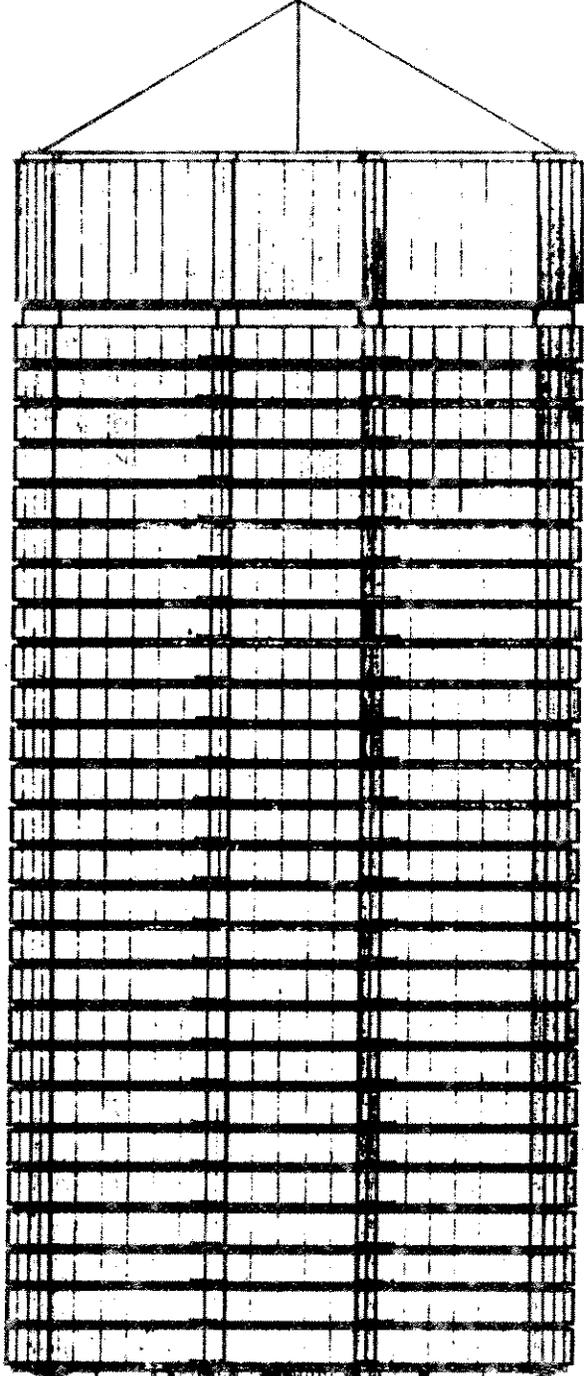
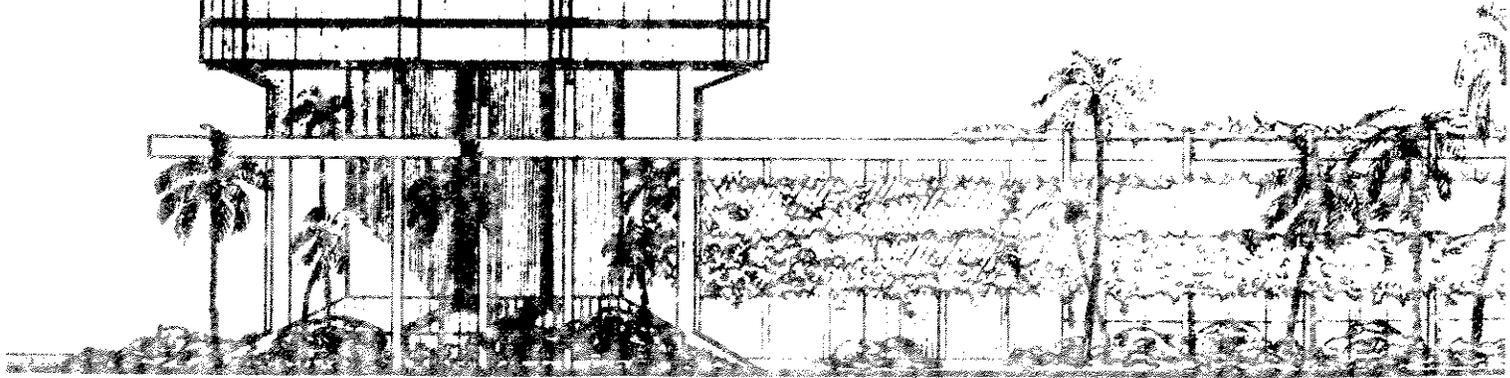


WAIKIKI TRIANGLE

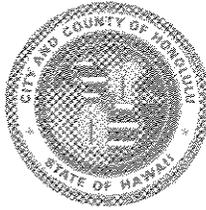


Environmental Impact Statement



DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813 • (808) 523-4411



FRANK F. FASI
MAYOR

TYRONE T. KUSAO
DIRECTOR

79/WSDD-23(SM)

April 15, 1980

Mr. Donald Bremner, Chairman
Environmental Quality Commission
State of Hawaii
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Mr. Bremner:

Revised Environmental Impact Statement
Waikiki Triangle

In accordance with Section 1:72 of the EIS Regulations implementing Chapter 343, HRS, we are notifying you of our acceptance of the above as an adequate fulfillment of the provisions of the Chapter. It should be noted that there are two unresolved issues as well as some concerns which are related to traffic circulation discussed in the acceptance report attached. We are transmitting a copy of this letter to the applicant.

Should you have any questions on this matter, please contact Sampson Mar of our staff at 523-4077.

Very truly yours,


for TYRONE T. KUSAO

Director of Land Utilization

TTK:sl
Attach.



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ACCEPTANCE REPORT: ENVIRONMENTAL IMPACT STATEMENT (EIS)
WAIKIKI TRIANGLE, WAIKIKI, OAHU
79/WSDD-23

A. Background

The EIS was prepared for the applicant, L. Robert Allen, by Environmental Communications, Inc. This document describes the anticipated environmental effects of the development of the Waikiki Triangle, including a 28-story office tower, two separate commercial structures, and a three level parking structure.

The affected site lies within the Resort Commercial Precinct of the Waikiki Special Design District (WSDD), and therefore the project proposal was subject to the provisions of Chapter 343, HRS. Accordingly, the project was assessed by the Department of Land Utilization (DLU), and an EIS was required of the applicant.

B. Procedures

1. The DLU issued an EIS Preparation Notice on November 29, 1979. This was distributed by the applicant to a list of consulted parties suggested by DLU.
2. Comments from consulted parties were received until January 7, 1980, allowing all parties the 30-day minimum consultation period required by Section 1:41(b) of the EIS Regulations. Fifteen parties submitted written comments during this period, and the applicant responded in writing to parties having substantive comments.
3. The EIS was received by the Environmental Quality Commission on February 5, 1980. The deadline for the public review period was then set for March 9, 1980. A list of the reviewers is attached.

Late comments were received from the Environmental Center - University of Hawaii and the State of Hawaii Office of Environmental Quality Control. The City and County of Honolulu - Department of General Planning also submitted late comments to the revised EIS for this project.



4. The applicant made a point-by-point response to all comments received "on-time", within the 14-day response period.
5. According to Chapter 343, 1:72(b), the applicant can request an extension to the 60-day time limit for accepting an EIS. The DLU extended the time limit for accepting this EIS by 7 days to April 15, 1980, upon a request by the applicant, to allow for the preparation and review of additional data.

C. Content

The revised EIS meets all of the basic content and style requirements specified in Section 1:42 and 1:43 of the EIS Regulations.

D. Response

The applicant made an adequate point-by-point response to all comments postmarked before the end of the official review period. Those organizations submitting late comments have been previously mentioned.

F. Determination

The revised EIS is determined to be acceptable under the criteria for acceptance established in Section 1:71 of the EIS Regulations. There are, however, two issues which are presently considered to be unresolved and some concerns related to traffic circulation. These are discussed in a letter to the applicant, enclosed herein. The unresolved issues and traffic concerns must be resolved during the review of the application for a Development Conformance Certificate for this development within the WSDD.

This determination in no way implies a favorable recommendation on the applicant's request for a Development Conformance Certificate under Ordinance No. 4573 (WSDD).

APPROVED


for TYRONE T. KUSAO

Director of Land Utilization



REVISED
ENVIRONMENTAL IMPACT STATEMENT
for the proposed
WAIKIKI TRIANGLE PROJECT
March 1980

Developer : L. Robert Allen

Architect :

Jo Paul Rognstad & Associates Inc.

Environmental Consultants :

Environmental Communications, Inc.

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
SUMMARY	v
I. PROJECT DESCRIPTION	1
A. Project Location	1
B. General Description of the Action's Technical, Economic, Social, and Environmental Characteristics	1
C. Statement of Objectives	6
D. Funding and Phasing	7
II. DESCRIPTION OF THE ENVIRONMENTAL SETTING AND PROBABLE IMPACT OF THE PROPOSED ACTION	7
A. Present Uses of the Project Site	7
B. Topography	10
C. Soils	11
D. Climate	11
E. Flora	12
F. Avifauna	12
G. Air Quality	13
H. Noise	14
I. Stormwater Runoff and Water Quality	14a
J. Flood Hazards	15
K. Potable Water	15
L. Sewer System	17
M. Other Utilities	17
N. Schools and Public Recreational	17
O. Fire Protection Services	17
P. Police Protection Services	18
Q. Hospital and Medical Care	18
R. Historical and Archaeological Sites	19
S. Socioeconomic Considerations	19
T. Parking, Mass Transit, and Transportation System	20
U. Aesthetics	23

TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Page</u>
III. THE RELATIONSHIP OF THE PROPOSED ACTION TO LAND USE PLANS, POLICIES, AND CONTROLS FOR THE AFFECTED AREAS	24
A. State Land Use Designations and County's Interim Land Use Control	24
B. Special Management Area	24
C. Easements and Setbacks	25
IV. ANY PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND MITIGATION MEASURES PROPOSED TO MINIMIZE IMPACT	25
V. ALTERNATIVES TO THE PROPOSED ACTION	27
VI. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY AND THE COMMITMENT OF RESOURCES	27
VII. AN INDICATION OF WHAT OTHER INTERESTS AND CONSIDERATIONS OF GOVERNMENTAL POLICIES ARE THOUGHT TO OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION	28
VIII. ORGANIZATIONS AND PERSONS CONSULTED DURING THE EIS CONSULTATION PERIOD AND REPRODUCTION OF COMMENTS AND RESPONSES MADE	29
IX. EIS REVIEW PERIOD - REPRODUCTION OF COMMENTS AND RESPONSES PROVIDED	29

TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Page</u>
X. SUMMARY OF UNRESOLVED ISSUES	70
XI. LIST OF NECESSARY APPROVALS	70

APPENDICES

<u>Appendix</u>	<u>Page</u>
I. SOCIOECONOMIC IMPACTS	
II. AIR QUALITY IMPACT ANALYSIS	A-II
III. TRAFFIC IMPACT STATEMENT	A-III
IV. LETTER DATED MARCH 5, 1980 FROM JO PAUL ROGNSTAD	A-IV

LIST OF PHOTOGRAPHS

<u>Photograph</u>	
1. AERIAL PHOTOGRAPH SHOWING THE WAIKIKI AREA	4
2. WAIKIKI TRIANGLE PROJECT SITE	8

LIST OF FIGURES

<u>Figure</u>	
1. WAIKIKI TRIANGLE MAP LOCATION	2
2. WAIKIKI TRIANGLE VICINITY MAP	3
3. WAIKIKI TRIANGLE - SITE PLAN	5

LIST OF TABLES

<u>Table</u>	
1. PRESENT BUSINESSES LOCATED ON THE PROJECT SITE	9
2. AGENCIES PARTICIPATING IN THE EIS CONSULTATION PERIOD	30
3. EIS FOR WAIKIKI TRIANGLE - RESPONSES RECEIVED AS OF MARCH 10, 1980	31

SUMMARY SHEET

Developer/Applicant: L. Robert Allen

Approving Agency for the EIS: Department of Land Utilization, City
and County of Honolulu

Agent for the EIS: Environmental Communications, Inc.

Architect: Jo Paul Rognstad and Associates, Inc.

Project Location: Waikiki, Honolulu District, Oahu

Request: Waikiki Special Design District (WSDD)

Tax Map Key: 2-6-14: 39-56 and 59

A. PROPOSED ACTION

The developer and applicant, L. Robert Allen, proposes to construct a 28-story (approximately 320 feet high) commercial building on a 2.85+ acre site located at the Ewa perimeter of the Waikiki Special Design District. Specifically, the triangular-shaped project site is bounded by McCully Street, Kalakaua Avenue and Ala Wai Boulevard. The project, presently called the Waikiki Triangle project will provide 240,000 square feet of business/office space and 60,000 square feet of commercial space (for retail businesses). The applicant has tentatively determined that under the existing zoning, Resort Commercial, 350 office suites of approximately 500 to 1,000 square feet can be developed on the parcel. A total of 700 parking stalls will be provided in the basement level, the ground level, and three upper levels of the proposed building (see cover for location of parking decks). Of the 700 spaces, 135 will be used by the Royal Aloha Condominium located along McCully Street across the project site. The remaining spaces will be used for the businesses and commercial uses on the project site.

The site is presently in urban use, housing four one- and two-story structures and a larger open paved parking lot (accommodating 134 cars and used by the Royal Aloha Condominium). Businesses on the site include Al Phillips (dry cleaners), Island Homes Realty, KC Drive-Inn, and the Rock and Roll Clinic (cabaret). These buildings will be demolished and dislocated by the proposed development.

It is the objective of the developer to achieve a higher rate of monetary return of the property by intensifying the land use.

The construction cost of the project is approximately 38 million dollars. Construction will take place in one phase and is expected to be completed within 24 months.

B. EVALUATION OF MAJOR IMPACTS

1. Physical Impacts. The impact of construction is normally adverse; however, it is not a long-term impact and is subject to many standards, codes, and regulations. A review of noise and air quality impacts indicate that no significant effects related to these concerns will likely occur.

Parking: Adequate parking will be provided on-site; no parking problems are anticipated.

Vehicular traffic will be accommodated as indicated in the traffic impact study. The site is bounded by major thoroughfares which can adequately serve the expected number of vehicles generated by the proposed uses on the project site.

Air quality: The project will adversely affect the air quality of the proposed site. The existing air quality, under adverse climatic and peak hour conditions, is estimated to exceed the State's ambient air quality standards (for carbon monoxide). Calculations indicate that under adverse climatic conditions during the AM peak, the ambient air quality for both the State's and Federal's one-hour and eight-hour standards for carbon monoxide will be violated in late 1981. Mitigation measures have been adopted and will lower air emissions from vehicles generated by the project.

Noise: The building, once constructed, will not generate excessive noise. The commercial use of the building and its fully enclosed business spaces will not add to the ambient noise environment. Noise from the parking garage in form of tire squeal will be avoided through design of the parking areas.

The visual environment will be affected. The building will be noticeable from various streets and other structures.

However, the height will be within the zoning regulations and the WSDD review will include height considerations. In the surrounding area, there are a significant number of buildings with heights of 300'+, the proposed building will not be inconsistent with these high-rise developments.

2. Economic Impacts. A wide range of economic impacts will occur. These include direct and indirect income generated by the project, employment, property taxes, increased governmental expenditures for services and facilities on and for the project, and impact on competing commercial spaces. For the most part, the economic impact cannot be established since the future tenants and their labor requirements are unknown. Based on the project's floor space and the proposed commercial space the following statements on economic impact can be made (1) jobs will be created which will likely be greater than the present number of jobs provided by businesses now on the project site; (2) revenue to the State and County will increase in form of property, general excise, and income taxes; (3) this revenue is expected to compensate for the amount of public services and facilities which will be needed to support the project.

Competing commercial spaces is a form of free enterprise. The proposed building must be able to compete on the open market for commercial spaces in order to be economically viable.

3. Social Impacts. A total of about 125 full-time equivalent jobs will be affected. However, many of these employees will be relocated by their employers. The termination of the remaining employees may generate personal trauma in form of looking for another job, loss of income, and other psychological impacts. Upon completion of the project more jobs will likely be created, thus compensating for the numerical and total monetary loss of jobs and income. Jobs relating to construction will be generated and will bring millions of dollars into the State economy directly and indirectly.

Public services and facilities are adequate as indicated by the letters received from various City agencies. Where appropriate the consultant engineer and architect will work with the City agencies to insure the adequacy of facilities, connection procedures, easements and maintenance rights, and agreement to pay a fair share cost of the proposed improvements.

C. ALTERNATIVES

The developer has not reviewed nor, at this time, considered any alternatives for the proposed project. A no-action alternative would mean that the present uses will continue until other development plans are proposed.

D. LAND USE CONSIDERATIONS

The project is consistent with the State and County land use designations for the project site. From a standpoint of building height and uses, the project is compatible with the surrounding area.

E. OTHER CONSIDERATIONS

No commitment of natural resources will occur if the project is implemented. Building material, labor, and land will be committed to the project.

At this time there are no known unresolved issues.

I. PROJECT DESCRIPTION

A. Project Location

The proposed Waikiki Triangle Project is located at the Ewa perimeter of the Waikiki Special Design District on a triangular site bounded by McCully Street, Kalakaua Avenue and Ala Wai Boulevard. The property is identified by Tax Map Key 2-6-14: 39-56 and 59, consisting of approximately 124,419 square feet (2.856+ acres).

Figures 1 and 2, show the location of the project site. Photograph 1 (aerial) shows the site's location in respect to the Waikiki District.

The site is presently in urban use, housing four (4) one- and two-story structures and an open paved parking lot (accommodating approximately 134 cars). Businesses presently on the site include Al Phillips the Cleaner, Island Homes Realty, KC Drive-Inn, and the Rock and Roll Clinic (cabaret).

The proposed project site lies within the Resort Commercial Precinct of the Waikiki Special Design District (WSDD).

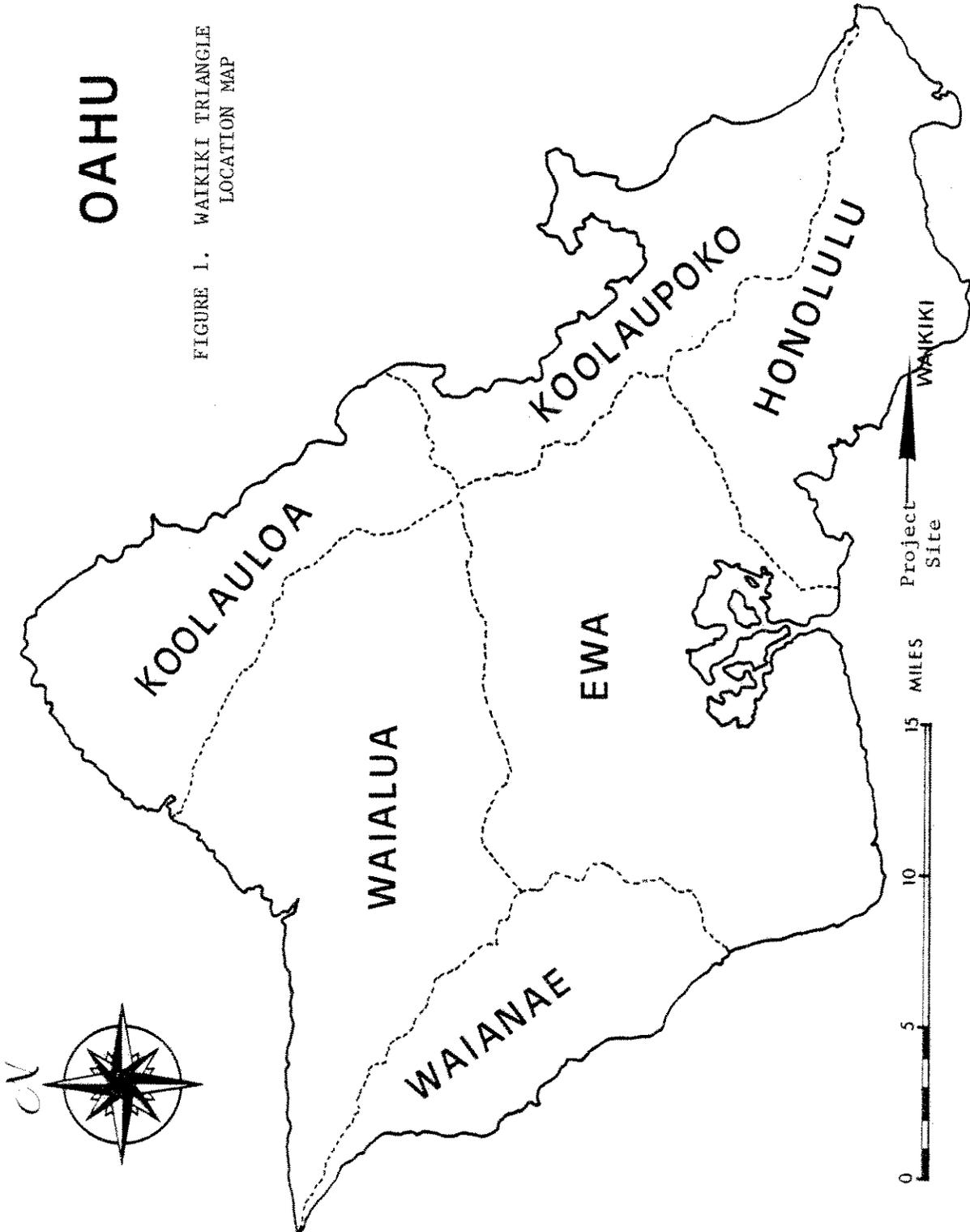
B. General Description of the Action's Technical, Economic, Social, and Environmental Characteristics

The developer and applicant, L. Robert Allen, proposes to construct a 28-story (approximately 320 feet high) commercial building on the project site. See Figure 3, Site Plan. The applicant has tentatively determined that under existing zoning, 350 office suites of approximately 500 to 1,000 square feet can be developed on the parcel. In addition, approximately 60,000 square feet of commercial rental space will be developed. Parking for the business/office space and for the commercial space will be provided in the basement level, the ground level and three upper decks of parking; plans call for a total of 700 parking stalls with 135 spaces to be used by the Royal Aloha Condominium, across the project site along McCully Street. Parking for the proposed project will exceed the calculated zoning requirements. Loading zones will be provided as required by the Comprehensive Zoning Codes (CZC) of the City and County of Honolulu.

The proposed project will provide for 300,000 square feet of business/office space under the present design plans being reviewed by the applicant. Final

OAHU

FIGURE 1. WAIKIKI TRIANGLE
LOCATION MAP



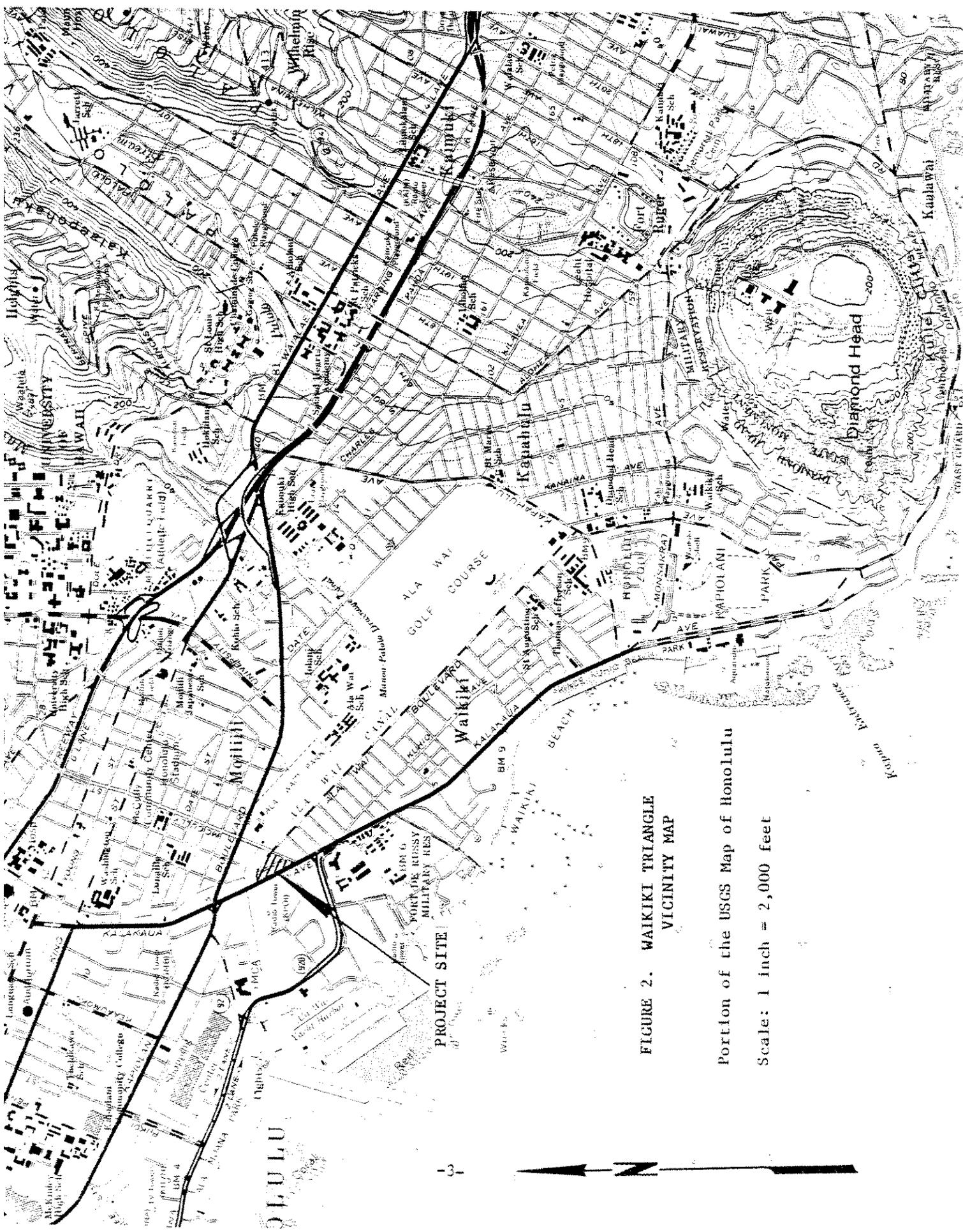


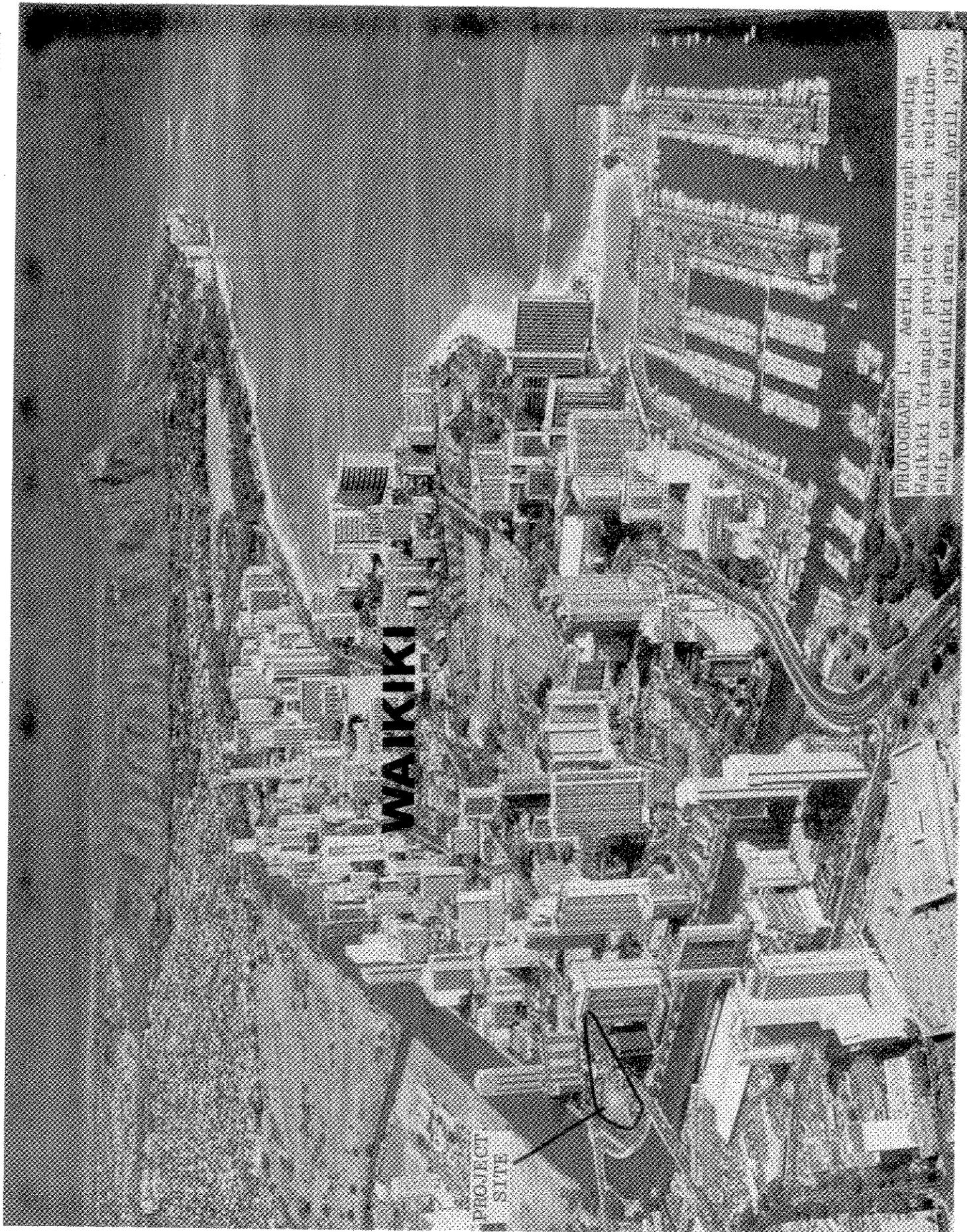
FIGURE 2. WAIKIKI TRIANGLE
VICINITY MAP

Portion of the USGS Map of Honolulu

Scale: 1 inch = 2,000 feet







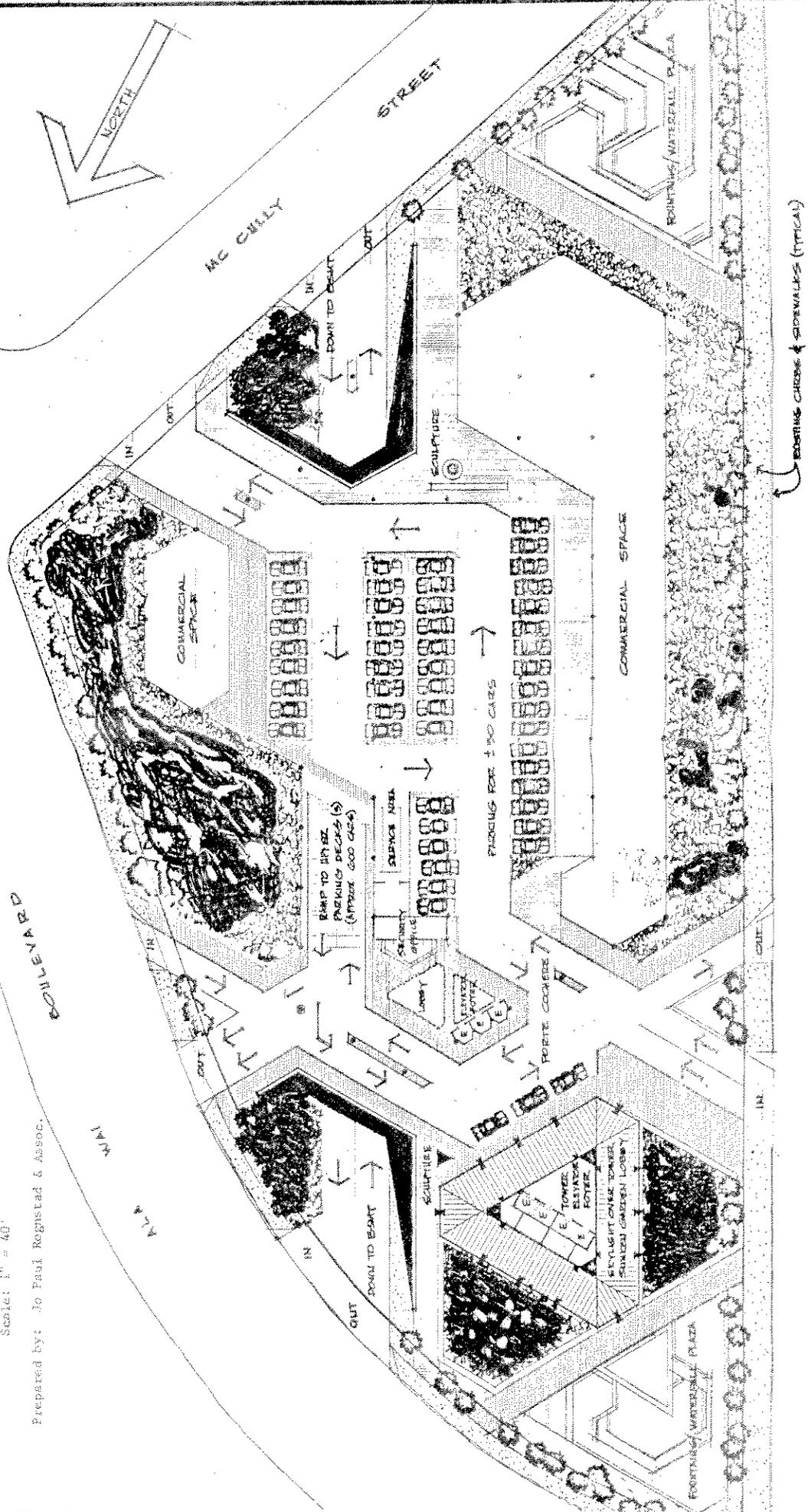
WAIKIKI

PROJECT SITES

PHOTOGRAPH 1. Aerial photograph showing Waikiki Triangle project site in relationship to the Waikiki area. Taken April, 1979.



FIGURE 1. MAIN TRIANGLE - SITE PLAN
 Scale: 1" = 40'
 Prepared by: Jo Paul Registrad & Assoc.



KALA KAULA AVENUE

design plans have not been made pending final approval and processing required under the WSDD ordinance. It is the applicant's intent to develop the maximum allowable density permitted by the existing zoning.

A total of five (5) vehicular entrance/exits are planned. Two along Ala Wai Boulevard (one exclusively for the basement parking); two along McCully Street (one exclusively for the basement parking); and one along Kalakaua Avenue. Offsite and onsite utility improvements and connections are also proposed.

Tentatively, the commercial space will provide a full service 24-hour restaurant that will meet the "breakfast to dinner" trade, a health food service store, boutique, real estate offices, travel agency space, and other related commercial uses. The business/office spaces will be pre-sold to businesses and individuals who will purchase the amount of space needed for their business and work with the architect to achieve the desired floor plan for their individual needs. This will insure specific office space partitioning and efficient business layouts for individual businesses. The applicant has worked on this premise on other developments (e.g. Century Center and Century Square) and finds that this concept of specific space improvements results in a more satisfactory arrangement relative to providing a standard office space.

Proposed landscaping for the project will comprise over 40,000 square feet of improved areas at a total cost of over \$800,000. This cost includes not only plant material, but two major fountain/waterfall plazas of 9,000 square feet each located at both ends of the project. The use of indirect lighting will provide the passerby, both pedestrian and vehicular, a distinctive entry into the Waikiki District. At the pedestrian or street level, the existing mature coconut trees will be augmented by additional trees to enhance the perimeter of the site with a distinctive Hawaiian atmosphere. On each level of the parking/commercial decking, a system of high impact plastic support framing will be used as base standards for the plant material to sustain itself.

C. Statement of Objectives

The developer has initiated the proposed project in order to construct a high-density business and commercial building on the site, thereby increasing revenue generated by the project site. The present uses are low-density commercial uses; the project parcel is used for parking or small businesses conducted in one- and two-story structures. The property is not being utilized to

obtain a equitable return as are other properties in Waikiki designated for Resort Commercial. It is objective of the developer and landowner to achieve a higher rate of monetary return for the property by intensifying the land use.

D. Funding and Phasing

The developer will fund the proposed project through monies obtained from conventional loan institutions. No State or County monies will be involved in the construction of the proposed building. Total construction costs are estimated to be \$38 million.

The project will be constructed in one phase. The developer intends to initiate the construction of the project as soon as all approvals and permits are filed and granted (anticipated to be late 1980).

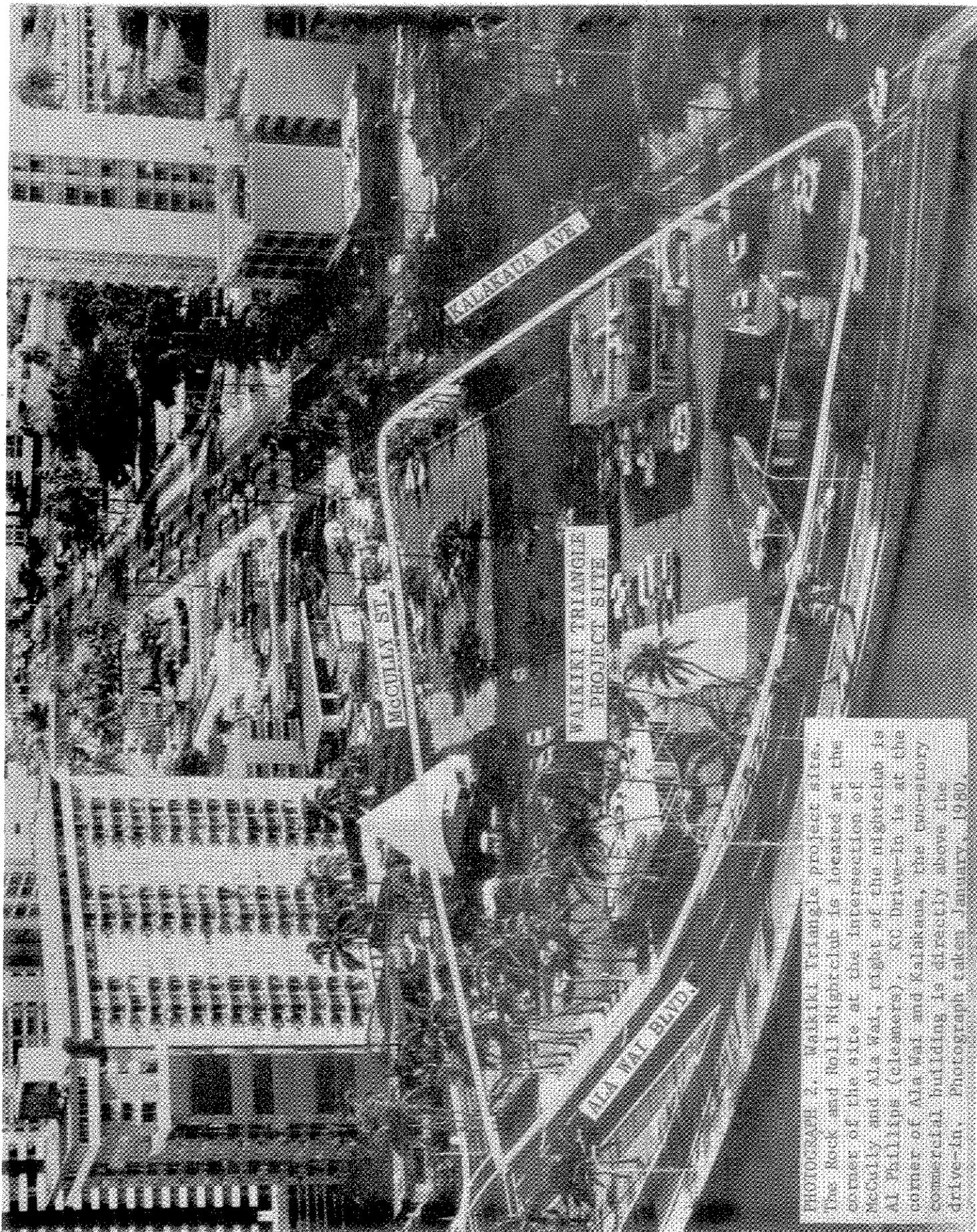
Construction will take 24 months.

II. DESCRIPTION OF THE ENVIRONMENTAL SETTING AND
PROBABLE IMPACT OF THE PROPOSED ACTION

A. Present Uses of the Project Site

As shown in Photograph 2, the entire project site is developed at the present time in low density commercial uses. The names of these businesses, their addresses, and the types of business activities conducted are identified in Table 1. The businesses located on the project site have been in operation at the site for time periods ranging from less than a year to about 47 years. Excluding the parking and taxi business operations, a total of 110 full-time employees and 31 part-time employees are based within the project site.

Probable impact on the present uses. (Source: "Socioeconomic Impacts, Waikiki Triangle," prepared by Evaluation Research Consultants, see Appendix I for the report.) Interviews with available management personnel involved with these businesses indicated that all were aware of the possibility of their business operations being displaced or at least seriously disrupted by the proposed project.



PHOTOGRAPH 7. Waikei Triangle project site. The Rock and Holly Nightclub is located at the corner of the site at the intersection of McCully and Ala Wai, right of the nightclub is Al Phillips (oleomers). KO Drive-kh is at the corner of Ala Wai and Kalakaua, the temporary commercial building is directly above the drive-kh. Photograph taken January 1980.



TABLE 1

PRESENT BUSINESSES LOCATED ON THE PROJECT SITE

<u>NAME</u>	<u>ADDRESS</u>	<u>TYPE OF BUSINESS ACTIVITY</u>
KC Drive-Inn	1860 Kalakaua Avenue	Local Fast Food
Rock and Roll Clinic	240 McCully Street	Cabaret
Island Homes Realty	1856 Kalakaua Avenue	Real Estate Sales
This Week Magazine	1856 Kalakaua Avenue	Tourist Weekly Magazine
Al Phillips	244 McCully Street	Dry Cleaning
Parking Lot*	Kalakaua Avenue - McCully Street corner of the project site	134 Parking Stalls
Charley's Taxi	Along Ala Wai Boulevard next to the Rock and Roll Clinic	4 Taxicab Stalls
The Cab	Next to Charley's Taxi location	4 Taxicab Stalls

* For the Royal Aloha Condominium

As of January, 1980

The relocation of the firms operating on the project site is speculative at this time, for considerable negotiation are still pending. The economies of leasing the commercial portions of the proposed project indicates that the commercial space in the new building could readily accommodate a restaurant and other current business activities. The extent to which each individual business will in fact be re-established is subject to each tenant's ability to successfully negotiate for space in the new complex.

Interviews with available managers of existing businesses on the project site, indicated that the more prominent businesses are still in the process of negotiating the terms of their displacement. Since these terms are not yet finalized, most of the managers had not yet seriously explored their relocation options. Consequently, they were unable to provide estimates of the number of employees to be laid off, nor of the short-term and long-term relocation sites. They could not begin to estimate items such as relocation costs and changes in business volume. It is yet too soon to usefully estimate the details of displacement impacts. However, it should be emphasized that almost all of the managers interviewed anticipated a definite possibility of re-opening some variation of their existing operation, and often this relocation was anticipated to be in the proposed project.

At the worst, all of the 110 full-time and 31 part-time employees would not return to work at the site, although an unknown number of other jobs would occur in the commercial portions of the new project. Also, at least a portion of the displaced jobs may disappear as the present firms re-locate. The number of "new" jobs in commercial outlets in the proposed project may be approximately equal to the present such employment at this location, although this cannot be estimated until the exact types of businesses to be located there are known.

The parking lot accommodating 134 cars for the Royal Aloha Condominium will be demolished; however, 135 parking stalls for the condominium will be set aside in the proposed building's parking structure. During the construction phase, the parking spaces for Royal Aloha will be provided onsite subject to periodic relocation.

B. Topography

The proposed project site is level and lies approximately 5± feet above mean sea level. The site has been in urban use for approximately 50 years and has been filled in and graded for the present structures on the site. It does not have any unique or unusual topographic or natural features.

Impact of the proposed action. Minimal impact is anticipated. Excavation for the basement parking will be required; however, other portions of the site will involve minor grading.

C. Soils

The project site was once part of a swamp-type environment which existed in Waikiki until the early 1920's when the Ala Wai Canal was built and drainage was provided. This allowed lands adjacent to Ala Wai Canal to be filled in and urbanization to occur. Consequently, the soil is classified Fill land, mixed (FL) by the Soil Conservation Service (SCS). The SCS publication, Soil Survey Interpretation - Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, described this land type as follows:

"It consists of areas filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources....This land type is used for urban development including airports, housing areas, and industrial facilities."

The plans call for a pile-driven foundation to support the proposed building. Construction plans for the support and fill materials (if needed) will follow the recommendations of a detailed soil study. The preparation of a soil study is a normal procedure in which a qualified soil engineering consultant is retained to take soil borings so that the site's specific soil conditions are known and the appropriate engineering measures for structural support can be taken.

Impact on the soils. Minimal impact on the site's soil is anticipated. Presently the soil is covered with buildings and pavement; the proposed action will not significantly alter this condition.

D. Climate

The climate in the Waikiki area is dry, mild, and uniform. The annual average rainfall for Waikiki is approximately 20 inches. The temperature, much like the rest of the island, ranges from 60°F (January - mean low temperature) to 85°F (mean high temperature) in the summer months.

The observed surface winds (as recorded at the Honolulu International Airport) show that the predominant wind direction and higher wind speeds are from the north, north-east, and east direction (66.7 percent of the time), and averages 11.2 knots per hour. Although 13 percent of the time winds blow from the north to west quadrant, these winds have lower wind speeds, 5.75 knots per hour. The yearly mean wind speed is 9.7 miles per hour.

Impact on climatic conditions. Little or no impact on climatic conditions is expected. The factors controlling the climatic conditions will not be affected by the relatively miniscule land area utilized by this project. Surface winds will be altered by the building mass and the landscaping material; this is normal and should not result in significant and/or adverse changes to the surrounding area and uses.

E. Flora

The flora on the project site consists of plant materials which are along the perimeter of the project site. These trees and plants include: coconut trees, palm trees, croton plants, oleander, shrubs, and other ornamental plants (especially in the vicinity of the large parking area reserved for residents/guests of the Royal Aloha Condominium). These plants have been planted and maintained by man's efforts; there are no indigenous or rare plants on the project site.

Impact on flora. The impact on the existing vegetation will be minimal. Present plans call for more extensive landscaping than now exists. These plans will retain the mature coconut trees along the perimeter and augment these trees with other vegetation which will provide a denser, more attractive and diverse variety of plants. Additionally, a larger area (approximately 40,000 square feet) will be landscaped within the project site.

F. Avifauna

The commercial uses of the project site limits fauna to pests such as rats and mice. Avifauna (birds) are more numerous on the project site. Because of the drive-in and the availability of discarded food, many sparrows were noted on the project site. Other birds in this area include the common mynah, cardinals, pigeons, doves, white-eye, house finch, ricebird, and mockingbird. These are common, exotic birds found throughout the urban areas of Honolulu.

Impact on avifauna. Site clearing and construction activities will displace birds which presently feed or nest on the project site. Upon completion, some birds may periodically visit the area, and possibly nest in the trees. The primary impact will be the displacement of the birds (sparrows) feeding on the discarded foodstuff. This is not felt to be adverse because of the common species and other available urban areas in which these birds can relocate.

G. Air Quality

The information provided in this section is abstracted from the Appendix II, "Air Quality Impact Analysis for the Proposed Ala Wai, McCully, Kalakaua Triangle Project, Waikiki, Oahu," prepared by Barry D. Root. Because the report is included in the Appendix in its entirety, only the summary portion of the study is provided below; readers wishing more information on this subject may refer to Appendix II.

The air quality consultant's analysis indicates that under adverse climatic and peak hour conditions, the ambient air quality at the site exceeds the State's ambient air quality standards for carbon monoxide. (Refer to Table 5 of the Air Quality Impact Analysis report, Appendix II.) This is a result of the location of the project site along major thoroughfares and the volume of cars which utilize these thoroughfares.

The proposed Waikiki Triangle project can be expected to produce direct air pollutant emissions in the form of fugitive dust from project construction and indirect emissions from vehicles attracted to the area because of the presence of this building.

Fugitive dust emissions will be of a short term nature and adequate control measures exist to insure that such emissions do not become a problem to nearby residents. Particulate air pollution measurements at nearby sampling sites indicate that present levels exceed State of Hawaii ambient air quality standards about once per year, but that particulate air pollution is generally not a problem.

Vehicular traffic will produce carbon monoxide, hydrocarbons, nitrogen oxides, and airborne lead.

Federal regulations should insure future reductions in those emissions, but carbon monoxide emissions and resulting concentrations could pose some problems. The State of Hawaii one-hour ambient air quality standard for carbon monoxide is being exceeded at the Department of Health building monitoring site at the rate of about 20 times per year.

A detailed carbon monoxide modeling study of the proposed project area has been carried out for five selected critical receptor sites. In general, the results indicate that carbon monoxide levels are presently greater than allowable State of Hawaii air quality standards at all five sites. Under worst case meteorological conditions increased peak hour traffic generated by the proposed project could raise one hour levels by as much as 5.4 mg/m^3 in 1980. Furthermore, the Federal eight-hour air quality standard is likely to be exceeded under worst case 1980 conditions at four of the selected sites whether the proposed project is undertaken or not.

By 1995, however, all Federal air quality standards can be easily met even with the inclusion of an increase in traffic generated by the proposed project. (Note: These calculations include the assumption that the Federal government will remain on a schedule which requires automobile manufacturers to bring new car models up to a minimum air emission standard. Should that schedule be delayed or relaxed, the air emissions calculated will subsequently reflect that situation.)

In fact, by that time, peak hour worst case carbon monoxide values will, for the most part, be less than 1 mg/m^3 higher with increased project traffic than would be the case without it. By 1995, it would appear that even the stringent State of Hawaii one-hour air quality standard can be met at every site but one.

The major potential problem area appears to be along the Ewa side of Kalakaua Avenue where parking garage emissions are likely to combine with those from street traffic to produce projected worst case carbon monoxide levels in excess of the State of Hawaii one-hour standard. Several mitigative measures to reduce air emissions are identified in Section IV.

H. Noise

Present noise on the project site consists of vehicular noise along Ala Wai Boulevard, Kalakaua Avenue, and McCully Street and within the project site. This traffic noise produces a constant humming sound; periodically, buses and trucks create a louder noise which is noticeable above the sounds of other automobiles.

Impact on noise. The proposed project will indirectly generate noise via automobiles going to and from the project site. Some automobiles will create tire squeal noise going up and down the parking decks. Noise from tire squeal is dependent on the turning radius, car weight, and the tire condition, the speed of the car when making the turns, and the type of surface. The turning ramps will be

designed to minimize tire squeal and car speed limits will be controlled by posted speed limits or speed bumps. People within the building will not be affected by vehicular or tire squeal sounds because of the enclosed building construction and centralized air-conditioning system. The problem of vehicular speed and noise created by tire squeals is predicated on the driving habits of individual drivers. If and when this problem occurs, control via warning signs or directing individuals to stop this type of activity would be more realistic.

The noise created on the project site will blend into the surrounding background vehicular noise; it is not expected to adversely affect the surrounding land uses.

Noise generated during construction, especially when the concrete piles are being driven will be restricted to normal working hours and subject to several Public Health Regulations, OSHA standards, and the Comprehensive Zoning Code. This noise will be a short-term impact and may prove to be annoying to residents living in high-rise apartments in the immediate vicinity.

The Department of Health (February 22, 1980 response to the EIS) provides the following information relating to noise:

"The facility must be designed to comply with the provisions of Public Health Regulations, Chapter 44B, Community Noise Control for Oahu. Noise from any equipment, such as air conditioning/ventilation units, kitchen exhaust units, and booster pumps, must be attenuated to meet the allowable noise levels of the regulations based on zoning districts."

"Traffic noise from heavy vehicles traveling to and from the construction site must be minimized and must comply with the provisions of Public Health Regulations, Chapter 44A, Vehicular Noise Control for Oahu."

I. Stormwater Runoff and Water Quality

The present drainage system consists of water collecting on the lower end of the project site and eventually drains into the streets where the storm water flows into the street drainage system. The stormwater collected is drained into the Ala Wai Canal which drains into the ocean at the Ala Wai Boat Harbor. Because

of the low rainfall, the grading and paving of the site, and the available street drainage system, no problems with drainage have been encountered.

The proposed drainage system will include catch basins on the project site which will connect onto the street drainage system. The added concrete and building surfaces will increase the amount of surface runoff, this amount is not a significant increase nor will the quality of the runoff differ from the present quality (both will reflect the urban uses of the project site). Prior to the finalization of construction plans, the project engineer will coordinate plans for the drainage with the Department of Public Works, City and County of Honolulu, in order to assure that an adequate drainage system is provided. All plans must conform with the drainage standards set by the City and County.

J. Flood Hazards

During the EIS Consultation Period, the U.S. Army Engineer District provided the following information relating to flood hazards:

"The proposed project site lies in an area of 100-year flooding of two feet average depth according to the preliminary flood insurance study for the Waikiki area by the US Federal Emergency Management Agency, Federal Insurance Administration. The 100-year flood refers to an event having a one percent chance of being equalled or exceeded in any given year. Consideration should be given to minimizing the flooding potential for the proposed project such as elevating the structure above the base flood elevation and flood proofing utilities."

The building will be elevated above the present ground level. Additionally, vehicular entrance/exits to the basement area will include drainage features so that flooding in the basement will not occur.

K. Potable Water

Potable water is available to the site. Water lines along the major streets can be utilized to provide the necessary water. The estimated water demand for this project is 50,000 gallons per day (GPD). The Board of Water Supply commented during the EIS Consultation Period:

"We have no objections to the project. However, the developer will be required to submit a site development plan (showing the proposed development, estimated water demands, etc.) and construction plans for our review and approval."

"Also water development charges for source, storage, and transmission facilities are applicable to the project."

Subsequent to these comments, the Board of Water Supply provided a response to the EIS (dated February 29, 1980) which stated:

"In addition to our comments of December 19, 1979, page 47 (of the EIS), we have to add that we cannot, at this time, make a water commitment to the project due to the State Department of Land and Natural Resources' designation of the Pearl Harbor Basin. This action has made it uncertain whether we will be allowed to export additional waters from the basin to accommodate projects which will impose additional demands upon our system."

On March 5, 1980, the architect, Jo Paul Rognstad, sent information on the proposed project to the Board of Water Supply and requested water availability. This type of coordination will continue as the project plans and other details are prepared.

L. Sewer System

Sewer lines are available along the major streets bordering the project site. Connection onto these existing lines is planned. The sewage collected is eventually treated at the Sand Island Sewage Treatment Plant; the treated effluent is discharged via outfall into the ocean. The developer will be responsible for construction of the onsite sewer lines and the cost of sewer connection. The sewer assessment fees will be paid by the building's management. Plans for the sewer system will be coordinated with and must be approved by the Department of Public Works, City and County of Honolulu.

There are adequate sewer lines and facilities which will service the needs of the proposed development.

M. Other Utilities

Gas, electrical, and telephone lines are available along the three major streets bordering the project site. Prior to preparing the construction plans, the project engineer will coordinate and get approvals from the respective utility companies to connect onto these existing utilities.

These utilities are available and will adequately meet the demands of the proposed development.

N. Schools and Public Recreational Facilities

The proposed project will not require nor place demand on schools and recreational facilities. There are no immediate surrounding schools or recreational areas which will be affected by the proposed project during construction or on a long-term basis.

O. Fire Protection Services

As stated by the Fire Department, City and County of Honolulu, in their letter of December 13, 1979, responding to the EIS Preparation Notice:

"We have no objections to the proposed project provided all fire codes are met. Fire protection services are available from the

Pawaa Fire Station with supportive services from the McCully and Waikiki Fire Stations."

The developer will meet all fire codes and install the necessary fire protection devices and systems required.

Because fire protection is provided on an emergency basis, the demand for this service is unpredictable; the proximity of fire stations in the near vicinity assures that should a fire occur, immediate response will be taken.

P. Police Protection Services

The response from the Police Department during the EIS Consultation Period indicated they had three major concerns:

- (1) obstruction of the sidewalks creating a hazardous condition for pedestrians during construction;
- (2) not creating a hazardous condition for vehicles especially in regards to the locating of the entrances/exits so that they are as far as possible from the points of congestion; and
- (3) provisions for security personnel for the business and commercial areas, property, and vehicles.

During construction standard barriers and posted signs will be erected for pedestrian safety; if required, the contractor will retain off-duty policemen to direct traffic for large trucks and construction equipment moving in and out of the project site. Entrances and exits have been located away from major intersections. Also, the five entrance/exits provide for a uniform distribution of vehicles entering and leaving the site so that no one entrance will result in congesting the immediate public street. Finally, a security force will be provided for the protection of the building's occupants, property, and vehicles. Police calls to the project site are expected in emergency cases and little impact for police services is anticipated.

Q. Hospital and Medical Care

Because of the nature of the proposed development, the need for hospital and/or medical care will likely be utilized only on an emergency basis. In these cases,

several hospitals, including Kapiolani Hospital, Kaiser Hospital, Straub Clinic, and several ambulances (City and County), will respond in minutes to any medical emergencies.

R. Historical and Archaeological Sites

There are no known sites of historical and/or archaeological value within the project site, as recognized by the Historic Sites Section, State Department of Land and Natural Resources. The comments from the Historic Sites Section also indicated that: "This office has no reservations for the project to proceed." Additionally, the Historic Sites Section indicates that should archaeological artifacts be encountered during construction, work should stop and their office be immediately informed.

In view of the filled land on which the site is located, it is highly unlikely that subsurface archaeological artifacts will be encountered. If any features are found, the developer will advise the Historic Sites Section as recommended in their response.

S. Socioeconomic Considerations

The total amount of business income derived from the existing businesses is not available. However, it is likely that each will relocate to other locations since they are either backed by a larger chain of enterprises or can relocate to other more conventional office spaces.

As indicated previously, as many as 110 full-time and 31 part-time employees will be terminated or relocated. This will result in a loss of income for the individual affected; also, the psychological impact in attempting to find new employment may result. However, the construction of the proposed project and the consequent employment of individuals for commercial areas, business activities, and maintenance, is likely to compensate for the total monetary loss as a result of dislocation of existing tenants.

The dislocation of businesses and possible termination of employees cannot be avoided. Because details of future tenants within the proposed development cannot be anticipated, the exact monetary benefits (jobs and gross income) cannot be specified. An increase in jobs and gross income because of the increased size of the proposed development is expected.

Revenue to government will be generated in the form of income taxes, property taxes, business taxes, et cetera. These taxes will offset the cost incurred by the County and State for various public services.

Finally, the economic impact on other office spaces should be reviewed. There is competition for office and business space in downtown Honolulu and Waikiki. Several office buildings and commercial complexes have been completed, are in the process of being completed, or are planned in the downtown to Waikiki area. The availability of office space will create competition for this development. However, the developer, L. Robert Allen, finds that the location of the project site (between Waikiki and downtown Honolulu) to be an ideal location for several types of firms. The success of Century Center indicates that there is an interest in locating businesses close to the Waikiki area without being caught up in the pedestrian and traffic congestion. Businesses locating in this building are ideally suited for: (1) "retired" business executives wanting to have an office to work in a few days a week; (2) individual consultants working with a limited staff; (3) representatives of foreign or mainland companies who may need smaller-scale office space, or may divide their time between Hawaii and their home office; (4) businesses whose clientele are located in Waikiki and downtown Honolulu; (5) businesses that find the location accessible to various areas throughout Honolulu. These will be executive office spaces enhanced by the location, and with interior surroundings which will provide an immediate recognition of distinction for the business and commercial activities housed in the proposed complex. With this in mind, it is felt that these spaces can be effectively marketed. As in all private ventures, the developer must take some financial risk.

T. Parking, Mass Transit, and Transportation System

The site presently has about 200 parking spaces (including those for the real estate company, Royal Aloha Condominium, KC Drive-Inn, taxicabs, and the other uses). The proposed development will provide approximately 565 parking spaces for the commercial and office uses on the project; an additional 135 parking spaces will be provided for the Royal Aloha Condominium as replacement parking. The number of spaces available is expected to accommodate employees' parking as well as parking for visitors. No impact on on-street parking is anticipated. Public parking will not be provided.

The impact on the transportation system has been reviewed and analyzed by Henry T. Au, traffic consultant, and his report is included in this EIS as Appendix III. Because the entire report is included in the appendix, no attempt is made to restate his premises and analyses. The discussion provided below is a summary of his findings.

- (1) The Waikiki Special Design District ordinance enacted by the City Council in 1976 is to insure quality growth and development of Waikiki with due consideration to optimum community benefit. The creation of the Special District is an attempt to relate the size of Waikiki's ultimate development to the capacity of the area to handle it.
- (2) 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 showed a considerable reduction from the 1967 volume of 37,729 to 30,061 in 1971, a decrease of 7,688 vehicles or 20.3 per cent.
- (3) The one-way operation distributed the traffic load over more streets and diverted the Ewa bound traffic on Kalakaua Avenue to Kuhio Avenue and Ala Wai Boulevard, primarily to Ala Wai Boulevard. This redistribution of traffic illustrates the fact that there are alternatives to the solution of the traffic problems without major improvements of the highway system.
- (4) Traffic surveys show that traffic crossing the Lewers Street Screenline extending from Kalakaua Avenue to Ala Wai Boulevard increased at the rate of 1.32 per cent per year for the period from 1967 to 1975. At this rate of growth, the traffic volume crossing the screenline will increase by 26.4 per cent or 23,620 vehicles within the 20 year period from 1975 to 1995 for a total screenline volume of 113,091 vehicles.
- (5) The existing highway system 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.

- (6) The traffic study conducted by the Department of Transportation Services of the City and County of Honolulu on Wednesday, March 18, 1970, indicated that contrary to common belief, through traffic in Waikiki was not a major problem. The majority of vehicles had origins and destinations within Waikiki.
- (7) The Waikiki District has a high dependency in walking to activity centers within the neighborhood. 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.
- (8) The total number of parking spaces to be provided will be 700, of which 135 parking spaces will be set aside for the Royal Aloha Condominium located nearby across the street on McCully Street and Ala Wai Boulevard. During the construction phase, the parking for Royal Aloha will be relocated onsite in areas not under construction.
- (9) With primarily tenant parking permitted on the premises, the project will generate minimal additional automobile traffic. The parking will be all day parking and the turnover will be quite low.
- (10) The building will be located entirely within the premises with sufficient setback from the street frontages, and unlike the older developments whereby loading and unloading must be made on the street fronting the establishment, freight loading and unloading for this project could be made within the premises, outside the loading zone or in the parking lot. A freight loading zone, therefore, is not as critical. Although the freight loading zone complies with the requirements of the Comprehensive Zoning Code, consideration will be given to revising the plan to relocate the loading zone to a more suitable location.
- (11) The individual actions of pedestrians make it extremely difficult to provide or design adequate facilities for the safety of pedestrians. Even

though unsafe, pedestrians prefer crossing at street grade in the shortest path possible. They often cross anywhere they wish and do not use the crosswalks where provided. They are even more reluctant to use any pedestrian facility that requires changing grade when crossing, such as stairways, pedestrian overpasses and underpasses. Consequently, it is considered that adequate provisions for pedestrians have been made when adequate sidewalks have been provided and there are sufficient signalized intersections within reasonable distances to permit pedestrians to safely cross the streets.

Sidewalks are a requirement and integral part of city streets. There are, therefore, adequate sidewalks within the vicinity of the project site and sufficient signalized intersections within reasonable distances to permit pedestrians to safely cross the streets. Signalized intersections are located at the intersections of McCully Street and Ala Wai Boulevard, McCully Street and Kalakaua Avenue, and Kalakaua and Ala Wai Boulevard.

On Kalakaua Avenue, between Ala Wai Boulevard and John Ena Road, there is a median on the roadway which allows pedestrians to safely cross the street by crossing half of the street at a time.

- (12) The Department of Transportation Services provided (in response to the EIS, memorandum dated March 6, 1980) the following information on mass transportation servicing the area.

"Bus service on Kalakaua Avenue fronting the project site has an average headway of four minutes, peak hour and five minutes, off-peak. There is another bus route (#4) traveling makai on McCully Street, left Kalakaua Avenue, left Kuhio Avenue. The return route is from Kuhio Avenue, right Kalakaua Avenue, right Pau Street, left Ala Wai Boulevard, right McCully Street, right Kapiolani Boulevard. Average headway is fifteen minutes, peak and off-peak periods."

Based on this information, mass transit transportation servicing the project site is available and the "waiting time" for buses is normally short.

U. Aesthetics

View planes and the proposed building's appearance. The building will be constructed so that the outer walls will consist of reflective glass material as at the Century Center building about 600 feet mauka from the project site. See fold-out cover of the EIS. This reflective glass surface has both advantages and disadvantages and has drawn both positive and negative comments from the public. The disadvantages include the glare that is visible to passerbys on foot and in cars along adjacent streets; the appearance of the glass (like a mirror) does not appeal to some individuals; the reflection of surrounding uses on the exterior proves to be distracting, and in most cases reflects the surrounding high-rise buildings which do not enhance the reflective surface. Some individuals are concerned about the safety of the reflective glass against high-speed winds. Advantages to a reflective glass material include the occupants' clear view of the surrounding area from inside the building; the appearance of a reflective surface is "softer" than a concrete building; the architect finds that it provides a sense of the surrounding environment, thus making it appear to "blend-in" with its surrounding; the upper floors reflect the sky and clouds which creates an open effect. Although glare is noticeable on occasion, this glare does not produce a hazardous situation for drivers along the nearby streets. The building is distinctive in appearance and immediately recognizable and finally, it is noted that during the severe wind conditions imposed during the recent January storms, the reflective glass material proved stable and was not damaged.

Regardless of the subjective opinions held by individuals, it should be noted that the building will be highly visible from the surrounding buildings and adjacent streets. Its appearance, height and size, location will make this impact unavoidable. The view of some buildings (e.g. Royal Aloha Condominium, Waipuna, Century Center) will be obstructed by the proposed development. However, the view being obstructed is that of other high-rise and not of special landmarks or panoramic views of Waikiki. In that regard this development will be similar to other high-rise buildings in the immediate surroundings.

Landscaping. Landscaping will be an integral part of the project. The perimeter of the site and the areas next to the streets will be planted with ornamental plants supplementing the coconut trees already there. Street trees and planting will be coordinated and reviewed by the Department of Parks and Recreation for their approval. Other plantings will provide a ring of greenery

around the proposed building so that the building will be enhanced. Finally, the waterfall features will serve to provide a distinctive and appealing exterior amenity for the building.

Overall, the preliminary landscaping concepts indicate that the amount of plantings will be much greater in quantity and variety than presently available on the site.

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

A. State Land Use Designation and County's Interim Land Use Control

The project site and surrounding area is designated urban by the State Land Use Commission. The Interim Land Use Control (which replaces the Detailed Land Use Map) identifies the area for commercial use. The project site is zoned for resort commercial uses. The surrounding areas are zoned and have uses consistent with the resort commercial precinct other uses and their zoning include high-rise apartment use, resort hotel use, and mauka of Ala Wai Canal, commercial use.

The project is consistent with the zoning and the Waikiki Special Design District. It is also compatible with the surrounding high-rise buildings in the immediate area.

The project is consistent with the City's General Plan in regards to its policy of keeping developments of this nature within appropriately zoned and designated areas in the primary urban center. The other objectives of the General Plan and the policies and objectives of the Hawaii State Plan were reviewed, these are based on broad concepts and considerations which are not specifically applicable for a specific project such as this.

B. Special Management Area

The project does not lie within the Special Management Area as designated by Ordinance 4529, City and County of Honolulu.

C. Easements and Setbacks

An existing 25-foot private road right-of-way is shown traversing the property from McCully Street to Ala Wai Boulevard. The developer plans to consolidate and develop the entire site and will request the deletion of the easement at the appropriate time.

Building setbacks will comply with the applicable requirements of 20' and 30' along Ala Wai Boulevard, Kalakaua Avenue and McCully Street.

IV. ANY PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND
MITIGATION MEASURES PROPOSED TO MINIMIZE IMPACT

There are several areas in which adverse environmental effects, both short-term and long-term, will occur. These include: (1) air quality, (2) construction noise, (3) impact on view planes, and (4) the impact of dislocation. Each of these foreseeable adverse impacts are discussed below; mitigation measures that will be implemented are also discussed under that same topic.

- (1) Air Quality Impact. The proposed project will indirectly affect ambient air quality via vehicular air emissions. As indicated, under worst case meteorological conditions and peak-hour traffic, the State of Hawaii and Federal air quality standards for carbon monoxide will be violated. This is the case for the existing condition and future estimations without the proposed development. The project will add to the existing condition by virtue of its attraction to vehicular traffic.

Mitigation measures have been identified by the air quality consultant and the developer will incorporate these measures into the project plans. These measures are: installation of mechanical ventilation on the lower levels of the main parking garage (the upper levels will have natural ventilation); certain entrance/exits will be assigned to specific parking areas, basement parking will have its own entrance/exits to evenly distribute traffic; and use of dense foliage to screen the parking garage area from potential pollutant receptors.

Fugitive dust generated during construction will be mitigated through compliance with the State of Hawaii Department of Health Rules and Regulations (Chapter 43, Section 10) which stipulates that control measures be employed to reduce fugitive dust. Primary control consists of frequent wetting down of loose soil areas with water, oil or suitable dust retardent chemicals. An effective watering program can reduce particulate emissions on construction sites by as much as 50 percent. Other control measures include good housekeeping on the job site and possibly, the erection of dust-catching barriers if nearby local residents are being subjected to suspended particulate levels more than 150 micrograms per cubic meter above existing background levels.

- (2) Noise Impact. Adverse noise impact on the surrounding areas will occur during the construction period. This will be especially evident during site clearing, demolition, and pile driving activities. Several enforceable regulations and standards require the reduction of construction related noise and these include: the Comprehensive Zoning Code, OSHA standards (for occupational safety), Public Health Regulations, 44-A and 44-B.

The Department of Health in their response to the EIS (dated February 22, 1980) stated,

- "4. Construction activities must comply with the provisions of Public Health Regulations, Chapter 44B:
- a. The contractor must obtain a noise permit if the noise levels from the construction activities are expected to exceed the allowable levels of the regulations.
 - b. Construction equipment and on-site vehicles or devices requiring an exhaust of gas or air must have a muffler.
 - c. The contractor must comply with the conditional use of permit as specified in the regulations and the conditions issued with the permit."

- (3) Impact on View Planes. The building will be highly visible from several surrounding high-rise buildings and from the major streets adjacent to the project site. This is unavoidable and no mitigation measures for this impact are possible without the alteration of project plans.

- (4) Impact of Dislocation. The present tenants on the project site will be dislocated causing the loss of employment and loss of revenue. Although this is unfortunate, it is unavoidable. This loss will be compensated with the completion of the project and the occupancy of new and relocated businesses within the new development.

- (5) Energy Demands. The developer is exploring various methods to conserve energy and is intending to apply them when the final building interior plans have been completed.

V. ALTERNATIVES TO THE PROPOSED ACTION

The developer has not considered another alternative to the proposed development as described in this EIS. Therefore, from the developer's standpoint, no other alternatives are feasible or desirable. The developer has the development rights for this parcel and no other sites in the vicinity are available for this type of development. At this time, the developer has not considered alternative building designs.

An alternative of no action exists and if such an alternative is followed, the present uses of the project site will continue. It is then likely that the landowner and/or developer will pursue other plans to intensify the land use to achieve a greater return on their investments.

VI. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY AND THE COMMITMENT OF RESOURCES

It is anticipated that the construction of the proposed building will commit the necessary construction materials and human resources (in the form of planning, designing, engineering, construction labor, landscaping, and personnel for the sales, management, services, offices, and maintenance functions). Some of the construction material could be reused if and 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 is not economical. The human resources expended for this project also will not be retrievable. The primary human resource, labor, will be compensated during the various stages of the project by the developer, commercial and business offices, and the building's management.

In addition to construction material and labor resources, the services and merchandise sold in the building can also be considered resources which will be utilized or consumed by the purchasers.

There will be some loss of view planes; as cited previously, the building will block certain views from some surrounding high-rise apartments. The prin-

cipal view plane consists mainly of other buildings in Waikiki and the proposed development will not be incompatible with other high-rise buildings in the surrounding area.

Air quality will be adversely affected by this proposed project. Presently, air quality in Waikiki is declining primarily due to the increased vehicular traffic in the district.

The project development will result in a commitment of land for a long-term period. Once in a high density commercial use, it is unlikely that the land will be reverted to a lower usage in the distant future.

The project will, in the long-term, result in the availability of office and commercial space for private businesses. The revenue from the property and businesses operating on the premises will increase and result in a higher gross revenue for this property.

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

The height, setbacks, and use of the proposed building have been determined largely by the use precincts and design control established by Ordinance 4573, Waikiki Special Design District. The determination of parking spaces and loading zones were based on complying with the Comprehensive Zoning Code. To this extent, it is felt that the compliance and mitigation measures within governmental policies are inherent in the initial project design.

VIII. ORGANIZATIONS AND PERSONS CONSULTED DURING THE EIS CONSULTATION PERIOD AND REPRODUCTION OF COMMENTS AND RESPONSES MADE

The EIS Preparation Notice was officially filed with the State Environmental Quality Commission on December 3, 1979. Environmental Communications, Inc., the authorized agent for the EIS process, provided the Preparation Notice to twenty-eight (28) governmental and private organizations. (These agencies are identified in Table 2.) Review and comments on the Preparation Notice were requested on or before January 8, 1980. As of January 30, 1980, a total of fifteen (15) comments were received; of this total, seven (7) required no response. The remaining eight (8) comments were reviewed and responded too. The following pages contain reduced copies of the comments; where a response was provided, a copy of that response follows the comments.

IX. EIS REVIEW PERIOD --REPRODUCTION OF COMMENTS AND RESPONSES PROVIDED

The EIS was sent (by the State Environmental Quality Commission) to thirty-four (34) agencies and organizations for review and comments. (See EQC distribution list on pages 30a, 30b, 30c, and 30d for reference.) The deadline for comments to the EIS was set for March 9, 1980.

A total of nineteen (19) responses were received during the EIS review period (February 8, 1980 to March 9, 1980); of these, 12 did not have comments to offer, and 9 responses made comments on the EIS. Those agencies/organizations responding are identified in Table 3 on page 31. Reduced copies of these letters and where appropriate, the responses to comments from Environmental Communications, Inc. are provided on pages to .

It should be noted that two (2) agencies sent comments in after the March 9, 1980 deadline. These comments, from the Environmental Center and the Office of Environmental Quality Control are not included in this document because of the stringent response and revision schedule of the Revised EIS document.

TABLE 2

AGENCIES PARTICIPATING IN THE EIS CONSULTATION PERIOD

<u>AGENCIES RECEIVING EIS PREPARATION NOTICE</u>	<u>RESPONSE RECEIVED</u>	<u>DATE OF RESPONSE</u>	<u>DISPOSITION PROVIDED</u>
CITY & COUNTY AGENCIES:			
Board of Water Supply	Yes	12/9/79	Yes
Honolulu Fire Department	Yes	12/13/79	Yes
Department of Parks & Recreation	Yes	12/21/79	Yes
Building Department	Yes	12/20/79	*
Department of General Planning	No		
Honolulu Police Department	Yes	12/18/79	Yes
Department of Transportation Services	No		
Department of Public Works	Yes	12/27/79	Yes
STATE AGENCIES:			
Department of Accounting & General Services	No		
Department of Land & Natural Resources	No		
Department of Social Services & Housing	Yes	12/27/79	*
Department of Transportation	Yes	12/13/79	*
Water Resources Research Center	No		
Office of Environmental Quality Control	No		
Department of Education	Yes	12/12/79	*
Department of Health	Yes	12/21/79	*
Historic Sites Section, DLNR	Yes	1/7/80	Yes
Department of Taxation	Yes	12/20/79	*
Environmental Center	Yes	1/2/80	*
Hawaii Visitors Bureau	No		
FEDERAL AGENCY:			
U.S. Army Corps of Engineers	Yes	1/4/80	Yes
COMMUNITY ORGANIZATIONS:			
Waikiki Community Center	No		
Waikiki Improvement Association	No		
Waikiki Residents Association	No		
Waikiki Neighborhood Board	No		
Life of the Land	No		
American Lung Association	Yes	1/7/80	Yes
Outdoor Circle	No		

* The agency had no comments; no disposition required.

EQC DISTRIBUTION LIST

() E.A. (X) EIS (X) APPLICANT ACTION () AGENCY ACTION

Title: Waikiki Triangle Project

Location: Waikiki, Oahu

Proposing-Agency/Applicant: L. Robert Allen

Accepting-Authority/Approving Agency: Dept. of Land Utilization, C & C

Deadline for Comments: March 9, 1980

Date Sent: _____

By: _____

<u>STATE AGENCIES</u>	<u>Amount Sent</u>	<u>Remarks</u>
OEQC	3	
Dept. of Agriculture	1	
Dept. of Land and Natural Resources (3)	3	
Dept. of Health	1	
Dept. of Planning and Economic Development	1	
Dept. of Defense	1	
Dept. of Accounting and General Services	1	
Dept. of Social Services and Housing		
Dept. of Transportation (3)	3	
Dept. of Education*		
DLNR State Historic Preservation Officer	1	
Dept. of Hawaiian Home Lands*		
State Energy Office	1	
<u>UNIVERSITY OF HAWAII</u>		
Environmental Center (4)	4	
Water Resources Research Center	1	
Marine Programs*		
<u>FEDERAL</u>		
Environmental Protection Agency*		
U.S. Army Corps of Engineers	1	
U.S. Fish and Wildlife Service	1	
Soil Conservation Service	1	
15th ABW/DEE	1	
Navy	1	
Army-DAPE	1	
U.S. Coast Guard	1	
U.S. Geological Survey*		

<u>NEWS MEDIA</u>	<u>Amount Sent</u>	<u>Remarks</u>
Honolulu Star Bulletin	1	
Advertiser	1	
The Sun Press - Oahu		
Ka Leo O Hawaii - UH		
Hawaii Tribune - Hawaii		
West Hawaii Today - Kona		
Lahaina Sun - Maui		
Maui News - Maui		
Ka-Molokai - Molokai		
The Garden Island Newspaper - Kauai		
<u>HONOLULU - CITY & COUNTY AGENCIES</u>		
Dept. of General Planning	1	
Dept. of Land Utilization	1	
Dept. of Transportation Services	1	
Dept. of Parks and Recreation	1	
Dept. of Public Works	1	
Board of Water Supply	1	
Dept. of Housing & Community Development	1	
Mass Transit Division*		
Building Department		
<u>HAWAII - COUNTY AGENCIES</u>		
Planning Department		
Dept. of Public Works		
Dept. of Parks and Recreation		
Dept. of Water Supply		
Dept. of Research and Development		
University of Hawaii - Hilo Campus Library		
<u>MAUI - COUNTY AGENCIES</u>		
Planning Department (2)		
Dept. of Public Works		
Dept. of Parks and Recreation		
Dept. of Water Supply		
Economic Development Agency		
Maui Community College Library		
<u>KAUAI - COUNTY AGENCIES</u>		
Planning Department		
Dept. of Public Works		
Dept. of Water Supply		
Kauai Community College Library		

<u>LIBRARIES</u>	<u>Amount Sent</u>	<u>Remarks</u>
State Main Branch (2)	2	
Regional:		
Kaimuki Regional Library	1	
Kaneohe Regional Library	1	
Pearl City Regional Library	1	
Hilo Regional Library	1	
Wailuku Regional Library	1	
Lihue Regional Library	1	
Branch:		
OAHU		
Aiea Library		
Aina Haina Library		
Ewa Beach Community-School Library		
Hawaii Kai Library		
Kahuku Community-School Library		
Kailua Library		
Kalihi-Palama Library		
Liliha Library		
Manoa Library		
McCully-Moiliili Library	1	
Mililani Library		
Wahiawa Library		
Wai'alua Library		
Waianae Library		
Waikiki-Kapahulu Library	1	
Waimanalo Community-School Library		
Waipahu Library		
HAWAII		
Bond Memorial Library (Kohala)		
Holualoa Library		
Honokaa Library		
Kailua-Kona Library		
Kaau Community-School Library		
Kealahou Library		
Laupahoehoe Community-School Library		
Mountain View Community-School Library		
Pahala Community-School Library		
Pahoa Community-School Library		
Thelma Parker Memorial Library		
Waimea Library		
MAUI		
Kahului Library		
Lahaina Library		
Makawao Library		
MOLOKAI		
Molokai Library		
LANAI		
Lanai Community-School Library		

<u>LIBRARIES</u>	<u>Amount Sent</u>	<u>Remarks</u>
<u>KAUAI</u>		
Hanapepe Library		
Kapaa Library		
Koloa Community-School Library		
Waimea Library		
<u>OTHERS</u>		
Hamilton Library, Hawaiian Collection	1	
State Archives	1	
LRB Library	1	
Municipal Reference Center (for Oahu EIS's)	1	
Windward Community College Library	1	
Waikiki Improvement Association 2222 Kalakaua Avenue Honolulu, Hawaii 96815	1	
Waikiki Neighborhood Board c/o Wikiki-Kapahulu Library 400 Kapahulu Avenue Honolulu, Hawaii 96815	1	
American Lung Association 245 North Kukui Street Honolulu, Hawaii 96817	1	
Outdoor Circle 200 North Vineyard Blvd. Honolulu, Hawaii 96817	1	
Life of the Land 404 Piikoi Street, Room 209 Honolulu, Hawaii 96814	1	
Waikiki Residents Association 2222 Kalakaua Avenue Honolulu, Hawaii 96815	1	
Waikiki Community Center 285 Paoakalani Avenue *Optional Honolulu, Hawaii 96815	1	

Notation by Environmental Communications, Inc. - Copies of the EIS were also sent to the Honolulu Fire Department and Honolulu Police Department after it was noted that these two agencies were not on this mailing distribution list.

TABLE 3

EIS FOR WAIKIKI TRIANGLE - RESPONSES RECEIVED AS OF MARCH 10, 1980

Responses having no comments:

Federal:

Department of the Army, Headquarters
U.S. Support Command, Hawaii
February 19, 1980

Headquarters, Naval Base Pearl Harbor
February 20, 1980

U.S. Department of the Interior
Fish and Wildlife Service
March 7, 1980

U.S. Coast Guard
February 12, 1980

Responses requiring dispositions:

U.S. Army Engineering Division
March 3, 1980

State:

Department of Defense
Office of the Adjutant General
February 13, 1980

Department of Health
February 22, 1980

Department of Agriculture
February 13, 1980

Office of Rep. Kina'u Kamali'i
March 7, 1980

Department of Accounting & General Services
February 14, 1980

Department of Transportation
February 26, 1980

City and County of Honolulu:

Department of Housing & Community
Development
February 22, 1980

Board of Water Supply
February 29, 1980

Honolulu Police Department
February 22, 1980

Department of Land Utilization
February 29, 1980

Fire Department
February 25, 1980

Department of General Planning
February 29, 1980

Department of Parks and Recreation
February 27, 1980

Department of Transportation Services
March 6, 1980

TABLE 3

(Page 2)

Responses having no comments:

Community/Environmental Groups:

Responses requiring dispositions:

Life of the Land
March 7, 1980

American Lung Association of Hawaii
March 10, 1980

TOTAL RESPONSES: 21

NO COMMENT TYPE RESPONSES: 12

RESPONSES REQUIRING DISPOSITIONS: 9

NOTE: THE PAGE ON WHICH THE RESPONSES ARE REPRODUCED IS IDENTIFIED ON PAGE 46.

SAMPLE OF LETTERS SENT TO VARIOUS AGENCIES (TABLE 2) REQUESTING REVIEW
AND COMMENT ON THE EIS PREPARATION NOTICE.

December 7, 1979

Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

To Whom It May Concern:

SUBJECT: Consultation Process Prior to Filing the EIS for
the Proposed Waikiki Triangle Project

Enclosed is a copy of the Environmental Impact Statement Preparation Notice (prepared by the Department of Land Utilization, City and County of Honolulu), for the proposed Waikiki Triangle Project. Briefly, the applicant, L. Robert Allen, proposes to construct a business office/commercial complex within a 2.8± acre parcel bounded by Kalakaua Avenue on the south, McCully Street on the east, and Ala Wai Boulevard on the north and west. The office tower will extend to the maximum height allowed by the Waikiki Design District (WSDD), i.e. 320 feet. It will have a total floor area of approximately 29,000 square feet. A commercial area will be located on the ground level. A parking structure which will accommodate 700 cars is also planned within the complex. Presently the site is occupied by several low-rise commercial buildings as well as a large paved parking area.

We have been retained to prepare the environmental documents necessary for the proposed project. Consequently, we are requesting comments from your organization on this initial environment impact statement notice. We recognize your indicated interest in this matter and would appreciate your written comments.

We request your comments on or before January 8, 1980. If you require further information, please contact this office at 521-8391. If we are not contacted or receive comments prior to January 8, 1980, we will assume that your organization does not have significant comments or foresees any conflicts with this project at this time. Comments should be sent to: Environmental Communications, Inc., P.O. Box 536, Honolulu, Hawaii 96809, with a carbon copy to the Department of Land Utilization, 650 South King Street, Honolulu Hawaii 96813.

We appreciate your review and look forward to any comments you may provide.

Very truly yours,

F. J. Rodriguez

FJR/lka
Enclosures

cc: Jo Paul Rognstad & Associates, Inc.
Department of Land Utilization

GEORGE R. ARYOSHI
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF STATE PARKS
P. O. BOX 521
HONOLULU, HAWAII 96809

DIVISIONS
CONSERVATION
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 7, 1980

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

Dear Mr. Rodriguez:

Thank you for your letter of December 7, 1979 concerning a preliminary assessment for your proposed Waikiki Triangle project.

The proposed undertaking will have no effect upon any known historic or archaeological site on or likely to be eligible for inclusion on the Hawaii Register and/or National Register of Historic Places. This office has no reservations for the project to proceed.

In the event that any unanticipated sites or remains such as shell, bone or charcoal deposits; human burials; rock or coral alignments, pavings, or walls are encountered during construction, please inform the applicant to stop work and contact this office immediately.

Sincerely yours,

Ralston Nagata
Ralston Nagata
Director
Historic Sites Section

ENVIRONMENTAL,
COMMUNICATIONS
INC.

F. J. RODRIGUEZ,
PRESIDENT

January 25, 1980

Mr. Ralston Nagata, Director
Historic Sites Section
Department of Land and Natural Resources
Division of State Parks
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Nagata:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

We have reviewed your letter of January 7, 1980, commenting on the above-mentioned EIS Preparation Notice. The project site has been in an urban use for approximately fifty years. Any archaeological sites on the surface would have been destroyed long ago. However, should excavations reveal remnants such as described we will immediately contact your office.

Thank you for your review and comments.

Very truly yours,

F. J. Rodriguez
F. J. Rodriguez

FJR/ika

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rogstad
L. Robert Allen

JAN 10 1980

AMERICAN LUNG ASSOCIATION of Hawaii

F. J. RODRIGUEZ,
PRESIDENT

ENVIRONMENTAL
COMMUNICATIONS
INC.

January 7, 1980

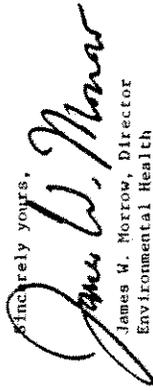
Environmental Communications, Inc.
P. O. Box 536
Honolulu, Hawaii 96809

Gentlemen:

Subject: Environmental Impact Statement for the
Proposed Waikiki Triangle Project

Thank you for forwarding a copy of the EIS Preparation Notice for the proposed project. Considering the continually growing traffic volume in Waikiki and its potential effects on local air quality, we trust that the latest available methods will be used in assessing the impact of the project on traffic and air quality.

Sincerely yours,


James W. Morrow, Director
Environmental Health

JMM:jm

cc: DLU
GEQC

January 25, 1980

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

Dear Mr. Morrow:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

We have received your comments of January 7, 1980 on the abovementioned project. Please be assured that the air quality study will include competent analysis and identify potential impacts on air quality. For your review and information, we will request that the air quality study along with the EIS, be sent to your organization for your review and comments.

Very truly yours,


F. J. Rodriguez

FJR/lka

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rogstad
L. Robert Allen

JAN 8 1980

Christmas seals Eight P3 Ash on Envelope, Air Pl 1000



DEPARTMENT OF THE ARMY
 U. S. ARMY ENGINEER DISTRICT, HONOLULU
 BUILDING 230
 FT SHAFTER HAWAII 96858

PODED-PV

4 January 1980

Mr. F. J. Rodriguez, President
 Environmental Communications, Inc.
 PO Box 536
 Honolulu, HI 96809

Dear Mr. Rodriguez:

We have reviewed the Environmental Impact Statement (EIS) Preparation Notice for the Proposed Waikiki Triangle Project and provide the following comments:

- a. There are no US Army Corps of Engineers requirements that are applicable to the proposed project.
- b. The proposed project site lies in an area of 100-year shallow flooding of two feet average depth according to the preliminary flood insurance study for the Waikiki area by the US Federal Emergency Management Agency, Federal Insurance Administration. The 100-year flood refers to an event having a one percent chance of being equalled or exceeded in any given year. Consideration should be given to minimizing the flooding potential for the proposed project such as elevating the structure above the base flood elevation and flood proofing utilities.

Thank you for allowing us to comment on the EIS Preparation Notice for the subject project.

Sincerely yours,

KISUK CHEUNG
 Chief, Engineering Division

CF:
 Mr. Tyrone Kusao, Director
 Department of Land Utilization
 City and County of Honolulu
 650 South King Street
 Honolulu, HI 96813

**ENVIRONMENTAL
 COMMUNICATIONS
 INC.**

F. J. RODRIGUEZ,
 PRESIDENT

January 25, 1980

Mr. Kisuk Cheung, Chief
 Engineering Division
 Department of the Army
 U.S. Army Engineer District, Honolulu
 Building 230
 Fort Shafter, Hawaii 96858

Dear Mr. Cheung:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

Thank you for your letter of January 4, 1980, commenting on the above-mentioned EIS Preparation Notice. We will include in the EIS the information provided on flooding; building codes and flood-proofing measures will be included into the project's design as required.

Very truly yours,

F. J. Rodriguez
 F. J. Rodriguez

FJR/lka

cc: Department of Land Utilization
 Environmental Quality Commission
 Jo Paul Rognstad
 L. Robert Allen

JAN 7 1980



University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2559 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 948-7381

Office of the Director

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

Dear Mr. Rodriguez:

Environmental Impact Statement Preparation Notice
Proposed Waikiki Project

The Environmental Center has received the above cited preparation notice.
Although we have no comments to make at this time, we look forward to reviewing
the draft Environmental Impact Statement, when it becomes available.

Thank you for sending us the preparation notice.

Yours truly,

[Signature]

Doak C. Cox
Director

DCG/cyy

cc: Barbara Vogt
Elizabeth Cunningham

[Signature]

January 2, 1980

AN EQUAL OPPORTUNITY EMPLOYER

JAN 4 1980

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
550 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK P. PASE
MAYOR



WALLACE MIYAHIRA
DIRECTOR AND CHIEF ENGINEER

ENV 79-418

December 27, 1979

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

Dear Mr. Rodriguez:

Subject: EIS Consultation for the Proposed
Waikiki Triangle Project,
Honolulu, Hawaii

The EIS for the subject project should address existing street
conditions and any proposed improvements within the street
right-of-way. Any street setbacks as shown in the Development
Plan or DLUM should be noted.

Sewers are available and adequate to serve the proposed
development.

Very truly yours,

[Signature]

WALLACE MIYAHIRA
Director and Chief Engineer

cc: Div. of Engineering (Control Section)
Div. of Wastewater Management (Planning
Section)

JAN 4 1980

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ /
PRESIDENT

GEORGE B. HAYASHI
SECRETARY

January 25, 1980

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

Dear Mr. Miyahira:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

This is in response to your comments of December 27, 1979 on the above-mentioned EIS Preparation Notice. The EIS will address your concerns on the following:

- (1) existing street conditions,
- (2) proposed street improvements (within the street right-of-way), and
- (3) identify the street setbacks as noted in the Development Plan.

Thank you for your review and comments.

Very truly yours,

F. J. Rodriguez
F. J. Rodriguez

FJR/ika

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rogstad
L. Robert Allen



STATE OF HAWAII
DEPARTMENT OF SOCIAL SERVICES AND HOUSING
HAWAII HOUSING AUTHORITY
P. O. BOX 1789
HONOLULU, HAWAII 96817

FRANKLIN F. SIMS
EXECUTIVE DIRECTOR

WILLIAM A. HALL
ASST. EXEC. DIRECTOR

IN REPLY REFER

December 27, 1979

NO. 0-128.1/3126

Environmental Communications Inc.
1152 Bishop Bldg., Suite 508
P.O. Box 536
Honolulu, Hawaii 96809

Attention: Mr. F. J. Rodriguez, President
Gentlemen:

Subject: Waikiki Triangle Project

Your letter of December 7, 1979 addressed to the Department of Social Services and Housing was referred to us for answer. Our review of the subject project concludes that it will have minimum impact on this agency's programs.

Thank you for allowing this agency to review and comment on the proposed project.

Sincerely,

HAROLD I. KURIHARA
HAROLD I. KURIHARA
Development Administrator

cc: Dept. of Land Utilization
DSSH-PERS

JAN 2 1980

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
450 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK P. FASH
MANAGER



RAMON DURAN
DIRECTOR

F. J. RODRIGUEZ
PRESIDENT

ENVIRONMENTAL
COMMUNICATIONS
INC.

January 25, 1980

December 21, 1979

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

Dear Mr. Rodriguez:

**SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
FOR THE PROPOSED WAIKIKI TRIANGLE PROJECT**

The proposed business/commercial use of this property will not have any impact on our public park facilities in this area. However, development of a street tree and landscape plan will be required to meet our Department's requirements.
Warm regards.

Sincerely,

Ramon Duran
RAMON DURAN, Director

RD:ls

cc: Department of Land Utilization

Mr. Ramon Duran, Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Duran:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

This is in response to your comments of December 21, 1979 on the above-mentioned EIS Preparation Notice. As indicated in your comments, the developer must provide a street tree and landscape plan to meet your Department's requirements. This information will be incorporated into the EIS.

We appreciate your review and response to the EIS Preparation Notice.

Very truly yours,

F. J. Rodriguez

F. J. Rodriguez

FJR/Ika

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rognstad
L. Robert Allen

DEC 28 1979

GEORGE R. ARYOSHI
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3078
HONOLULU, HAWAII 96801

December 21, 1979

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

Dear Mr. Rodriguez:

Subject: Request for Comments on Proposed Environmental Impact Statement (EIS)
for the Proposed Waikiki Triangle Project

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.

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,

James S. Kimagai

For JAMES S. KIMAGAI, Ph.D.
Deputy Director for
Environmental Health

cc: Department of Land Utilization
City & County of Honolulu

DEC 27 1979

BUILDING DEPARTMENT
CITY AND COUNTY OF HONOLULU

HONOLULU MUNICIPAL BUILDING
480 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK F. PAH
CLERK

GEORGE A. L. YUEN
DIRECTOR OF HEALTH
Assistant: Mr. Moku-A-O-...
Deputy Director of Health
Henry W. Thompson, M.A.
Deputy Director of Health
James S. Kimagai, Ph.D., P.E.
Deputy Director of Health

In reply, please refer to
File # EPHS - 55

December 20, 1979

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

Dear Mr. Rodriguez:

Subject: EIS for the Proposed Waikiki
Triangle Project
Tax Map Key: 2-6-14: 39-56, 59

This is in answer to your letter dated December 7, 1979 requesting our comments on the initial EIS notice for the subject project.

Since our permit approval process is strictly ministerial, this department does not have any comments concerning the environmental impact of this project.

Very truly yours,

Howard H. Shina

HOWARD H. SHINA
Director and Building Superintendent

HH:ka

DEC 27 1979



GEORGE R. ARITYOSHI
Governor

DEPARTMENT OF TAXATION
STATE OF HAWAII

GEORGE FREITAS
Director
Wallace Aoki
Director
DEPARTMENT OF LAND UTILIZATION

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA
HONOLULU, HAWAII 96843



FRANK F. FASI, Mayor
YOSHIE H. FUJIMAKA, Chairman
DAT UDON FANG, Vice Chairman
HYOKICHI HIGASHIONNA
TERESTA R. JOBINSKY
WALLACE S. MITAHIRA
ROBERT A. SONZA
CLAUDE I. YAMAMOTO

December 19, 1979

KAZU HAYASHIDA
Manager and Chief Engineer

Honolulu, Hawaii
December 20, 1979

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

Dear Mr. Rodriguez:

This is in reference to your request for our comments on your Environmental Impact Statement Preparation Notice for the Proposed Waikiki Triangle Project.

We have no comment to offer on this matter since property assessment or taxation is merely the valuing of all real properties at a given time (January 1) after considering all the adverse and beneficial value factors affecting the properties.

Very truly yours,

GEORGE FREITAS
Director of Taxation

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

Dear Mr. Rodriguez:

Subject: Your Letter of December 7, 1979
on the Proposed Waikiki Triangle
Project

We have no objections to the project. However, the developer will be required to submit a site development plan (showing the proposed development, estimated water demands, etc.) and construction plans for our review and approval.

Also, water development charges for source, storage, and transmission facilities are applicable to the project.

Should you have questions or require additional information, please call Lawrence Whang at 548-5221.

Very truly yours,

Kazu Hayashida
per KAZU HAYASHIDA
Manager and Chief Engineer

cc: Dept. of Land Utilization

DEC 24 1979

DEC 24 1979

ENVIRONMENTAL
COMMUNICATIONS
INC.

January 25, 1980

Mr. Kazu Hayashida, Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813

Dear Mr. Hayashida:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

This is in response to your comments of December 19, 1979 on the above-mentioned EIS Preparation Notice. We appreciate the information provided on the potable water considerations for the proposed project. All potable water demands will be coordinated between the project's engineering consultant and your office to insure compliance with applicable code requirements. This EIS will note that the detailed project plans must be reviewed and approved by the Board of Water Supply.

We appreciate your expeditious review and reply on this EIS Preparation Notice.

Very truly yours,

F. J. Rodriguez

F. J. Rodriguez

FJR/lla

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rogustad
L. Robert Allen

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

1488 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96814 AREA CODE (808) 955-8111

FRANK P. FAH
GATOR



December 18, 1979

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 Waikiki Triangle Project

In response to your query of December 7, 1979 regarding the proposed Waikiki triangle project, the concerns of the Honolulu Police Department in general are with security for persons and property during and after construction. In particular, we are concerned that:

1. The construction process and the completed complex not present a hazard to pedestrians wishing to transit the area. Sidewalks must be adequate to accommodate the pedestrian traffic without undue interruption or threat from vehicles (e.g., those entering and exiting the Royal Aieha and other buildings in the area).
2. The construction process and the completed complex not present a hazard to vehicles transiting the area. Care must be taken not to restrict the busy thoroughfares bordering the triangle any more than necessary, particularly during rush hours. In addition, driveways must be located and designed so that they are adequate to handle the volume of traffic into and out of the complex, so that they are as far as possible from points of congestion on the surrounding streets (e.g., traffic lights at intersections), and so that vehicles entering and leaving the complex are visible in all directions from some distance away.

DEC 19 1979

Mr. F. J. Rodriguez

-2-

December 18, 1979

3. The completed complex be designed and staffed so as to provide security for personnel, property, vehicles in the parking area, and so forth.

We hope that the above information will be of use to you.

Sincerely,

FRANCIS KEALA
Chief of Police

By 
EARL THOMPSON
Assistant Chief
Administrative Bureau

EFJ:es

cc: Department of Land Utilization
City and County of Honolulu

ENVIRONMENTAL
COMMUNICATIONS
INC.

January 25, 1980

F. J. RODRIGUEZ,
PRESIDENT

Mr. Francis Keala, Chief
Police Department
City and County of Honolulu
1455 S. Beretania Street
Honolulu, Hawaii 96814

Dear Mr. Keala:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

This is in response to your comments of December 18, 1979 on the above-mentioned EIS Preparation Notice. We would like to provide the following dispositions to your concerns:

- (1) Pedestrian traffic will be safely accommodated during the construction period; this will be stated in the EIS.
- (2) The traffic consultant has completed the traffic impact study and has addressed these concerns. The location of entrances and exits will be designed so as to avoid traffic congestion and not obstruct sight lines.
- (3) Building security will be provided as necessary for the protection of the occupants and property.

We appreciate your expeditious review and response to this EIS Preparation Notice.

Very truly yours,



F. J. Rodriguez

EJR/ika

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rognstad
L. Robert Allen

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ,
PRESIDENT

GEORGE R. AMYOSH
DIRECTOR

OFFICE OF BUSINESS SERVICES



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2240
HONOLULU, HAWAII 96804

December 12, 1979

January 25, 1980

Mr. Boniface K. Aiu, Fire Chief
Fire Department
City and County of Honolulu
1455 S. Beretania Street, Room 305
Honolulu, Hawaii 96814

Dear Mr. Aiu:

Subject: EIS Preparation Notice for the Proposed Waikiki Triangle Project

This is in response to your comments of December 13, 1979 on the above-mentioned EIS Preparation Notice. We will include information provided in the EIS being prepared; additionally we will indicate that all five fire codes must be met in the design and construction of the proposed project.

We appreciate your expeditious review and response on this matter.

Very truly yours,

F. J. Rodriguez

FJR/ika

cc: Department of Land Utilization
Environmental Quality Commission
Jo Paul Rogstad
L. Robert Allen

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

Dear Mr. Rodriguez:

SUBJECT: Environmental Impact Statement Preparation Notice
Waikiki Triangle Project

We have reviewed the proposed subject project and have no comments to offer at this time.

Thank you for the opportunity to review and comment on the project.

Sincerely,

JAMES E. EDINGTON
Assistant Superintendent

JEE:HL:jj

cc: Dept. of Land Utilization
Honolulu District

DEC 18 1979

COPIES OF THE RESPONSES RECEIVED DURING THE EIS REVIEW PERIOD

<u>Agency</u>	<u>Page</u>
1. State Department of Agriculture-----	47
2. State Department of Defense-----	47
3. State Department of Accounting and General Services-----	48
4. Department of the Army, Hawaii Headquarters-----	48
5. Naval Base Pearl Harbor-----	49
6. Department of Housing and Community Development, City and County of Honolulu-----	49
7. State Department of Health-----	50
8. Disposition to th Department of Health-----	51
9. Police Department, City & County of Honolulu-----	51
10. Fire Department, City & County of Honolulu-----	52
11. State Department of Transportation-----	52
12. Department of Parks & Recreation, City & County of Honolulu-----	53
13. State Department of Land and Natural Resources-----	53
14. Board of Water Supply, City & County of Honolulu-----	54
15. Department of General Planning, City & County of Honolulu-----	55-56
16. Disposition to the Department of General Planning-----	56
17. Department of Land Utilization, City & County of Honolulu-----	57
18. Disposition to the Department of Land Utilization-----	58
19. State Department of Planning and Economic Development-----	58
20. Department of the Army, U.S. Army Engineer District-----	59
21. Disposition to the Department of the Army-----	59
22. Soil Conservation Service, U.S. Department of Agriculture-----	60
23. Fish and Wildlife Service, U.S. Department of the Interior-----	60
24. Department of Transportation Services, City & County-----	61
25. Disposition to the Department of Transportation Services-----	62-63
26. Leslie K. Jones, Legislative Assistant to State Representative Kinau Kamalii, House of Representatives, Tenth Legislature-----	64
27. Disposition to Leslie K. Jones-----	65
28. Life of the Land-----	66-67
29. Disposition to Life of the Land-----	67-68
30. American Lung Association of Hawaii-----	69
31. Disposition to the American Lung Association of Hawaii-----	69



JOHN FARIAS, JR.
CHAIRMAN/BOARD OF AGRICULTURE
YUNO KITAGAWA
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF AGRICULTURE
1400 SOUTH KING STREET
HONOLULU, HAWAII 96814

February 13, 1980

MEMORANDUM

To: Department of Land Utilization, C&C of Honolulu
Subject: EIS for Maikiki Triangle Project

The Department of Agriculture has reviewed the subject environmental impact statement and has no comments to offer. The EIS document is returned herewith.

Thank you for the opportunity to comment.

JOHN FARIAS, JR.
Chairman, Board of Agriculture

cc: Environmental Communications, Inc. ✓

FEB 15 1980

State of Hawaii
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 Diamond Head Road
Honolulu, Hawaii 96816

13 FEB 1980

HIRING

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

Gentlemen:

Maikiki Triangle Project

We have received a copy of the "Maikiki Triangle Project" Environmental Impact Statement and have no comments to offer at this time. The Environmental Impact Statement is being forwarded to the Environmental Quality Commission under separate cover.

Sincerely,

 Signed

WAYNE R. TOMOVASHI
Major, CE, HAWING
Contr & Eng'r Officer

cc: Environmental Comm., Inc. ✓

FEB 14 1980

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY SUPPORT COMMAND, HAWAII
FORT SHAFTER, HAWAII 96858

19 FEB 1980

AFZV-BHE-E

(P) 1165.0

FEB 14 1980

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

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

Gentlemen:

Subject: Environmental Impact Statement
for the Waikiki Triangle Project

Gentlemen:

The Environmental Impact Statement for the Proposed Waikiki Triangle Project has been reviewed and we have no comments to offer. There are no Army installations or activities in the vicinity which will be affected by the proposed project.

Thank you for this opportunity to review and comment on the subject project.

The project will not have any adverse environmental effect on any existing or planned facilities serviced by our department.

Sincerely yours,

Very truly yours,

RIKIO NISHIOKA
State Public Works Engineer

NI:jm

cc: Environmental Communications

Original signed by
FRANK D. STEARNS
COL, EM
Director of Engineering and Housing

Copies Furnished:
Environmental Communications, Inc.
P.O. Box 336
Honolulu, Hawaii 96809

Office of Environmental Quality Commission
State of Hawaii
550 Hialehua Street, Room 301
Honolulu, Hawaii 96813

FEB 19 1980

FEB 21 1980

HEADQUARTERS
NAVAL BASE PEARL HARBOR
BOX 110
PEARL HARBOR, HAWAII 96860

REPLY REFER TO:
002A:AMH
Ser 385

20 FEB 1980

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813
PHONE 473-4141



FRANK C. FASI
MAYOR
EDWARD Y. MURATA
MANAGING DIRECTOR

BARRY CHUNG
DIRECTOR
MYRA M. LARSEN
DEPUTY DIRECTOR

February 22, 1980

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

Gentlemen:

Environmental Impact Statement for the
proposed Waikiki Triangle Project

The Environmental Impact Statement for the proposed Waikiki Triangle

Project forwarded by the Commission has been reviewed, and the Navy has

no comments to offer. By copy of this letter, the subject EIS has
been returned to the Commission.

The opportunity to review the EIS is appreciated.

Sincerely,

J. W. CARL
LIEUTENANT COMMANDER, CEC, USN
DEPUTY FACILITIES ENGINEER
BY DIRECTION OF THE COMMANDER

Copy to:
State EQC (w/enc1)
Environmental Communications, Inc.

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

Gentlemen:

Subject: Waikiki Triangle Project
Environmental Impact Statement

We have reviewed the Environmental Impact Statement
for the Waikiki Triangle Project and have no comment.

Very truly yours,

Barry Chung
Barry Chung

cc: Environmental Communications, Inc.
Environmental Quality Commission

FEB 21 1980

FEB 25 1980



STATE OF HAWAII
DEPARTMENT OF HEALTH

P.O. Box 3018
HONOLULU, HAWAII 96809

February 22, 1980

GEORGE A. L. YUEN
DIRECTOR OF HEALTH

ANDREW W. WENTZ, M.D., M.P.H.
Deputy Director of Health

HENRY N. THOMPSON, M.A.
Deputy Director of Health

JAMES S. KUMAGAI, Ph.D., P.E.
Deputy Director of Health

In reply, please refer to
File #HS-88

Mr. L. Robert Allen

-2-

February 22, 1980

c. The contractor must comply with the conditional use of permit as specified in the regulations and the conditions issued with the permit.

5. Traffic noise from heavy vehicles traveling to and from the construction site must be minimized and must comply with the provisions of Public Health Regulations, Chapter 44A, Vehicular Noise Control for Oahu.

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 yours,

Melvin K. KoiZumi

MELVIN K. KOIZUMI
Deputy Director for
Environmental Health

cc: ORQC
Dept. of Land Utilization

Mr. L. Robert Allen
Environmental
Communications, Inc.
P. O. Box 536
Honolulu, Hawaii 96809

Dear Mr. Allen:

Subject: Environmental Impact Statement (EIS) for Waikiki Triangle Project

Thank you for allowing us to review and comment on the subject EIS. On the basis that the project will comply with all applicable Public Health Regulations, please be informed that we have no objections to this project.

We submit the following comments for your consideration:

1. The facility must be designed to comply with the provisions of Public Health Regulations, Chapter 44B, Community Noise Control for Oahu. Noise from any equipment, such as air conditioning/ventilation units, kitchen exhaust units, and booster pumps, must be attenuated to meet the allowable noise levels of the regulations based on zoning districts.
2. We concur with the applicant's mitigative measures in the design of the parking garage to minimize tire squeals. In addition, consideration should be directed toward the reduction of noise from vehicular emissions, such as vehicle start-up and acceleration.
3. Noise associated with splashing water from the proposed fountain/waterfall plazas may create some problems in terms of annoyances for neighboring residents. Some consideration should be given towards the design of such amenity to minimize possible noise disturbances.
4. Construction activities must comply with the provisions of Public Health Regulations, Chapter 44B:
 - a. The contractor must obtain a noise permit if the noise levels from the construction activities are expected to exceed the allowable levels of the regulations.
 - b. Construction equipment and on-site vehicles or devices requiring an exhaust of gas or air must have a muffler.

FEB 26 1980

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ,
PRESIDENT

March 17, 1980

Mr. Melvin K. Koizumi, Deputy Director
for Environmental Health, State
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Mr. Koizumi,

Subject: Environmental Impact Statement for the Proposed
Waikiki Triangle Project

Your letter of February 22, 1980 on the abovementioned EIS has been reviewed. We would like to provide the following dispositions to each of your Department's comments.

1. The second paragraph of page 15 will be extended to include this information.
2. If this problem (i.e. noise from vehicle start-up and acceleration) occurs, control via warning signs or directing individuals to stop this type of activity would be more realistic.
3. The distance of the residential areas from these fountains as well as the overall noise from the streets will mask the sound of splashing water. Therefore, no problem in this regard is anticipated.
4. Items a, b, and c, will be acknowledged in the Revised EIS.
5. We will include this information on page 15, second paragraph, of the Revised EIS.

We appreciate your comments and concerns in these matters.

Very truly yours,

F. J. Rodriguez
F. J. Rodriguez

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Rogstad & Associates, Inc.

152 BISHOP BOULEVARD, SUITE 508 - P. O. BOX 516 - HONOLULU, HAWAII 96809 - TELEPHONE (808) 524-8391

February 22, 1980

TO : ROBERT B. DUNCAN, ACTING DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM : FRANCIS KEALA, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT FOR
WAIKIKI TRIANGLE PROJECT

The environmental impact statement for the Waikiki Triangle Project appears to satisfy the concerns that we had originally expressed regarding this project. We therefore have no further comments about it.

FRANCIS KEALA
Chief of Police

By EARL THOMPSON
Assistant Chief
Administrative Bureau

EFS:js

cc: Environmental Communications, Inc.

FEB 26 1980

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

1455 S. BERG AVENUE, SUITE 1, BLDG 305
HONOLULU, HAWAII 96814

FORM 1 FAS
1-1-80

U. S. A. U.
1000



February 25, 1980

TO : MR. TYRONE KUSAO, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM : BONIFACE K. AIU, FIRE CHIEF

SUBJECT: REVIEW OF ENVIRONMENTAL IMPACT STATEMENT
FOR WAIKIKI TRIANGLE PROJECT

We have reviewed the Environmental Impact Statement
for this project and have no comments to make at this time.

BKA:JAF:eya

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

Boniface K. Ai
BONIFACE K. AIU
Fire Chief

February 16, 1980

STP 8.6056

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

Dear Mr. Kusao:

Subject: Environmental Impact Statement
Waikiki Triangle Project
Waikiki, Oahu

Thank you for giving us the opportunity to review and
comment on the above-captioned statement. We have no sub-
stantive comments to offer which could improve the document.

Very truly yours,

Byokichi Higashionna
Byokichi Higashionna
Director of Transportation

ALK:jk

cc: Environmental Communications, Inc.
HWY-P

FEB 27 1980

FEB 28 1980

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
 650 SOUTH KING STREET
 HONOLULU, HAWAII 96813



FRANK P. FASB
 MAYOR

February 27, 1980

MEMORANDUM

TO : TYRONE T. KUSAO, DIRECTOR
 DEPARTMENT OF LAND UTILIZATION

FROM : RAMON DURAN, DIRECTOR

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT
 WAIKIKI TRIANGLE PROJECT
 TMK: 2-6-14: 39-56 AND 59

We have no additional comments to offer on the Environmental Impact Statement (EIS) for the Waikiki Triangle Project. The EIS has noted that the street trees and planting will be reviewed by our Department for approval.

Thank you for the opportunity to comment on the project.
 Warm regards.

RAMON DURAN, Director

RD:ls

cc: Environmental Communications, Inc.

MAR 5 1980

10:00 AM '80



GEORGE A. ANTONICH
 GOVERNOR OF HAWAII

RAMON DURAN
 DIRECTOR

RECEIVED
 100 MAR 5 AM 8:21



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 P O BOX 821
 HONOLULU HAWAII 96808

February 28, 1980

REF NO.: APO-1414

Department of Land Utilization
 City and County of Honolulu
 650 South King Street
 Honolulu, HI 96809

Gentlemen:

We have reviewed the EIS for the Waikiki Triangle project.

Our concerns have already been expressed in our letter of January 7, 1980. In addition we share the Police Department's concern about minimizing the impact of construction on pedestrians and traffic.

Very truly yours,

[Signature]
 SUSUMU OHO, Chairman
 Board of Land and Natural Resources

MAR 6 1980

COPY

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
800 SOUTH BEULAH
HONOLULU, HAWAII 96813

FRANK F. FASI, Mayor
YOSHIE H. FUJIKAWA, Chairman
DATT QUON PANG, Vice Chairman
RYOKICHI HIGASHIONNA
TERESHA R. JUBINSKY
WALLACE S. MIYAHARA
ROBERT A. SOUZA
CLAUDE T. YAMAMOTO

KAZU HAYASHIDA
Manager and Chief Engineer

February 29, 1980

TO : MR. TYRONE T. KUSAO
DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM : KAZU HAYASHIDA
BOARD OF WATER SUPPLY

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT FOR
WAIKIKI TRIANGLE PROJECT

In addition to our comments of December 19, 1979, page 47, we have to add that we cannot, at this time, make a water commitment to the project due to the State Department of Land and Natural Resources' designation of the Pearl Harbor basin. This action has made it uncertain whether we will be allowed to export additional waters from that basin to accommodate projects which will impose additional demands upon our system.

The State will be establishing pumpage limits on all our sources in the Pearl Harbor Basin by June 30, 1980. After the limits are established, we will then know whether or not our system will have excess capacity to accommodate new developments.

Should you have questions or require additional information, please call Lawrence Whang at 548-5221.

Kazu Hayashida

KAZU HAYASHIDA
Manager and Chief Engineer

cc: Environmental Communications, Inc.

jo paul rognstad, Inc.
1750 kalakaua avenue honolulu, hawaii 96826 phone 041-4417

architecture
planning
graphics
illustration
engineering
fine arts

NOTE: THIS LETTER TO THE BOARD OF WATER SUPPLY WAS SENT IN RESPONSE TO THE BOARD OF WATER SUPPLY'S LETTER OF FEBRUARY 29, 1980.

March 5, 1980

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
630 South Beretania Street
Honolulu, HI 96813

Dear Mr. Hayashida:

Re: Request for Water Availability

Below is information on a proposed building for which we are requesting water availability. There are no preliminary plans as yet.

- a. TMK: 2-6-14: 39, 41, 43, 44, 49, 50, 52, 53, 54, 55, 56, 59
Location: Waikiki
- b. Acreage: 124,419 sq. ft.
Type of development: Office Building
- c. No. of units: 350
- d. Location of Access: Kalakaua, Ala Mai and McCully Streets
- e. Elevation: 28 Floors; 320 feet
- f. Building/Street layout: See attached
- g. Developer: Leroy Robert Allen
- g. Estimated Water Demand: 50,000 GPD

Very truly yours,

JO PAUL ROGNSTAD AND ASSOCIATES, INC.

Jo Paul Rognstad

Jo Paul Rognstad

JPR/ff

MAR 6 1980

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



GEORGE S. MORIGUCHI
CHIEF PLANNING OFFICER

DGP2/80-377 (CT)

February 29, 1980

MEMORANDUM

TO : MR. TYRONE T. KUSAO, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM : GEORGE S. MORIGUCHI, CHIEF PLANNING OFFICER

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT FOR WAIKIKI
TRIANGLE PROJECT, DATED FEBRUARY 1980
COMMENTS REQUESTED FEBRUARY 11, 1980

We offer the following comments.

Water - The impact statement indicates that "The Board of Water Supply has indicated that potable water and water services are available to the project site" (p. 16, par. 3).

This statement is not contained in the Board of Water Supply letter of December 19, 1979 to Environmental Communications, Inc., who prepared the EIS.

Although the developer must submit "a site development plan (showing the proposed development, estimated water demands, etc.) and construction plans for (BWS) review and approval," the EIS does not provide estimates of water demand for the project.

The water demand for the two fountain/waterfall plazas should be estimated separately from other aspects of the project.

Traffic - The EIS indicates that with proposed new facilities and improvements to the existing system, "the future highway system will mitigate at a future time, any possible undesirable traffic congestion" (p. 21, Section II.T(2)).

Later, it is indicated that the one-way "redistribution of traffic illustrates the fact that there are alternatives to the solution of the traffic problem without major improvements of the highway system" (p. 21, Section II.T(6)).

Mr. Tyrone T. Kusao
Page 2

These statements are somewhat contradictory.

It may be true that the one-way traffic pattern made dramatic improvements in traffic flow as compared to the two-way system. But since the conversion to a one-way pattern has already been made, it is not readily evident that similar drastic improvements in traffic flow are possible without major improvements. Unless Environmental Communications, Inc. can elaborate on the alternatives, the statement should be deleted.

Highway System Improvements - Among the highway system improvements are the Waikiki By-pass and the University Avenue Extension across the Ala Wai Canal (Appendix III, p. 7-7, et. seq., and Fig. 3, p. 7-9).

The EIS indicates

"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. This major by-pass route is being restudied by the City Department of General Planning.

"The State Department of Transportation, in cooperation with the City Department of Transportation Services, is examining a makai High Occupancy Vehicle (HOV) travelway which closely follows the by-pass alignment set forth in the Waikiki Special Design District Plan" (p. III-10).

There are several inaccuracies in the above statements taken from the EIS.

1. The Waikiki by-pass is not an element of the Waikiki Special Design District Plan.
2. The makai freeway connecting Ala Moana Boulevard to H-1 has been deleted from the City's Detailed Land Use Map and Development Plan for the Waikiki and Nanea-Moiliili areas under Ordinance 77-94, September 27, 1977.
3. The University Avenue Extension to Waikiki has been discussed for years, but is not shown on the adopted BLDG and DP for the area.
4. The by-pass route is not being restudied by the Department of General Planning.

MAR 3 1980

Mr. Tyrone T. Kusao
Page 3

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ
PRESIDENT

March 17, 1980

5. So far as we know, City DOTS staff are not involved in any cooperative study of the makai travelway. Thank you for affording us the opportunity of reviewing the impact statement.

Mr. George S. Moriguchi, Chief Planning Officer
Department of General Planning,
650 South King Street
Honolulu, Hawaii 96813


GEORGE S. MORIGUCHI
Chief Planning Officer

Dear Mr. Moriguchi,
Subject: Environmental Impact Statement for the Proposed
Maikiki Triangle Project

GSM:fmt

We have received and reviewed your comments of February 29, 1980. Dispositions to your comments are provided below.

cc: Environmental Communications, Inc.

1. Water - in response to your query on water availability, we are providing correspondence from the architect and also the Board of Water Supply that addresses the subject of water availability. Corrections to the narrative portions of the EIS will be made accordingly. A final decision as to the inclusion of the fountains as an amenity is still under review. With the concerns over adequate availability of water may preclude this aesthetic item.
2. Traffic and Highway System Improvements - Henry I. Au, traffic consultant has reviewed each of your comments relating to these concerns. Au's responses to these comments (dated March 5, 1980) are attached.

Thank you for your comments; we hope that we have adequately responded to your concerns. Where needed, information on your concerns will be included in the Revised EIS.

Very truly yours,



F. J. Rodriguez

Enclosures NOTE: FOR ENCLOSURES SEE - page 54 (Water)
and Appendix III, Pages T-1 to T-V.

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Rogstad & Associates

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
850 SOUTH KING STREET
HONOLULU, HAWAII 96813 • (808) 923-4411



FRANK P. CASI
DIRECTOR

TYRONE T. KUSAO
DIRECTOR

79/MSDD-23(SM)

February 29, 1980

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

Dear Mr. Rodriguez:

Draft Environmental Impact Statement
Waikiki Triangie

We have reviewed the subject document and have the following comments to offer:

1. General Comment: In order to provide maximum justification for the selected design alternative, it is felt that a view plane study should be undertaken. This would entail views from different perspectives (e.g., from Kalakaua Avenue, Ala Wai Boulevard, and McCully Street) toward the project site with the building envelope superimposed on the views. An acceptable view plane study was undertaken for the Hilton Tapa Tower project.

2. General Comment: In the review of the Waikiki Special Design District application, the following items will receive additional scrutiny:

a. Reference: Page 27

Comment: Section 1.42-g of the EIS Regulations requires that other feasible design and siting alternatives be presented, even if they are deemed more costly. Justification should accompany each alternative. It must be stressed that the best design should be sought for this project, due to the sensitive location of the site as a "gateway area" to Waikiki.

b. The spacing of the ingress and egress points along Ala Wai Boulevard--the Department of Transportation Services will be asked to study this aspect in depth.

Mr. Fred J. Rodriguez
Page 2

- c. Alternative locations for the office/commercial tower on the site to soften its visual impact at the confluence of Kalakaua Avenue and Ala Wai Boulevard.
- d. The adequacy of landscaping, i.e., 50% of the setback area to be landscaped, and the usage of two fountain/waterfall plazas.
- e. The appropriateness of certain building materials, i.e., the use of reflective glass vs. other treatments.

We hope that these comments will provide useful input to this development. If there are further questions regarding this matter, please contact Mr. Sampson Mar of our staff at 523-4077.

Very truly yours,

TYRONE T. KUSAO
Director of Land Utilization

TTK:ey

MAR 3 1980

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ
PRESIDENT

March 17, 1980

Mr. Tyrone T. Kusao, Director
Department of Land Utilization,
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kusao,

Subject: Environmental Impact Statement for the Proposed
Waikiki Triangle Project

Your Department's letter of February 29, 1980 commenting of the
abovementioned EIS has been reviewed by the architectural con-
sultant, Jo Paul Rognstad. In the attached letter (dated March 5,
1980 and addressed to Environmental Communications, Inc.) Mr. Rognstad
discusses his rationale for the selection of the building's location,
design, and landscaping plan.

Additionally, the suggestion that a view plane study be undertaken has
been covered with the applicant and retained architect. We note in
Ordinance No. 4671 (enabling legislation for this parcel) the discussion
on view plane impact is explicit in the manner in which this subject is
treated. We would request your favorable reconsideration on this matter
and feel that during the SDD portion of the project review, the subject
can be further analyzed to our mutual satisfaction.

Thank you for your comments.

NOTE: FOR COPY OF JO PAUL ROGNSTAD'S LETTER
SEE APPENDIX IV.

Enclosure

cc: L. Robert Allen
Jo Paul Rognstad & Associates, Inc.

1152 BISHOP BUILDING, SUITE 508 • P. O. BOX 536 • HONOLULU HAWAII 96809 • TELEPHONE (808) 521-8394

March 3, 1980

Ref. No. 0768

Mr. Tyrone Kusao, Director
Department of Utilization
City and County of Honolulu
Honolulu, Hawaii 96813

Dear Mr. Kusao:

Subject: Environmental Impact Statement (EIS) for the Proposed
Waikiki Triangle Project, Honolulu, Hawaii

We have reviewed the subject EIS and have no comments to offer.
Thank you for the opportunity to review this document.

Sincerely,



Hideto Kono

cc: Environmental Communications, Inc. ✓

MAR 6 1980



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 230
FT. SHAFTER, HAWAII 96859

FODED PV

3 March 1980

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

Dear Mr. Kusao:

We have reviewed the Environmental Impact Statement (EIS) for the proposed Waikiki Triangle Project and provide the following comments: There are no U. S. Army Corps of Engineers requirements that are applicable to the proposed project. The proposed project site lies in an area of 100-year shallow flooding of two feet average depth according to the preliminary flood insurance study for the Waikiki area by the U.S. Federal Emergency Management Agency, Federal Insurance Administration. The 100-year flood refers to an event having a one percent chance of being equalled or exceeded in any given year. Consideration should be given to minimizing the flooding potential for the proposed project such as elevating the structure above the base flood elevation and floodproofing utilities. Thank you for the opportunity of commenting on the EIS for subject project.

Sincerely,

KISUK CHEUNG
Chief, Engineering Division

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

Environmental Quality Commission
Office of the Governor
550 Halekaunila Street, Room 301
Honolulu, Hawaii 96813 w/EIS

MAR 5 1980

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ,
PRESIDENT

March 17, 1980

Mr. Kisuk Cheung
Chief, Engineering Division
Department of the Army,
U.S. Army Engineer District, Honolulu
Building 230
Fort Shafter, Hawaii 96858

Dear Mr. Cheung,

Subject: Environmental Impact Statement for the Proposed
Waikiki Triangle Project

Thank you for your response of March 3, 1980 on the above-mentioned EIS. We note that your information and concerns on flood inundation are discussed on pages 15 and 16 of the EIS. Consideration to mitigating the impact of flooding has been given; the second paragraph of page 16 states:

"The building will be elevated above the present ground level. Additionally, vehicular entrance/exits to the basement area will include drainage features so that flooding in the basement will not occur."

We appreciate your concern in this matter.

Very truly yours,

F. J. Rodriguez
F. J. Rodriguez

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Rognstad & Associates, Inc.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

P.O. Box 50006 Honolulu, Hawaii 96850

March 6, 1980

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

Dear Sir:

Subject: Environmental Impact Statement for
the proposed **Maliki Triangle Project**
February, 1980

We have reviewed the above mentioned Environmental Impact Statement
and have no comments to offer at this time.

Thank you for the opportunity to review this project.

Sincerely,


Otis M. Gryde
District Conservationist

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

MAR 7 1980



United States Department of the Interior

FISH AND WILDLIFE SERVICE

100 ALA MOANA BOULEVARD
P.O. BOX 50187
HONOLULU, HAWAII 96850

March 7, 1980

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

Dear Sir:

We have reviewed the subject Environmental Impact Statement
(EIS) and offer the following comments.

The proposed action will have little, if any, adverse impact
on fish and wildlife resources in the area. In view of the,
we have no comments to offer.

We appreciate this opportunity to comment.

Sincerely yours,


Maurice B. Taylor
Field Supervisor
Division of Ecological
Services

cc: Environmental Communications, Inc.

Save Energy and You Save America!

MAR 10 1980



DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
HONOLULU MUNICIPAL BUS DIVISION
1115 KULUWAHANA STREET
HONOLULU, HAWAII 96813



FRANK F. FARI
MAYOR

March 6, 1980

DIRECTOR
TE2/80-376

COPY

MEMORANDUM

TO : TYRONE T. KUSAO, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM : AKIRA FUJITA, ACTING DIRECTOR

SUBJECT: WAIKIKI TRIANGLE ENVIRONMENTAL IMPACT STATEMENT

We offer the following comments:

1. The traffic consultant's comments regarding the future highway system are not based on current policy. The future system map shows Waikiki by-pass route and the University bridge across Ala Wai Canal. The write-up implies that these facilities will be built, thus improving traffic capacity. This statement is not valid and is misleading.
2. The Mass Transportation section contains erroneous information. Bus service on Kalakaua Avenue fronting the project site has an average headway of four minutes, peak hour and five minutes, off-peak. There is another bus route (#4) traveling makai on McCully Street, left Kalakaua Avenue, left Kuhio Avenue. The return route is left Ala Wai Boulevard, right Kalakaua Avenue, right Pau Street, Kapolei Boulevard. Average headway is fifteen minutes, peak and off-peak periods. The statement of "Adequate mass transit transportation service is available to the Waikiki District" does not appear to be justified by the information presented in one paragraph.

Tyrone T. Kusao, Director
Page two

3. We recommend that the developer provide a bus shelter and litter container for the bus stop located on Kalakaua Avenue fronting the project site.
4. The passenger loading zones on site should be designed to accommodate the projected demand. No provisions for curbside loading zones can be provided on adjacent streets.
5. There is no discussion on how the 134 cars from the Royal Aloha Condominium will be accommodated during the twenty-four month construction period.
6. The statement to the effect that the one-way system proved that there are alternatives aside from physical improvements is groundless since no alternatives are offered.
7. The internal circulation may cause problems on street due to the crossing pattern of internal driveways.
8. The traffic report does not discuss the project's traffic load in and out during peak hours and the effect of these movements on traffic flow.
9. The freight loading zone seems inadequate and poorly located. A discussion on the commercial developments freight loading requirements would be helpful.
10. The traffic report should also discuss pedestrian traffic and its impact on street crossing, especially at the End Road-Kalakaua Avenue intersection.

cc: Environmental Communications, Inc.

bcc: Mass Transit
D-1

AKIRA FUJITA
Acting Director

MAR 10 1980

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ,
PRESIDENT

March 17, 1980

Mr. Akira Fujita, Acting Director
Department of Transportation Services,
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Fujita,

Subject: Environmental Impact Statement for the Proposed
Waikiki Triangle Project

Thank you for your response of March 6, 1980 on the abovementioned
EIS. We have reviewed each of your concerns and would like to pro-
vide the following dispositions.

1. Henry Au, the traffic consultant provided the following informa-
tion relating to this comment. As stated on page T-7 of the
Traffic Impact Statement, "The future highway system is set forth
in the Waikiki Special District Plan and ...". What is confusing
is that the Waikiki Special Design District Ordinance is a
separate ordinance and although Ordinance 77-94, effective
September 1977 deleted the Waikiki by-pass route, Ordinance
77-94 did not amend the Waikiki Special Design District Ordinance
by amending Exhibit "g" (Circulation Plan) to delete the
Waikiki by-pass route and the University Avenue pedestrian
bridge across the Ala Wai Canal. Exhibit "g", therefore, is
still in effect, although it is now inconsistent with current
policy. The Waikiki by-pass route and the University Avenue
bridge across the Ala Wai Canal were shown on the future highway
system plan only because these are shown on Exhibit "g" of the
Waikiki Special Design District Ordinance.

There was no attempt to imply that these facilities will be
built, thus improving highway capacity. The implication is that
if these facilities are built, although not necessary, it will
mitigate at a future time, any possible undesirable traffic
congestion. The following statement is set forth on page
T-23 of the Traffic Impact Statement: "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 District."

2. This information on mass transit will be incorporated into the
Revised EIS.

Mr. Akira Fujita, Acting Director
March 17, 1980
Page Two

3. The developer concurs that a bus shelter and litter container be
provided. The architect will work details out with DLR.
4. The architect will provide for passenger loading zones on the site.
The location will be at ground level, convenient to the building's
entrances.
5. The parking spaces for Royal Aloha will be provided onsite subject
to periodic relocation onsite during the construction phase.
6. The detailed elaboration of the various alternatives was not
included in the Traffic Impact Statement with the purpose in mind
to simplify the study, but at the same time to include those
elements that are significant and pertinent to the evaluation.
However, all alternative solutions as it affects traffic genera-
tion have been considered. The usual situation in the solution
of traffic congestion problems is to meet the need for increased
roadway capacity and alternatives are limited to those providing
greater capacity. These alternatives for providing greater
capacity usually include:

- (a) Widening existing streets or adding lanes.
- (b) Constructing a new parallel facility or a major bypass.
- (c) Improving traffic operations through channelization,
reversible lanes, signal timing and other traffic engineer-
ing control devices.
- (d) Prohibiting left turns and curb parking.
- (e) Rerouting traffic through a system of one-way streets to
reduce congestion and delay, thereby increasing the ca-
pacity of the existing street system.

Other alternatives exist but are often not considered. These
are not only the most effective alternatives but are also the
most acceptable in an environmental way. These alternatives
are as follows:

- (a) Balancing of land uses with highway and transportation
facilities through planning and zoning.
- (b) Inhibiting the use of the automobile by regulating,
adjusting quantity and pricing parking to the extent
that generated traffic will not exceed the desirable
capacities of the streets and highways.
- (c) Changing urban design to provide for higher densities,
more open spaces and decentralization of hotel and resort
facilities from Waikiki.
- (d) Improving the public transportation system serving the
Waikiki District.

Other alternatives, but showing little promise of achieving the objectives, include:

- (a) Levying a toll for motorists entering and leaving the Waikiki District.
- (b) Limiting the number of automobiles in the Waikiki District.
- (c) Requiring a special permit to drive in the District.
- (d) Prohibiting automobiles in the District.

These latter alternatives, although drastic in their approaches, require the least capital investment.

All of the alternatives enumerated are not narrow in scope and include all worthwhile possibilities to cope with the adverse effects of traffic and environmental consequences brought about by developments in Waikiki. The various alternatives broaden the range of approaches possible and help to indicate their appropriateness.

7. While there may be some cross pattern of internal driveways, the driveways to the street do not have the crossing pattern and are located as far as possible from the intersections in order to provide maximum storage and maneuver space. Whatever problems exist will be internal, and will not affect highway traffic. Furthermore, since the internal traffic consist of slow moving parking traffic, the traffic problem will be minor.

8. As set forth on page T-20 of the Traffic Impact Statement, "the peak hour volumes are 941 for McCully Street at Kalakaua Avenue, 1,404 for Ala Wai Boulevard at Kalakaua Avenue, and 1,339 for Kalakaua Avenue at McCully Street. All of these streets, therefore, have considerable excess capacity and should be able to accommodate the proposed development without any adverse traffic effects."

The traffic generated by the project will be dependent on the number of parking spaces available. The total number of parking spaces to be provided will be 700, or which 135 parking spaces will be set aside for the Royal Aloha Condominium located nearby across the street on McCully Street and Ala Wai Boulevard. Unlike a shopping center these parking spaces (as indicated on page T-24 of the Traffic Impact Statement) will be primarily for the various tenants of the project. With primarily tenant parking on the premises the project will generate very few automobile traffic. The parking will be all day parking and the turnover will be quite low.

Because of the one-way operation of the street system, entrances and exits to the parking facility will be located on all three frontages for multi-access to facilitate traffic movement and to minimize traffic congestion. The project's traffic in and out during peak hours will have minimal effect.

9. The building will be located entirely within the premises with sufficient setback from the street frontages, and unlike the older developments whereby loading and unloading must be made on the street fronting the establishment, freight loading and unloading for this project could be made within the premises, outside the loading zone or in the parking lot. A freight loading zone, therefore, is not as critical. Although the freight loading zone complies with the requirements of the Comprehensive Zoning Code, consideration will be given to revising the plan to relocate the loading zone to a more suitable location.

10. The individual actions of pedestrians make it extremely difficult to provide or design adequate facilities for the safety of pedestrians. Even though unsafe, pedestrians prefer crossing at street grade in the shortest path possible. They often cross anywhere they wish and do not use the crosswalks where provided. They are even more reluctant to use any pedestrian facility that requires changing grade when crossing, such as stairways, pedestrian overpasses and underpasses. Consequently, it is considered that adequate provisions for pedestrians have been made when adequate sidewalks have been provided and there are sufficient signalized intersections within reasonable distances to permit pedestrians to safely cross the streets.

Sidewalks are a requirement and integral part of city streets. There are, therefore, adequate sidewalks within the vicinity of the project site and sufficient signalized intersections within reasonable distances to permit pedestrians to safely cross the streets. Signalized intersections are located at the intersections of McCully Street and Ala Wai Boulevard, McCully Street and Kalakaua Avenue, and Kalakaua Avenue and Ala Wai Boulevard.

On Kalakaua Avenue, between Ala Wai Boulevard and John Ena Road, there is a median on the roadway which allows pedestrians to safely cross the street by crossing half of the street at a time.

We appreciate your concerns regarding traffic and have incorporated the above information into the Revised EIS as necessary.

Very truly yours,

F. J. Rodriguez
F. J. Rodriguez

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Roguetad and Associates, Inc.

HOUSE OF REPRESENTATIVES
THE TENTH LEGISLATURE

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

MEMBERS
JAMES H. WAKAYAMA
DANIEL J. KING
HENRY HANSEN
KATSUO YAMADA



March 7, 1980

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

Dear Mr. Rodriguez:

Subject: Draft EIS for the Proposed Waikiki Triangle Project

We have reviewed your draft EIS regarding the proposed Waikiki Triangle Project and the concerns of Representative Kina'u Kamali'i in general are with noise and traffic. In particular, we are concerned that:

1. The completed complex, specifically the associated parking areas be so designed as to minimize adverse noise effects from tire squeal and other parking area noise. We find that there has been a particular problem with these concerns in other projects the applicant has worked on. It is noted that the conflict between moving cars more rapidly through the parking structure to avoid adverse air quality effects and moving them more slowly to avoid tire squeal should be resolved.
2. The central air conditioning system in particular and the completed complex in general be so designed as to provide maximum ventilation and circulation and to minimize adverse noise effects between offices to building tenants. This has also been a problem in other projects the applicant has worked on.
3. There be more specific and thorough discussion of traffic effects of the proposed complex and associated mitigating actions.
 - a) We find that traffic impact study and the air quality commercial rental space in the complex whereas under the Project Description Section I, Part B, page 1 the complex is to have 60,000 square feet of commercial rental space. Following the EPA guidelines referred to in Appendix II, page 17 the proportionate increase in parking space necessary to support the commercial

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HOUSE OF REPRESENTATIVES
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HONOLULU, HAWAII 96813

MEMBERS
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HERBERT A. SHAWA
KATSUO YAMADA
YOSHIO TAKAMINE
MINORU HARA

(2)

area that would occur and the resultant increase in turnover of such parking space, may increase the likelihood of traffic congestion both within and outside the complex, as well as increase adverse air quality effects. Further discussion of this problem in the EIS would be most appreciated.

b) Under mitigative measures, Appendix II, page 17, if the complex is to have assigned parking spaces and/or gates, a more thorough discussion of traffic impacts is requested to arrive at the most feasible alternative. Also, if a direct access ramp is to be provided to any level of the parking structure, a more thorough discussion of traffic impacts is requested for these plans as well.

Sincerely,

Representative Kina'u Boyd Kamali'i
House Minority Leader

By *Leslie K. Jones*
Leslie K. Jones
Legislative Aide

RBK/llkj

cc: Department of Land Utilization
City and County of Honolulu

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MAR 10 1980

ENVIRONMENTAL
COMMUNICATIONS
INC.

March 17, 1980

Mr. Leslie K. Jones, Legislature Aid
March 17, 1980
Page Two

Mr. Leslie K. Jones, Legislative Aide
The Office of Representative King 'u Boyd Kamali'i,
House Minority Leader,
House of Representatives, Tenth Legislature,
State Capitol
Honolulu, Hawaii 96813

Dear Mr. Jones,

Subject: Environmental Impact Statement for the Proposed
Waikiki Triangle Project

We have received and reviewed your comments dated March 7, 1980, on the abovementioned EIS. Below, dispositions to each of your concerns are provided.

1. The problem of vehicular speed and noise created by tire squeals is predicated on the driving habits of individual drivers. If and when this problem occurs, control via warning signs or directing individuals to stop this type of activity would be more realistic.
2. This design consideration will be incorporated at the appropriate time. It is noted that in certain cases, an entire floor of the building is sold and partition of that floor is left to the lessee.
3. a) There appears to be some confusion; the 20,000 square feet mentioned in the air and traffic reports refer to the commercial space available on the first floor only. All technical consultants based their work on a total retail, office/commercial space of 300,000 square feet.
b) The traffic consultant, Henry Au, advises that should specific entrances/exits be assigned to various parking levels or ramps, the overall impact will be less internal traffic congestion and less on-street congestion. That is, queuing will not occur at a specific entrance/exit, rather, the vehicles entering and/or leaving the site will be more evenly distributed.

Your concerns on these matters are appreciated. Where needed, we will include this information in the Revised EIS.

Very truly yours,
F. J. Rodriguez
F. J. Rodriguez

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Rogustad & Associates, Inc.



A GROUP FOR ENVIRONMENTAL RESEARCH AND ACTION
March 7, 1980

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

RE: Comments on the Waikiki Triangle Project E.I.S.

Dear Sir or Madam:

We would like to thank you for giving us this opportunity to review the Waikiki Triangle Project E.I.S. Unfortunately, we believe this E.I.S. does not adequately address major impacts within the study area. Specifically, this document does not include a satisfactory discussion of social impacts, other alternative projects, or building design as it relates to energy conservation. By overlooking pending future developments in the immediate area, this study also fails to sufficiently measure cumulative traffic impacts.

We request that this E.I.S. be rejected until a more thorough and concise study is initiated and these major impacts have been given ample scrutiny according to E.I.S. rules and regulations.

The following are our specific concerns regarding this project and the acceptability of the current E.I.S.

A. The overall socio-economic impacts are not discussed in sufficient depth.

The recent decline of visitors to Hawaii reflects the need to pay careful attention to the needs of the tourism industry, our state's primary source of income. Waikiki is the focal point of the tourist industry, and therefore, the physical appeal of this area must be safe-guarded, enhanced, and maintained to ensure the vitality of the industry.

This E.I.S. should, but does not, pay close attention to the social and aesthetic impacts this project would exact both on tourism and local residents.

The statement, in appendix I, page 13, charging that social analyses have been "explicitly excluded" because they are "such abstruse topics and are"so empirically unreliable as to not be useful for policy considerations", is irresponsible and does not justify this project. In effect, the

negation of the social sciences' reliability to adequately study this area suggests that we drop a primary tool for studying possible impacts of developments. We believe this attitude ignores the necessity of fulfilling Environmental Quality Commission regulations on addressing social impacts of proposed developments.

We think these social impacts should be addressed:

- 1) Community sentiment;
- 2) Social atmosphere of the surrounding neighborhoods;
- 3) Neighborhood Board, Neighborhood Council and Association positions on the proposed development;
- 4) Impacts on the Tourism Industry and attractiveness to tourists;
- 5) Impacts on crime rates;
- 6) Possible impacts on future traffic flow and the effects on pedestrian safety;
- 7) Possible impacts on surrounding property values.

In its present limited form, this portion of the EIS is unacceptable, though analysis of economic and employment related impacts is adequate.

B. Discussion of specific alternatives is inadequate.

It seems no objective attempt is made to evaluate alternative uses of this property. It fails to explore EIS regulation Section 1:41, g. This section requires the EIS to evaluate environmental impacts of all reasonable alternatives for developing the property in question. EIS regulations do not require economically viable alternatives, but rather "any known alternatives ... even though more costly." The only alternative discussed is that of "No Development". We feel this narrow analysis serves to undermine the intent of an Environmental Impact Statement, i.e.: to inform the public and lead agencies about various options and their various impacts. For this EIS to be acceptable, a discussion of alternatives needs to be included.

C. Alternative building designs have not been discussed.

The developer has not considered alternative building designs that could further conserve Hawaii's limited supply of energy resources. This is unfortunate in light of the extreme energy shortage world-wide. There should be little need to mention Hawaii's nearly 100% dependence on unreliable

MAR 11 1980

out-side energy sources. Furthermore, the hardships of limited energy supplies are difficult for all residents of Hawaii. Developers should not make these hardships increase through lack of social awareness.

Conservation plays an important role in relieving our often wasteful uses of energy. Practicing energy conservation saves money, time and valuable resources. The building design suggested in this EIS is totally enclosed, requiring mechanical air-conditioning and fuel-burning hot water heaters. Buildings in Hawaii should be designed to take advantage of our semi-tropical climate -- prevailing tradewinds and predominantly sun-filled weather -- to meet demands for maximum comfort and minimum energy use.

The present building design and technology suggest that the plans where for a structure planned for a temperate climate. Included below are suggestions for improving the design to fit in with Hawaii's climate.

- *1) Natural ventilation -- using sill vents at each window unit; air-flow restrictors; lattice over-hangs to shade from the sun's radiation and to catch prevailing breezes;
- *2) Interior design can complement exterior design to allow full ventilation;
- *3) Solar hot water systems to meet full and/or partial hot water demands.

* Refer to James Pearson's Hawaii Home Energy Book, 1978.

We look forward to reviewing subsequent Environmental Impact Statements concerning this project.

Mahalo,

 Jim O'Rourke
 LOL Staff

CC: Environmental Communications, Inc.,
 McCully/Moiliili Neighborhood Board # 8
 Waikiki Neighborhood Board # 9

ENVIRONMENTAL
 COMMUNICATIONS
 INC.

J. O'Rourke,
 President

March 17, 1980

Mr. Jim O'Rourke
 Life of the Land
 404 Piikoi Street
 Honolulu, Hawaii 96814

Dear Mr. O'Rourke,

Subject: Environmental Impact Statement for the Proposed
 Waikiki Triangle Project

Your letter of March 7, 1980 commenting on the abovementioned EIS has been reviewed by the developer, architect, and socioeconomic consultant as well as our office. We would like to provide the following dispositions to your concerns.

A. First, the intent of the EIS process is not to academically study a project to exhaust or solve the social "problems" as determined by your analysis. Your overall concerns about tourism and social aesthetics are far beyond the scope of this project. In fact, the project constitutes office space and is not directly related to the tourist industry. Secondly, we note that other EIS's for projects in the Waikiki District, including the Papa Towers, Royal Hawaiian Shopping Center, addition to the Halekulani, et cetera did not relate or analyze these issues. Thirdly, the issues which you find necessary to address require extensive research and surveying work which would be costly and would likely result in a "educated guess" as far as the impact of this specific project is concerned.

Specifically you identify community sentiment, social atmosphere of the surrounding neighborhoods, Neighborhood Board, Neighborhood Council and Association positions on the proposed development, impacts on tourism industry and attractiveness to tourists, impacts on crime rates, possible impacts on future traffic flow and the effects on pedestrian safety, and possible impacts on surrounding property values as appropriate study areas.

The EIS process is designed to allow responses from the community and community groups. In that sense, we are, through the EIS process requesting comments from the community and Neighborhood Board and Council. It is our understanding that several community organizations including the Neighborhood Board received a copy of the EIS for their review and comment. The social atmosphere of the surrounding area requires in-depth research and data collecting; also, personal observation indicates that there is a

Mr. Jim O'Rourke
March 17, 1980
Page Two

variety of activities and people living in the surrounding area. The extent to which these people are affected, if at all, is speculative. It is the opinion of the socioeconomic consultant that very little alteration of these existing surrounding activities will occur.

As stated above, the project will not directly be related to the tourist industry. Some of the office's will likely be involved in tourism; however, their economic welfare is based on a multitude of factors relating to the tourist industry which are beyond the scope of this EIS. The effect of projects such as this on crime rates is not predictable; also, it was noted in the EIS that the building will include private security personnel. Traffic flow was discussed; pedestrian safety will be included in the Revised EIS. Surrounding property values will likely increase due to the proposed development. This is normally the case for any project which proposes a higher use; the socioeconomic consultant indicates that the extent of increase is not predictable due to a number of factors which could influence land values.

- B. You state that: "Discussion of specific alternatives is inadequate." The section of the Environmental Impact Statement Regulations cited (1.41.g) is incorrect; the correct section is 1.42.g. It would be misleading to state that a number of alternatives were considered or under consideration by the developer. In fact, the developer finds that no other alternative is "reasonable" to take other than the proposed action. In this regard, it would appear that a lengthy discussion on alternatives is meaningless if the developer does not intend to implement these alternatives. This being the case, we would disagree with your position; the EIS reflects the alternative course of actions which the developer has determined to be available.
- C. The developer is exploring various methods to conserve energy and is intending to apply them when the final building interior plans have been completed. The conservation ethic is well understood by the developer since rising energy costs are an integral part of the building's maintenance expense and as such, it is prudent management to keep these costs in reasonable bounds.

In general, we find that while your comments reflect concern for the socioeconomic welfare of the community, these problems are better addressed to a general overall economic development plan rather than a specific EIS. While such information requested is informative, the probable impact of this project would not be more fully realized if these areas were studied. Finally, the need for alternatives is required in the EIS. However, pragmatically, the developer does not

Mr. Jim O'Rourke
March 17, 1980
Page Three

intend to pursue other alternatives, therefore that discussion would be moot in the EIS document.

We appreciate the opportunity to exchange views on this EIS and the EIS process.

Very truly yours,



F. J. Rodriguez

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Rogstad & Associates, Inc.

AMERICAN LUNG ASSOCIATION of Hawaii

March 10, 1980

Department of Land Utilization
650 South King Street
Honolulu, Hawaii 96813

Gentlemen:

Subject: **EIS for the Proposed Waikiki Triangle Project**

We have reviewed the subject EIS with particular attention to those sections addressing traffic and air quality impact. Overall, the air quality impact analysis was very good, and we have only a few comments.

1. The air quality analysis was necessarily based on existing federal motor vehicle emission standards and the projected improvement in air quality as more and more new cars meeting these standards enter the fleet and the older, more polluting ones are lost to attrition. This scenario inevitably leads to the conclusion that by 1995 air quality will improve despite increased traffic volumes. Theoretically this is quite correct; however, we feel it is important to also mention that recent history shows that these same federal standards have been delayed and relaxed several times so that EPA's projected improvements have been adjusted and extended as well. Another such delay or relaxation could result in declining air quality rather than improving air quality as traffic volumes increase due to projects such as this. The author was quite correct, however, in pointing out that fuel shortages or changes in fuel types could result in improved air quality or an entirely new set of pollutants to be concerned with. What happens between now and the end of this century with regard to automotive pollution is difficult to accurately predict.

2. We are becoming quite concerned about the continuing development of Waikiki and its effect on air quality in that area. Each new project is accompanied by a large parking facility which encourages people to drive cars into an area which is already suffering from heavy and continuous traffic. At some point a hard decision must be made to stop further developments which encourage automobile use in Waikiki. There are sound energy, health and aesthetic reasons for making such a decision.

Sincerely yours,

James W. Morrow, Director
Environmental Health

JWM:ct

cc: Environmental Communications, Inc.

Christiana Study Eight TB, Ashland, Emph, v, v, v, Air Pollution

MAR 12 1980

ENVIRONMENTAL COMMUNICATIONS INC.

March 12, 1980

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

Dear Mr. Morrow,

Subject: Environmental Impact Statement for the Proposed Waikiki Triangle Project

We have received and reviewed a copy of your letter, dated March 10, 1980, commenting on the abovementioned EIS. Below, dispositions to your comments are provided.

1. We agree with your statements and will indicate in the Revised EIS that federal standards for new cars' vehicular emissions may be delayed and/or relaxed. If this is the case, EPA's projected improvements will be adjusted and extended as well, resulting in greater CO values than calculated.
2. Having reviewed several air quality studies in the Waikiki area, we understand that the studies are based on a worst-case condition and are compared to the State's more stringent air quality standards. Given these two conditions, it is not unreasonable to assume that, air pollution in Waikiki is not now a threat to health. However, since air pollution may be potentially adverse to health in the future, we will include this information in the Revised EIS. The references to a "a hard decision" remains essentially a planning or land use decision. The EIS as a disclosure document can only fulfill its obligation as the instrument designed to aid decision makers.

Thank you for your comments and concerns on this matter.

Very truly yours,


F. J. Rodriguez

cc: Department of Land Utilization
L. Robert Allen
Jo Paul Rogstad & Associates

1152 HOSPITAL BUILDING, SUITE 508 - P. O. BOX 336 - HONOLULU HAWAII 96809 - TELEPHONE (808) 537 5066

X. SUMMARY OF UNRESOLVED ISSUES

At this time there are no known unresolved issues.

XI. LIST OF NECESSARY APPROVALS

The following approvals and permits must be obtained prior to the implementation of the proposed project.

1. Environmental Impact Statement EIS Acceptance - (project is located within the Waikiki-Diamond Head Area), Department of Land Utilization.
2. Waikiki Special Design District (Waikiki Development Conformance Certificate) - Department of Land Utilization (line agency)
3. Grading Permit - Department of Public Works (also will review plans in regards to approving the location of the project within the Ala Wai Canal's 100-year flood level).
4. Building Permit - Building Department
5. Other General Building Permits (relating to utilities and trades) will be obtained by the Contractor from the appropriate private and governmental agencies as stipulated in the contractor's specifications).

Evaluation Research Consultants

Socioeconomic Planning

Project Evaluation

APPENDIX I

SOCIOECONOMIC IMPACTS

WAIKIKI TRIANGLE

January 14, 1980

A-I

-71-

CONFIDENTIAL QUESTIONNAIRE FOR ENVIRONMENTAL COMMUNICATIONS INC.
ENVIRONMENTAL IMPACT STUDY

INTRODUCTION

The following report on selected socioeconomic impacts of the proposed Waikiki Triangle project is based on data and opinions secured from:

- (1) available management personnel affiliated with existing businesses on the subject property as per the interview guide shown on the following page;
- (2) available secondary data concerning office space as encountered in local periodicals and government publications;
- (3) interviews with leasing agents in several local firms dealing in office space rentals and sales;
- (4) published reports of the Building Owners and Managers Association;
- (5) economic models initially prepared by the Department of Planning and Economic Development, State of Hawaii.

As is usual in such endeavors, questions of data validity and conflicting opinions have been resolved to the best of our professional judgment. Also, confidentiality has been promised to our primary sources of information in order to engender frank and detailed responses.

The report is organized in the following sections:

- (1) present uses of the subject property;
- (2) impacts associated with temporary dislocation;
- (3) economic impacts associated with the construction phase of the project;
- (4) a descriptive inventory of the more important Honolulu office buildings of recent years;
- (5) a discussion of the inherent impossibility of usefully estimating the economic impacts the proposed project would have on existing and anticipated supplies of office space.

1. Business Name _____
2. Nature of Business _____
3. How long at this location? _____
4. Number of full time employees here _____ Part time _____
Average number of hours/week _____
5. If this project is undertaken what would probably happen to your employees? % laid off _____ How much _____
6. Is there any probability of severance pay for employees laid off? _____ How much? _____
7. The project under consideration, as you probably know, is for a top quality, commercial and office complex. If lease rates are competitive with similar facilities do you expect that you will seriously consider returning to this location following approximately two years of construction? _____

8. If yes, what interim arrangements would probably be made for your operation? _____
Approximate cost of such arrangements? _____
Loss of business during the two-year period, if any? _____
If no, would you probably relocate in Waikiki/McCully? _____
Can you estimate the cost of such relocation? _____
Can you estimate the time required to relocate? _____
Could you estimate the impact of such a move on your business? _____

We have explicitly excluded from consideration any discussion of impacts on such phenomena as the social atmosphere of the neighborhood, esthetics of the environment, the social structure of the work place, incidence of crime, etc. It is our professional opinion that the expertise of the social sciences concerning such abstruse topics is as yet so empirically unreliable as to not be useful for policy considerations.

PRESENT USES

The triangular block is located on the periphery of the Waikiki District. As such, it offers relatively easy access to people outside Waikiki, for the difficulties of traffic congestion commonly encountered in the Waikiki District generally are not encountered in reaching the property. At the same time, the location makai of the Ala Mai is the key characteristic in making the location a part of the Waikiki District, at least in the minds of much of the general public.

The property's low level of use is highly unusual in the immediate neighborhood, particularly since it is fronted by three important arteries of traffic into and out of Waikiki. The commercial uses of the property at present are:

Name	Type of Business Activity
KC Drive-In	Local Fast Food
Rock and Roll Clinic	Cabaret
This Week Magazine	Tourist Weekly Magazine
Island Homes	Real Estate Sales
Al Phillips	Dry Cleaning
Aloha Parking	134 Parking Stalls
Charley's Taxi	4 Taxicab Stalls
The Cab	4 Taxicab Stalls

The businesses located on the subject property have been in operation at the site for time periods ranging from less than a year to about 47 years. Excluding the parking and taxi business operations, a total of 110 full-time employees and 31 part-time employees are based at sites on the property. Interviews with available management personnel involved with these businesses indicated that all were aware of the possibility of their business operations being displaced or at

DISLOCATION IMPACT

least seriously disrupted by the proposed project.

Property uses in the immediate neighborhood are occupied by densely developed medium- and high-rise structures housing small retail outlets, hotel facilities, residential apartments, and some office space. The proposed project is thus not out of character with such existing activities in the immediate neighborhood. Existing businesses reported impressions that their clientele was composed of a tourist/resident mix ranging from slightly over half being tourists to virtually all clientele consisting of Hawaii residents.

The eventual relocation of the firms presently operating on the property is largely speculative at this point, for considerable negotiation will yet be necessary. The economies of leasing the commercial portions of the proposed project strongly suggest that the commercial space in the new facility could readily accommodate a coffee shop, which in a sense would be a modification of the present fast food drive-in. Conceivably, some present management and staff could thus be accommodated in the proposed project. Also, a retail dry cleaning drop-off could in a sense replace a portion of the present dry cleaning operation, although the actual processing presently handled at the site would necessarily occur elsewhere. Furthermore, a cabaret, even in its existing format would also be a compatible future use in the commercial portion of the proposed development. The "faddish" nature of such enterprises suggests that even that exact eventuality may not be likely. All other present commercial activities are less compatible with the proposed development, so it is less likely that such firms would relocate in the new facility.

In our interviews with available managers of existing businesses on the project site, we determined that the more prominent businesses are still in the process of negotiating the terms of their displacement. Since these terms are not yet finalized, most of the managers had not yet seriously explored their relocation options. Consequently, they were unable to provide estimates of the number of employees to be

CONSTRUCTION EMPLOYMENT IMPACT

laid off, nor of the short-term and long-term relocation sites. They could not even begin to estimate items such as relocation costs and changes in business volume. In other words, it is yet too soon to usefully estimate the details of dislocation impacts. However, it should be emphasized that almost all of the managers interviewed anticipated a definite possibility of re-opening some variation of their existing operation, and often this relocation was anticipated to be in the proposed project.

At the worst, all of the 110 full-time and 31 part-time employees would not return to work at the site, although an unknown number of other jobs would occur in the commercial portions of the new project. Also, at least a portion of the displaced jobs may disappear as the present firms re-locate. The number of "new" jobs in commercial outlets in the proposed project may be approximately equal to the present such employment at this location, although this cannot be usefully estimated until the exact types of businesses to be located there are known.

The only employment directly generated by the project is in terms of construction, for it can be argued that the commercial and office employment at the site prior to and subsequent to development is actually generated by tourism (or other basic sectors such as Federal expenditures and agriculture). If the jobs would not occur at that particular site, approximately the same number of such jobs would occur elsewhere at other commercial and office locations in order to perform equivalent services. In other words, the provision of commercial and office space only permits the accommodation of jobholders whose jobs are actually generated by the development of basic sectors in the state's economy.

The estimated \$38 million in construction costs (which we consider to be a reasonable cost estimate) would directly generate, using a very conservative estimating basis, about 456 full-time equivalent jobs on an annual basis in the state's construction industry. About \$18.6 million in incomes (salaries, profits, dividends, etc.) would be generated directly in the state by the project's construction. The multiplier process would increase this to about 950 jobs in Hawaii's economy and about \$33.8 million in income, both on an annual basis. (The multipliers are based on an update version of the state's interindustry model originally prepared by the Department of Planning and Economic Development.)

OFFICE SPACE INVENTORY

The proposed project involves approximately 300,000 square feet of office space. The location of the property is on the periphery of Waikiki, rather than being in the Downtown Business District or along the "Kapiolani Corridor" where the bulk of recent office space for private sector use has occurred. The anticipated design features are also unusual. Instead of entire floors being devoted to use by a single firm, each floor would have eight separate offices of about 500 to 1,000 square feet each. Also, the provision of amenities such as showers and a wet bar would also be somewhat unusual. Similar designs have been implemented in the Century Center and Century Square projects developed by the applicant.

Informal discussions with a number of leasing agents in Honolulu indicate a widely shared perception that the present vacancy rate for office space is about 3 percent. This vacancy rate is about half the rate being experienced nationwide. The recent absorption rate of private sector office space is about 325,000 square feet per year for 1975 to 1979. (See Table 1.) A number of office building developments are in various planning stages in Downtown Honolulu, and at least one Waikiki office building project in the very preliminary stages of planning is within several blocks of the subject property. The tentative and often confidential nature of such data makes it very difficult to reliably determine the magnitude and nature of such projects to be developed in the next few years.

Table 1. Office Space Inventory Increases.

	Year	Office Space (Sq. Ft.)
<u>Downtown</u>		
1164 Bishop building	1975	170,000
Queen Street Building	1975	65,000
Pioneer Plaza	1977	247,000
Grosvenor Center	1979	274,000
Central Pacific Bank Building	1980	250,000
Hasegawa Komuten building	1980	70,000
Century Square	1981	200,000
<u>Kapiolani</u>		
1221 Kapiolani building	1976	112,500
American Security Bank Building	1976	140,000
1580 Makaloa building	1978	90,000
Kawalahao Plaza	1978	125,000
Century Center	1978	100,000
615 Piikoi building	1979	144,000
<u>Waikiki</u>		
Waikiki Trade Center	1980	156,000

IMPACT ON OFFICE SPACE SUPPLY

The interactions of the supply and demand for office space vary for each existing or potential property, depending upon such key characteristics as type, class, location, and incidence. As a heterogeneous commodity that is essentially immobile, market analysis of real estate is far more tenuous than the economic analysis of homogeneous, mobile commodities such as grain or precious metals.

Demand for office space in a localized economy is determined by a multitude of factors, including: (1) levels and structure of population and employment, (2) location, (3) interest rates, (4) tax regulations, (5) sociological changes, (6) psychological tastes and preferences, (7) retail demand for services, (8) overall economic levels of activity, (9) inflation rates, and (10) expectations of all of the above.

Supply of office space is determined by (1) land and construction costs, (2) the market value of alternative uses of the property, (3) tax regulations, (4) interest rates and mortgage ratios, (5) vacancy rates, (6) location and prices of competing properties, (7) technological, financing, and marketing innovations, (8) rates of demolitions, (9) political trends, and (10) expectations of all of the above.

A rigorous analysis of the supply and demand for office space in Honolulu would require reliable data on all of the above factors. Not only is such data not available, but some factors defy quantification. Consequently, most analysis is restricted to asserting that the factors described will continue

to operate in the same way they have in the past in that the rate of absorption of office space will continue apace. This assertion may be modified, usually on a highly subjective basis, if an analyst believes that one or more of the important factors has changed. We have thus encountered estimates from the industry that the annual absorption rate of office space in Honolulu may be as low as 100,000 square feet or as high as 700,000 square feet. For lack of a better technique, we are comfortable with a figure of about 325,000 square feet, which simply amounts to an assertion that what has occurred will continue.

However, this discussion of the difficulties of precise analysis is somewhat beside the point in the case of the subject proposal. Although one of the major economic effects of the project will be in terms of the market supply of office space, estimating the magnitude of this effect is virtually impossible, for the project is not a simple continuation of past projects, both in terms of its location and its basic design. The project would not be in the Downtown Business District, nor would it be centrally located in the Waikiki District. Consequently, it would compete with existing and potential sites in both districts, as well as the less developed area commonly referred to as the "Kapiolani Corridor." However, even this competition is limited, for the design of the small offices, the condominium development approach, and the amenities all make the project unusual. Indeed, perhaps the most direct competitive impact will be on the apparently common practice of

using residential property for office space. By its very nature, the present magnitude of such uses is not known. The only Honolulu properties thus far marketed in the manner anticipated for this development are Century Square and a portion of Century Center, which makes them targets of primary competitive impact. Both properties were developed by the applicant.

To the extent that offices would relocate from residentially zoned units, there would be no impact on legitimately competing properties. Furthermore, very little impact would be felt by owners of office buildings designed to house large numbers of employees per office unit. It is our professional opinion that there is no sufficiently reliable analytic technique available to estimate the magnitude of economic impact of the subject proposed development on competing properties.

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APPENDIX II

AIR QUALITY IMPACT ANALYSIS

WAIKIKI TRIANGLE PROJECT

Waikiki, Oahu

Prepared by

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Kaneohe, Hawaii

January, 1980



TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
I. INTRODUCTION AND PROJECT DESCRIPTION	1
II. AMBIENT AIR QUALITY STANDARDS	1
III. EXISTING AMBIENT AIR QUALITY	6
IV. AIR QUALITY IMPACT OF PROJECT CONSTRUCTION	6
V. INDIRECT AIR QUALITY IMPACT OF INCREASED TRAFFIC	9
A. Mesoscale Emissions Analysis	9
B. Microscale Carbon Monoxide Analysis	12
VI. MITIGATIVE MEASURES	16
VII. SUMMARY	18
REFERENCES	20

LIST OF FIGURES

1. PROJECT LOCATION MAP WITH AIR POLLUTANT MONITORING SITES	2
2. SITE PLAN WITH SELECTED CARBON MONOXIDE RECEPTOR SITES	3
3. ELEVATION DRAWING	4

LIST OF TABLES

1. SUMMARY OF STATE OF HAWAII AND FEDERAL AMBIENT AIR QUALITY STANDARDS	5
2. SUMMARY OF AIR POLLUTANT MEASUREMENTS AT ALA MOANA PARK	7
3. SUMMARY OF AIR POLLUTANT MEASUREMENTS AT KINAU HALE (DEPT. OF HEALTH LAB) - PUNCHBOWL AND BERETANIA STREETS	8
4. VEHICULAR EMISSIONS ANALYSIS, TRIANGLE PROJECT AREA	11
5. RESULTS OF MICROSCALE CARBON MONOXIDE ANALYSIS (milligrams per cubic meter)	14



I. INTRODUCTION AND PROJECT DESCRIPTION

The proposed Ala Wai, McCully, Kalakaua Triangle Project involves demolition of four existing low-rise structures and construction of a 320-foot high business/commercial complex similar to the nearby Century Center. Project location, site plan, and elevation drawings are shown in Figures 1 through 3.

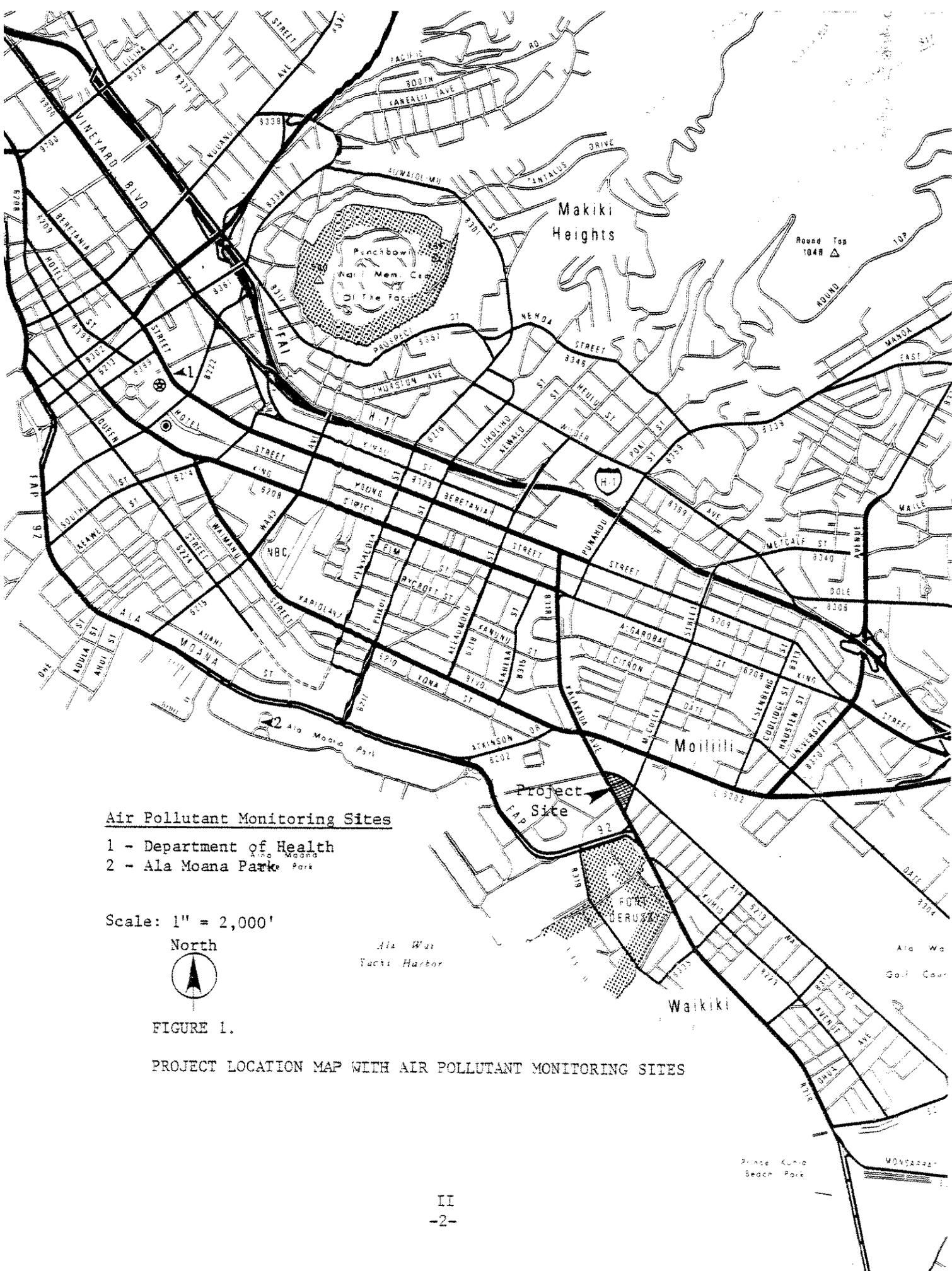
The first floor of the project will have about 20,000 square feet of retail/commercial area with parking spaces for 50 automobiles. There will be a three deck parking structure with 200 spaces on each floor and 50 parking spaces in the basement to yield a total planned parking capacity of 700.

The purpose of this study is to describe the existing air quality environment at the project site and to evaluate the short and long term impacts that are likely to occur if the project is undertaken as planned.

II. AMBIENT AIR QUALITY STANDARDS

State of Hawaii and Federal Ambient Air Quality Standards (AQS) have been established for seven classes of pollutants as shown in Table I. An AQS is a concentration level not to be exceeded over specified short and/or long term sampling periods which vary from pollutant to pollutant. Each of the regulated pollutants has the potential to cause some form of adverse health effect or to produce environmental degradation when present in sufficiently high concentration. Federal AQS have been set at levels below those known to cause adverse effects but State of Hawaii AQS are significantly more stringent. Federal AQS have also been divided into Primary and Secondary values for some pollutants. Primary AQS refer to levels above which adverse health impacts could occur while Secondary AQS refer to welfare impacts such as reduced visibility or soiling. Each Federal AQS is a level not to be exceeded more than once per year, but State of Hawaii AQS are specified as levels not to be exceeded at any time.

The Federal AQS for airborne lead has just recently been adopted. The State of Hawaii has until 1982 to develop and implement a control plan to insure that the AQS can be met by that date and maintained thereafter. For Hawaii the most likely control strategy will be to assume that Federally-mandated limits on the production of lead-containing fuels and curbs on new-car leaded-fuel usage will be sufficient to achieve and maintain airborne lead levels below the AQS.



Air Pollutant Monitoring Sites

- 1 - Department of Health
- 2 - Ala Moana Park

Scale: 1" = 2,000'

North



FIGURE 1.

PROJECT LOCATION MAP WITH AIR POLLUTANT MONITORING SITES

FIGURE 2. SITE PLAN WITH SELECTED CARBON MONOXIDE RECEPTOR SITES

Scale: 1" = 80'

SITE PLAN PREPARED BY JO PAUL ROGNSTAD
AND ASSOCIATES, INC.

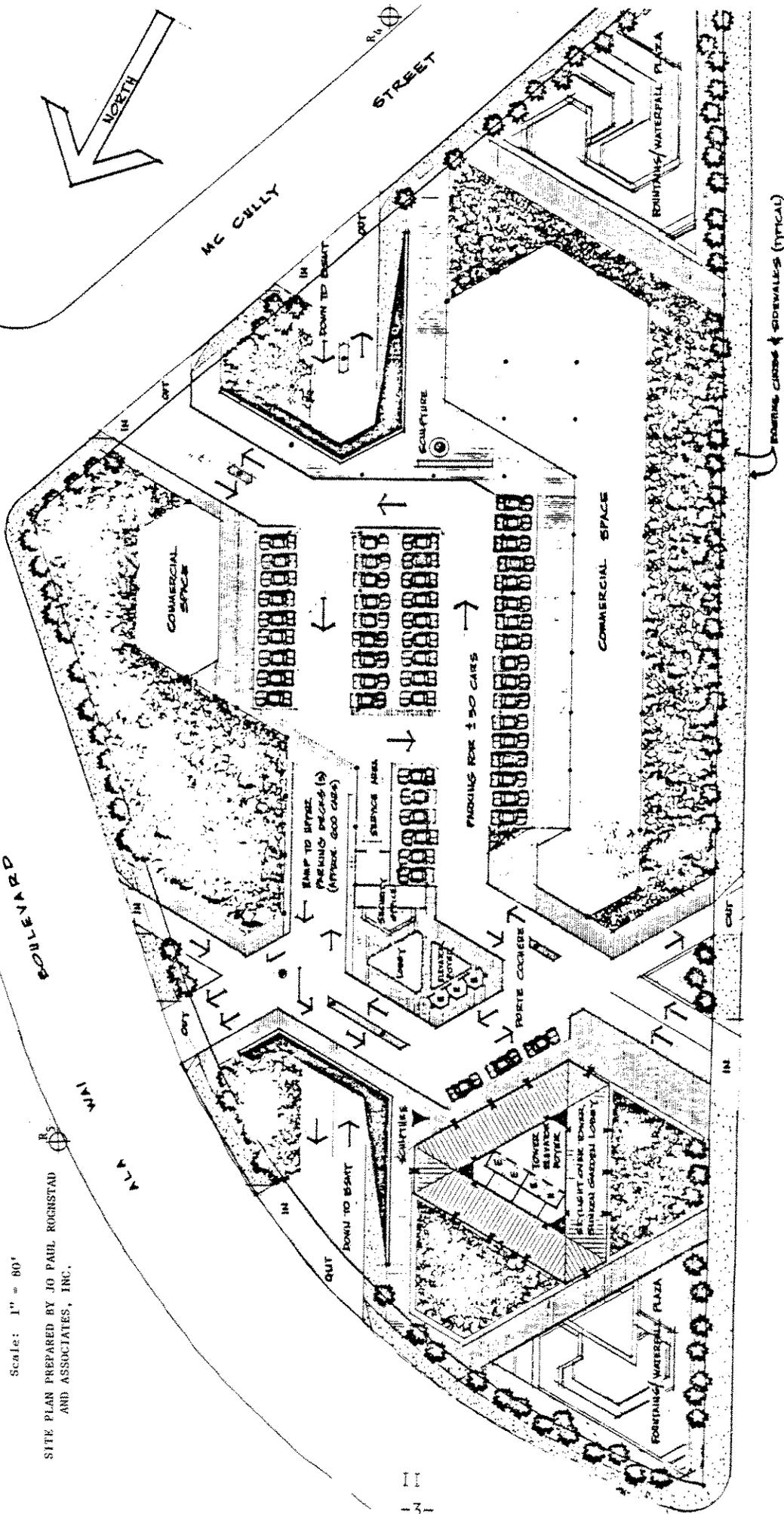


FIGURE 3.

ELEVATION DRAWING

PREPARED BY JO PAUL ROGNSTAD AND ASSOCIATES, INC.

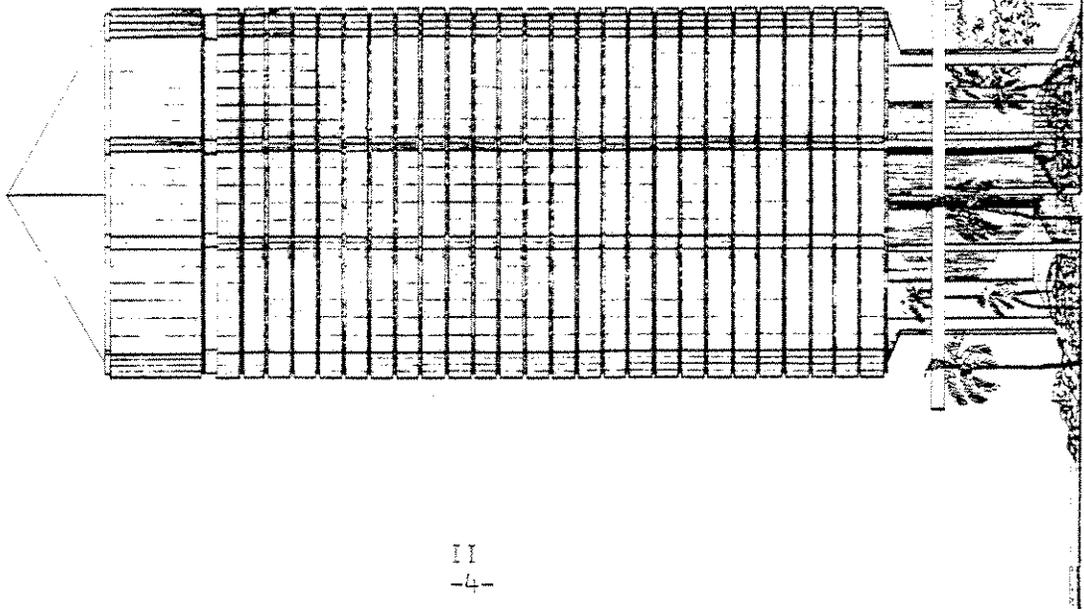


TABLE 1
SUMMARY OF
STATE OF HAWAII AND FEDERAL AMBIENT AIR QUALITY STANDARDS

<u>POLLUTANT</u>	<u>SAMPLING PERIOD</u>	<u>FEDERAL STANDARDS</u>		<u>STATE STANDARDS</u>
		<u>PRIMARY</u>	<u>SECONDARY</u>	
1. Suspended particulate matter (micrograms per cubic meter)	Annual Geometric Mean	75	60	-
	Annual Arithmetic Mean	-	-	55
	Maximum Average in any 24 hours	260	150	100
2. Sulfur Dioxide (micrograms per cubic meter)	Annual Arithmetic Mean	80	-	20
	Maximum Average in any 24 hours	365	-	80
	Maximum Average in any 3 hours		1300	400
3. Carbon Monoxide (milligrams per cubic meter)	Maximum Average in any 8 hours		10	5
	Maximum Average in any 1 hour		40	10
4. Hydrocarbons Non-methane (micrograms per cubic meter)	Maximum Average in any 3 hours		160	100
5. Ozone (micrograms per cubic meter)	Maximum Average in any 1 hour		240	100
6. Nitrogen Dioxide (micrograms per cubic meter)	Annual Arithmetic Mean		100	70
	Maximum Average in any 24 hours		-	150
7. Airborne Lead (micrograms per cubic meter)	Average Over 3 Months		1.5	1.5

Source: 40 Code of Federal Regulations, Part 50 and State of Hawaii Public Health Rule and Regulations, Chapter 42.

III. EXISTING AMBIENT AIR QUALITY

There are no air pollutant monitoring stations in Waikiki. The nearest State of Hawaii air quality monitoring site is in Ala Moana Park about one mile west of the proposed project site. Recent results of monitoring at this location are shown in Table 2. Since 1976 the State of Hawaii AQS for particulate matter has been exceeded at the rate of once per year at Ala Moana Park, but since 1977 the peak reading has not been above 109 micrograms per cubic meter. A once per year level this high does not seem particularly serious. Unfortunately, only particulate matter and sulfur oxides are presently being monitored at Ala Moana Park and these two pollutants are not the ones of greatest concern from the standpoint of evaluating the potential impact of this particular project.

A more comprehensive monitoring program is carried out at the Department of Health laboratory located about two miles northwest of the project area. Measurements from this site are presented in Table 3. It is evident from the data recorded at this site that short term carbon monoxide concentrations are likely to present the most difficult compliance problem for any proposed project in the urban Honolulu/Waikiki area.

It is important to note, however, that the State of Hawaii one-hour standard for carbon monoxide is four times more stringent than the comparable Federal limit. The highest carbon monoxide concentration recorded at the Department of Health building thus represents a level less than half the allowable Federal Standard.

IV. AIR QUALITY IMPACT OF PROJECT CONSTRUCTION

During the construction phase of this project it is inevitable that a certain amount of fugitive dust will be generated by demolition and dirt moving or hauling operations. After this short period of site preparation smaller amounts of particulate emission can be expected from building construction activities. Based on field measurements of particulate emission rates from apartment and shopping center construction projects, an emission rate of 1.2 tons of dust per acre of construction per month of activity has been estimated. This figure assumes: (1) medium-level activity, (2) moderate soil-silt content (about 30%); and (3) a semi-arid climate.

TABLE 2
SUMMARY OF AIR POLLUTANT MEASUREMENTS
AT ALA MOANA PARK

POLLUTANT	1975	1976	1977	1978	1979
PARTICULATE MATTER					
No. of Samples	88	73	53	61	29
Range of Values	41-152	24-130	18-109	21-79	21-102
Average of Value	64	65	40	38	46
No. of times State AQS exceeded	4	1	1	0	1
SULFUR DIOXIDE					
No. of Samples	88	70	54	61	24
Range of Values	<5-9	<5-7	<5-<5	<5-5	<5-13
Average Value	<5	<5	<5	<5	<5
No. of times State AQS exceeded	0	0	0	0	0
NITROGEN DIOXIDE					
No. of Samples	88	21			
Range of Values	5-64	24-61			
Average Value	38	44			
No. of times State AQS exceeded	0	0			

NOTES: All values in micrograms per cubic meter for a 24-hour sampling period. Values for 1979 - January through June. Nitrogen dioxide sampling discontinued in April, 1976. Monitoring site moved from sewer pumping station to McCoy Pavilion on 2/28/77.

Source: State of Hawaii Department of Health

TABLE 3

SUMMARY OF AIR POLLUTANT MEASUREMENTS AT KINAU HALE
(DEPARTMENT OF HEALTH LAB) - PUNCHBOWL AND BERETANIA STREETS

POLLUTANT	1975	1976	1977	1978	1979 ^a
PARTICULATE MATTER^b					
No. of Samples (24-hour)	200	74	57	60	29
Range	12-96	19-62	14-51	14-53	22-62
Average	40	34	31	29	36
No. of times State AQS Exceeded	0	0	0	0	0
SULFUR OXIDES^b					
No. of samples (24-hour)	91	71	59	61	28
Range	<5-31	<5-51	<5-53	<5-44	<5-42
Average	9	23	17	18	23
No. of times State AQS Exceeded	0	0	0	0	0
NITROGEN DIOXIDE^b					
No. of samples (24-hour)	91	22*			
Range	16-70	5-29			
Average	33	14			
No. of times State AQS Exceeded	0	0			
CARBON MONOXIDE^c					
No. of sampling days	169	355	359	365	168
Range values (1-hour)	0.9-27.4	.5-24.2	0-19.6	0-20.7	0-17.3
Average value (1-hour)	6.6	5.4	3.5	3.1	3.1
No. of times State AQS Exceeded	35	41	22	19	10
OXIDANT (OZONE)^b					
No. of sampling days	234	322	300	284	173
Range values (1-hour)	6-65	2-127	4-61	10-84	10-78
Average value (1-hour)	25	40	25	33	44
No. of times State AQS Exceeded	0	1	0	0	0

* Sampling discontinued 4/1/76

^a through 6/79

^b micrograms per cubic meter

^c milligrams per cubic meter

Source: State of Hawaii Department of Health

Since the proposed project site is nearly level and relatively small in size, fugitive dust emissions from construction activities should be minimal.

Applicable control regulations and suggested mitigative measures are discussed later in this report.

V. INDIRECT AIR QUALITY IMPACT OF INCREASED TRAFFIC

The proposed project will not, in itself, constitute a direct source of air pollutant emissions, but by serving as an attraction for motor vehicle traffic the complex becomes an indirect source of increased air pollutant emissions in the project area. Motor vehicles, especially those with gasoline-powered internal combustion engines, are prodigious emitters of carbon monoxide. They also produce significant quantities of hydrocarbons and nitrogen oxides. Vehicles operating by the use of fuel which contains lead as an additive also release measurable amounts of airborne lead.

The major control measure designed to reduce vehicular lead emissions is a Federal law requiring the use of unleaded gasoline in most new automobiles. As older cars are gradually removed from the vehicle fleet, lead emissions should be steadily falling. Federal control regulations also call for increased efficiency in removing carbon monoxide from vehicle exhausts. By 1995 carbon monoxide emissions from the vehicle fleets then operating should be less than half the amount now emitted. Substantial decreases in hydrocarbon and nitrogen dioxide emissions have been mandated as well.

To gain an overview of the general trends that these control measures are likely to produce a mesoscale vehicular emissions analysis has been carried out.

A. Mesoscale Emissions Analysis

At present approximately 3347 vehicles operate on the roadways surrounding the Triangle project area during peak hour. In fact this figure is somewhat inflated because peak hour volume on Ala Wai Boulevard starts at 0700, on McCully Street at 0800, and on Kalakaua Avenue at 1600. But the amount of inflation is not so great as it at first might seem since hourly traffic volumes in this area are nearly constant throughout the day. In all there are 0.2 miles of road length surrounding the proposed project on these three

streets. By 1995 peak hour volume on this road length is expected to increase to about 3993 without the addition of any traffic generated by the proposed project. This volume forecast is based on a 20-year (1975-1995) total growth of 26.4 percent as stated in the traffic study conducted for the project.

To be as conservative as possible it was then assumed that the peak hour turnover in the 700-vehicle parking garage would be 100 percent. To fulfill this assumption all 135 vehicle spaces assigned to the Royal Aloha Condominium would have to be vacated during the peak hour and the remaining 565 spaces allocated for project use would have to be filled with arriving vehicles. While it is unlikely that a 100 percent parking turnover rate would occur at any time during the day a rate approaching this level could occur during morning peak hour conditions. To simplify comparisons it is further assumed that the proposed project can be completed and put into use by the end of 1980 yielding a project-generated peak hour traffic increase of 700 vehicles this year. Since the capacity of the parking garage will remain fixed this figure should be valid for 1995 as well.

To compute pollutant emissions a standard set of vehicular emission factors (from Table F-15 of EPA's Mobile Source Emission Factors) was used. Inherent assumptions are: (1) a vehicle mix containing 88.2 percent automobiles with the remainder light duty trucks and vans, (2) average temperature of 70°F, (3) average vehicle speed of 19.6 mph, and (4) 20.6 percent of the vehicles operating under cold start conditions.

Results of the comparison are summarized in Table 4. There will clearly be an immediate increase in vehicular emissions of carbon monoxide, hydrocarbons, and nitrogen dioxide in the project area if the complex is constructed as planned, but, because the garage traffic generated by the project will be fixed while adjacent roadway traffic continues to increase in future years, by 1995 total vehicular emissions with or without the proposed project will be nearly the same.

As shown in Table 4 carbon monoxide and hydrocarbon emissions are expected to decrease substantially between 1980 and 1995 whether the project is constructed or not. There should also be a small decrease in nitrogen dioxide emissions during this time period. Measurements of nitrogen dioxide in Ala Moana Park and at the Department of Health building indicate that ambient air quality standards for this pollutant were easily being met in 1976 and the slight decreases shown from 1980 to 1995 indicate that the standard should continue to be met through that time period.

TABLE 4
VEHICULAR EMISSIONS ANALYSIS, TRIANGLE PROJECT AREA

<u>YEAR</u>		<u>PEAK HOUR TRAFFIC VOLUME</u>	<u>CARBON MONOXIDE (Kilograms)</u>	<u>HYDROCARBONS (Kilograms)</u>	<u>NITROGEN DIOXIDE (Kilograms)</u>
1980	WITHOUT TRIANGLE PROJECT	3347	34.5	3.7	1.8
	WITH TRIANGLE PROJECT	4047	41.7	4.5	2.2
1995	WITHOUT TRIANGLE PROJECT	3993	12.8	1.5	1.3
	WITH TRIANGLE PROJECT	4693	15.0	1.8	1.5

Since there are no existing hydrocarbon measurements for the project area it is difficult to relate the hydrocarbon emissions shown in Table 4 to allowable limits. In any case hydrocarbon emissions are important primarily because of the precursor role that they play in the formation of photochemical oxidants such as ozone. Since the State of Hawaii AQS for oxidants has been exceeded only one time in the last five years at the Department of Health sampling site it would seem that the decreased levels of hydrocarbon emissions expected by 1995 should serve to reduce the likelihood that ozone levels in excess of State AQS will occur at any time during the next 15 years.

Although Table 4 shows that significant decreases in carbon monoxide emissions are expected by 1995 it is not possible to compare these emissions directly to State or Federal AQS without carrying out a detailed microscale analysis of expected concentrations of this pollutant at selected critical receptor sites in the vicinity of the proposed project.

B. Microscale Carbon Monoxide Analysis

Peak hour traffic volumes on Ala Wai Boulevard, Kalakaua Avenue, and McCully Street were obtained using the 1978 traffic counts included in the traffic study for the project and applying the previously described 26.4 percent total 20 year growth estimate to obtain 1980 and 1995 peak hour projections. The 700 maximum turnover for the parking garage was allocated in the following manner: 25 vehicles in and out of each of the two basement parking entrances; 172 vehicles entering and 45 vehicles departing from each of the three main floor access routes.

Vehicular carbon monoxide emissions for 1980 and 1995 were determined using a Federal Highway Administration tabulated version of the Environmental Protection Agency's computerized Mobile Source Emissions Model (MOBILE 1). The present vehicle mix on Waikiki streets was estimated to be 92.4 percent automobiles, 4.3 percent light-duty trucks less than 6000 pounds gross vehicle weight (GVW), 1 percent light-duty trucks between 6000 and 8000 pounds GVW, 0.8 percent heavy duty gasoline-powered trucks, and 1.5 percent diesel trucks and buses. The mixture of garage traffic was assumed to be 94 percent automobiles and 6 percent light-duty trucks and vans. The same vehicle mix was used to determine 1980 and 1995 emissions estimates. To be as conservative as possible a morning peak hour situation was considered with ambient air tem-

perature of 60 degrees Fahrenheit and 50 percent of vehicles operating in the cold start mode.

Traffic speeds on ramps and upstream from red lights was assumed to be 5 mph while free-flowing traffic on the main streets was assumed to move at 25 mph. Each of the major streets carries only one-way traffic with the exception of a single bus lane on Kalakaua Avenue.

Five critical receptor sites were selected for analysis and the EPA computer model HIWAY of the UNAMAP Series was used to estimate resulting carbon monoxide concentrations with or without the proposed project. Stability category D was used for the computations. This is the most stable conditions likely to occur in an urban area during day or night. A uniform windspeed of one meter per second was used to simulate worst case wind flow, but the worst case wind direction was decided based on the geometry of each receptor area. Location of the receptor sites is shown in Figure 2.

Background contributions of carbon monoxide from distant sources not directly considered in the analysis were estimated to be 2 mg/m^3 in 1980 and 1 mg/m^3 in 1995 (when more stringent emission controls will be in effect).

Results of the computations are shown in Table 5 for peak hour and eight-hour time periods. Because traffic volumes are near peak hour levels for eight hours or more on the major streets considered the eight-hour estimates were made by direct application of a 'meteorological persistence factor' of 0.6 as recommended in EPA guidelines.

Receptor site 1 (located on the Ewa side of Kalakaua Avenue) was selected to evaluate the impact of increased traffic levels at the intersection of Ala Wai and Kalakaua. For this location the worst case wind direction is north northeast.

Receptor site 2 is located on the Ewa side of Kalakaua Avenue downwind from one of the proposed main floor access routes to the project. The worst case wind direction for this site is north.

Receptor site 3 (also located along the Ewa side of Kalakaua Avenue) was selected to evaluate the impact of traffic movements within the parking garage. The worst case wind direction for this site is also north.

Receptor site 4 (on the Diamond Head side of McCully Street) was selected to evaluate the impact of increased traffic entering and exiting both the main floor and basement parking access routes located on this side of the project. Again north is the worst case wind direction.

TABLE 5

RESULTS OF MICROSCALE CARBON MONOXIDE ANALYSIS
(milligrams per cubic meter)

SITE	CONFIGURATION	1980		1995	
		PEAK HOUR	8-HOUR	PEAK HOUR	8-HOUR
1	Without Project	22.5	13.5	9.2	5.5
	With Project	24.6	14.8	10.0	6.0
2	Without Project	21.0	12.6	8.7	5.2
	With Project	23.5	14.1	9.5	5.7
3	Without Project	21.0	12.6	8.7	5.2
	With Project	26.4	15.8	10.5	6.3
4	Without Project	20.7	12.4	8.5	5.1
	With Project	22.7	13.6	9.2	5.5
5	Without Project	15.0	9.0	6.2	3.7
	With Project	16.6	10.0	6.7	4.0

		<u>1 HR</u>	<u>8 HR</u>
STATE OF HAWAII	AQS	10	5
FEDERAL	AQS	40	10

NOTE: See Figure 2 for location of receptor sites.

NOTE: During the EIS review period, James Morrow from the American Lung Association of Hawaii provided comments on the air quality study. In particular, Morrow felt that there should be recognition that the calculations relating to air quality (CO) are based on the automobiles' manufacturers compliance with new air emission standards for automobiles. We concur with Morrow's comments (quoted below).

"The air quality analysis was necessarily based on existing federal motor vehicle emission standards and the projected improvement in air quality as more and more new cars meeting these standards enter the fleet and the older, more polluting ones are lost to attrition. This scenario inevitably leads to the conclusion that by 1995 air quality will improve despite increased traffic volumes. Theoretically this is quite correct; however, we feel it is important to also mention that recent history shows that those same federal standards have been delayed and relaxed several times so that EPA's projected improvements have been adjusted and extended as well. Another such delay or relaxation could result in declining air quality rather than improving air quality as traffic volumes increase due to projects such as this. The author was quite correct, however, in pointing out that fuel shortages or changes in fuel types could result in improved air quality or an entirely new set of pollutants to be concerned with. What happens between now and the end of this century with regard to automotive pollution is difficult to accurately predict."

Receptor site 5 (on the mauka side of Ala Wai Boulevard) was selected to evaluate the impact of increased traffic entering and leaving access routes along the Ala Wai side of the project. For this site the worst case wind direction is south.

All receptor sites were located on the sidewalk about one meter from the nearest traffic lane and at a breathing level of 1.5 meters.

The general results in Table 5 indicate that carbon monoxide levels are presently greater than allowable State of Hawaii peak and eight-hour AQS at all five sites. Increased traffic generated by the proposed project can be expected to raise peak hour levels by amounts ranging from 1.6 mg/m³ at site 5 to 5.4 mg/m³ at site 3 under worst case meteorological conditions. Furthermore the Federal AQS for an eight-hour period is likely to be exceeded under present worst case traffic and meteorological conditions at sites 1 through 4 whether the project is constructed as planned or not.

By 1995, however, all Federal AQS can be easily met even with the increased traffic generated by the proposed project. In fact, by that time, peak hour worst case carbon monoxide levels with project construction will be, for the most part, less than one milligram per cubic meter higher than would be the case under the no-construction alternative. It would appear that even the stringent State of Hawaii one-hour AQS can be met at most locations by that time.

The main potential problem area appears to be along the Ewa side of Kalakaua Avenue, especially downwind from the parking garage in the vicinity of receptor site 3. Computations for this location indicate that under worst case conditions the one-hour State of Hawaii AQS might not be met even by 1995. The impact of traffic moving within the parking garage was assessed by assuming that the basement and main floor parking areas (100 spaces total) would be ventilated by a mechanical exhaust system emitting collected pollutants from above the top level of the parking garage area. The three 200-space parking levels were assumed to be ventilated only by natural wind flow and each floor was mathematically treated as an elevated line source in the computations. The primary contributor to the total peak hour carbon monoxide levels shown in Table 5 for site 3 (aside from projected traffic Kalakaua Avenue itself) was traffic moving along the first 200-space parking level. This contribution was significantly greater than that for other levels of the garage because it was assumed that to get to higher levels in the parking garage all traffic would

have to travel the full length of this first parking level. Possible ways in which this particular impact could be mitigated are addressed in the following section of this report.

VI. MITIGATIVE MEASURES

As stated earlier the only direct emission of air pollutants that this project is likely to create is fugitive dust generated by project construction activities. State of Hawaii Department of Health Rules and Regulations (Chapter 43, Section 10) stipulate control measures that are to be employed to reduce this type of emission. Primary control consists of frequent wetting - down of loose soil areas with water, oil or suitable chemicals. An effective watering program can reduce particulate emissions from construction sites by as much as 50 percent. Other control measures include good housekeeping on the job site and possibly, erection of dust-catching barriers if nearby local residents are being subjected to suspended particulate levels more than 150 micrograms per cubic meter above existing background levels (as measured on a 12-hour basis).

Emissions from vehicles operating within the project area and on nearby roadways can be decreased if

- (1) the emission rate of each vehicle is decreased,
- (2) the total number of vehicles operating is decreased, or
- (3) the project is designed to permit vehicle movement at more rapid rates of speed with less chance that vehicles can become tied up in queues with engines idling.

Project planners can do little to decrease emission rates from individual vehicles. Those reductions will depend on Federally-mandated controls on new vehicle emissions.

While it is true that the total amount of parking planned for this project could be reduced somewhat it is not clear that significant improvements in projected air quality could be gained as a consequence. An unknown, but probably large, percentage of Waikiki traffic consists of drivers looking for a place to park their vehicle. Construction of a project with inadequate parking would only exacerbate this problem.

To a certain extent the project is already designed to permit vehicle movements unimpeded by potential bottlenecks. With five entrance/exit locations

peak hour traffic flow in and out of the project should be free of significant queues if traffic is evenly distributed as has been assumed in the computations of expected impact. To achieve this end it might be well to assign both parking spaces and parking gates to insure that regular users do not tend to congregate at one particular access point. A recent air quality study of the Waikiki theater parking garage on Seaside Avenue has shown that a maximum of 225 cars can enter a controlled parking gate during a one hour period with an attendant collecting money from each entering vehicle. Assuming no impediments to the flow of entering vehicles to this project the 172 maximum number of entering vehicles at each of the three main access gates can obviously be accommodated with little or no queuing.

The project is presently planned to have 20,000 square feet of commercial/retail area. EPA guidelines estimate a daily usage rate of 20 vehicles per 1000 square feet of commercial space. Assuming an eight hour commercial day with each attracted vehicle parked for one hour yields 50 required parking spaces to support the commercial area. Since a greater turnover rate would be expected at these parking spaces it might be most beneficial to restrict this commercial/shopping traffic to the basement area which has two dedicated entrance/exit areas for just 50 parking spaces.

In this same vein it might be possible to mitigate the potential adverse effects of traffic movement within the parking garage if the top floor of the garage were to consist only of assigned parking (perhaps to include the 135 stalls set aside for Royal Aloha Condominium use). Then if a direct access ramp could be provided to allow this assigned parking to proceed to the top level a minimum of cruising time would be spent traversing the lower parking decks and air pollutant emissions in these areas could be minimized.

As stated earlier it is most important to quickly dilute or remove emissions generated on the first 200-space parking level. From an air pollution standpoint natural ventilation should prove sufficient to insure that ambient air quality standards are not violated by emissions from higher floors, but during a calm wind situation users of the parking structure could be subjected to unacceptably high levels of indoor carbon monoxide if no form of mechanical ventilation is provided.

To minimize these garage exposures to carbon monoxide it would also be constructive to prohibit smoking within the parking area.

Screening the garage area from nearby receptor areas by the use of dense vegetation is not only aesthetically desirable, but potentially beneficial in limiting ambient carbon monoxide and particulate concentrations. Landscaping of this nature is already planned for the project site, but it is important to select plants that are quick growing and hardy so that their effectiveness as pollutant removers can be realized as soon as possible.

Finally, vehicular emissions estimates used in this study do not take into account the distinct possibility that future gasoline shortages may result in curtailment of vehicle use and eventual development of non-gasoline-powered vehicles which create few or none of the air pollutants that are presently of concern.

VII. SUMMARY

The proposed Ala Wai, McCully, Kalakaua Triangle project can be expected to produce direct air pollutant emissions in the form of fugitive dust from project construction and indirect emissions from vehicles attracted to the area because of the presence of the complex.

The fugitive dust emissions will be of a short term nature and adequate control measures exist to insure that such emissions do not become a problem to nearby residents. Particulate air pollution measurements at nearby sampling sites indicate that present levels exceed State of Hawaii ambient air quality standards about once per year, but that particulate air pollution is generally not a problem.

Vehicular traffic will produce carbon monoxide, hydrocarbons, nitrogen oxides, and airborne lead.

Federal regulations should insure future reductions in those emissions, but carbon monoxide emissions and resulting concentrations could pose some problems. The State of Hawaii one-hour ambient air quality standard for carbon monoxide is being exceeded at the Department of Health building monitoring site at the rate of about 20 times per year.

A detailed carbon monoxide modeling study of the proposed project area has been carried out for five selected critical receptor sites. In general the results indicate that carbon monoxide levels are presently greater than allowable State of Hawaii air quality standards at all five sites. Under worst case meteorological conditions increased peak hour traffic generated by the

proposed project could raise one hour levels by as much as 5.4 mg/m^3 in 1980. Furthermore the Federal eight-hour air quality standard is likely to be exceeded under worst case 1980 conditions at four of the selected sites whether the proposed project is undertaken or not.

By 1995, however, all Federal air quality standards can be easily met even with the inclusion of an increase in traffic generated by the proposed project. In fact, by that time, peak hour worst case carbon monoxide values will for the most part be less than 1 mg/m^3 higher with increased project traffic than would be the case without it. By 1995 it would appear that even the stringent State of Hawaii one-hour air quality standard can be met at every site but one.

The main potential problem area appears to be along the Ewa side of Kala-kaua Avenue where parking garage emissions are likely to combine with those from street traffic to produce projected worst case carbon monoxide levels in excess of the State of Hawaii one-hour standard. One possible way to mitigate this condition would be to have only assigned parking on the upper level of the parking garage and then provide a direct access so that assigned traffic could reach this level without traversing the lower floors of the garage.

Computations assume natural ventilation of all above ground parking decks. Installation of some form of mechanical ventilation on the lower level of the main parking garage could significantly reduce garage emissions.

With five proposed entrance/exit access routes to the project there should be no problem with peak hour congestion at any particular entrance, but it might be necessary to institute some form of access plan to insure that arriving and departing traffic is evenly distributed among the available entrances.

The use of dense foliage to screen the parking garage area from potential pollutant receptors is also highly recommended as a mitigative measure.

Finally it is important to state that the vehicle emission rates and traffic volumes used in this study do not take account of the distinct possibility that future gasoline shortages may result in curtailment of vehicle use and eventual development of non-gasoline-powered vehicles which create few or none of the air pollutants that are presently of concern.

REFERENCES

1. ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE for Ala Wai, McCully, Kalakaua Triangle Project, November 29, 1979.
2. Au, Henry T. Traffic Impact Statement for Ala Wai, McCully, Kalakaua Triangle Project, January, 1980.
3. U.S. Environmental Protection Agency, Office of Air Planning and Standards, Compilation of Air Pollutant Emission Factors, August, 1977.
4. U.S. Environmental Protection Agency, Office of Air and Waste Management, Mobile Source Emission Factors, March, 1978.
5. U.S. Environmental Protection Agency, Office of Air, Noise and Radiation, User's Guide to MOBILE 1: Mobile Source Emissions Model, August, 1978.
6. Federal Highway Administration, Office of Environmental Quality Control, Noise, and Air Quality Branch, Tabulation of Selected Low Altitude Emission Factors Based on EPA's Mobile Source Emission Factors dated March, 1978, September, 1978.
7. U.S. Environmental Protection Agency, National Environmental Research Center, Office of Research and Development, User's Guide for HIWAY, a Highway Air Pollution Model (by John R. Zimmerman and Roger S. Thompson), February, 1975.
8. U.S. Environmental Protection Agency, Office of Air and Waste Management, Office of Air Quality Planning and Standards, Guidelines for Air Quality Maintenance Planning and Analysis Volume 9: Evaluating Indirect Sources, January, 1975.
9. State of Hawaii Department of Transportation, Highways Division, Traffic Summary Island of Oahu, 1973, February 1975.

APPENDIX III

TRAFFIC IMPACT STATEMENT

ALA WAI, McCULLY, KALAKAUA
TRIANGLE PROJECT*
WAIKIKI, OAHU

TAX MAP KEY 2-6-14: 39 - 56, 59

NOTE: Several substantial comments on the Traffic Impact Statement were received during the EIS review period. The following letter by Henry Au (dated March 5, 1980) discusses in detail these concerns on traffic.

* The project name has changed to Waikiki Triangle Project.

Prepared By

HENRY TUCK AU, Consulting Engineer
33 S. King Street
Suite 507
Honolulu, Hawaii 96813

January 1980

HENRY TUCK AU
Consulting Engineer
33 S. KING STREET, SUITE 307
HONOLULU, HAWAII 96813
Telephone 538-7237

March 5, 1980

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

Dear Mr. Rodriguez:

Subject: Environmental Impact Statement for
Waikiki Triangle Project, Dated
February 1980

Submitted herewith are the responses to the comments of the Department of General Planning relative to the Waikiki Triangle Project. (Ref: DGP2/80-377 (CT) dated February 29, 1980).

COMMENT

Traffic - The EIS indicates that with proposed new facilities and improvements to the existing system, "the future highway system will mitigate at a future time, any possible undesirable traffic congestion" (p. 21, Section II.T(2)).

Later, it is indicated that the one-way "redistribution of traffic illustrates the the fact that there are alternatives to the solution of the traffic problem without major improvements of the highway system" (p. 21, Section II.T(6)).

These statements are somewhat contradictory.

It may be true that the one-way traffic pattern made dramatic improvements in traffic flow as compared to the two-way system. But since the conversion to a one-way pattern has already been made, it is not readily evident that similar drastic improvements in traffic flow are possible without major improvements. Unless Environmental Communications, Inc. can elaborate on the alternatives, the statement should be deleted.

III
T-i

RESPONSE

All alternative solutions as it affects traffic generation have been considered. The usual situation in the solution of traffic congestion problems is to meet the need for increased roadway capacity and alternatives are limited to those providing greater capacity. These alternatives for providing greater capacity usually include:

1. Widening existing streets or adding lanes.
2. Constructing a new parallel facility or a major bypass.
3. Improving traffic operations through channelization, reversible lanes, signal timing and other traffic engineering control devices.
4. Prohibiting left turns and curb parking.
5. Rerouting traffic through a system of one-way streets to reduce congestion and delay, thereby increasing the capacity of the existing street system.

Other alternatives exist but are often not considered. These are not only the most effective alternatives but are also the most acceptable in an environmental way. These alternatives are as follows:

1. Balancing of land uses with highway and transportation facilities through planning and zoning.
2. Inhibiting the use of the automobile by regulating, adjusting quantity and pricing parking to the extent that generated traffic will not exceed the desirable capacities of the streets and highways.
3. Changing urban design to provide for higher densities, more open spaces and decentralization of hotel and resort facilities from Waikiki.
4. Improving the public transportation system serving the Waikiki District.

Other alternatives, but showing little promise of achieving the objectives, include:

1. Levying a toll for motorists entering and leaving the Waikiki District.

2. Limiting the number of automobiles in the Waikiki District.
3. Requiring a special permit to drive in the District.
4. Prohibiting automobiles in the District.

These latter alternatives, although drastic in their approaches, require the least capital investment.

All of the alternatives enumerated are not narrow in scope and include all worthwhile possibilities to cope with the adverse effects of traffic and environmental consequences brought about by developments in Waikiki. The various alternatives broaden the range of approaches possible and help to indicate their appropriateness.

Since the statements in the EIS appear to be contradictory without the above detailed elaboration of the various alternates, it may be in the best interest of all parties concerned to delete the statements as suggested by the Department of General Planning.

COMMENT

Highway System Improvements - Among the highway system improvements are the Waikiki By-pass and the University Avenue Extension across the Ala Wai Canal (Appendix III, p. T-7, et. seq., and Fig. 3, p. T-9).

The EIS indicates:

"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. This major by-pass route is being restudied by the City Department of General Planning.

"The State Department of Transportation, in cooperation with the City Department of Transportation Services, is examining a makai High Occupancy Vehicle (HOV) travelway which closely follows the by-pass alignment set forth in the Waikiki Special Design District Plan" (p. III-10).

There are several inaccuracies in the above statements taken from the EIS.

1. The Waikiki by-pass is not an element of the Waikiki Special Design District Plan.

RESPONSE

Section V (A-1) of the Waikiki Special Design District Ordinance states as follows:

"A. Circulation Plan.

1. All developments within the district shall comply with the guidelines prescribed on the WSDD Circulation Plan marked Exhibit "B" and attached hereto as part of this ordinance.

A review of Exhibit "B" will indicate that the Waikiki by-pass route along the mauka side of the Ala Wai Canal is shown on the plan. If the by-pass is in reality not an element of the Waikiki Special Design District Plan, and in order to avoid any confusion, it would be advisable for the Department to delete the by-pass route from Exhibit "B". There is, therefore, a legal question as to whether or not the by-pass route is or is not a part of the Waikiki Special Design District Plan. The by-pass route was mentioned in the EIS only because the route was shown on Exhibit "B".

COMMENT

2. The makai freeway connecting Ala Moana Boulevard to H-1 has been deleted from the City's Detailed Land Use Map and Development Plan for the Waikiki and Manoa-Moiliili areas under Ordinance 77-94, September 27, 1977.

RESPONSE

What is confusing is that the Waikiki Special Design District Ordinance is a separate ordinance and although Ordinance 77-94, effective September 27, 1977 may have deleted the makai freeway connecting Ala Moana Boulevard to H-1 from the City's Detailed Land Use Map and Development Plan for the Waikiki and Manoa-Moiliili areas, Ordinance 77-94 did not amend the Waikiki Special Design District Ordinance by amending Exhibit "B" to delete the proposed makai freeway. Exhibit "B" is intact although it is now inconsistent with the Detailed Land Use Map and Development Plan.

COMMENT

3. The University Avenue Extension to Waikiki has been discussed for years, but is not shown on the adopted DLUM and DP for the area.

RESPONSE

Similar to the circumstances of the makai freeway as set forth above, the University Avenue Extension to Waikiki is shown on Exhibit "B" of the Waikiki Special Design District Ordinance as a pedestrian overpass. Since Ordinance 77-94 also did not amend the Waikiki Special Design District Ordinance by amending Exhibit "B" to delete the proposed pedestrian overpass, Exhibit "B" is still intact although it is now inconsistent with the adopted DLUM and DP for Waikiki.

COMMENT

4. The by-pass route is not being restudied by the Department of General Planning.
5. So far as we know, City DOTS staff are not involved in any cooperative study of the makai travelway.

RESPONSE

In his comments to the Environmental Quality Commission relative to another project in the Waikiki District (Waikiki Tennis-Commercial Building), E. Alvey Wright, Director of the State Department of Transportation by letter dated August 15, 1977 advised the Commission that the Waikiki by-pass route is being restudied and that the State Department of Transportation, in cooperation with the City Department of Transportation Services, is examining a makai, High Occupancy Vehicle (HOV) travelway which closely follows the makai by-pass alignment. His letter is self-explanatory and a copy is submitted for your information.

Sincerely yours,


Henry Tuck Au
Consulting Engineer

HTA:jmh

SOURCE: Environmental Impact Statement for the proposed Waikiki Tennis-Commercial Building,
Revised September, 1977, page XIII-25.

GEORGE K. MATTHEWS
DIRECTOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
145 FERNBERG STREET
HONOLULU, HAWAII, 96813

August 15, 1977

Environmental Quality Commission
550 Halekauihala St., Room 301
Honolulu, Hawaii 96813

Gentlemen:

Subject: Environmental Impact Statement
Waikiki Tennis-Commercial Building

Thank you for giving us the opportunity to review the above-captioned document.

In reference to the Waikiki by-pass route, page III-51, lines 10-12, it is to be noted that while the DLUM shows a "makai highway alignment," there has been a move on the part of the City Department of General Planning to delete it from the DLUM. The City Planning Commission, however, recommended that the Waikiki By-pass be retained until further studies have been conducted by the appropriate City and State agencies to determine the location, size, and type of highway configuration that are required to alleviate existing traffic congestion and that these needed comprehensive traffic and transportation plans then be incorporated into the development plan for this area.

The Department of Transportation, in cooperation with the City Department of Transportation Services, is examining a makai, High Occupancy Vehicle (HOV), travelway which closely follows the makai by-pass alignment. A joint City/State/federal concurrence of this alignment could well serve as the fixed guideway route for the Honolulu urbanized area, and providing the necessary vehicle capacity for this transportation corridor.

Sincerely,

E. Alvey Wright
E. ALVEY WRIGHT
Director

F. ALVEY WRIGHT
DIRECTOR

MEMBER OF
HAWAIIAN ENGINEERING SOCIETY
ALANUCHI HONOLULU
DOUGLAS S. ENAYALDO
CHARLES D. SHANNON

F. J. RODRIGUEZ,
PRESIDENT

August 25, 1977

ENVIRONMENTAL
COMMUNICATIONS
INC.

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

Dear Admiral Wright:

Thank you for your letter of August 15, 1977 (STP B.4414) commenting on the Environmental Impact Statement for the proposed Waikiki Tennis-Commercial Building project.

Your comments were reviewed by the project's traffic consultant, Mr. Henry T. Au. Mr. Au has prepared the following disposition to your comments:

"Since the Environmental Impact Statement was prepared on the basis of the existing alignment, the revised alignment will be an improvement over the existing alignment and should further mitigate in the future, the adverse consequences of traffic and improve considerably the traffic flow on the highway and street systems of the Waikiki district. Therefore, the revised alignment will better serve the Waikiki district and provide more than sufficient vehicle capacity for this transportation corridor."

Very truly yours,

F. J. Rodriguez
F. J. Rodriguez

cc: S & M Partners
Boone & Associates, Inc.
Environmental Quality Commission
Department of Land Utilization

TABLE OF CONTENTS

	<u>Page</u>
Table of Contents	T- i
Illustrations and Tables	T-ii
Summary	T- 1
Description of Project	T- 5
Introduction	T- 5
Waikiki Special Design District	T- 6
Existing Highway System	T- 7
Future Highway System	T- 7
Traffic Volumes	T-10
Future Traffic Volumes	T-20
Traffic Circulation	T-23
Parking	T-24
Mass Transportation	T-25

ILLUSTRATIONS

<u>Plate No.</u>	<u>Title</u>
1	Project Location Map
2	Existing Highway System
3	Future Highway System
4	Hourly Variations of Traffic Kalakaua Avenue

TABLES

1	24 Hour Traffic Volumes, Lewers Street Screenline
2	24 Hour Traffic Volumes - 1976 & 1975, Kalakaua Avenue at Royal Hawaiian Avenue
3	24 Hour Traffic Volume - 1977, Kuhio Avenue at Lewers Street
4	24 Hour Traffic Volume - 1976 & 1975, Ala Wai Boulevard at Lewers Street
5	24 Hour Traffic Volume - 1978, Ala Wai Boulevard at Kalakaua Avenue
6	24 Hour Traffic Volume - 1978, Kalakaua Avenue at McCully Street
7	24 Hour Traffic Volume - 1978, McCully Street at Kalakaua Avenue
8	Peak Hour Volumes - 1975

SUMMARY

1. The proposed Ala Wai, McCully, Kalakaua Triangle Project is located at the ewa perimeter of the Waikiki Special Design District on a triangular site bounded by McCully Street, Kalakaua Avenue and Ala Wai Boulevard. The property is identified by Tax Map Key 2-6-14: 39-56 and 59, consisting of approximately 124,419 square feet.
2. The tentative proposal for the project is to demolish the existing 4 small free standing buildings and develop a 320 foot high business office commercial complex containing a total floor area of 290,000 square feet. The complex will include 20,000 square feet of retail and commercial space on the first floor, supporting parking facilities for a total of approximately 700 automobiles and a basement consisting of mechanical and electrical support equipment, some retail space and parking for approximately 50 automobiles.
3. The Waikiki Special Design District ordinance enacted by the City Council in 1976 is to insure quality growth and development of Waikiki with due consideration to optimum community benefit. The creation of the Special District is an attempt to relate the size of Waikiki's ultimate development to the capacity of the area to handle it.
4. The future highway system was developed by the addition of new facilities built onto or added to the existing system with improvements to the present highways of higher standards and design for future traffic volumes. With these improvements, the future highway system will mitigate at a future time, any possible undesirable traffic congestion.
5. 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 showed a considerable reduction from the 1967 volume of 37,729 to 30,061 in 1971, a decrease of 7,688 vehicles or 20.3 per cent.
6. The one - way operation distributed the traffic load over more streets and diverted the Ewa bound traffic on Kalakaua Avenue to Kuhio Avenue and Ala Wai Boulevard, primarily to Ala Wai Boulevard. This redistribution of traffic illustrates the fact tht there are alternatives to the solution of the traffic problems without major improvements of the highway system.

7. Traffic surveys show that traffic crossing the Lewers Street Screenline extending from Kalakaua Avenue to Ala Wai Boulevard increased at the rate of 1.32 per cent per year for the period from 1967 to 1975. At this rate of growth, the traffic volume crossing the screenline will increase by 26.4 per cent or 23,620 vehicles within the 20 year period from 1975 to 1995 for a total screenline volume of 113,091 vehicles.
8. The existing highway system 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.
9. 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.
10. The traffic study conducted by the Department of Transportation Services of the City and County of Honolulu on Wednesday, March 18, 1970, indicated that contrary to common belief, through traffic in Waikiki was not a major problem. The majority of vehicles had origins and destinations within Waikiki.
11. The Waikiki District has a high dependency in walking to activity centers within the neighborhood. 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.
12. The total number of parking spaces to be provided will be 700, of which 135 parking spaces will be set aside for the Royal Aloha Condominium located nearby across the street on McCully Street and Ala Wai Boulevard.
13. With primarily tenant parking permitted on the premises, the project will generate very few automobile traffic. The parking will be all day parking and the turnover will be quite low.
14. Adequate mass transportation service is available to serve the Waikiki District. There is now increasing dependence on the use of public transportation. The energy crisis and the consequent enforced use of public transportation and other modes of travel should bring about considerable relief to the present and future traffic problems.

15. Analyzing the various factors, it may be concluded that the proposed project will enhance the aesthetic, environmental and economic aspects of the Waikiki District and provide a service to the community with a minimum disruption of environmental activities.

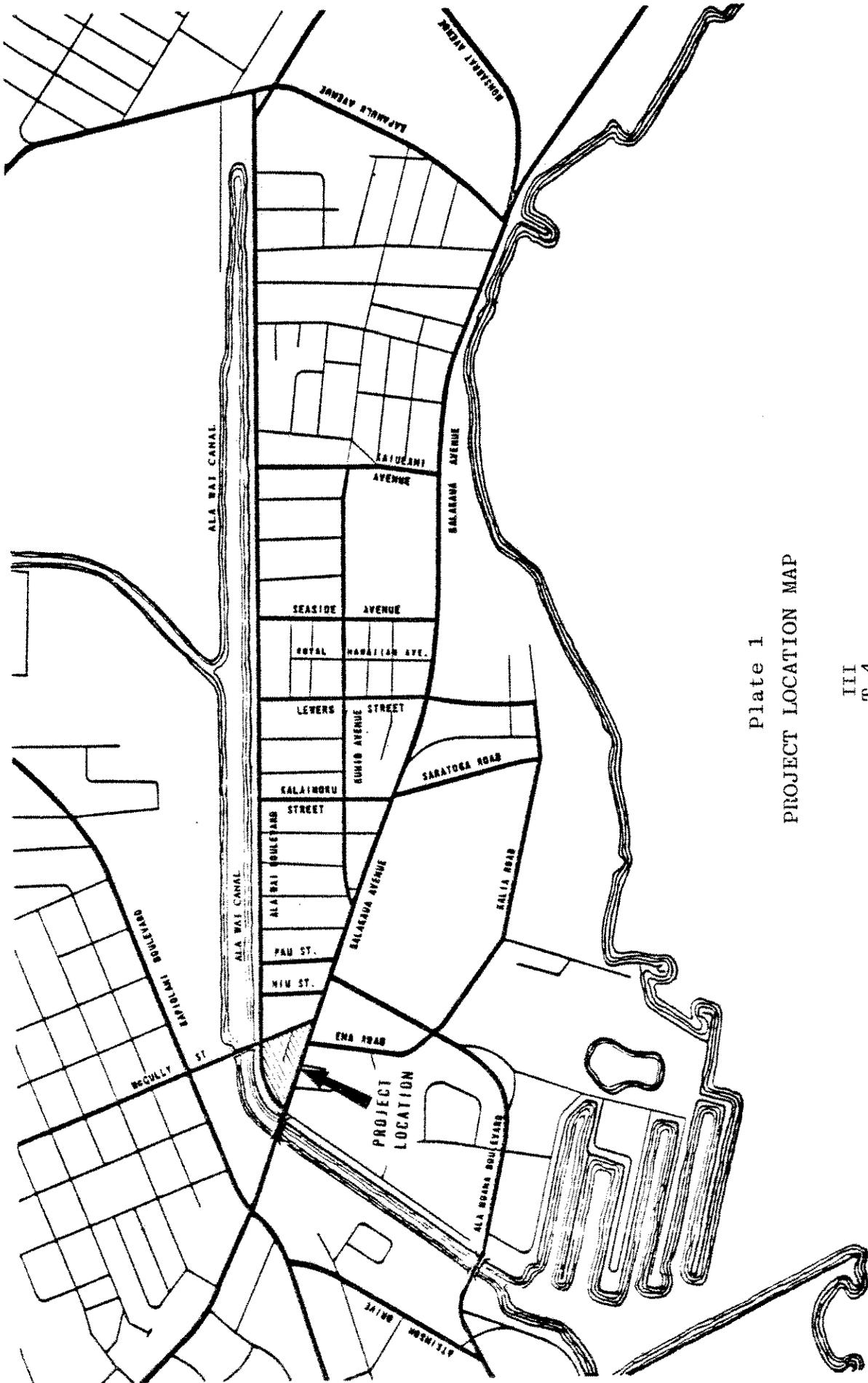


Plate 1
PROJECT LOCATION MAP

DESCRIPTION OF PROJECT

The proposed Ala Wai, McCully, Kalakaua Triangle Project is located at the ewa perimeter of the Waikiki Special Design District on a triangular site bounded by McCully Street, Kalakaua Avenue and Ala Wai Boulevard. The property is identified by Tax Map Key 2-6-14: 39-56 and 59, consisting of approximately 124,419 square feet. The project location map, Plate 1, outlines its relation to the highway system and the neighborhood.

The project site presently contains 4 small, free-standing buildings consisting of KC Drive In (1 story), Island Homes Realty (2 stories), Al Phillips the Cleaner (1 story), and Hale Aloha Nightclub.* The open space is a large paved parking area. The tentative proposal for the project is to demolish the structures and develop a 320 foot high business office commercial complex with a total floor area of 290,000 square feet to include the following facilities:

- 1) First floor - retail and commercial area of approximately 20,000 square feet.
- 2) Supporting parking facilities for a total of approximately 700 automobiles, of which 135 parking spaces will be set aside for the Royal Aloha Condominium located nearby on McCully Street and Ala Wai Boulevard. Of the 700 parking spaces, 600 will be located on three parking decks of 200 spaces each above the first floor, 50 spaces will be on the ground floor and approximately 50 spaces will be located in the basement.
- 3) A basement consisting of mechanical and electrical support equipment, some retail space and parking for approximately 50 automobiles.

The property or site is designated as a "Resort Commercial Precinct" under the Waikiki Special Design District. No change in land use designation is required for the development.

INTRODUCTION

Any plan for community development must have sound social and economic objectives. Social, aesthetic and other values play a role in the pattern of development and the physical growth of a community must include improvements to the aesthetics, the general environment and to the social and economic welfare of the area affected by the project.

* Now called the Rock & Roll Clinic.

The impact of traffic on the environment can be severe and is one of the most controversial issues. However, appropriate land use and development patterns make it possible to minimize adverse environmental and traffic effects. With the aid of well-conceived plans, based on sound economic principles and with a high social purpose, a commercial development in a resort district can be made to enhance the aesthetic, environmental, social and economic aspects of the neighborhood and provide a service to the community with a minimum disruption of environmental activities. The proposed development, therefore, should provide a balance in hotels, resort facilities and retail and commercial service facilities in the Waikiki District, as set forth in the Waikiki Special Design District.

The purpose of this report is to analyze and evaluate the traffic impact of the proposed project on the highway system, the neighborhood and the community.

WAIKIKI SPECIAL DESIGN DISTRICT

An ordinance was enacted in 1976 by the City Council establishing the Waikiki Special Design District to insure quality growth and development of Waikiki with due consideration to optimum community benefits. This ordinance became effective on April 1, 1976. The special design district drastically reduced the number of hotel rooms and apartments that could be constructed in the area and require that significant development or construction projects be approved by the City Council.

The Special Design District lowered the floor area ratio for apartments from 4.0 to 1.5 and for hotels from 4.5 to 2.8. In 1976 there were approximately 22,500 hotel rooms in Waikiki and the prior zoning would have permitted more than 68,000 hotel rooms in Waikiki. Under the Special Design District, the number of hotel rooms is limited to approximately 26,000, an increase of only 3,500 more than existed in 1976. With such limitations, the population of Waikiki would be maintained at 65,000, compared to the 1976 population of approximately 55,000. With the prior zoning, the population of Waikiki could increase to approximately 177,000 or 122,000 more than the 1976 population.

The creation of the Special District, therefore, is an attempt to relate the size of Waikiki's ultimate development to the capacity of the area to handle it. There are three objectives for the Special District.

1. To guide the orderly growth and development of Waikiki.
2. To provide safeguards for the preservation, protection and enhancement of the area.
3. To protect it from physical deterioration, overcrowding, traffic congestion and other adverse influences.

The plan specifies the type of structures permitted, the density, height limits and the amount of open space required for each type of land use. Open space amounts to 50 per cent at the ground level, with one-half of this space to be landscaped.

EXISTING HIGHWAY SYSTEM

The existing highway system serving the Waikiki District is shown on Plate 2. 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.

FUTURE HIGHWAY SYSTEM

The future highway system is set forth in the Waikiki Special Design District Plan and is shown on Plate 3. Since the existing highway system establishes the foundation of the future highway system and these highways must continue in use, the future highway was developed by the addition of new facilities built onto or added to the existing system with improvements to the present highways of higher standards and designs for future traffic volumes. With these improvements, the future highway system will mitigate at a future time, any possible undesirable traffic congestion.

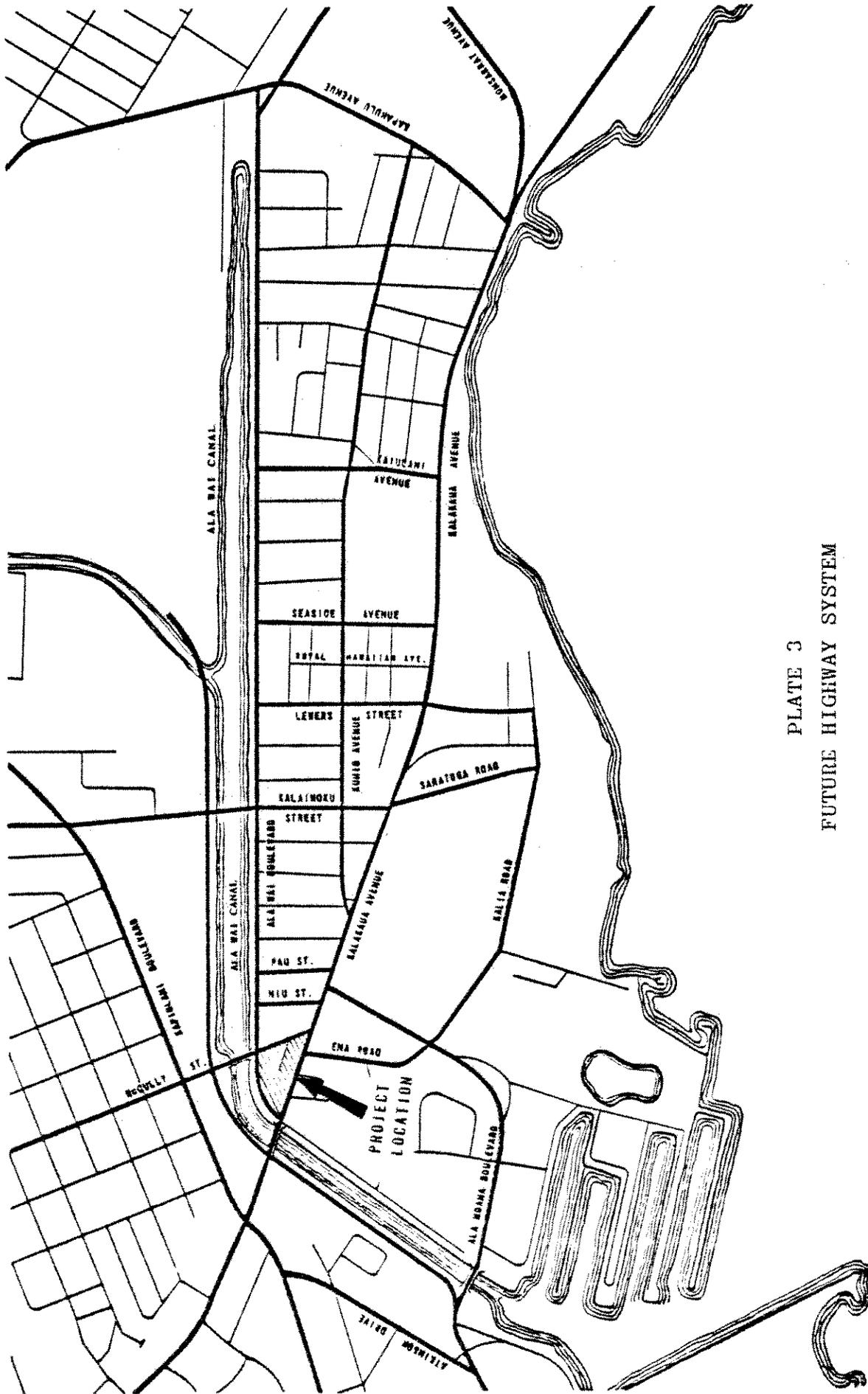


PLATE 3
 FUTURE HIGHWAY SYSTEM

The future highway system proposes 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. This major by-pass route is being restudied by the City Department of General Planning.

The State Department of Transportation, in cooperation with the City Department of Transportation Services, is examining a makai High Occupancy Vehicle (HOV) travelway which closely follows the proposed by-pass alignment set forth in the Waikiki Special Design District Plan. The revised alignment will be an improvement over the existing alignment and should mitigate in the future, the adverse consequences of traffic and improve considerably the traffic flow on the highway and street systems of the Waikiki District. The revised alignment would better serve the Waikiki District and provide more than sufficient vehicle capacity for this transportation corridor.

TRAFFIC VOLUMES

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 volume counts of the City and County of Honolulu are shown on Tables 2 to 7. These counts were taken for each 15 minute period during the 24 hours of the day.

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 1 shows the past and present traffic volumes on the major streets of Waikiki at the Lewers Street Screenline for the years 1963 to 1976. 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

Table 1
24 Hour Traffic Volumes
Lewers Street Screenline

Year	Ala Wai Blvd.	Kuhio Avenue	Kalakaua Ave.	Total Screenline Count
1978				
1977			33,700	
1976	28,583	18,837	31,891	79,311
1975	30,351	22,647	36,473	89,471
-----	-	-	-	-
1973	30,816	19,725	33,493	84,034
1972	29,906	22,362	29,950	82,218
1971	29,906*	15,413	30,060*	75,380
1970	27,055	15,118	36,648	78,821

1967	26,024	17,146	37,729	80,899

1963	16,070			

* Converted to one way operation

PEAK HOUR TRAFFIC VOLUMES

Year	A.M. Peak	P.M. Peak	A.M. Peak	P.M. Peak	A.M. Peak	P.M. Peak
1978						
1977					1798	2213
1976	1986	1764			1653	2240
1975			1128	1345	1688	2200

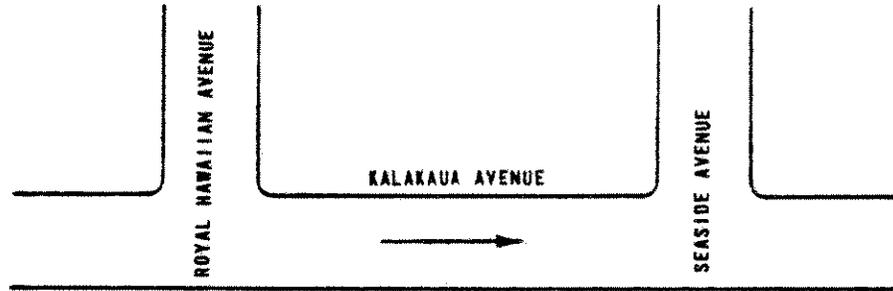
1973	2271	1941	970	1442	1365	2178
1972	2669	1982	1046	1639	1405	2250
1971	2081	1640	748	1122	1324	2534
1970	1841	2120	832	1145	2074	2318

1967						

1963						

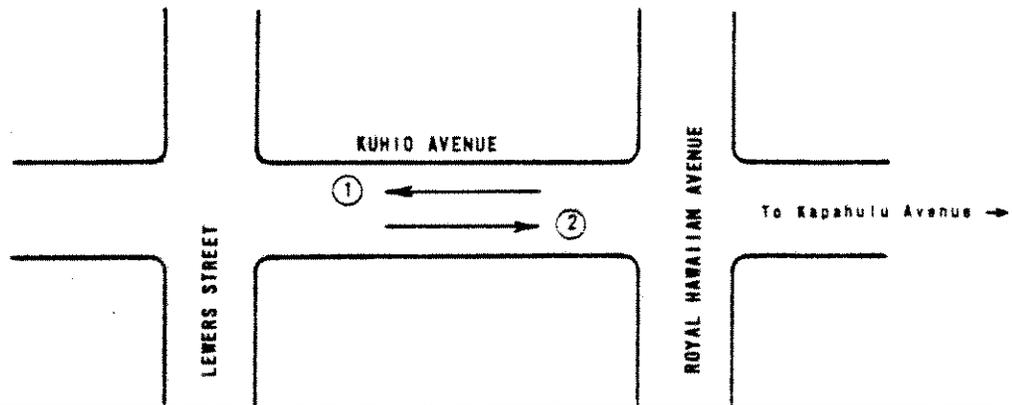
Table 2

24 Hour Traffic Volumes-1976 & 1975
Kalakaua Avenue At Royal Hawaiian Avenue



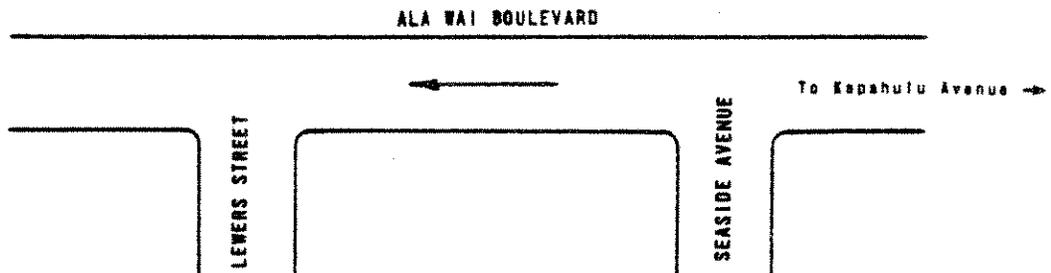
Time	No. of Vehicles		Total	Percent of 24 Hour Volume
	Movement Year 1976	Movement Year 1975		
4:00 - 5:00 A.M.	321	445		1.0
5:00 - 6:00 A.M.	387	395		1.2
6:00 - 7:00 A.M.	664	817		2.1
7:00 - 8:00 A.M.	1328	1354		4.2
8:00 - 9:00 A.M.	1653	1688		5.2
9:00 - 10:00 A.M.	1477	1828		4.6
10:00 - 11:00 A.M.	1585	1824		5.0
11:00 - 12:00 N.	1794	1948		5.6
12:00 - 1:00 P.M.	1950	1995		6.1
1:00 - 2:00 P.M.	1740	1970		5.5
2:00 - 3:00 P.M.	1775	1938		5.6
3:00 - 4:00 P.M.	1915	2002		6.0
4:00 - 5:00 P.M.	2151	2195		6.7
5:00 - 6:00 P.M.	2240	2200		7.0
6:00 - 7:00 P.M.	1684	1752		5.3
7:00 - 8:00 P.M.	1509	1722		4.7
8:00 - 9:00 P.M.	1382	1740		4.3
9:00 - 10:00 P.M.	1505	1771		4.7
10:00 - 11:00 P.M.	1629	1826		5.1
11:00 - 12:00 P.M.	1062	1625		3.3
12:00 - 1:00 A.M.	787	1202		2.5
1:00 - 2:00 A.M.	590	963		1.9
2:00 - 3:00 A.M.	458	762		1.4
3:00 - 4:00 A.M.	332	511		1.0
24 Hour Volume	31891	36473		100.0

Table 3
 24 Hour Traffic Volume-1977
 Kuhio Avenue At Lewers Street



Time	No. of Vehicles		Total	Percent of 24 Hour Volume
	Movement 1	Movement 2		
4:00 - 5:00 A.M.	134	65	199	1.1
5:00 - 6:00 A.M.	117	126	243	1.3
6:00 - 7:00 A.M.	117	279	396	2.1
7:00 - 8:00 A.M.	148	588	736	3.9
8:00 - 9:00 A.M.	251	682	933	5.0
9:00 - 10:00 A.M.	257	647	904	4.8
10:00 - 11:00 A.M.	281	639	920	4.9
11:00 - 12:00 N.	310	701	1011	5.4
12:00 - 1:00 P.M.	316	738	1054	5.6
1:00 - 2:00 P.M.	321	687	1008	5.4
2:00 - 3:00 P.M.	320	755	1075	5.7
3:00 - 4:00 P.M.	318	754	1072	5.7
4:00 - 5:00 P.M.	296	905	1201	6.4
5:00 - 6:00 P.M.	311	907	1218	6.5
6:00 - 7:00 P.M.	292	734	1026	5.4
7:00 - 8:00 P.M.	312	584	896	4.8
8:00 - 9:00 P.M.	357	584	941	5.0
9:00 - 10:00 P.M.	363	587	950	5.0
10:00 - 11:00 P.M.	348	495	843	4.5
11:00 - 12:00 P.M.	315	345	660	3.5
12:00 - 1:00 A.M.	290	212	502	2.7
1:00 - 2:00 A.M.	252	155	407	2.2
2:00 - 3:00 A.M.	270	100	370	2.0
3:00 - 4:00 A.M.	202	70	272	1.4
24 Hour Volume	6498	12339	18837	100.0

24 Hour Traffic Volume-1976 & 1975
Ala Wai Boulevard At Lewers Street



Time	No. of Vehicles		Total	Percent of 24 Hour Volume
	Movement Year 1976	Movement Year 1975		
4:00 - 5:00 A.M.	187	209		0.7
5:00 - 6:00 A.M.	346	378		1.2
6:00 - 7:00 A.M.	887	1033		3.1
7:00 - 8:00 A.M.	1986	1797		6.9
8:00 - 9:00 A.M.	1680	1581		5.9
9:00 - 10:00 A.M.	1419	1557		5.0
10:00 - 11:00 A.M.	1517	1647		5.3
11:00 - 12:00 N.	1502	1707		5.3
12:00 - 1:00 P.M.	1523	1696		5.3
1:00 - 2:00 P.M.	1659	1757		5.8
2:00 - 3:00 P.M.	1839	1803		6.4
3:00 - 4:00 P.M.	1766	1913		6.2
4:00 - 5:00 P.M.	1764	1736		6.2
5:00 - 6:00 P.M.	1758	1657		6.2
6:00 - 7:00 P.M.	1526	1466		5.3
7:00 - 8:00 P.M.	1196	1380		4.2
8:00 - 9:00 P.M.	993	1301		3.5
9:00 - 10:00 P.M.	1070	1247		3.7
10:00 - 11:00 P.M.	1247	1368		4.4
11:00 - 12:00 P.M.	1029	1142		3.6
12:00 - 1:00 A.M.	678	745		2.4
1:00 - 2:00 A.M.	478	611		1.7
2:00 - 3:00 A.M.	303	372		1.1
3:00 - 4:00 A.M.	230	248		0.8
24 Hour Volume	28583	30351		100.0

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 per cent. 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 per cent of the traffic volume on Kalakaua Avenue, in 1976 the traffic volume on Ala Wai Boulevard represented 89.6 per cent 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.

Using the data from the traffic volume counts, the variations in daily time patterns may be illustrated as shown in Plate 4. 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.

Tables 5 to 7 show the traffic volumes for those sections of the major streets which serve the proposed project. Since the project is located at the perimeter of the Waikiki Special Design District, the 24 hour traffic volumes as well as the peak

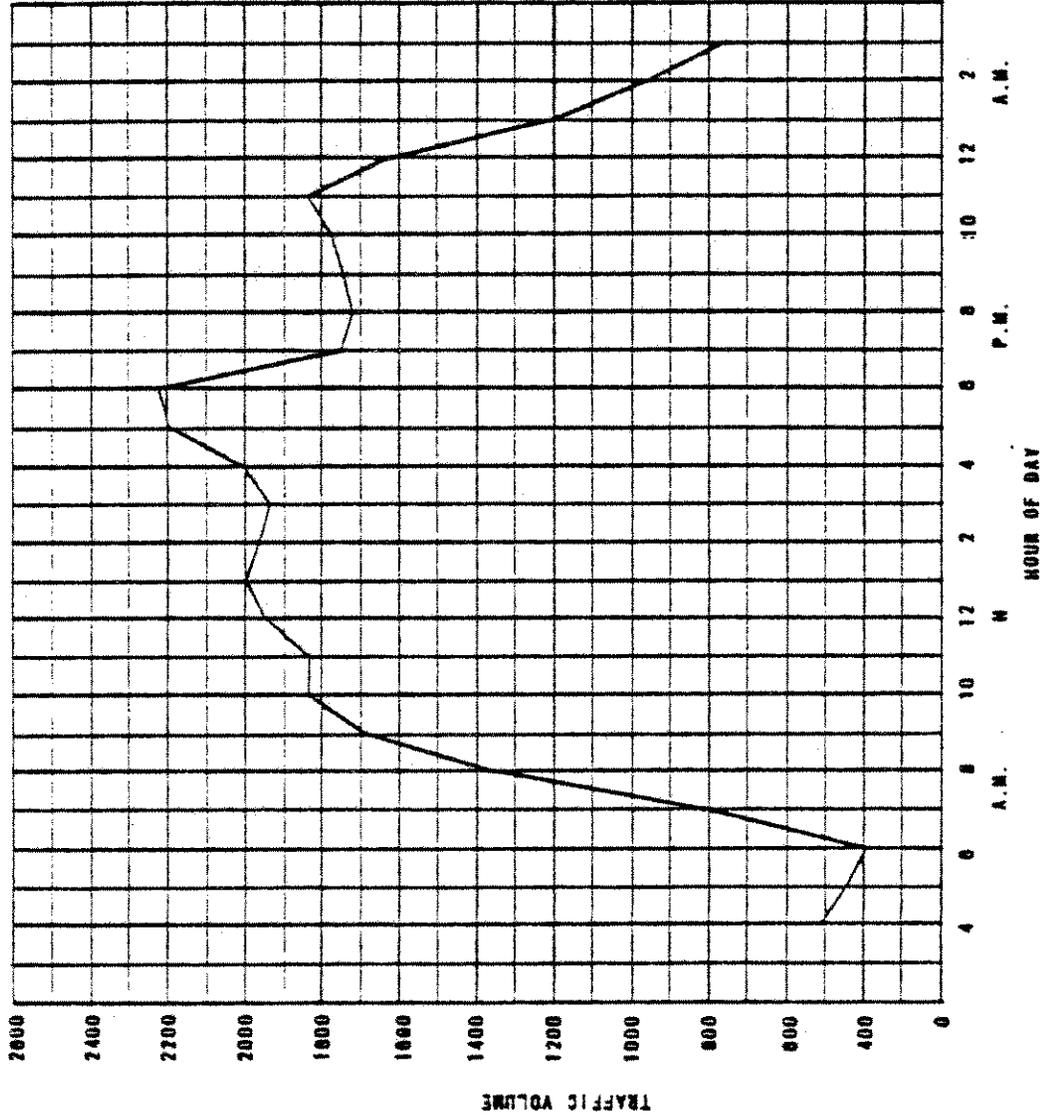
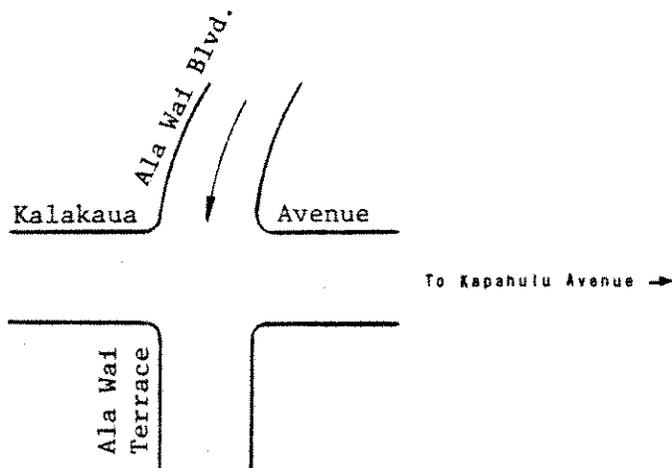


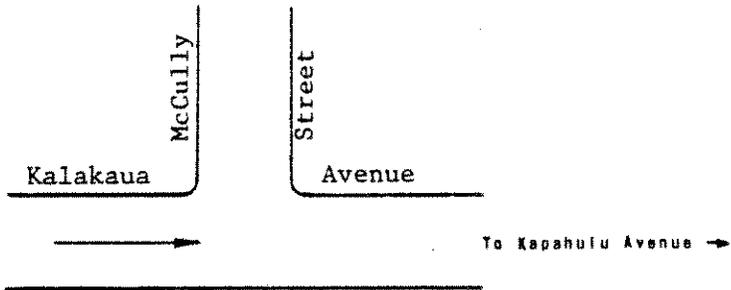
Plate 4
 Hourly Variations of Traffic
 Kalakaua Avenue
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Table 5
 24 Hour Traffic Volume-1978
 Ala Wai Boulevard At Kalakaua Avenue



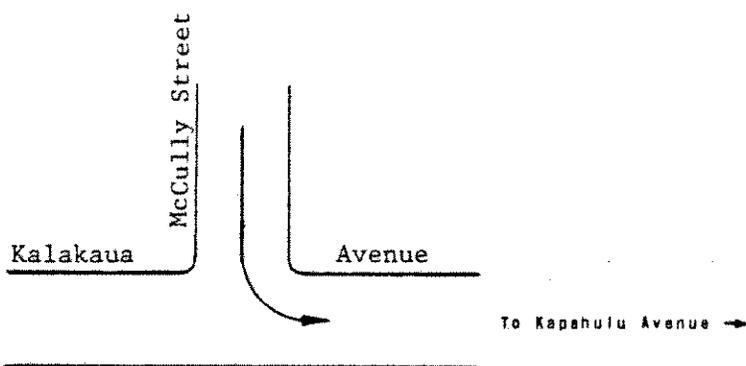
Time	No. of Vehicles		Total	Percent of 24 Hour Volume
	Movement 1978	Movement		
4:00 - 5:00 A.M.	104			0.58
5:00 - 6:00 A.M.	164			0.91
6:00 - 7:00 A.M.	484			2.70
7:00 - 8:00 A.M.	1,104			6.16
8:00 - 9:00 A.M.	919			5.13
9:00 - 10:00 A.M.	933			5.21
10:00 - 11:00 A.M.	976			5.45
11:00 - 12:00 N.	1,036			5.78
12:00 - 1:00 P.M.	933			5.21
1:00 - 2:00 P.M.	1,103			6.16
2:00 - 3:00 P.M.	1,038			5.80
3:00 - 4:00 P.M.	967			5.40
4:00 - 5:00 P.M.	997			5.57
5:00 - 6:00 P.M.	1,013			5.66
6:00 - 7:00 P.M.	874			4.88
7:00 - 8:00 P.M.	898			5.01
8:00 - 9:00 P.M.	711			3.97
9:00 - 10:00 P.M.	748			4.18
10:00 - 11:00 P.M.	822			4.59
11:00 - 12:00 P.M.	734			4.10
12:00 - 1:00 A.M.	511			2.85
1:00 - 2:00 A.M.	351			1.96
2:00 - 3:00 A.M.	292			1.63
3:00 - 4:00 A.M.	194			1.08
24 Hour Volume	17,906			100.00%

Table 6
 24 Hour Traffic Volume-1978
 Kalakaua Avenue At McCully Street



Time	No. of Vehicles		Total	Percent of 24 Hour Volume
	Movement McCully Street	Movement		
4:00 - 5:00 A.M.	201			0.96
5:00 - 6:00 A.M.	396			1.89
6:00 - 7:00 A.M.	782			3.73
7:00 - 8:00 A.M.	1,042			4.97
8:00 - 9:00 A.M.	1,012			4.83
9:00 - 10:00 A.M.	963			4.60
10:00 - 11:00 A.M.	1,133			5.41
11:00 - 12:00 N.	1,078			5.14
12:00 - 1:00 P.M.	1,216			5.80
1:00 - 2:00 P.M.	1,102			5.26
2:00 - 3:00 P.M.	1,186			5.66
3:00 - 4:00 P.M.	1,168			5.57
4:00 - 5:00 P.M.	1,339			6.39
5:00 - 6:00 P.M.	1,210			5.77
6:00 - 7:00 P.M.	1,014			4.84
7:00 - 8:00 P.M.	1,028			4.91
8:00 - 9:00 P.M.	1,037			4.95
9:00 - 10:00 P.M.	845			4.03
10:00 - 11:00 P.M.	1,023			4.88
11:00 - 12:00 P.M.	770			3.67
12:00 - 1:00 A.M.	496			2.37
1:00 - 2:00 A.M.	380			1.81
2:00 - 3:00 A.M.	308			1.47
3:00 - 4:00 A.M.	224			1.07
24 Hour Volume	20,953			100.00%

Table 7
 24 Hour Traffic Volume-1978
 McCully Street At Kalakaua Avenue



Time	No. of Vehicles		Total	Percent of 24 Hour Volume
	Movement	Movement		
4:00 - 5:00 A.M.	91			0.66
5:00 - 6:00 A.M.	205			1.48
6:00 - 7:00 A.M.	482			3.49
7:00 - 8:00 A.M.	802			5.81
8:00 - 9:00 A.M.	941			6.82
9:00 - 10:00 A.M.	699			5.06
10:00 - 11:00 A.M.	689			4.99
11:00 - 12:00 N.	760			5.51
12:00 - 1:00 P.M.	687			4.98
1:00 - 2:00 P.M.	693			5.02
2:00 - 3:00 P.M.	747			5.41
3:00 - 4:00 P.M.	798			5.78
4:00 - 5:00 P.M.	835			6.05
5:00 - 6:00 P.M.	930			6.74
6:00 - 7:00 P.M.	864			6.26
7:00 - 8:00 P.M.	671			4.86
8:00 - 9:00 P.M.	612			4.43
9:00 - 10:00 P.M.	683			4.95
10:00 - 11:00 P.M.	647			4.69
11:00 - 12:00 P.M.	367			2.66
12:00 - 1:00 A.M.	242			1.75
1:00 - 2:00 A.M.	152			1.10
2:00 - 3:00 A.M.	133			0.96
3:00 - 4:00 A.M.	72			0.52
24 Hour Volume	13,802			100.00%

hour volumes will be considerably less than the volumes for the same streets taken at the screenline at Lewers Street (see Table 1). Thus, the traffic volumes at the screenline provide a very good indication of the traffic volumes that could be accommodated by these same major streets in the vicinity of the proposed project.

As indicated in Tables 5 to 7, the peak hour volumes are 941 for McCully Street at Kalakaua Avenue, 1,104 for Ala Wai Boulevard at Kalakaua Avenue, and 1,339 for Kalakaua Avenue at McCully Street. All of these streets, therefore, have considerable excess capacity and should be able to accommodate the proposed development without any adverse traffic effects.

FUTURE TRAFFIC VOLUMES

The various established methods of traffic projection do not yield a reasonably accurate forecast of future traffic volumes. As an example, the Oahu Transportation Study projection of future traffic volumes are extremely conservative. The Study, completed in 1967, indicated that by 1985, the 24 hour volume on Kuhio Avenue between Kaiulani Avenue and Kapahulu Avenue will total 8,000 vehicles. It must be pointed out the projection was made on the assumption that the proposed Fixed Guideway Rapid Transit System would be in operation by 1995. In contrast, the present traffic count on Kuhio Avenue (1975) for the existing improved section from Kalakaua Avenue to Kaiulani Avenue averages more than 21,000 vehicles per day.

Traffic projections based on growth trends of traffic volumes for major streets in the City and County of Honolulu crossing the screenlines give a more realistic and reasonably accurate method for estimating future traffic volumes. Since highway facilities are more permanent than the land uses, traffic projections should be high for sound planning so that the highway system will be able to accommodate changing requirements and unpredictable future land uses.

From traffic counts obtained from traffic surveys conducted by the State Department of Transportation, traffic crossing the Manoa-Palolo Drainage Canal Screenline, which includes the Waikiki District, increased at the rate of 5.9 per cent per year over the past decade from 1960 to 1970. In comparison, traffic volumes across the Kalihi Stream Screenline increased at a considerably higher rate of 10.5 per cent per year over the same period.

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 (Table 1) show that traffic crossing the Lewers Street Screenline extending from Kalakaua Avenue to Ala Wai Boulevard increased at an even lower rate of 1.32 per cent per year for the period from 1967 to 1975. It should be emphasized that during this period, the Waikiki District experienced the highest level of activity in the construction of hotels, condominiums and commercial facilities. The growth in traffic volumes for any other period, therefore, cannot be expected to equal or even keep pace with the growth in traffic volumes for the period from 1967 to 1975. The traffic volumes through the Lewers Street Screenline beyond 1975 appear to support this contention.

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 cent per year. With a 66.9 per cent reduction in hotel rooms than is permitted under existing zoning, the rate of growth of traffic should not exceed 0.44 per cent or less than one-half per cent per year. The 0.44 per cent increase per year is equivalent to an increase of only 8.8 per cent or 7,873 vehicles crossing the screenline within the 20 year period from 1975 to 1995.

To assure that a sufficient margin of safety is built into the analysis, the higher rate of growth of 1.32 per cent per year will be used so that the traffic projection will still be valid for the future. At the rate of growth of 1.32 per cent per year, the traffic volume crossing the screenline will increase by 26.4 per cent 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:

Table 8
Peak Hour Volumes - 1975

<u>Ala Wai Blvd.</u>	<u>Kuhio Avenue</u>	<u>Kalakaua Avenue</u>	<u>Total</u>
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 one-way highway is South King Street in Honolulu, Hawaii. The section referred to is South King Street in the Civic Center between Richards Street and Kapiolani Boulevard Extension. 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 average maximum volume and need to be adjusted to actual roadway conditions inasmuch as there are too many variables.

Assuming the 26.4 per cent 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:

1. 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.
2. Since traffic seeks its own level, much as water, the motoring public will find its own alternate route and avoid the Waikiki District.
3. The energy crisis will encourage the trend towards smaller cars and the use of public transportation.

TRAFFIC CIRCULATION

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 per cent were through traffic. Furthermore, 71 per cent 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 per cent of the total. Thus, the majority of the vehicles had origins and destinations within Waikiki. Through traffic, therefore, was not a major problem, contrary to common belief.

PARKING

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.

Recognizing this unique pedestrian dependency factor in the Waikiki District, the City Planning Commission in August 1979 recommended approval of amendments to the Comprehensive Zoning Code which would generally liberalize parking requirements in the Waikiki Special Design District. Under the existing regulation, one parking space is required for each 400 square feet of building used for commercial activity. The amendment would require one parking space for each 800 square feet of building used for commercial activity or one-half the parking requirement of the existing regulation.

In accordance with proposed amendment, 363 parking spaces must be provided based on the gross floor area of the project of 290,000 square feet. The total number of parking spaces to be provided will be 700, of which 135 parking spaces will be set aside for the Royal Aloha Condominium located nearby across the street on McCully Street and Ala Wai Boulevard. The actual number of parking spaces to be provided for the project, therefore, will be 565 (700-135). These parking spaces will be primarily for the various tenants of the project. With primarily tenant parking on the premises, the project will generate very few automobile traffic. The parking will be all day parking and the turnover will be quite low.

Because of the one-way operation of the street system, entrances and exits to the parking facility will be located on all three frontages for multi-access to facilitate traffic movement and to minimize traffic congestion. These entrances and exits are to be placed as far as possible from the intersections in order to provide maximum storage and maneuver space. The multi-access pattern will also make it equivalent to an ideal arrangement whereby entry into the parking facility will be from a one-way street carrying inbound traffic and exit will be onto an outbound route.

MASS TRANSPORTATION

Adequate mass transportation service is available to serve the Waikiki District. Average headway is approximately 10 minutes during the peak hours and 15 minutes during the off-peak hours. There is now increasing dependence on the use of public transportation. The energy crisis and the consequent enforced use of public transportation and other modes of travel should bring about considerable relief to the present and future traffic problems.

CONCLUSION

Analyzing the various factors, it may be concluded that the proposed project will enhance the aesthetic, environmental and economic aspects of the Waikiki District and provide a service to the community with a minimum disruption of environmental activities.

jo paul rognstad and associates inc.

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March 5, 1980

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

Attn: Mr. Fred Rodriguez

Dear Mr. Rodriguez:

Re: EIS for Waikiki Triangle

In regard to the comments from the Department of Land Utilization, we have the following reply:

The design solution presented is not the most economical solution. Obviously, there are always alternate solutions. However, the existing solution has been arrived at in an attempt to provide the best design. The design attempts to provide the following:

1. The least impact on surrounding buildings by placing the tower on the property farthest from existing buildings and located so as to make use of the natural open space provided by the Ala Wai Canal. The two closest buildings are the Royal Aloha condominium and the old FAA office building. Since the Royal Aloha is a residential building, the impact of an adjacent building is greater; therefore, the use of the corner adjacent to FAA seems preferable.
2. Concentrate the building's density in a single slender tower of maximum height to minimize its bulkiness and allow maximum view plane visibility from other view points.
3. Since underground parking is virtually impossible to provide with the existing water table conditions, the design attempts to maximize the number of cars per floor to minimize the vertical height of the overall parking structure.

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Mr. Fred Rodriguez
Page 2
March 5, 1980

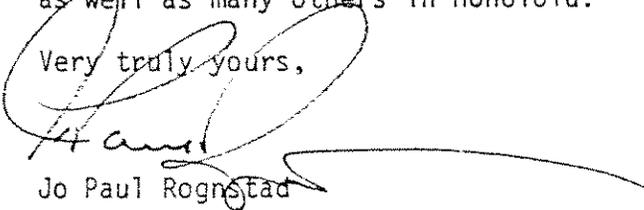
4. The tower could be placed in any of the three corners of the property or in the center. The tower is placed in the ewa corner for the reasons explained in paragraph #1. The tower could be located in the center of the property surrounded by parking decks, but this would cut the visual vertical height of the building and thus reduce its height to width ratio and thereby increase its bulkiness.

We would appreciate the input of the DLU staff as to their agreement or disagreement with the use of the Kalakaua-Ala Wai corner as the best solution to the tower location. This is a fundamental step in the design process.

The amount of landscaping versus the fountain/waterfall plazas is certainly a matter for review. Our original sketches showed all landscaping in the corners and the plazas were added in response to a DLU suggestion.

The appropriateness of building materials is open to a wide choice of materials and colors. The recent adoption of a new floor area definition which includes lanais and balconies has placed an extreme limitation on the use of projecting elements in exterior design treatment. This limitation will probably dictate a thin skin type of exterior on this building as well as many others in Honolulu.

Very truly yours,


Jo Paul Rognstad

JPR/1k

