resources Research Center) and Villegas (Department of Transportation Services) in their letters during the consultation period, yet no corrective action was taken. There appears to be some uncertainty about the design of this project (see our Comments 4, 8, and 9).
- 3. <u>Page 12, par. 3</u>. The term "knots per hour" is used several times. This is incorrect since knots by definition include a time factor.
- 4. Pages 31-35, Impact on Transportation. While this section and the traffic consultant's report on which it was based provide a fine analysis of current traffic conditions and problems in Waikiki, they unfortunately lack a specific analysis of the impact of the proposed commercial complex. The discussion was too much in general terms and did not include a detailed assessment of traffic patterns and impacts of the project. Perhaps this is due to the uncertainty about project design.
- 5. Page 41, Air Quality. The Air Quality Impact Study referred to in the text employed a regional methodology which not surprisingly showed an insignificant impact. This would be the case with almost any project if its emissions were compared with those of all other sources throughout an entire region. This gives a very misleading impression of the impact of the project. What should have been done is a microscale analysis to assess the impact in the immediate area of the project. In other words, what effect is the project going to have on the air that tourists and workers in Waikiki breathe? For more details, see Comments 9 and 11 and the attached impact analysis based on an EPA screening procedure and recent carbon monoxide (CO) measurements along Kalakaua Avenue.

Specifically, the attached report indicates that air quality in the vicinity of the proposed complex presently is already approaching or exceeding the State's ambient air quality standards and that the addition of a large parking garage associated with the project may result in further violations.

Christmas Seals Fight TB, Asthma, Emphysema, Air Pollution

- 6. <u>Page 43, Table 7</u>. Besides the inappropriate method used in deriving the figures (see Comments 5, 9, and 11) in the table, there are two errors in it:
  - a. The <u>24-hour</u> estimates for carbon monoxide cannot be compared with the <u>State's 8-hour</u> and <u>1-hour</u> standards. For comparison, estimates must be made for the same time averaging period.
  - b. The third column incorrectly identifies the figures as "Emissions" when in fact they are estimates of ambient air quality. Emissions are measured in terms of grams/second, pounds/day, etc. Ambient air quality is measured in micrograms or milligrams/cubic meter (µg or mg/m<sup>3</sup>) or parts per million (ppm), etc.
- 7. Page 45, Table 9. Comment same as 6.b. above.
- 8. Page 73, Waikiki Improvement Association Letter. The Design Review Committee of the WIA lauds the project on several notable aspects, one of which is <u>underground parking</u>. Since the EIS refers to a 10-story parking structure, this again raises the question of just how certain the design of this project is. Differences in the design and capacity of the parking facility associated with this project can have a marked effect on the impact it has on air quality.
- 9. Page 93, Appendix I, Air Calculations.
  - a. The text refers to a "Figure 3 (outlined in red)" which is not included in the EIS.
  - b. An incorrect combination of high windspeed and shallow mixing depth were used. Fifteen years of record at Hickam AFB indicate that a mixing depth of 305 m would not occur except under inversion-like conditions (F stability) with low wind speeds (0 to 3 kt). The approximately 11 kt wind used in the EIS would be associated with the following mixing depths and stability categories:

Stability			Mixing Depth
	Moderately unstable	(B)	1,253 m
	Slightly unstable	(C)	1,329 m
	Neutral	(D)	1,408 m
	Slightly stable	(E)	1,390 m

If worst case conditions were truly to be evaluated, then a 1 - 3 kt wind speed should have been used.

As noted previously, however, using this "box model" regional approach gives very little indication of what the local impact of the proposed complex will be. Generally speaking, box models are not suitable for local or microscale air quality analyses. Again, a microscale analysis may not have been performed because of uncertainties about project design.

- 10. Page 95, second table. Comment same as 6.b. above.
- 11. Additional comments on the Air Quality Impact Study (June 1976)
  - a. The basis on which a box model regional approach was selected is not sound. First of all, there is a failure to recognize that the box model is just another type of diffusion model. Secondly, regardless of what model is selected be it box, Gaussian, rollback, physico-chemical, etc., they all require an emissions inventory in order to provide emissions input. The models translate emissions data into ambient air quality estimates. They all, except for the very simple rollback method, require meteorological data input to determine in which direction the emissions are carried and to what extent they are dispersed. Thus, in contradiction to what was stated in the Study, there are not just two methods of assessing the impact of the project; there are many variations of a general procedure which requires emissions and meteorological input as a minimum.

-3-

- b. The State Department of Health cannot use <u>only</u> an emission inventory system to predict ambient air quality as stated on p. 4 of the <u>Study</u>. The Department would have to use the inventory data in combination with a rollback method and monitoring data to determine ambient concentrations. Without monitoring data, the method is useless. In the case of the proposed Kalakaua Commercial Complex, an emissions inventory and rollback approach is of no value since no monitoring data was presented.
- c. The meteorological data presented and used in the <u>Study</u> represents an average of winds at all hours of the day and all months of the year. This type of data is useful for determining annual averages of pollutant concentrations but has little value in estimating hourly, daily, or monthly concentrations. Since a review of the complete airport data reveals marked differences in wind speeds and directions at different times of the day and during different months of the year, it is essential to use that data in estimating pollutant concentrations for a 24-hour period or for certain hours of the day such as peak traffic hours.

## AMERICAN ELUNG ASSOCIATION of Hawaii

#### PRELIMINARY AIR QUALITY ANALYSIS Kalakaua Commercial Complex

#### I. INTRODUCTION

The primary impact of this project on air quality will be due to vehicular traffic attracted to it. The basis for the preliminary analysis of this impact is a screening procedure described in EPA publication EPA 450/4-75-001.<sup>1</sup> The purpose of the procedure is to provide a simple and expeditious means of determining whether an indirect source such as a parking structure is likely to cause violations of air quality standards. If such violations are indicated by the procedure, then a more refined analysis may be performed perhaps including air monitoring, and/or the proposed source may be redesigned to avoid or mitigate the problem.

Normally, an analysis will include, at a minimum, a two-part assessment:

- 1. Assess the impact of the source itself, e.g., a parking garage acting as a small area source of emissions as a result of vehicle movement within it or queuing at gates.
- 2. Assess the impact of the source on nearby access roads as a result of additional traffic attracted to the source.

In this particular case we have restricted the analysis to part 2 only because of a lack of design data on the proposed parking structure. The mathematical estimates were also supplemental with actual measurement data collected in the vicinity of the proposed commercial complex.

#### II. TRAFFIC

Morning and afternoon one-hour traffic counts were conducted in order to identify any significant changes from the last count made by the City & County of Honolulu in 1975 along Kalakaua Avenue between Royal Hawaiian and Seaside Avenues. Our counts were in the same range as the 1975 counts as shown in Table 1.

#### TABLE 1

#### Kalakaua Avenue Traffic Counts

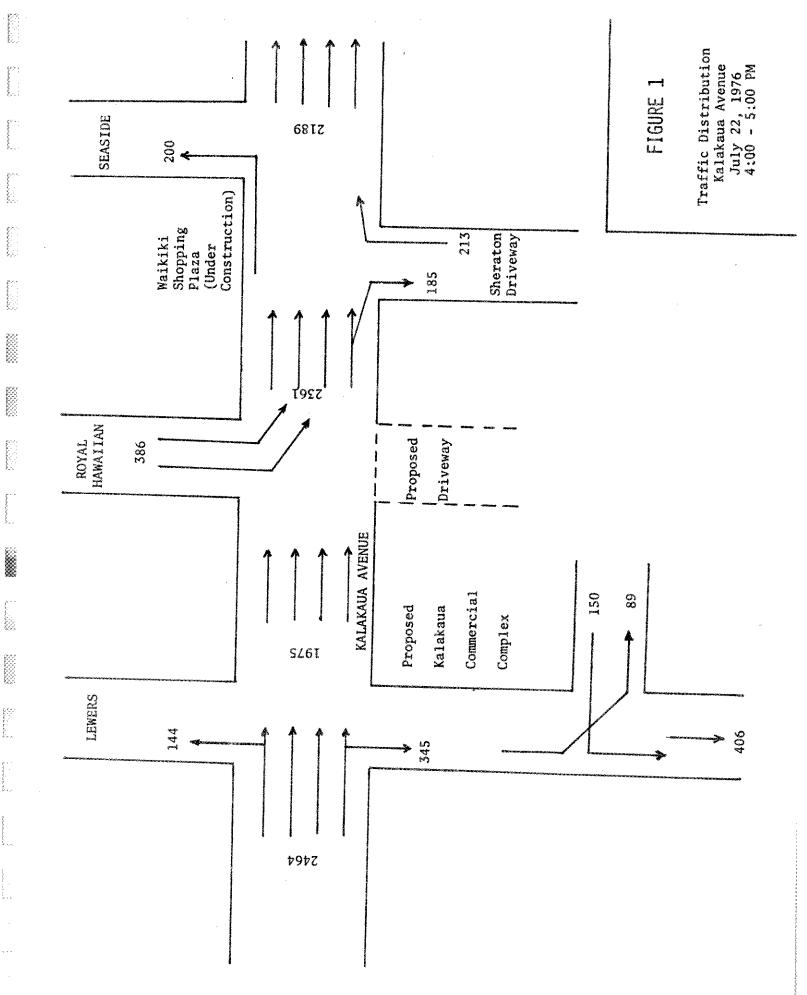
Date/Time	City & County Count	American Lung Assn. Count
1975/8:00-9:00 AM	1,688 veh	an an
19 Jul 76/8:10-9:00 AM	**	1,657
22 Jul 76/8:00-9:00 AM		1,728
1975/3:00-4:00 PM	2,002	ana 1916
1975/4:00-5:00 PM	2,195	44 RD
1975/5:00-6:00 PM	2,200	
20 Jul 76/3:20-4:20 PM	en es	2,091
22 Jul 76/4:05-5:05 PM	<i>ज्या</i> : ब्यून	2,342
23 Jul 76/4:00-5:00 PM	649 MD	2,361

Figure 1 shows the current distribution of traffic on the access streets in the vicinity of the proposed commercial complex. Figure 2 shows a 1978 projection of traffic distribution on the same streets based on the following assumptions:

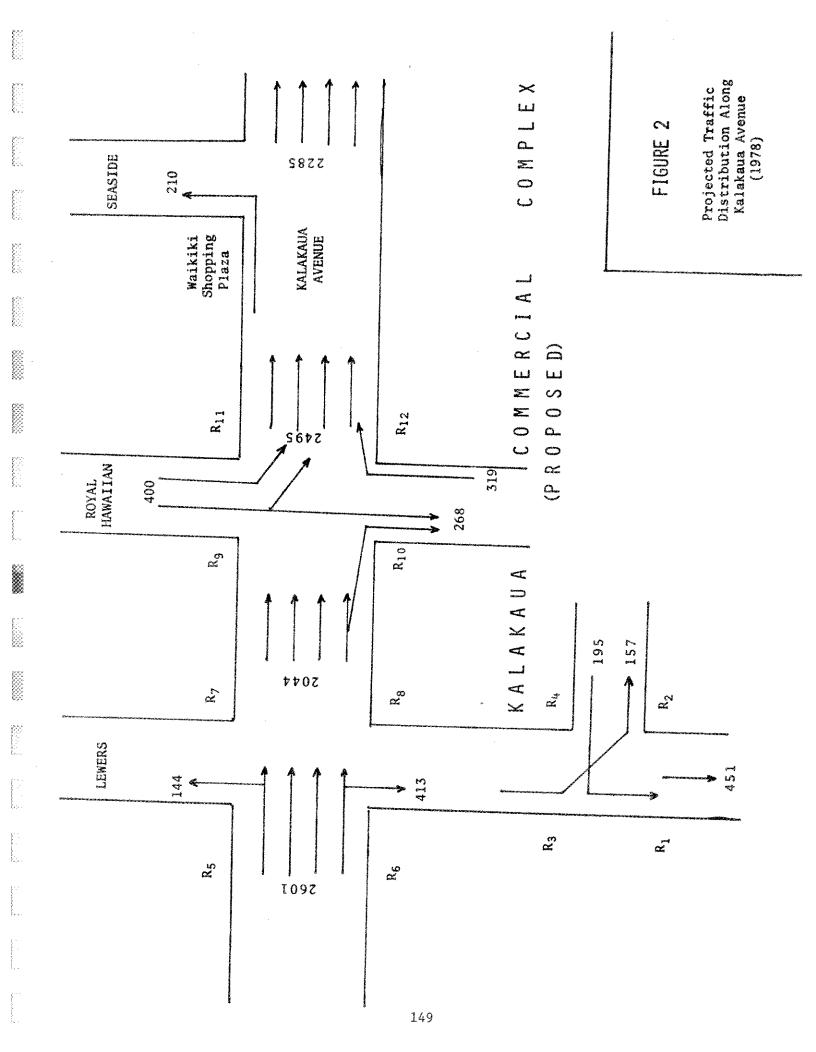
- 1. Traffic increases are generated only by the presence of the commercial complex.
- Turnover within the 600-stall parking structure is 6 per 12 hours (9 AM - 9 PM) as projected by the traffic consultant.<sup>2</sup>
- 3. The distribution of entering and exiting traffic among the various access roads and streets is proportional to the existing traffic split.
- 4. Half (50%) of the 300 vehicles entering the parking structure each hour are new vehicles attracted to the complex.

The remaining 50% are assumed to be vehicles in the current traffic counts.

Note that the existing Sheraton Waikiki Hotel driveway is assumed to be closed by 1978 and its traffic shifted over to the proposed entrance opposite Royal Hawaiian Avenue (see pp. 6 and 10 of the EIS<sup>3</sup>).



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#### III. CARBON MONOXIDE (CO) LEVELS

A. Existing Levels: CO measurements were made along Kalakaua Avenue both on the mauka and makai sides between Royal Hawaiian and Seaside Avenues. The results of the short-term monitoring are displayed in Table 2.

#### TABLE 2

#### Existing Carbon Monoxide Levels Kalakaua Avenue

. . . .

Date	Time	Site	Highest 1-Hour <u>Concentration</u>	8-Hour Concentration
19 Jul 76	8 AM - 4 PM	makai*	$4 \text{ mg/m}^3$	$4 \text{ mg/m}^3$
20 Jul 76	8 AM - 4 PM	¥B	4	4
23 Jul 76	8 AM - 4 PM	**	4	4
20 Jul 76	4:35 - 5:35 PM	mauka**	9 mg/m <sup>3</sup>	adar adə-
22 Jul 76	7:45 - 8:45 AM	tt	$9 \text{ mg/m}^3$	ant age
22 Jul 76	4:00 - 5:00 PM	28	12 mg/m <sup>3</sup>	

\*Makai site: 4 m from curb, 4 m height. \*\*Mauka site: 1.5 m from curb, 1.5 m height.

While no weather data was collected on site, hourly reports of the National Weather Service at Honolulu International Airport indicated generally clear weather with temperatures of  $75 - 86^{\circ}$  F and E - NE winds at 8 - 18 mph during the days and hours when our measurements were made. Our own observations at street level were that the winds appeared to be coming down Kalakaua Avenue, i.e., from NW to SE, or across the street from W to E apparently due to the effects of buildings.

The results indicate that even under tradewind conditions the State's 1-hour ( $10 \text{ mg/m}^3$ ) and 8-hour ( $5 \text{ mg/m}^3$ ) air quality standards for CO are being approached on the sidewalks along Kalakaua Avenue.

B. <u>Projected Levels</u>: Using the screening procedure mentioned above, estimates of CO concentrations at twelve (12) potential receptor locations in the vicinity of the proposed commercial complex were estimated. Some of the key input parameters were as follows: 1. For estimates upstream of intersections green to cycle (G/C) ratios of 0.65 at Kalakaua and Lewers and 0.56 at Kalakaua and Royal Hawaiian were used based on peak-hour signal cycles.

- 2. For downstream estimates, an average speed of 15 mph was used.
- 3. All receptor locations were set at 5 m from the curb and 20 m from the nearest side street.
- 8-hour estimates were derived by multiplying the peak 1-hour value by a meteorological persistence factor of 0.6 as suggested in EPA 450/4-75-001.<sup>1</sup>

The results of this screening are summarized in Table 3.

#### TABLE 3

Estimates of Maximum Carbon Monoxide Concentrations in the Vicinity of the Proposed Kalakaua Commercial Complex

Receptor Site*	1-Hour Concentration	8-Hour Concentration	
R1	$4 \text{ mg/m}^3$	$2 \text{ mg/m}^3$	
R <sub>2</sub>	4	2	
R <sub>3</sub>	3	2	
R4	4	2	
R5	20	12	
R <sub>6</sub>	20	12	
R <sub>7</sub>	14	8	
R <sub>8</sub>	15	9	
R <sub>9</sub>	19	11	
R <sub>10</sub>	20	12	
R <sub>11</sub>	17	10	
R <sub>12</sub>	17	10	

\*For receptor locations, see Figure 2.

The estimates suggest that under worst case conditions state 1-hour and 8-hour standards could be exceeded at all receptor locations along Kalakaua Avenue. Moreover, the federal 8-hour standard  $(10 \text{ mg/m}^3)$  might also be violated at most of these same sites.

#### IV. DISCUSSION AND CONCLUSIONS

The EPA screening procedure is admittedly very conservative and tends to give high values. Calculated values close to air quality standards probably do not require more detailed analysis; however, if values are significantly above standards, then further analysis and possibly air monitoring would seem justified. In this particular case the calculated values are well above state of Hawaii standards but well below or only close to federal standards. Furthermore, measurement data also indicate that State standards are already being approached or exceeded suggesting that the proposed commercial complex would not be creating a new problem but rather contributing to an existing one. It should be kept in mind that the mathematical estimates were based on worst case meteorology while the measurements were made under what could be described as best case (from a pollution dispersion viewpoint) meteorology.

We might also add that EPA's conservatism may be somewhat offset by the traffic projections used in our analysis which are probably low since they assumed no growth except that due to the proposed commercial complex. In reality, there is other growth and development occurring which could influence Waikiki traffic levels. In fact, immediately across the street from the proposed project is another commercial development, the Waikiki Shopping Plaza, with close to 200,000 ft<sup>2</sup> leasable and providing for 300 parking stalls.

In light of all of the above and the fact that there is a fairly steady flow of tourists along Kalakaua sidewalks and numerous open-front shops, further, more detailed study seems warranted.

#### REFERENCES

- 1. U.S. Environmental Protection Agency. <u>Guidelines for Air Quality</u> <u>Maintenance Planning and Analysis, Volume 9: Evaluating Indirect</u> Sources (1975).
- 2. Au, Henry Tuck. <u>Traffic Impact Statement, Kalakaua Commercial Complex</u>, Kalakaua Avenue, <u>Waikiki (1976)</u>.
- 3. Environmental Communications, Inc. Environmental Impact Statement for the Proposed Kalakaua Commercial Complex (1976).

ENVIRONMENTAL COMMUNICATIONS INC.

August 17, 1976

Mr. James Morrow American Lung Association 245 North Kukui Street Honolulu, Hawaii 96817

Dear Mr. Morrow:

F. J. RODRIGUEZ. PRESIDENT

> Your comments to the Environmental Impact Statement for the proposed Kalakaua Commercial Complex have been carefully reviewed and analyzed. We note that your comments were in three separate parts. The first part, a letter to the Department of Land Utilization, dated August 6, 1976, relates to your major findings in reviewing the EIS. The second set of comments were more detailed comments on the EIS. The last portion of your comments was your Preliminary Air Quality Analysis, Kalakaua Commercial Complex. For easy reference, we will refer to these separate correspondence as I, II, and III, respectively.

Clearly, your primary concern is the air quality impact discussion in the EIS. To respond to items I.1, II.5., II.9., II.11.(a, b, and c), and III, we note that there are personal biases as to which method is better and all methods have advantages and disadvantages. The key to deciding what model to use is - what information is needed and the time and money available.

Basically there are three general types of dispersion models that can be used relating to the pollutant emissions to air pollution concentrations.

- 1. Box Models The least sophisticated and provides the least detail. This type of model is useful in making preliminary decisions, especially in the area of defining the tolerance of a given area. The mathematical calculations are simple and easily understood by anyone.
- 2. Gaussian Plume Models A higher level of sophistication and provides very detailed information. This type of model is useful as an evaluative tool to consider alternative land use and transportation plans in terms of the impact on the air quality. This method requires the use of a high speed digital computer along with comprehensive emissions and meteorological data. It is expensive and time consuming. It is necessary to make assumptions, therefore, care must be taken in analyzing and evaluating the results.
- 3. <u>Numerical Simulation Models</u> The most sophisticated and still in a formative stage. They provide detailed two and three dimensional pictures of the spatial patterns of pollutant concentrations and, therefore, most applicable to determining air quality impact of individual sources. This type of model is useful in the design and placement of large individual sources of air pollution. These models require the use of a high speed digital computer.

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Mr. James Morrow August 17, 1976 Page Two

Generally, for EIS the box model is widely used because of its simplicity and provides adequate information in defining the tolerance of an area toward receiving additional pollution. Based on existing air quality levels, allowable pollutant concentration increases are transformed into allowable increases in pollutant emissions through the use of a box model analysis.

We do recognize that a box model is a type of dispersion model.

General steps in defining the tolerance of an area to additional pollutant emissions through use of a box model.

Equivalent Annual Average Annual averages are used because 1, 3, 8 and Air Quality Standards 24 hour standards are localized and the level of detail data is insufficient to generate meaningful air quality information. Calculate Allowable Utilizing available existing air quality data Increases in and proportional model as described in Federal Regulations (4DCFR51; 36 FR 22398, Nov. 25, Concentration 1971).  $\frac{A-C}{A-B} \times 100$  = percent reduction needed Is Allowable Increase Less than or Equal to Anticipated Increase? A = Existing air qualityB = Background concentration C = StandardNegative percentage = Maximum allowable increase (Non-degradation requirements and other consideration will reduce percentage.) Volume = (A) (B) (C) in meters<sup>3</sup> Box Model Analysis A = Project cross section to trades (M)B = Height (M)C = 24-hr. travel distance (M/hr)(24 hr) B & C are critical parameters subject to challenge, therefore, need justification. Volume can be greatly affected. All available meteorological data must be obtained and analyzed closely to substantiate the use of a particular mixing height or wind speed. In cases where there is a lack of relevant data (and there will be many) assumptions

must be made and these assumptions should be qualified. Depending on what type of people are doing the analysis or for what purpose the analysis is being done assumptions can vary to a large degree. For example, for those wanting to stop a project or show large concentrations, assumptions can be ridiculously low and vice versa. Mr. James Morrow August 17, 1976 Page Three

Transformation of emission estimates into ambient air quality estimates is done for all three types of models. The box model transforms emission estimates into ambient air quality by relating the amount of emissions to a volume of air as defined by wind direction, wind speed and atmospheric stability (inversion height).

Standard definitions include:

Emissions - Effluents into the atmosphere in terms of weight per unit time.

- Ambient Air Quality Concentration levels in ambient air for a specifided averaging time within a given geographic region.
- Concentration A measure of the average density of pollutants specified in terms of pollutant weight per unit volume of air (micrograms/cubic meter) or in terms of relative volume of pollutant per unit volume of air (parts/ million).

Regarding your comments on traffic (items I.2, II.4, and II.8), our traffic consultant, Henry T. Au, has provided the following disposition:

"Unfortunately, the preliminary draft of the EIS did not include the drawings that visually depict the traffic circulation and parking structure of the proposed project. These will be made a part of the final EIS.

The adequacy of environmental information for use to allow a decision maker to judge the importance of environmental consequences and cost of the project must be tempered in favor of being practical. Although it is desirable to adpt a comprehensive viewpoint, the time involved and the expense for making a complete or more thorough analysis is uneconomical. Furthermore, unless the amount of data and supporting material is significant, the final results may be of very little importance in influencing the ultimate decision.

The purpose of the impact statement is primarily to include those elements that are pertinent to the evaluation that would lead a decision maker to determine what significant environmental impacts he must consider for each project alternative. References should be made to <u>significant</u> impacts as distinguised from ordinary effects. This is in line with the objectives for the preparation of an impact statement, otherwise an environmental assessment is not required unless the project's impact is significant."

The Comprehensive Zoning Code mandates 1,200-1,300 parking stalls. The Waikiki Special Design District permits that total to be reduced 50% to 600-650 parking stalls. Because of these code limitations, the applicant plans to build 600-650 stalls. If this requirement can be reduced, the applicant will agree to reduce the size of its garage accordingly.

Items II.1., II.2., II.3., II.6., and II.7., have been reviewed, and we have incorporated these changes into the revised EIS.

In closing, we would like to note that we have consulted Mr. Paul Aki, Chief of the Pollution Investigation and Enforcement Branch of the State Department of Health. Mr. James Morrow August 17, 1976 Page Four

This consultation affirmed that the methodology utilized in our study is acceptable to the governmental regulatory agency on air quality. We do not dispute your calculations, but are of the opinion that the assumptions made in your study are extremely conservative and provide for highly unusual atmospheric conditions occurring frequently in short periods of time during the year rather than the normal meteorological conditions. It is also pointed out that under your assumptions, there would be a multitude of air quality violations occurring on Oahu.

We hope that we have answered your comments and have clearly stated our position in this matter.

Very truly yours, tigy F. J. Rodriguez

cc: Helumoa Land Co., Inc. Wong & Wong Associates, Inc. Department of Land Utilization

#### XIV. SUMMARY OF UNRESOLVED ISSUES

At this time, there are no known unresolved issues relating to this project.

XV. LIST OF NECESSARY APPROVALS

The proposed project must obtain the following approvals and permits prior to its implementation:

- Shoreline Management Permit Department of Land Utilization (line agency) and City Council (decision making body).
- Waikiki Special Design District (Development Conformance Certificate) - Department of Land Utilization (line agency) and City Council (decision making body).
- 3. Grading Permit Department of Public Works (City).
- 4. Building Permit Building Department.

## APPENDIX I

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### Air Calculations

#### TRADEWIND CONDITIONS

TOTAL VOLUME =  $L \times H \times D$ 

Computation #1

#### Where:

- L represents the length of area cross section to the <u>tradewinds</u> (includes winds from the NE, ENE, and E sectors which represents the predominant wind condition occurring 66.7 percent of the time). The area which is considered the air mass above the site in which pollutants are dispersed is shown in Figure 3. The area includes the major thoroughfares which has high capacity traffic (see estimated vehicular travel -Computation #3).
- H represents the height of inversion (minimum inversion height was utilized to provide for the worst possible conditions).

D represents the 24-hour travel distance (average wind speed x 24)

 $L = (1.06 \times 10^3) \times H = (3.05 \times 10^2) \times D = (4.97 \times 10^5)$ 

Total Volume  $16.07 \times 10^{10} = 160,700,000,000$  cubic meters of air

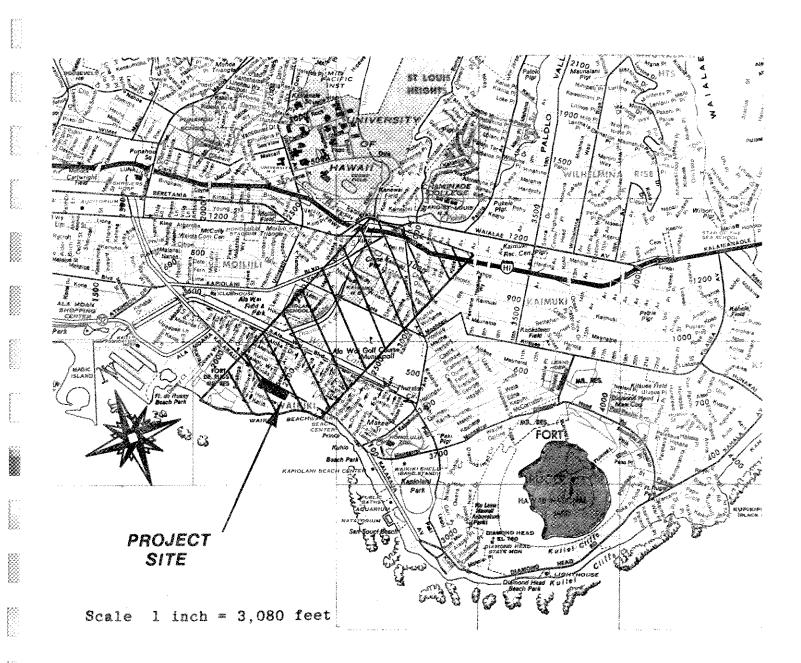


Figure 3 - Assumed Air Basin Kalakaua Commercial Complex

Computation #2

24-hour volumes from Ala Wai Canal screen line counts along Ala Moana Boulevard, Kalakaua Avenue, McCully Street, Date Street, Kapiolani Boulevard, King Street and H-1, Lunalilo Freeway.

#### 1968 to 1972 Counts

	Over Previous	
Number of Vehicles	Year Increase	Percentage
208,711		
211,229	2,518	1.2%
228,160	16,931	8.0%
239,685	11,525	5.1%
260,131	20,446	8.5%
	208,711 211,229 228,160 239,685	Number of VehiclesYear Increase208,711211,2292,518228,16016,931239,68511,525

#### Estimated 1973 to 1977 Vehicular Counts Based on an Average Increase of 8.5%

Year	Number of Vehicles
1973	282,242
1974	306,233
1975	332,263
1976	360,505
1977	391,148

#### 1977 Estimated Vehicular Traffic in the Air Volume Above the Site

- 391,148 vehicles in screenline count (est.)
- + 78,230 vehicles traveling along side streets, other local streets

469,378 total vehicles

- x 2 mile/vehicle (estimated travel distance within air basin above the site
- 938,756 vehicular miles

#### EXISTING VEHICULAR EMISSIONS

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Vehicular miles per day (see Computation #1) - 938,756 miles Assuming that the average travel speed is 25 m.p.h. Average Emission Factors for 1977 based on 25 m.p.h.:

Pollutant	<u>Grams/Mile</u>
Nitrogen Oxides	4.92
Hydrocarbons	6.19
Carbon Monoxide	38.64
Sulfur Oxides	.22
Particulates	.54

Estimated existing vehicular emission within the project site's air basin:

Average	Emission	Factor	x	Vehicular	Miles/day
		ir Volu			

\*

Pollutant	$ug/m^3 *$
Nitrogen Oxides	28.8
Hydrocarbons	36.2
Carbon Monoxide	225.7
Sulfur Oxides	1.3
Particulates	3.2

 $ug/m^3 = micrograms$  per cubic meter

## APPENDIX II

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## Existing Plant Inventory

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#### Criteria:

- -- Trees were selected if there were poor availability of an equal size specimen from commercial nurseries or other sources.
- -- All coconuts were included due to historical value and the community response to them.
- Large rare trees were also included.

#### Inventory List:

Quantity		Height
1	Akee/ <u>Blighia</u> sapida	35'
5	Alexandra Palm/Archontophoenix alexandria	30'
4	Bird of Paradise, White/Strelitzia nicolai	20'
5	Blue Latan Palm/Latania loddigesii	15'
1	Breadfruit Tree/Artocarpus communis	50'
158	Coconut Tree/Cocos nucifera	50'
2	Chinese Banyan Tree/Ficus retusa	60'-80'
12	Chinese Fan Palm/ <u>Livistonia</u> chinensis	25'-30'
10	Date Palm/ <u>Phoenix</u> <u>dactylifera</u>	60*
3	Dwarf Date Palm/Phoenic roebelinii	6'
5	Macarthur Palm/Ptychosperma macarthurii	20'-30'
1	Milo/ <u>Thespesia</u> populnea	351
3	Queen Palm/Acrecastrum romanzoffianum	60'
1	Royal Poinciana/Delonix regia	30'
2	Shower Tree, Pink/Cassia grandis	30'
2	Shower Tree, Rainbow/ <u>Cassia javanica</u> <u>C. fiscula</u>	25'-30'
2	Shower Tree, Yellow/Cassia fiscula	25'-30'
4	Soapberry Tree/Sapindus saponaria	30'
б	Wine Palm/Caryota urens	35*

APPENDIX III



Anyone who has driven into Waikiki on a Saturday evening knows that fighting the traffic is a nightmare.

But if the Waikiki Improvement Association has its way, at least a part of the traffic crunch will be eased.

"The traffic problem is mostly generated by the Sheraton-Walkiki parking garage," said Donald A. Bremner, WIA executive vice president:

"Everybody is coming down Kalakaua to the Sheraton garage. Cars are backed up to Ala Moana Boulevard, and it's difficult to get into the Lewers Street area."

Lewers provides access to the Reef Towers, Imperial, Halekulani, Reef and Edgewater hotels. There is also a second entrance and exit for the Sheraton garage on Lewers.

To ease the traffic jam, the WIA has asked the City Traffic Department to change the one-way traffic flow on Helumoa Street to make it go toward Diamond Head. (Helumoa connects Beachwalk Avenue with Lewers Street.)

If the Traffic Department agrees with the change, drivers on Kalakaua will turn right into Beachwalk and then left on Helumoa to get to Lewers.

This will enable drivers to park at the Reef Towers, Imperial, Halekulani and Reef hotels and ease the jam-packed traffic between Beachwalk and Lewers.

It's not the complete solution, but it will alleviate the problem.

Bremner concedes that there simply aren't enough parking areas to bandle weekend Waikiki drivers, but there isn't much that can be done about that in the immediate future.

A planning specialist, Bremner is highly pleased that the City Council has approved rezoning of Waikiki.

"We're in pretty good shape as far as our goals and objectives are concerned," he said. "The long-sought rezoning is now in effect."

Dealing with density, the new zoning puts a limit on the number of hotel rooms and apartments for the Waikiki area, which is only seventenths of a square mile in size.

"We have room for about 3,000 more hotel rooms and about 2,400 apartments," Bremner said. "We now have about 23,500 hotel rooms and 13,000 to 14,000 apartments." Bremner is also happy that the City and State have come to agreement on Waikiki improvements, and hopes the work will get under way soon.

The improvement plans include extending the Gateway Park to the Gateway Hotel, widening some streets, building sidewalks, installing underground utility wiring and improving the sewer and storm drainage systems.

"These things must be done now to accommodate the people and activities in the Walkiki area," he said.

Bremner regrets the passing of the "Hawaii Calls" radio show and feels that it may be brought back in the future.

"I think it was quite effective," he said.

He added that before moving here in 1969, he often listened to the program in Westport, Conn., and it made him think about coming here, particularly in the winter months.

Taking everything into consideration, Bremner feels Hawaii and Walkiki rate high compared with other tourist areas.

"We are certainly up with the other destination resort areas," he said. "We may not be ahead, but we're certainly not behind,

"Miami and Acapulco are just beginning to get concerned about where they will wind up sizewise. We started planning in the late 1960s."

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