

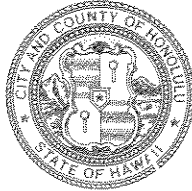
PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 8TH FLOOR • HONOLULU, HAWAII 96813-3017
PHONE: (808) 523-4533 • FAX: (808) 523-4950

JEREMY HARRIS
MAYOR

RECEIVED

'98 DEC -7 AM 11:04



PATRICK T. ONISHI
CHIEF PLANNING OFFICER

DONA L. HANAIKE
DEPUTY CHIEF PLANNING OFFICER

MH 11/98-2257

November 30, 1998

Mr. Gary Gill, Director
Office of Environmental Quality Control
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813

Dear Mr. Gill:

Acceptance Notice for the Final
Environmental Impact Statement (EIS)
for the Block J Redevelopment Project

The Planning Department is notifying you of our acceptance of the Final EIS for the Block J Redevelopment Project, as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes.

Pursuant to Section 11-200-23(c), Chapter 200, Title 11 ("Environmental Impact Statement Rules") of the Administrative Rules, this acceptance notice should be published in the next issue of The Environmental Notice by your office.

We have attached our Acceptance Report for the Final EIS for the Block J Redevelopment Project. Should you have any questions, please contact me at 523-4713.

Yours very truly,

A handwritten signature in cursive script, reading "Patrick T. Onishi".

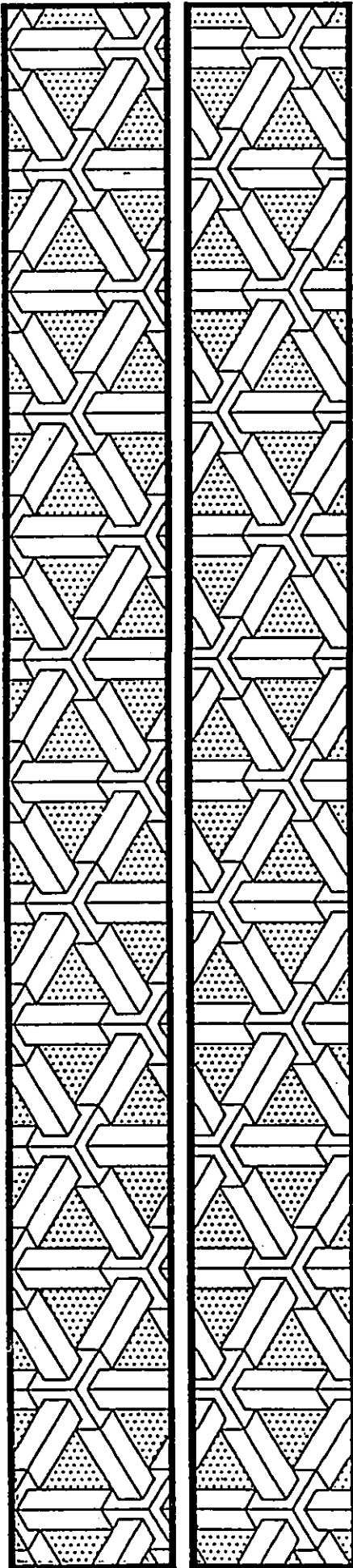
PATRICK T. ONISHI
Chief Planning Officer

PTO:ft
Attachment

c: Department of Community Services
Wilson Okamoto & Associates, Inc.

1998-Oahu - FEIS - 9-23-98

PLANNER



Block J

**Final
Environmental Impact Statement
for the
Block J Revelopment Project
Honolulu, Oahu, Hawaii**

Prepared For:

City and County of Honolulu
Department of Community Services

Prepared By:

Wilson Okamoto & Associates, Inc.

September 1998

**FINAL
ENVIRONMENTAL IMPACT STATEMENT
FOR THE
BLOCK J REDEVELOPMENT PROJECT**

Honolulu, Oahu, Hawaii

Prepared For: City and County of Honolulu
Department of Community Services

Responsible
Official: This document has been prepared under my direction pursuant
to the requirements of Chapter 343, Hawaii Revised Statutes

Georgina M. Uyea September 11, 1998
in Abelina M. Shaw, Director Date
Department of Community Services
City and County of Honolulu

Accepting
Agency: City and County of Honolulu
Planning Department

Prepared By: Wilson Okamoto & Associates, Inc.

September 1998

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- APPENDIX B: ACOUSTIC REPORT (Y. Ebisu & Associates)
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- APPENDIX D: ARCHAEOLOGICAL ASSESSMENT (Cultural Surveys Hawaii)
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PREFACE

This Final Environmental Impact Statement (EIS) is prepared pursuant to Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200, Administrative Rules, Department of Health, State of Hawaii. Proposed is an agency action by the City and County of Honolulu ~~Department of Housing and Community Development (DHCD)~~ *Department of Community Services* to lease City property for the development of a mixed-use affordable rental residential, retail and public parking complex in Downtown Honolulu, island of Oahu. The project will be developed by Block J & Associates, LLC, a Hawaii limited liability company, whose manager is Coastal Rim Properties. Block J & Associates was selected as the developer pursuant to a Request for Proposals issued by the City and County of Honolulu Department of Housing and Community Development to develop the project site. The City and County of Honolulu ~~DHCD~~ *Department of Community Services*, the proposing agency, has determined that an Environmental Impact Statement will be required for the proposed project.

The proposed project described in this Final EIS is based on Alternative 2 presented in the Environmental Impact Statement Preparation Notice dated May, 1998. Alternative 1, which would not have extended the underground parking garage beneath Kamalii Park, has been eliminated.

Due to the City's reorganization since the Draft EIS was published, the Final EIS reflects the respective newly designated City agencies, as appropriate.

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SUMMARY

Project: Block J Redevelopment Project

Proposing Agency: City and County of Honolulu
~~Department of Housing and Community Development~~
Department of Community Services
~~650 South King Street~~
715 South King Street, Suite 311
Honolulu, Hawaii 96813
Contact: Keith Ishida
Phone: (808) 527-5092

Accepting Agency: City and County of Honolulu
Planning Department
650 South King Street
Honolulu, Hawaii 96813
Contact: Patrick T. Onishi
Phone: (808) 523-4713

EIS Preparer: Wilson Okamoto & Associates, Inc.
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
Contact: Earl Matsukawa
Phone: (808) 946-2277

Location: Downtown Honolulu, Island of Oahu

Tax Map Key: 2-1-09: 18 and 27

Area: Approximately 178,285 square feet, including an approximately 44,870-square foot portion of Pali Highway which traverses the project site

Landowner: City and County of Honolulu

Existing Use: Municipal parking lot (TMK: 2-1-09: 18) and Kamalii Park (TMK: 2-1-09: 27)

State Land Use

Classification: Urban District

Development

Plan Land

Use: Commercial Emphasis Mixed Use
Parks and Recreation

Development

Plan Public

Facilities Map: Government Building/Modification (GB/M)

Zoning: BMX-4 Central Business Mixed Use District

Special

District: Hawaii Capital Special District

PROPOSED ACTION:

The City and County of Honolulu ~~Department of Housing and Community Development~~ *Department of Community Services* proposes to lease City property for the development of a mixed-use affordable rental residential, retail and public parking complex in Downtown Honolulu, island of Oahu. The project will be developed by Block J & Associates, LLC, a Hawaii limited liability company, whose manager is Coastal Rim Properties. The Block J Redevelopment Project is proposed for a portion of the block bounded by Beretania, Queen Emma, Kukui, and Fort Streets and bisected by Pali Highway. The portion of Pali Highway traversing the project site will remain open to through traffic, and Kamalii Park on its Ewa side will be reconstructed.

Major elements of the redevelopment include:

- Approximately 913 affordable rental one-and two-bedroom units located within two high-rise residential towers. The affordable rental units will be offered to households earning at or below 60 percent of the median income. Approximately 475 units located in one tower will be offered to senior households. The remaining approximately 438 rental units located in the second tower will be offered to households of all ages. The two towers will be approximately 350 feet in height.
- Approximately 100,000 square feet of retail space within two above-grade levels.

- A total of approximately 1,896 on-site parking stalls. Except for approximately 20 parking stalls which will be located at ground level, the remaining stalls will be located within three underground levels. The parking stalls will be allocated among the senior and multi-family residential units, guests, retail, municipal, and public parking. In addition, approximately 10 loading stalls will be provided for building and service use.
- Approximately 25,500 square feet of ground level open space.
- Approximately 32,000 square feet of rooftop recreational deck over the retail space, and approximately 1,700 square feet of arcade area.
- Reconstruction of the existing Kamalii Park.

The project will be developed within existing building height limits for the project area. This includes a 350-foot height limit which extends over the site, and a 40-foot height limit established by the Hawaii Capital Special District within an approximately 30-foot wide portion along Queen Emma Street. Development of the project will occur in a single phase.

SIGNIFICANT BENEFICIAL AND ADVERSE IMPACTS AND PROPOSED MITIGATION MEASURES

Hydrology and Drainage: During the short-term construction period dewatering activities will be required, which has the potential to affect surrounding *caprock* water tables and produce effluent discharges containing silt and other contaminants that could affect receiving waters in Honolulu Harbor. To minimize the potential for such impacts, a dewatering plan and best management practices plan will be prepared in conjunction with the NPDES permit application for Discharges Associated with Construction Dewatering Activity.

Soils: Prior to construction, a Phase I Environmental Site Assessment will be conducted at the project site to assess the potential for discovering any hazardous or toxic materials within the property. If deemed necessary, additional investigations will follow, along with any requirements for remediation.

Air Quality: During the short-term construction period, site preparation and earth moving, as well as the construction of structures will create particulate emissions. The movement of construction vehicles on unpaved areas of the project will also generate dust. To minimize these impacts, unpaved areas will be frequently watered during

construction to control dust, and landscaping will be installed as soon as feasible within completed areas.

Noise: During the short-term construction period, audible construction noise will probably be unavoidable during the entire three-year construction period. Recent geotechnical investigations, however, indicate that use of equipment such as impact pile drivers and pneumatic rams may not be necessary and, therefore, will be avoided. In the long-term, proposed project residences will be exposed to traffic noise levels in the range regarded as unacceptable by federal agencies administering housing programs. Appropriate means of mitigating noise impacts on future residents will be required to address this concern.

Access and Traffic: During the short-term construction period, various construction activities have the potential to disrupt traffic flow. To the extent possible, such disruptions will be minimized during the morning and afternoon peak traffic periods. This includes rerouting traffic using Pali Highway onto as many as four traffic lanes to be provided within the project site during peak traffic periods. The loss of public and employee parking during construction will increase parking demand in Downtown. Alternative approaches to accommodating such demand will be considered, including informing the public of alternative parking in the area and working with the City to identify alternative employee parking locations, possibly outside of the Downtown area. In the long-term, project-related traffic will additionally tax the capacity of key intersections that are projected to reach their capacities without the project. Various potential mitigation measures to address project-related traffic impacts will be presented for discussion to the City Department of Transportation Services to determine measures to be implemented.

Visual Characteristics: Of the important views identified in Section 3.13, only portions of the mauka views of the Koolau Mountains and Punchbowl are currently available from public vantage points in the vicinity of the project site. The primary public vantage points affected by the project include mauka views of the Koolau Mountains and Punchbowl from the Bishop Street and Alakea Street corridors near Beretania Street, mauka views of the Koolau Range from further makai on Bishop Street, and makai views from the Punchbowl Lookout. As indicated in Section 3.13, the project's residential towers will be clearly visible from the surrounding area, and in part will block portions of the mauka public views from these designated vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl Lookout, although the towers will unavoidably contribute to an increase in visual density of this view.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's two high-rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. Although the mass of the towers will be minimized by the neighboring high-rise office buildings, the perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is setback to create a visual step back from the retail structure located at ground level. Strategic landscaping will further minimize the overall mass of the tower and retail structures. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the

tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

Socio Economic:

Employment: Based on the estimated construction cost of \$110 million, the project will likely involve nearly 800 person-years of construction work over three years, and an additional 1,200 person-years of indirect and induced construction-related jobs. Upon completion, about 275 full-time jobs could be located in the project, depending upon the commercial uses utilizing the retail space. Except for a few positions, however, these jobs would not be created by the project. Instead, they are jobs that would otherwise be located elsewhere on Oahu if the project were not built.

Population: The project will house approximately 1,250 residents. This population amounts to an increase of about 15% within the Census Tracts 40, 41 and 42. These residents are likely to be Oahu residents who would be living elsewhere if the project were not built.

Housing: The project will not attract new residents or visitors to the island. The 438 new multi-family units in the project responds to a recognized housing demand for the 50% to 80% of median income group but will not greatly change the imbalance of demand over supply for this group. The 475 senior units constitute a 40% increase in the elderly housing supply expected to be built in the next few years.

Public Revenues: The City and County of Honolulu would receive an initial payment of \$8 million, followed by lease rents on the project and property taxes in the area. The net impact on the State of Hawaii is estimated at \$6.3 million associated with project construction.

Public Facilities and Services: No significant impacts on the provision of police, fire, medical, educational, child care and recreational services and/or facilities is anticipated. The Department of Education is requiring a "fair share" contribution for each housing unit that could include children. Demands on parks in the vicinity will likely increase to some degree in spite of the project's on-site park dedication improvements which will absorb a part of this demand.

Social Impacts: Positive benefits of the project include improving the quality of life for project residents through the provision of 913 affordable rental units in close proximity to public transportation and major employment and service destinations, and increasing the amount of public parking supporting businesses in the area. Potential adverse social impacts include construction-related inconveniences to commuters, customer access and

parking impediments to businesses in the same block as the project, and noise, dust and traffic impacts on nearby residents. In the long-term, St. Andrew's Priory may seem more a part of its urban surroundings.

ALTERNATIVES CONSIDERED

Alternatives analyzed for the project include: No Action Alternative, Alternative Locations, Alternative Site Development Concepts, and the Pacific Nations Center Development. The current project proposal was determined to be the most feasible in terms of meeting the project objectives.

UNRESOLVED ISSUES

Project Plan and Design: The conceptual plan and design features of the project remain to be finalized and may undergo revisions based on response to public input and to conform to applicable permits and other requirements. The City ~~Department of Housing and Community Development~~ *Department of Community Services* and the project developer will continue to consult and coordinate with appropriate agencies and reviewers during the course of the planning process until the project plans are finalized.

Project Financing: Project financing for the project is currently in the process of being obtained.

Necessary Permits and Approvals: A number of permits and approvals will be required prior to construction of the project, and are listed in ~~Chapter 5 Section 5.10~~ *Permits and Approvals*. Among the approvals is the possible need to pursue exemptions from the amount of open space, the number of parking stalls for the Senior Tower, the *Hawaii Capital Special District* Minor Permit process, and park dedication requirements pursuant to the affordable housing provisions of Chapter 201E, HRS.

Archaeological/Historical Resources: Excavation of the project site to the depths required for the proposed underground parking structure would impact any archaeological resources that may be present. *An archaeological inventory survey with* subsurface testing of the project site prior to construction to determine the extent and nature of archaeological and historic deposits and features present will be conducted in coordination with the State Historic Preservation Division. If significant findings are encountered, an appropriate mitigation plan will be prepared. The plan could include data recovery and/or construction monitoring.

Traffic and Access: Mitigation measures to minimize the disruption of traffic during construction will need to be determined through the preparation of a traffic management

plan in consultation with the City Department of Transportation Services which will approve the plan. The loss of public and employee parking during construction will increase parking demand in Downtown. Measures to address the increased demand, such as informing the public of alternative parking in the area and working with the City to identify alternative employee parking locations will need to be considered, and appropriate measures selected for implementation. In the long-term, project-related traffic will additionally tax the capacity of key intersections that are projected to reach their capacities without the project. Various potential mitigation measures to address project-related traffic impacts will be presented for discussion to the City Department of Transportation Services to determine measures to be implemented.

Utilities: Consultation has been initiated with the Board of Water Supply, City ~~Department of Wastewater Management~~ *Department of Environmental Services*, and the utility companies to determine the adequacy of the respective infrastructure and utility services to accommodate and serve the needs of the proposed project.

Water Quality: Appropriate or applicable Best Management Practices (BMP) to reduce and control the discharge of sediment from construction dewatering effluent will be determined during the National Pollutant Discharge Elimination System (NPDES) permit application process.

COMPATIBILITY WITH LAND USE PLANS AND POLICIES

The proposed project will generally conform with the various land use plans, policies and regulatory controls, including, but not limited to, the Hawaii State Plan and appropriate Functional Plans, and the City and County's General Plan, Development Plan (DP), and land Use Ordinance.

The proposed project conforms with the DP Land Use Map designations of Commercial Emphasis Mixed Use and Parks and Recreation. The project will conform in part with the urban design principles and controls of the DP Common Provisions, and the Special Provisions and Downtown Special Area of the Primary Urban Center DP. The project will be developed within existing building height limits for the project area. This includes a 350-foot height limit which extends over the site, and a 40-foot height limit established by the Hawaii Capital Special District within an approximately 30-foot wide portion along Queen Emma Street.

Of the important views identified in the DP, only portions of the Koolau Mountains and Punchbowl are currently visible looking mauka from public vantage points in the vicinity of the project site. The primary public vantage points affected by the project include mauka views of the Koolau Mountains and Punchbowl from the Bishop Street and Alakea

Street corridors near Beretania Street, mauka views of the Koolau Range from further makai on Bishop Street, and makai views from the Punchbowl Lookout. The project's residential towers will be clearly visible from the surrounding area, and will block portions of the mauka public views from these vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl Lookout.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's two high-rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. The perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the

corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

The BMX-4 Central Business Mixed Use District zoning is appropriate for the proposed project. The project will be developed within the 350-foot height limit established for the zoning district, except for the approximately 30-foot wide portion of the project site along Queen Emma Street located within the Hawaii Capital Special District. The project is proposed to be developed to a FAR of approximately 7.26 through an open space bonus to a total development floor area of approximately 748,800 square feet.

The proposed project will be developed in conformance with the Hawaii Capital Special District guidelines, including the 40-foot height limit established within the portion along Queen Emma Street.

Among the approvals is the possible need to pursue exemptions from the amount of open space, the number of parking stalls for the Senior Tower, the *Hawaii Capital Special District Minor Permit* process, and park dedication requirements pursuant to the affordable housing provisions of Chapter 201E, HRS.

REQUIRED PERMITS AND APPROVALS

The following is a list of permits and approvals which may be required prior to construction of the proposed project:

State of Hawaii

Department of Health

- Noise Variance Permit
- Permit for Air Emissions
- National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activity Dewatering
- Commission on Persons with Disabilities (Review pursuant to Americans with Disabilities Act Accessibility Guidelines (ADAAG))

Department of Land and Natural Resources

- Chapter 6E, HRS, State Historic Preservation Law

Department of Transportation

- Permit to Perform Work Within State Highways

City and County of Honolulu

~~Department of Land Utilization~~ *Department of Planning and Permitting*

- Conditional Use Permit (CUP), Type 1 for Joint Development of Two or More Adjacent Zoning Lots
- Hawaii Capital Special District Minor Permit for Removal of Trees Over Six Inches in Diameter
- Hawaii Capital Special District Minor Permit for Sidewalk Improvements
- Grading and Drainage Permits
- Excavation Permit
- Permit to Excavate Public Right-of-Way
- Construction Permit
- Construction Dewatering Permit
- Wastewater Permits
- Sewer Connection Permits
- Sewer Extension, Oversizing and Relief Sewer Requirements
- Building Permit
- Electrical Permit
- Plumbing Permit
- Sidewalk/Driveway Work Permit
- Certificate of Occupancy
- Street Usage Permit

Planning Department

- Environmental Impact Statement

Board of Water Supply

- Water and Water System Requirements for Developments

City Council

- Exemptions pursuant to Chapter 201E, HRS

Other

Utility Companies

- Utility Service Requirements
- Permit Regarding Work on Utility Lines

CHAPTER 1

INTRODUCTION

1. INTRODUCTION

1.1 Introduction

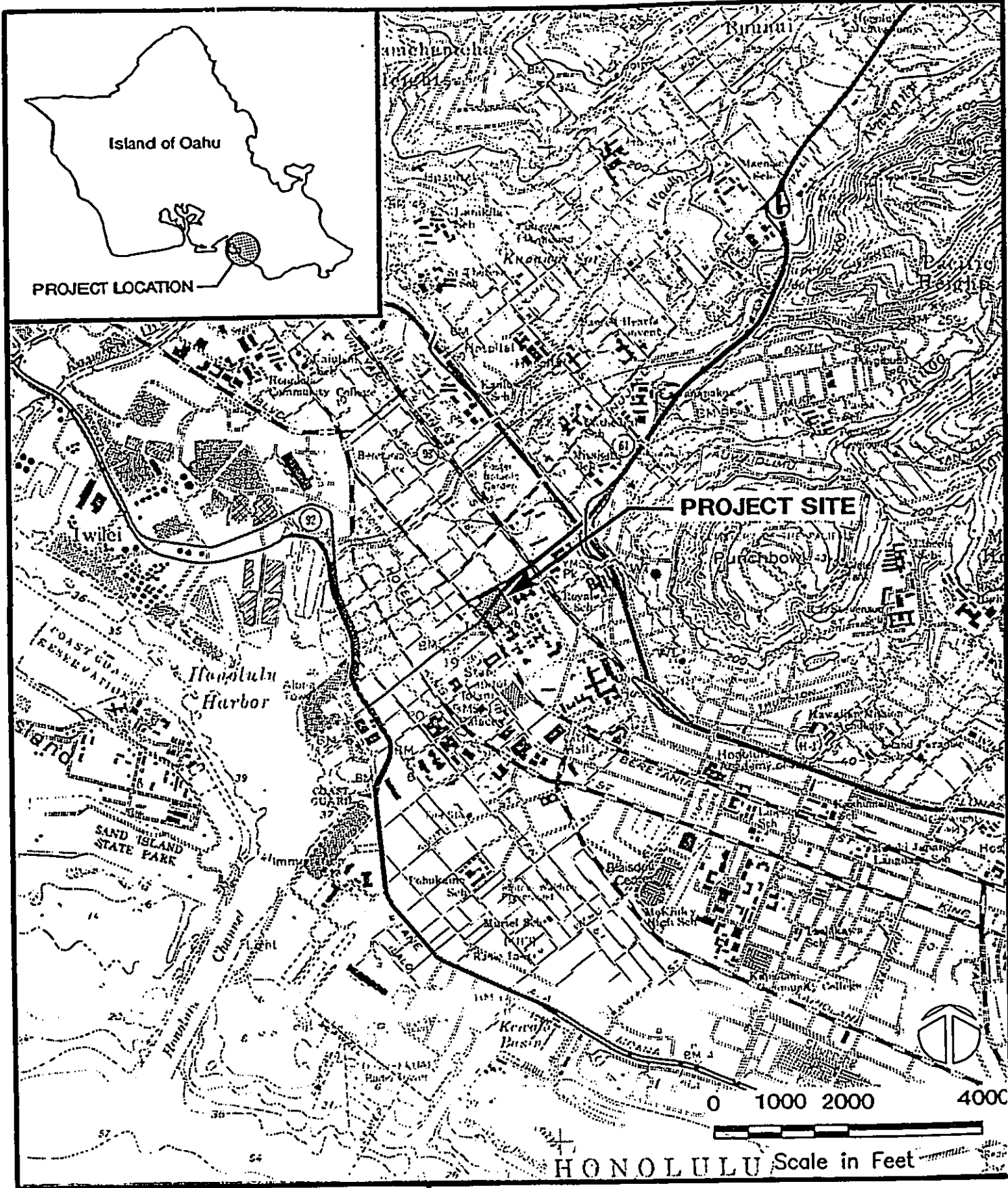
The City and County of Honolulu ~~Department of Housing and Community Development~~ *Department of Community Services* proposes to lease City property for the development of a mixed-use affordable rental residential, retail and public parking complex in Downtown Honolulu, island of Oahu (see Figure 1-1). The project will be developed by Block J & Associates, LLC, a Hawaii limited liability company, whose manager is Coastal Rim Properties. The Block J Redevelopment Project is proposed for a portion of the block bounded by Beretania, Queen Emma, Kukui, and Fort Streets and bisected by Pali Highway. The portion of Pali Highway traversing the project site will remain open to through traffic, and Kamalii Park on its Ewa side will be reconstructed.

1.2 Project Location

The project site is located within Downtown Honolulu, encompassing two parcels bounded by Beretania, Queen Emma, Kukui, and Fort Streets. The site encompasses approximately 178,285 square feet of land (approximately 4.1 acres) comprising Tax Map Keys (TMK): 2-1-09: 18 and 27, including an approximately 44,870-square foot portion of Pali Highway which traverses the project site (see Figure 1-2). The parcels comprising the project site, including the segment of Pali Highway, are currently owned by the City and County of Honolulu.

1.3 Project Background

In 1995, the City and County of Honolulu Department of Housing and Community Development established and conducted a Request for Proposals (RFP) process (RFP No. 056) to select a developer to either lease and develop, purchase and develop, or jointly develop with the City the proposed Block J Redevelopment Project on an approximately 103,139-square foot site bounded by Kukui, Queen Emma and Beretania Streets, and Pali Highway. The project represents one facet of the City's program to revitalize the Kukui District in downtown Honolulu by expanding its business and employment opportunities and enhancing its visual and social environs. The RFP set forth that whichever development option was chosen, the successful developer would develop commercial/retail activity on the project site. The RFP also required replacement of the existing public parking stalls with at least the equivalent number of new parking stalls. Subsequent to selection of the developer, the City and the developer entered into discussions regarding building design and increased retail/parking for the project. This



**BLOCK J
REDEVELOPMENT
PROJECT**

LOCATION MAP

Fig. 1-1

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.

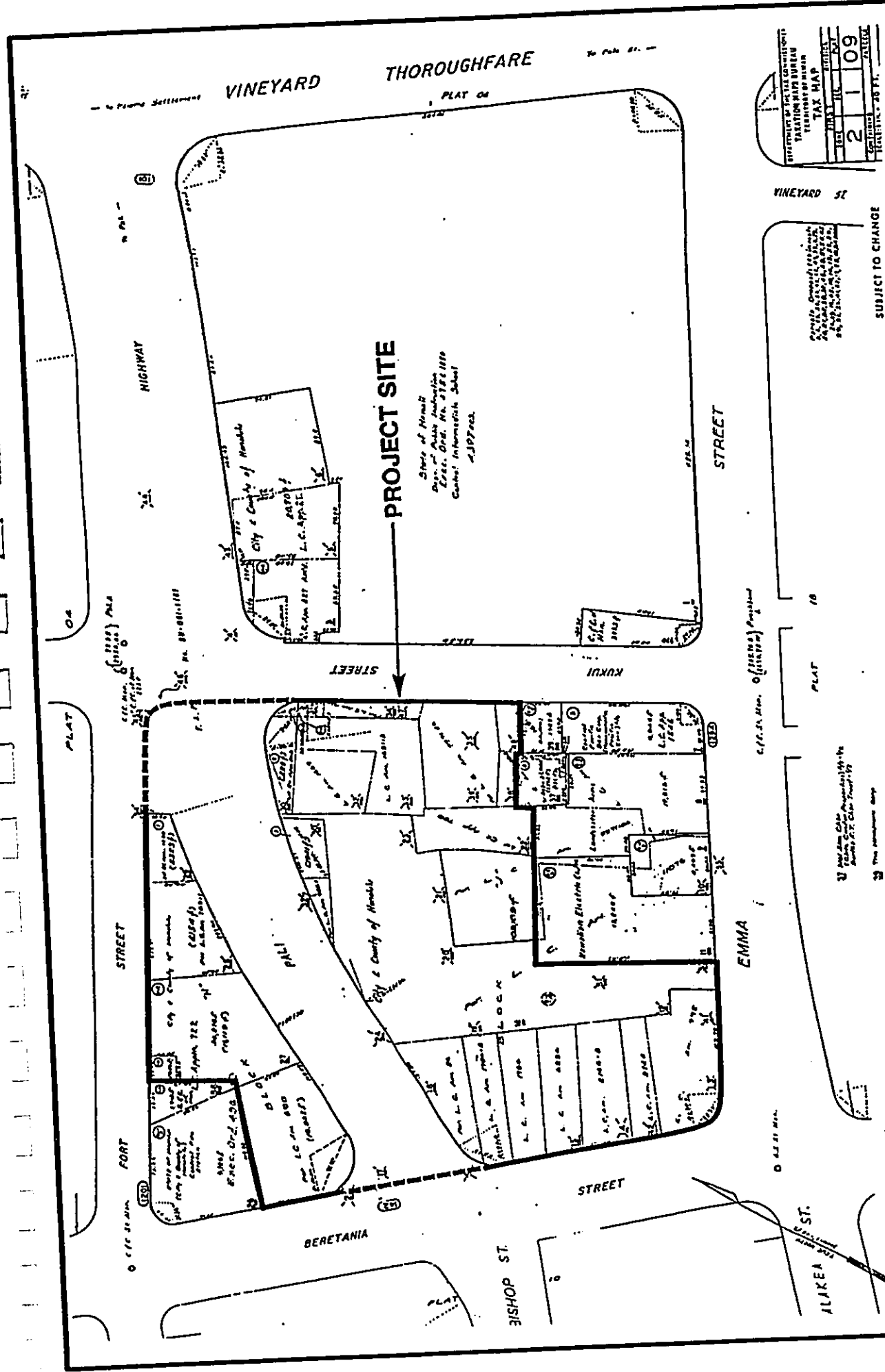


Fig. 1-2

**TAX MAP KEY
2-1-09:18 AND 27**

**BLOCK J
REDEVELOPMENT
PROJECT**

Prepared by:
**WILSON OKAMOTO &
ASSOCIATES, INC.**

Prepared for:
**CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES**

Not to Scale

REGISTERED MAPS COMMISSION	
TAX MAP BUREAU	
TERRITORY OF HAWAII	
TAX MAP	
2	109
DATE: 2-1-09	
SCALE: 1" = 25 FT.	

resulted in the current design to provide underground parking extending from the initial project site to beneath Pali Highway and Kamalii Park.

On September 19, 1995, the RFP was advertised. On February 3, 1998, Block J & Associates was selected as the developer. The City will master lease the project site to the developer who will develop the Block J Redevelopment Project.

1.4 Purpose and Need for Action

The City and County of Honolulu solicited design build proposals for the Block J Redevelopment Project to achieve diverse objectives, including:

- Better utilization of this valuable City property which is located in close proximity to governmental offices, the State Legislature, and headquarters for many of the State's leading businesses, utilities and financial institutions;
- Providing for the long-term viability of Downtown Honolulu as Oahu's historic and financial center; and,
- Assisting in stimulating the local economy in terms of construction expenditures, business opportunities and on-going operating expenditures.

The winning proposal also offers the potential for achieving the following objectives:

- Providing affordable rental housing in a location near a major employment center and schools;
- Providing affordable rental housing for seniors in close proximity to various supporting services;
- Reducing the dependence on automobiles for commuting by providing housing near a major employment center and public transportation;
- Providing more public parking than the existing parking lot which will be replaced by the proposed project; and,
- Stimulating retail businesses in the Downtown area by increasing the number of residents demanding goods and services.

1.5 Existing and Surrounding Land Uses

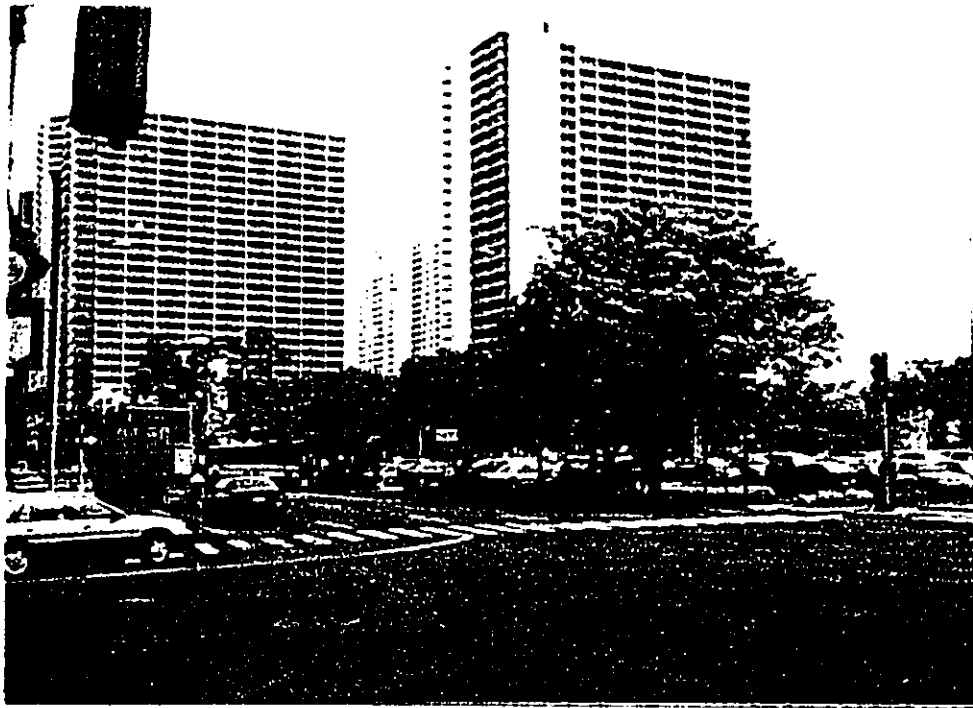
Existing Uses: The portion of the project site located between Queen Emma Street and Pali Highway (approximately 103,139 square feet) is currently a City parking lot (see Figures 1-3 and 1-3a). The paved surface lot includes two parking areas: a municipal lot with 208 metered stalls, and an approximately 75-stall lot located at the Beretania/Queen Emma Street corner which is used for parking by City official and employee vehicles. The portion of the project site located between Pali Highway and Fort Street (approximately 30,276 square feet) is Kamalii Park, a passive City park (see Figure 1-3a). The remainder of the project site includes a segment of Pali Highway (approximately 44,780 square feet) consisting of four makai-bound travel lanes divided by a landscaped median.

Surrounding Uses: As shown in Figure 1-4, the area immediately surrounding the project site is a mixture of commercial office/retail, residential and public facility uses. Land uses immediately adjacent to the project site include the mid-rise commercial/office Queen Emma Building, the low-rise Kukui Medical Center, 181 South Kukui and Civic Center commercial/office buildings, and the Hawaiian Electric substation to the east, and the Central Fire Station to the west adjacent to Kamalii Park.

The Pali Highway, and Kukui and Fort Streets intersect at the project site's northern corner. In this area, the high-rise Kukui Plaza residential/commercial complex is located across Fort Street from the project site, while the block diagonally to the north contains the low-rise See Dai Doo Society Building consisting of commercial office/retail establishments, and the Pali Shopping Center. Across Kukui Street is Central Middle School. Land uses further mauka of the project site along Vineyard Boulevard include the high-rise Queen Emma Apartments, the Nuuanu YMCA and Royal Elementary School.

Queen Emma and Beretania Streets border the project site on the south and western sides, respectively. Major uses in this area include St Andrew's Cathedral and St. Andrew's Priory across Queen Emma Street. In the block diagonally makai/Diamond Head of the project site is the Capitol Center and State Office Tower office complexes. Across Beretania Street in the block between Alakea and Bishop Streets are a restaurant establishment and the GTE Hawaiian Telephone building. On the block Ewa of Bishop Street are the Century Square commercial/office building and adjacent Our Lady of Peace Church. Further makai of the project site is the downtown Financial District consisting mostly of high-rise office buildings.

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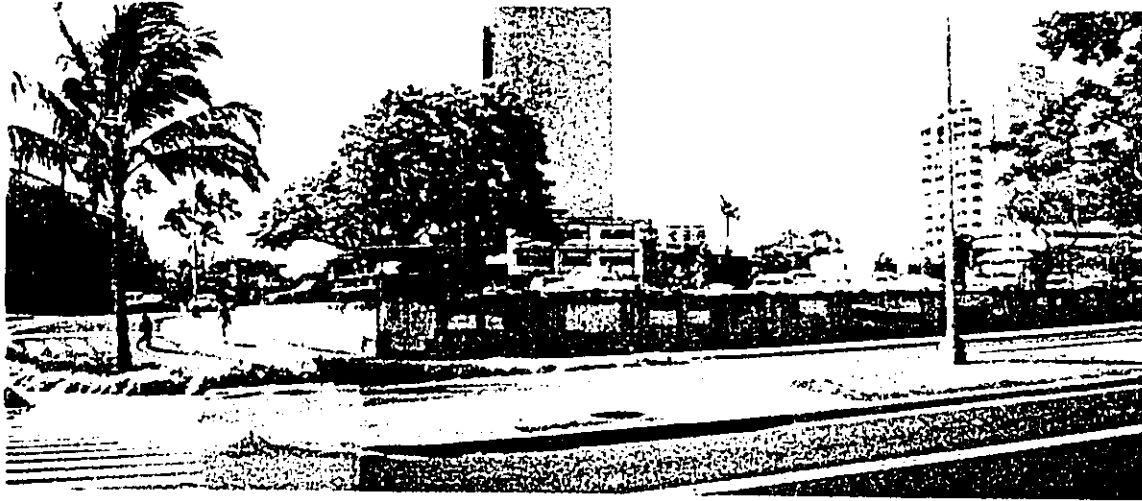


View of project site from intersection of Alakea and Beretania Streets, looking North (Kukui Plaza in the background).

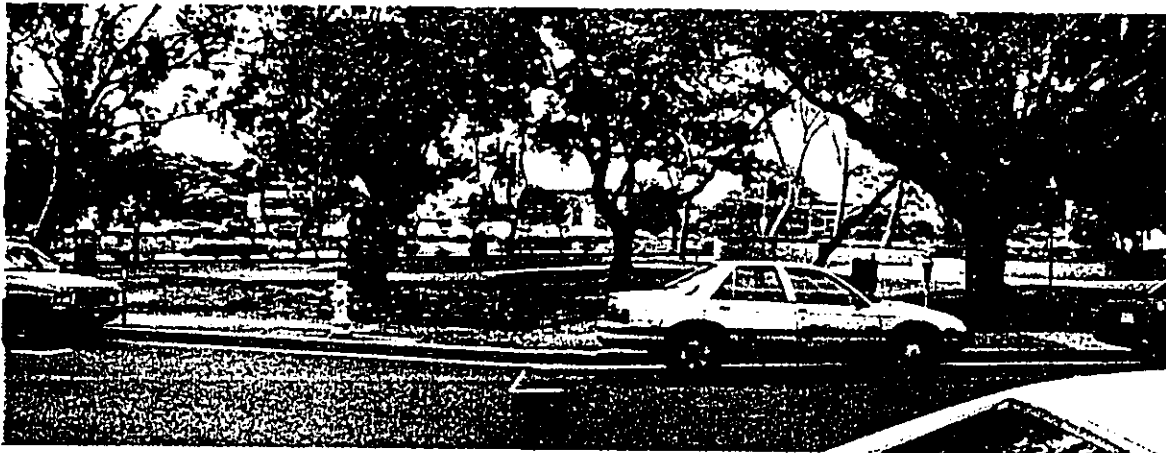


View from municipal parking lot within project site looking makai toward Bishop Street.

Fig. 1-3



View of project site from Pali Highway, looking south .
(Queen Emma Building in the center background)



View of Kamalii Park from Fort Street.

Fig. 1-3a

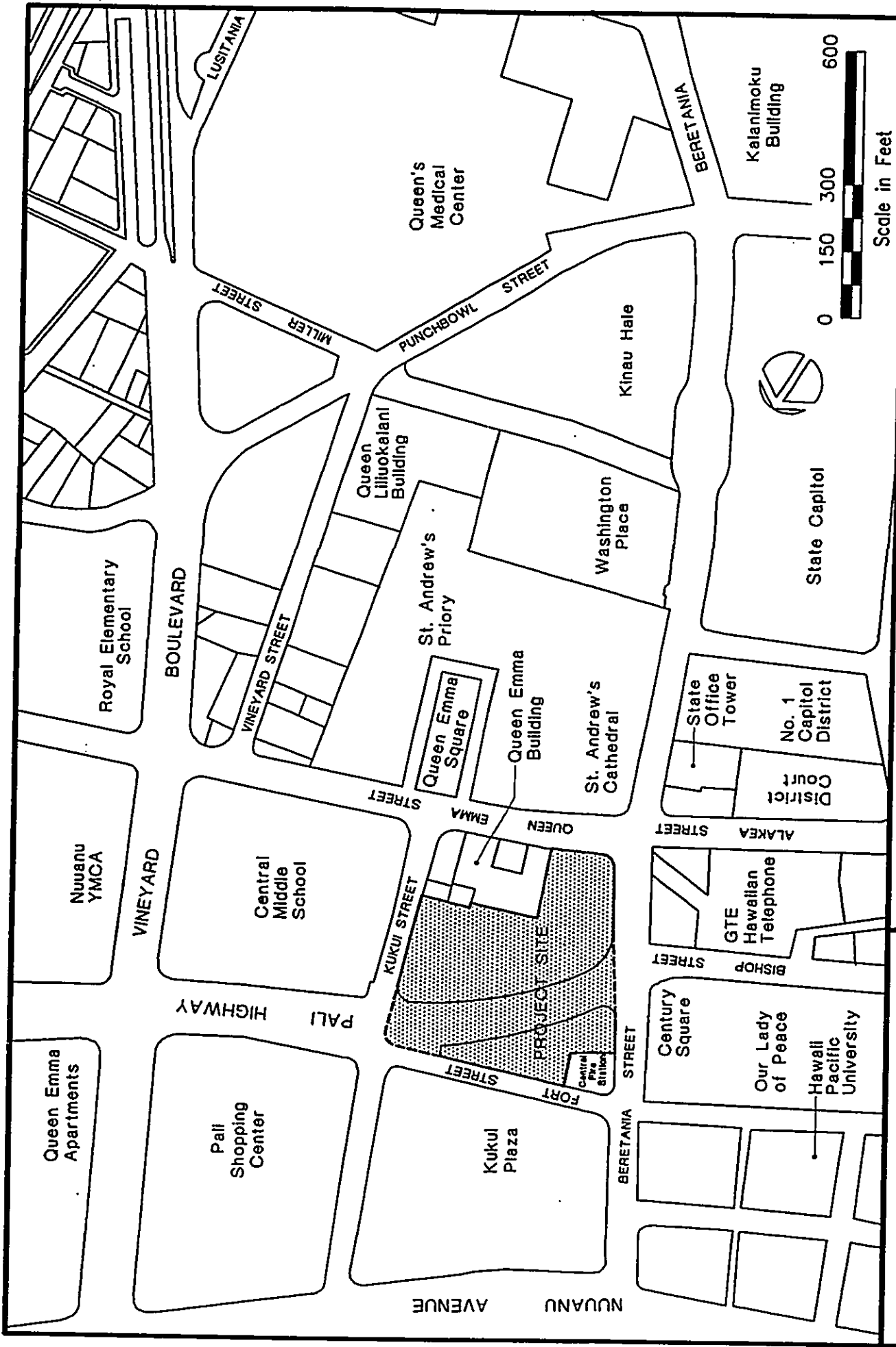


Fig. 1-4

PROJECT VICINITY MAP

**BLOCK J
REDEVELOPMENT
PROJECT**

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES

CHAPTER 2

DESCRIPTION OF THE PROPOSED PROJECT

2. DESCRIPTION OF THE PROPOSED PROJECT

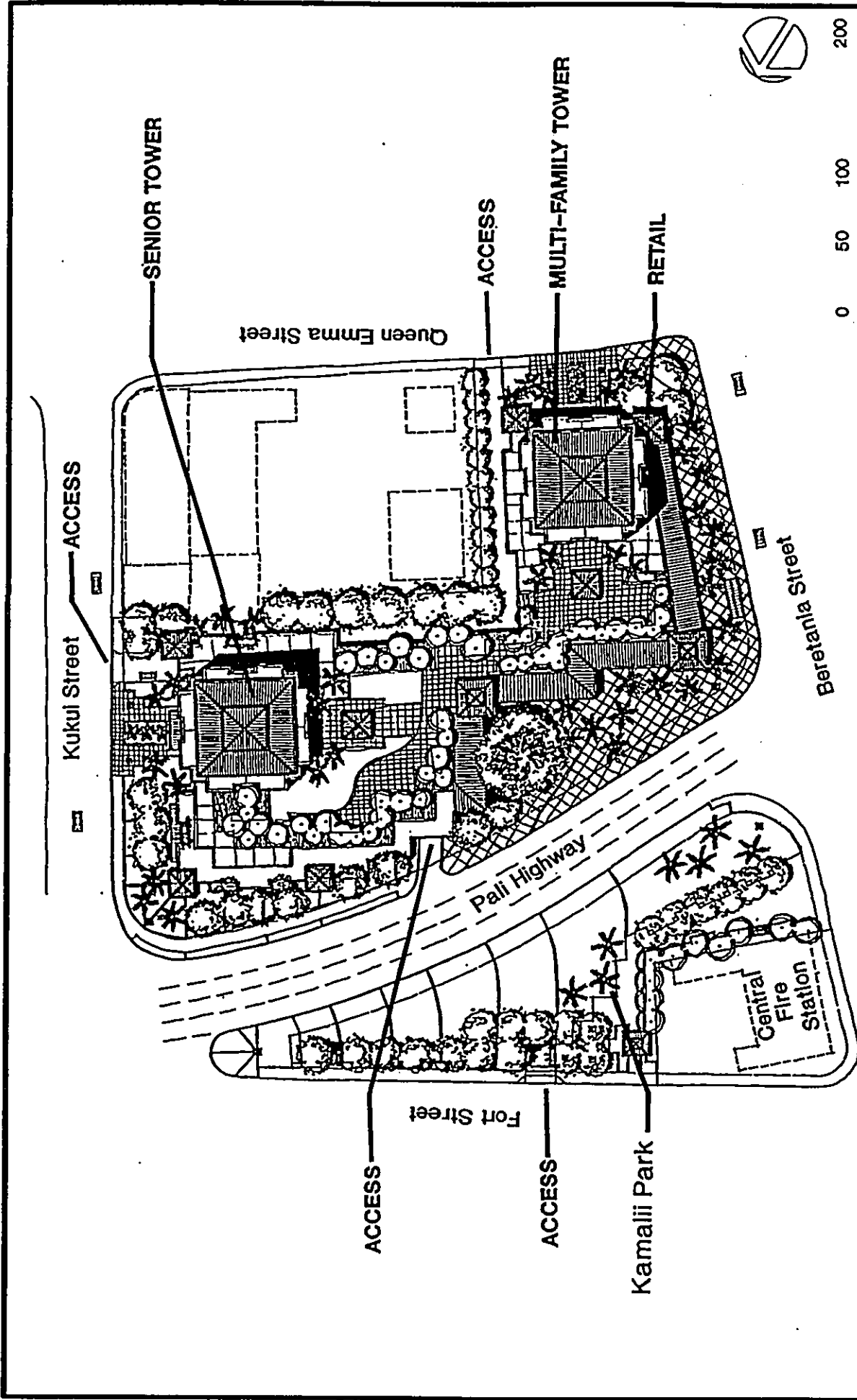
2.1 Project Description

The Block J Redevelopment Project is a mixed-use affordable rental residential, retail and public parking complex proposed for a portion of the block bounded by Beretania, Queen Emma, Kukui, and Fort Streets, and bisected by Pali Highway. The portion of Pali Highway traversing the project site will remain open to through traffic, and Kamalii Park on its Ewa side will be reconstructed.

The proposed project components will include two high-rise residential towers, two above-grade levels of retail space, three levels of underground parking, a reconstructed Kamalii Park, and a reconstructed portion of Pali Highway (see Figures 2-1, 2-2 and 2-3). The residential and retail components will be developed within the portion of the site bounded by Beretania, Queen Emma and Kukui Streets and Pali Highway. The three levels of underground parking will be developed beneath the entire project site. At the southeast corner of the project site, improvements will extend approximately 1,900 square feet into the excess curb frontage at Queen Emma Street to provide for additional landscaping and pedestrian buffer areas within the Hawaii Capital Special District.

Major elements of the redevelopment include:

- Approximately 913 affordable rental one-and two-bedroom units located within two high-rise residential towers. The affordable rental units will be offered to households earning at or below 60 percent of the median income. Approximately 475 units located in one tower will be offered to senior households (age 62 and older). The remaining approximately 438 rental units located in the second tower will be offered to households of all ages. The two towers will be approximately 350 feet in height.
- Approximately 100,000 square feet of retail space within two above-grade levels.
- A total of approximately 1,896 on-site parking stalls. Except for approximately 20 parking stalls which will be located at ground level, the remaining stalls will be located within three underground levels. The parking stalls will be allocated among the senior and multi-family residential units, guests, retail, municipal, and public parking. In addition, approximately 10 loading stalls will be provided for building and service use.
- Approximately 25,500 square feet of ground level open space.



Source: Kober/Hanssen/Mitchell Architects

**BLOCK J
REDEVELOPMENT
PROJECT**

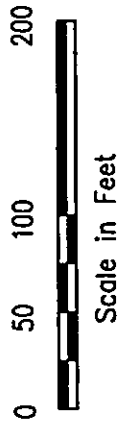
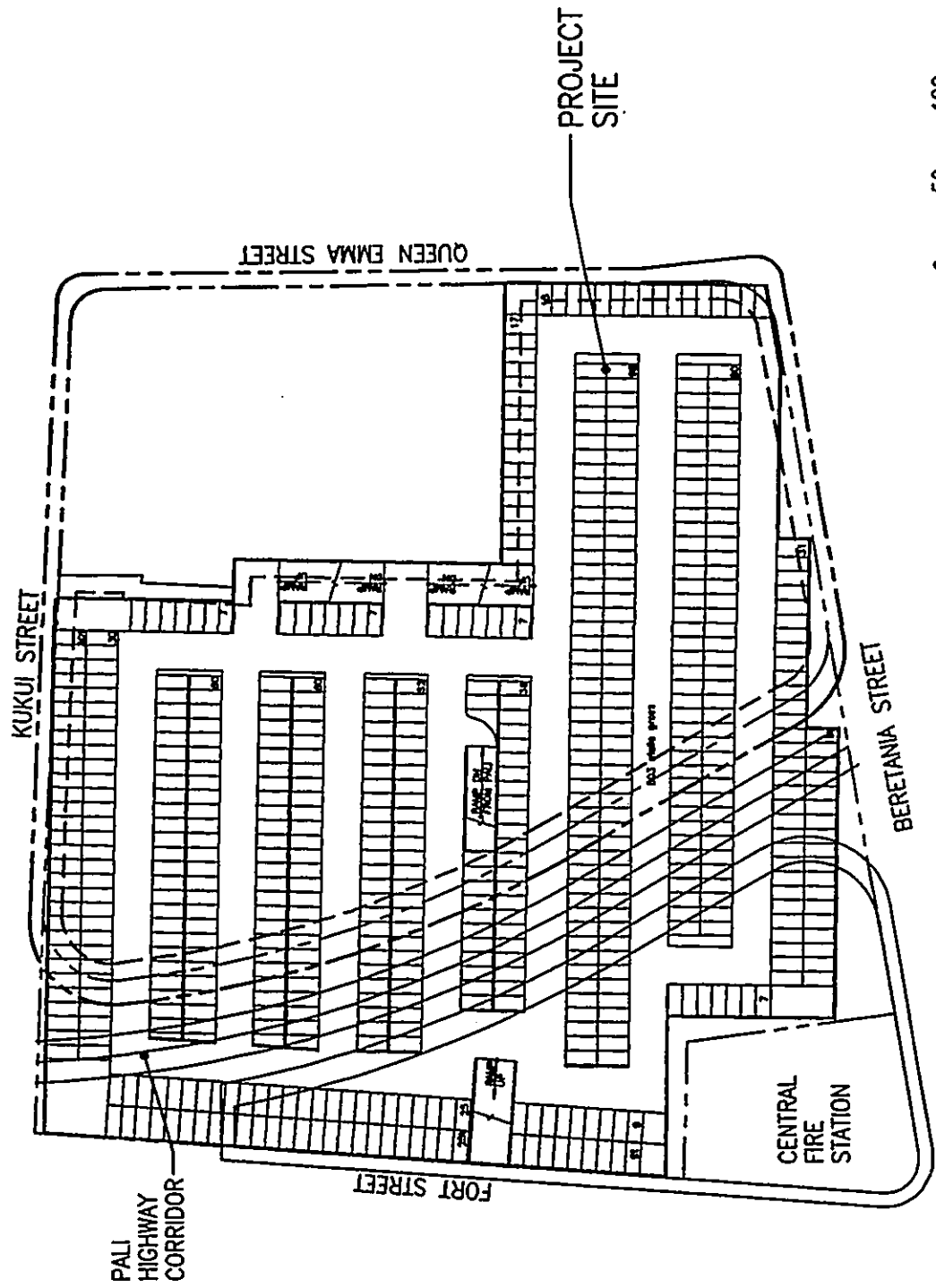
Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES

SITE PLAN

Fig. 2-1

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.

BLKFIG2-3.DWG 05/23/98 10:10



SOURCE: KOBER/HANSEN/MITCHELL ARCHITECTS INC.

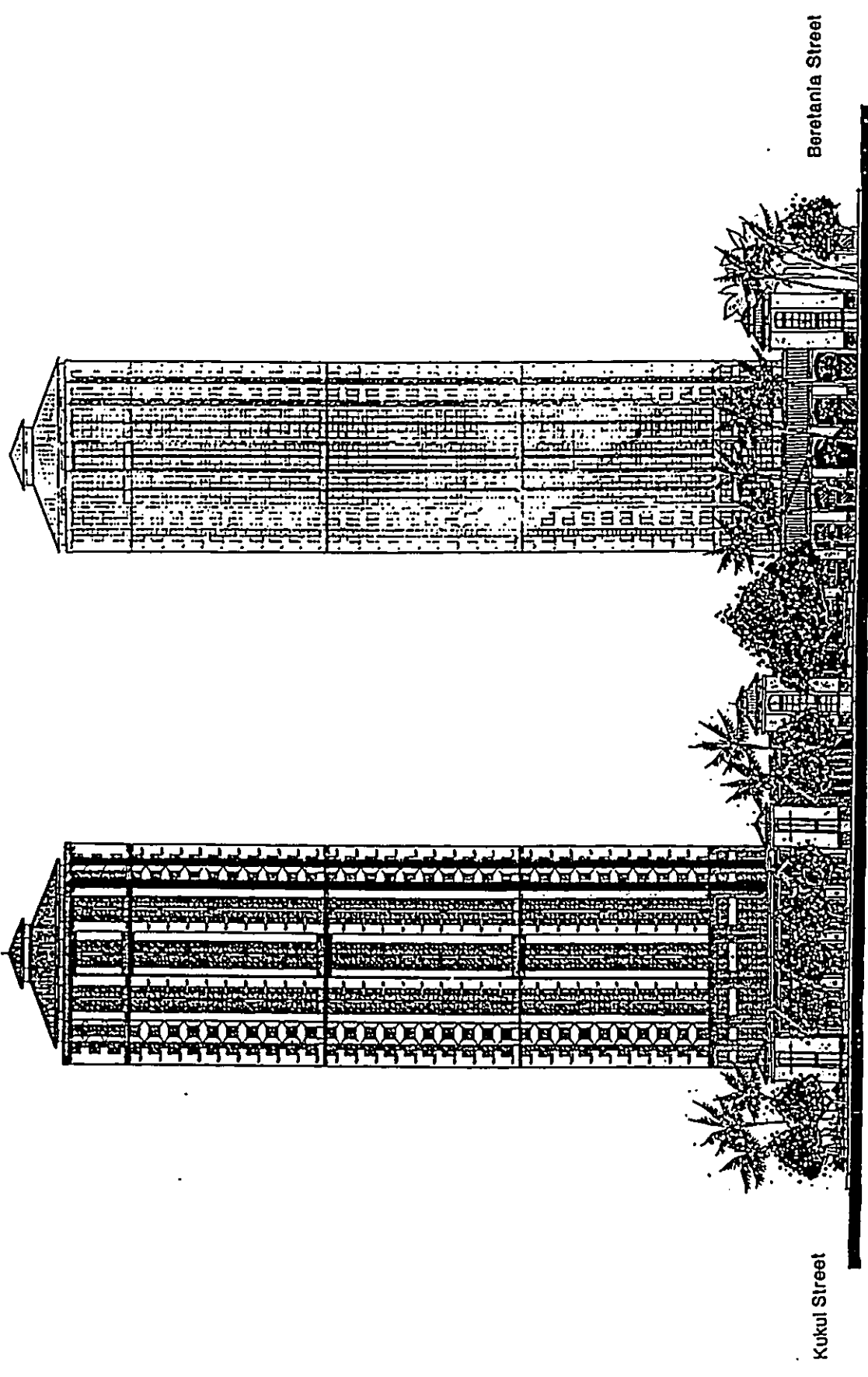
Fig. 2-2

**BLOCK J
REDEVELOPMENT
PROJECT**

PARKING PLAN - FIRST LEVEL

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.



Kukul Street Beretania Street
 Senior Tower Multi-Family Tower Retail
 Pali Highway Elevation

Not to Scale

Source: Kober/Hanssen/Mitchell Architects

**BLOCK J
 REDEVELOPMENT
 PROJECT**

PALI HIGHWAY ELEVATION PLAN

Fig. 2-3

Prepared for:
 CITY & COUNTY OF HONOLULU
 DEPARTMENT OF COMMUNITY SERVICES

Prepared by:
 WILSON OKAMOTO &
 ASSOCIATES, INC.



- Approximately 32,000 square feet of rooftop recreational deck over the retail space, and approximately 1,700 square feet of arcade area.
- Reconstruction of the existing Kamalii Park.

The project will be developed within existing building height limits for the project area. This includes a 350-foot height limit which extends over the site, and a 40-foot height limit established by the Hawaii Capital Special District within an approximately 30-foot wide portion along Queen Emma Street. Development of the project will occur in a single phase.

Affordable Residential Component: The two high-rise affordable rental residential towers include the Senior Tower and Multi-Family Tower located within the northwestern and southeastern portions of the site, respectively. Each tower will contain a mixture of one- and two-bedroom units on approximately 37 floors. A total of approximately 694 one-bedroom (approximately 500 square feet) and 219 two-bedroom (approximately 650 square feet) units will be provided within the two towers. The 475-unit Senior Tower will include approximately 402 one-bedroom and 73 two-bedroom units. The 438-unit Multi-Family Tower will include approximately 292 one-bedroom and 146 two-bedroom units.

Retail Component: The approximately 100,000 square feet of retail space is proposed within two above-grade levels. The retail space is proposed to be located at the base of each residential tower, extending out toward the Beretania Street and Pali Highway project frontages, respectively. The retail component is currently envisioned as an entertainment complex, with establishments potentially including a theater complex, a major retailer, and restaurants.

Parking Component: Of the approximately 1,896 parking stalls, approximately 1,876 stalls will be located in three underground levels, while the remaining 20 stalls will be at ground level near the retail area. The provision of underground parking stalls is intended to minimize visual impacts and to maximize the number of stalls available for public and private use. The project's parking allocation is proposed as follows:

*Block J Redevelopment Project**Description of the Proposed Project*

<u>Use</u>	<u>No. of Stalls</u>
Senior Residents	119
Multi-Family Residents	438
Residential Unit Guests	91
Retail	167
Public Parking (Metered Stall Replacements)	208
Additional Stalls Available to Public	<u>873</u>
Total	1,896

In addition, ten (10) ground level loading stalls will be provided for building and service use off of the service drive.

Separate parking areas will be designated for residents, guests, retail, and public uses. Parking pay booths and parking card readers will be strategically located within the parking garage to minimize potential vehicular circulation and queuing conflicts.

Vehicular Access and Circulation: Vehicular ingress/egress driveways for the project's underground parking garage are proposed at Queen Emma, Kukui and Fort Streets, and Pali Highway. The location of these driveways is intended to prevent queuing of vehicles, thereby minimizing traffic impacts around the site:

- Queen Emma and Kukui Streets: Two-way vehicular access would be provided at both Queen Emma and Kukui Streets. These driveways would provide access to the approximately 20 ground level parking stalls and ten (10) loading stalls, as well as the underground parking garage. Ingress and egress to all parking areas, including those for residents, visitors and the public, would be permitted.
- Pali Highway: An entranceway would be provided along this roadway to permit entry to all parking areas. An exit driveway may also be provided for use by designated parking areas.
- Fort Street: A two-way driveway would be provided along this street. The entranceway would provide access to all parking areas. The exitway would be used by designated parking areas.

Kamalii Park: Following construction of the parking garage beneath Kamalii Park, the park will be reconstructed. The proposed concept for the reconstructed park is to provide a visual transition from the "greenery" of the Pali Highway area mauka of the project site to the urban district near Beretania Street. The provision of strategically

placed trees and a grand lawn area would further emphasize the transition to the Civic/Downtown districts.

Pali Highway: Following construction of the parking garage beneath Pali Highway, the portion of the highway between Kukui and Beretania Streets will be rebuilt as a four-lane roadway without the existing landscaped median. The project's pedestrian and landscaped areas adjacent to this section of the roadway will be extended by the corresponding width of the existing median.

2.2 Project Schedule and Cost

Project Schedule: Construction of the proposed project is anticipated to commence by the beginning of 1999 with completion estimated by Fall 2001.

Project Cost: Total development cost for the project, including construction cost, is estimated at \$154 million. Federal, State and City funds will be used to finance the project.

CHAPTER 3

**DESCRIPTION OF THE EXISTING ENVIRONMENT,
IMPACTS AND MITIGATION MEASURES**

3. DESCRIPTION OF THE EXISTING ENVIRONMENT, IMPACTS AND MITIGATION MEASURES

3.1 Climate

The climate of the Honolulu area is typical of the leeward coastal lowlands of Oahu. The area is characterized by abundant sunshine, persistent tradewinds, relatively constant temperatures, moderate humidities, and the infrequency of severe storms.

Northeasterly tradewinds prevail throughout the year although its frequency varies from more than 90 percent during the summer months to 50 percent in January. The average annual wind velocity is approximately 10 miles per hour.

The mean temperature measured at Honolulu International Airport ranges from 70 degrees Fahrenheit (°F) in the winter to 84°F in the summer. The temperatures in the Downtown project area may be slightly higher due to localized urban heating effects. The average annual precipitation in the vicinity of the site is approximately 24 inches, with most of the rainfall occurring between November and April. Relative humidity ranges between 56 and 72 percent.

Additional descriptions of climatic conditions as they apply to the air quality of the area is included in the *Air Quality Impact Report* in Appendix A.

Impacts and Mitigation Measures

The proposed project will not affect the climate, however, development of the project site east of Pali Highway will replace a parking lot with a high-rise complex which will impact the microclimates in the immediate vicinity. Reduced wind speeds at ground level and additional shading would be typical of the microclimate found in the adjacent urban core.

Due to the spacing of the two residential towers, there will be no appreciable channeling of winds that could create gusts and eddies potentially affecting pedestrians.

Impacts on air quality in the vicinity are addressed in Section 3.7 Air Quality and in the *Air Quality Impact Report* in Appendix A.

3.2 Geology and Hydrology

Oahu's southcentral coast, geographically referred to as the Honolulu Plain, is underlain by a broad elevated coral reef which has been partly covered by alluvium carried down from the mountains. Core samples reveal that lava flows of the Honolulu Volcanic Series are interbedded with these reef deposits which were formed when sea level was higher than is now.

The same interbedding of coral and alluvial deposits which play an important role in Oahu's geology also influenced the hydrological character of Oahu's leeward coastline. The interface between upper sedimentary layers and the underlying basalt constitutes a zone of low permeability known as caprock. This caprock extends along the coastline about 800 to 900 feet below sea level, forming an impervious zone which prevents the seaward movement of potable water from the basaltic aquifers. The width and thickness of the caprock suggests that the basal potable water supply will be relatively unaffected by modifications near the coastline.

There are no surface water bodies within the project site. The nearest surface water body is Nuuanu Stream which is located approximately 0.3 mile Ewa of the project site. Honolulu Harbor is located about 0.4 mile makai of the project site. Nuuanu Stream is a perennial stream which is channelized along its lower reaches and outlets into Honolulu Harbor. According to the Hawaii Stream Assessment, Nuuanu Stream has limited aquatic resource value, but substantial riparian and recreational resource value.

According to the Flood Insurance Rate Map (FIRM, Community Panel Number 150001 0115 B revised September 4, 1990) prepared by the Federal Emergency Management Agency (FEMA), the entire project site is designated as Zone X, an area determined to be outside the 500-year flood plain. The site is not in a designated tsunami zone.

Five potable water sources are located in close proximity to the project site. The closest source (*State Well No. 30*) is located in the block diagonally across Beretania Street from the project site between Bishop and Alakea Streets. Approximately 0.2 mile toward Diamond Head, near the mauka-Ewa corner of the Vineyard Boulevard and Punchbowl Street intersection is a second source (*State Well No. 07*). Mauka of that source is a third source (*State Well No. 54*) in the vicinity of Queen's Medical Center at Vineyard Boulevard and Miller Street, which is approximately 0.3 mile from the project site. Further toward Diamond Head at the City and County of Honolulu Board of Water Supply, in the vicinity of Lauhala and Beretania Streets, is a fourth source (*State Well Nos. 12, 13, 24, 25, 31-35, 67*), which is 0.4 mile distance from the project site. The fifth source (*State Well No. 20*) is 0.5 mile Diamond Head of the project site, in the vicinity of the City and County of Honolulu Police Department Headquarters.

Recent geotechnical investigations conducted for the proposed project included borings which encountered stiff sandy silts and clayey silts of four to eight feet in thickness near the ground surface. These were underlain by dense coral deposits and formations down to a depth of 24 to 37 feet. The *caprock* water table was encountered at a depth of approximately 25 feet. Below the coral was alluvium consisting of stiff to very stiff sandy silts and clayey silts and medium dense to dense silty sands extending down to the maximum depth explored at about 101 feet.

Impacts and Mitigation Measures

In the short-term, construction of the underground parking structure will require excavations to depths of approximately 37 feet from the existing ground level, entailing removal of the sandy and clayey silts as well as coral deposits. Since the *caprock* water table will be encountered at a depth of approximately 25 feet, the project will require temporary dewatering. A dewatering plan will be required to address potential concerns such as impacts on the *caprock* water table and on surface waters that may be affected by the disposal of dewatering effluent.

With respect to impacts on the *caprock* water table, previous construction in the Downtown area requiring dewatering, including 1100 Alakea Street, Marin Tower and First Hawaiian Center, have not resulted in impacts such as ground settlement damaging structures in the vicinity. Shoring of the excavated area will minimize the infiltration of groundwater from adjacent properties. Dewatering effluent withdrawn from within the excavated area may also be used to recharge the *caprock* water table outside of the shoring to help maintain its level. A dewatering plan will be prepared in conjunction with obtaining a National Pollutant Discharge Elimination System (NPDES) permit for Discharges Associated with Construction Activity Dewatering (Notice of Intent Form G).

The NPDES permit for dewatering activities will also address water quality impacts associated with the disposal of dewatering effluent. Appropriate characterization of any potential pollutants such as sediments and nutrients in the effluent will be required. If any toxic or hazardous materials such as petrochemicals are discovered during environmental site assessments, as discussed in Section 3.5 Soils, the characterization must assure that appropriate remediation measures have been implemented to address water quality concerns associated with dewatering. The dewatering plan will address the anticipated rate of dewatering, method of treatment and disposal. Typically, water is withdrawn from perforated well casings installed beneath the excavation. The effluent that is withdrawn in this manner has a low sediment content since the ground around the well casing acts as a natural filter. To further reduce sediment content, the

effluent is treated, typically by passing it through a series of settling containers, where silt particles can settle out of the effluent. The treated effluent can then be used to recharge the *caprock* water table outside of the shoring and/or discharged into a municipal storm drainage system.

A Best Management Practices (BMP) plan, which is required as part of the NPDES dewatering permit, establishes procedures for operating the dewatering system. Typically, specific procedures are provided for the maintenance of dewatering equipment, including disposal of sediments collected in settling containers; training of workers to inspect equipment to prevent contamination by fuels and engine fluids; monitoring water quality of samples collected from designated points in the dewatering system; preventing storm water runoff and erosion from surrounding areas from entering the excavation; and, procedures for modifying or terminating dewatering activities if the system is failing to operate as intended.

Disposal of the dewatering effluent into the municipal storm drain system will require a permit from the City and County of Honolulu ~~Department of Public Works~~ *Department of Planning and Permitting*. The storm drains in the Downtown area discharge into Honolulu Harbor.

Storm runoff from the project site during site preparation will be controlled in compliance with City and County of Honolulu grading permit requirements. Typical mitigation measures include: phasing grading and grubbing activities to minimize the amount of soil that is exposed during various phases of construction; appropriately stockpiling materials on-site to prevent runoff; and, establishing landscaping as early as possible on completed areas. These measures, including those required pursuant to the aforementioned BMP plan for dewatering, will reduce the potential for siltation of drainage facilities and, ultimately, the waters of Honolulu Harbor.

In the long-term, the volume of storm runoff from the proposed project will be no greater than present since most of the site is paved, preventing infiltration. With the addition of landscaping for the project, the amount of infiltration would increase, thereby reducing the volume of runoff. Storm runoff from the proposed project will be directed toward existing catch basins in the immediate vicinity of the site.

3.3 Topography

The project site and surrounding areas are relatively flat and contain no unusual or unique topographic features. The site elevation is approximately 26 feet above Mean Sea Level (MSL) along Beretania Street, rising to approximately 28 feet MSL along Kukui Street. The project site has an average slope of 0.4 percent.

Impacts and Mitigation Measures

The proposed project will result in some alteration of the topography within the project site, however, any impacts on drainage patterns will be addressed through appropriate engineering design to prevent excessive surface flows or ponding.

3.4 Earthquake

As established in the Honolulu Building Code, Oahu is in Seismic Zone 2A.

Impacts and Mitigation Measures

All structures within the project site will be designed to meet *Zone 2A and applicable Uniform Building Code (UBC) requirements.*

3.5 Soils

According to the U.S. Department of Agriculture Soil Conservation Service, the project site consists of soil classified as Makiki clay loam (MkA) with 0 to 2 percent slopes. This soil occurs on smooth fans and terraces. The surface layer is a dark brown clay loam that has a subangular blocky structure. It contains cinders and rock fragments. The subsoil is underlain by similar material approximately 24 inches thick. Volcanic cinders are located below the subsoil. The soil is strongly acid to medium acid. Permeability is moderately rapid, runoff is slow, and the erosion hazard is slight. The available water capacity is about 1.7 inches per foot.

The *Detailed Land Classification - Island of Oahu* published by the University of Hawaii Land Study Bureau (LSB), evaluates the quality or productive capacity of certain lands on Oahu for selected crops and overall suitability in agricultural use. A five-class productivity rating system was established with "A" representing the highest productivity and "E" the lowest. Since the project site is classified as "U" or Urban, it is not rated for agricultural productivity.

Recent geotechnical investigations conducted for the proposed project included borings which encountered stiff sandy silts and clayey silts of four to eight feet in thickness near the ground surface. These were underlain by dense coral deposits and formations down to a depth of 24 to 37 feet. The *caprock* water table was encountered at a depth of approximately 25 feet. Below the coral was alluvium consisting of stiff to very stiff sandy silts and clayey silts and medium dense to dense silty sands extending down to the maximum depth explored at about 101 feet. No indications of petrochemical or other contamination were found in the core samples.

The geotechnical investigations indicated that a mat foundation consisting of a thick, reinforced concrete slab can be used for the structures instead of piles. The investigation also confirmed that excavation of the site can be accomplished without blasting and indicated that use of pneumatic hammering equipment such as hoe rams will not be required. Instead, hydraulic and mechanical excavation equipment can be used since the hardest material likely to be encountered are ancient coral layers. Moreover, sheet piling for shoring required during subsurface construction can be installed using vibratory pile drivers instead of impact pile drivers. Alternatively, the site could be shored by boring and then filling a series of adjoining holes with a concrete/soil mix, thus forming an underground wall prior to excavation.

Impacts and Mitigation Measures

Extensive subsurface construction throughout the project site will remove most of the existing soils near the surface. These soils, however, include imported fill or have been disturbed to varying depths as a result of prior construction activities and most have been built or paved over for decades. Replacement soils will primarily be provided for landscaping purposes, particularly where the park will be reconstructed following construction of the underground parking structure.

A Phase I Environmental Site Assessment will be conducted for the project site to assess the potential for discovering any hazardous or toxic materials within the property. If deemed necessary, subsurface testing in conjunction with a Phase II investigation will be pursued. Discovery of any hazardous or toxic materials on the property will require appropriate remediation in compliance with federal and State regulations.

3.6 Flora and Fauna

The project site on the Diamond Head side of Pali Highway is comprised of a paved parking lot with approximately 17 shade trees, including a large monkey pod near Kukui Street, and several Opiuma along Queen Emma Street. The adjacent section of Pali

Highway is divided by a landscaped median including four Monkey Pod trees and Hibiscus hedges. Kamalii Park is landscaped with trees and shrubs but none are notably large or otherwise significant. Among the trees are coral trees (exotic Wiliwili), Formosan Koa and Eucalyptus. None of the trees in the project area are listed by the City as an Exceptional Tree.

Species of cats and mice common to inner city environments are probably present at the site. Although the project site does not provide a habitat for native or endangered avifauna, species common to urban areas such as sparrows, mynahs and finches are seen in the area.

Impacts and Mitigation Measures

To the extent feasible, existing trees on the project site will be retained or relocated to other areas of the site depending on soil requirements. Trees removed from the project site, including those in the parking lot, the Pali Highway median and Kamalii Park, will be transplanted to other City parks or used for street landscaping, as determined in consultation with the City and County of Honolulu Department of Parks and Recreation *Services*. Otherwise, existing vegetation will be disposed of when the project site is prepared for construction.

In the portion of the project site Diamond Head of Pali Highway, new landscaping will be provided around the perimeter of the residential/retail complex and to enhance open space areas among the structures, including the rooftop deck above the retail space. The reconstructed section of Pali Highway will not include a planted median. The reconstructed Kamalii Park will be re-landscaped; and, it is possible that some of the trees removed prior to construction could be replanted. Due to the construction of the parking structure beneath the park, available soil depth for future plantings will need to be taken into account in selecting future landscaping.

The proposed project will not affect a natural habitat. Construction of the underground parking structure beneath Kamalii Park will result in the temporary removal of landscaping comprised of trees, shrubs and groundcover that provide a habitat for various bird, mammal and insect species that thrive in an urban environment. When the park is reconstructed, these species are anticipated to re-inhabit the site.

3.7 Air Quality

Air quality in the vicinity of the project site is primarily affected by vehicular emissions generated along Pali Highway and surrounding streets. Among the various air pollutants for which State and National air quality standards have been established, carbon monoxide levels are the primary concern in areas near heavy traffic flow. The *Air Quality Impact Report* prepared for the proposed project (See Appendix A) indicates that carbon monoxide levels in the immediate vicinity (ten meters) of major roadway intersections, including Vineyard Boulevard and Pali Highway, Beretania Street and Pali Highway, and Beretania Street and Queen Emma Street, currently meet federal 1-hour and 8-hour standards under "worst case" conditions, including an assumption of a very low wind speed of one meter per second. The more stringent State 1-hour and 8-hour standard for carbon monoxide, however, may currently be exceeded under similar "worst case" conditions within 10 meters of these intersections. Under typical Honolulu wind conditions, however, compliance with both federal and State standards is indicated. Also, carbon monoxide levels decline rapidly with distance from major roadways and is hardly an issue beyond 10 meters.

Impacts and Mitigation Measures

In the short-term, the principal source of air quality impact will be construction activity. Construction vehicle activity will increase automotive pollutant concentrations along existing streets as well as on the project site. Also, temporary rerouting of Pali Highway during the construction of the underground parking garage (See Section 3.9 Access and Traffic) will reduce travel speeds of commuting vehicles during peak traffic hours, resulting in increased vehicular emissions in the vicinity.

Site preparation and earth moving, as well as the construction of structures, will create particulate emissions. The movement of construction vehicles on unpaved areas of the project site will also generate particulate emissions. The semi-arid climatic classification for the area suggests an increased potential for fugitive dust. The construction contractor is responsible for complying with State Department of Health fugitive dust regulations which prohibit visible dust emissions at property boundaries. Nevertheless, the presence of nearby buildings suggests that open-air areas and naturally ventilated structures could be impacted by fugitive dust in spite of compliance with these regulations.

Off-site air quality impacts in the short-term include particulate matter and other gaseous pollutants emitted by concrete and asphalt batching plants located

elsewhere that will support construction. These sources, however, are specifically regulated by the State Department of Health Clean Air Branch.

Mitigation measures to address short-term impacts include:

- Minimizing the movement of construction vehicles during peak traffic periods;
- Providing up to four traffic lanes for the temporary roadway rerouting traffic on Pali Highway during construction of the parking garage; and,
- Controlling the generation of fugitive dust through frequent watering of unpaved roads and areas of exposed soil and planting landscaping as soon as possible on completed areas.

In the long-term, the projected cumulative increase in vehicular traffic in the area, including project traffic as well as assumed "background" increases associated with development in the area will increase emissions, of which carbon monoxide is the primary concern. Modelling of carbon monoxide emissions at key intersections using projected future traffic levels indicates little change with respect to current conditions. This is due in part to the Environmental Protection Agency's (EPA) motor vehicles emissions control program which mandates emissions standards for new vehicles. The result over time is that older, higher emitting vehicles are eventually replaced by newer, lower emitting vehicles. Increases in traffic volume can thereby be offset by the reduced per-vehicle emission rates. Modelling results also indicate very little difference between the "with project" and "without project" scenarios.

Mechanical ventilation of the parking structure will also emit carbon monoxide generated within the structure. In general, State Department of Health rules for ventilation rates are intended to insure the safety of persons inside parking structures; hence, the quality of the vented air, being essentially the same as within the parking structure would be safe to breathe. The DOH rules provide a significant margin of safety in their ventilation requirements. This is probably attributable to the fact that they were promulgated in 1983, when the carbon monoxide emissions from vehicles were substantially greater than they are today. Results of modelling the emissions from the vents indicate that it will minimally contribute to ambient carbon monoxide levels in the area.

Increased electrical demand resulting from the proposed project will require more fuel to be burned at Hawaiian Electric Company's (HECO) generating facilities

and, in turn, emit more air pollutants. Each of HECO's facilities are required to continuously demonstrate compliance with applicable air quality standards in order to retain their operating permit.

Solid waste generated by the proposed project will likely be burned at the City's resource recovery facility (HPOWER) at Campbell Industrial Park. The amount of emission attributable to the project, however, will be very small compared to the entire island.

Mitigation measures to address long-term impacts include:

- Siting parking garage ventilation exhausts on the downwind (relative to prevailing tradewinds) side of the project site to avoid emissions blowing across the site; and,
- Providing fixtures considered for their energy-efficient and sustainability. The design of the proposed project will take into account building colors, use of natural ventilation where feasible and exposure to natural daylight and wind. Use of heat pumps and other equipment that will allow high quality use at a relatively low cost will also be considered.

3.8 Noise

In the vicinity of the project site, ambient sound levels are influenced primarily by vehicular traffic. The *Acoustic Study for the Block "J" Redevelopment Project* (See Appendix B) assessed noise levels in the vicinity of the project site using the Day-Night Average Sound Level (Ldn) descriptor. This descriptor incorporates a 24-hour average of instantaneous A-Weighted Sound Levels read as decibels (dB) on a standard Sound Level Meter. The minimum averaging period for the Ldn descriptor is 24 hours with sound levels occurring in the nighttime hours of 10:00 PM to 7:00 AM increased by 10 decibels.

Noise levels of 55 Ldn or less are typical of rural areas or areas removed from high volume streets. In urbanized areas shielded from high volume streets, Ldn levels generally range from 55 to 65 Ldn and are usually controlled by traffic noise. Areas fronting major roadways are generally exposed to levels of 65 Ldn, and as high as 75 Ldn when the roadway is a high speed freeway.

For the purposes of receiving funding assistance from federal agencies such as the Federal Housing Administration (FHA), Housing and Urban Development (HUD) and the Veteran's Administration (VA), an exterior noise level of 65 Ldn or lower is

considered acceptable nationwide. For commercial, industrial and other land uses which are not noise sensitive, exterior noise levels as high as 75 Ldn are generally considered acceptable.

Noise sensitive uses in the vicinity of the project site include the Kukui Plaza residential development which is located across Fort Street from Kamalii Park, Central Middle School which is located across Kukui Street from the municipal parking lot, St. Andrew's Cathedral and Priory which are located across Queen Emma Street, and residential apartments located along Vineyard Street east of the project site. Other uses in the area are commercial or retail which are generally not regarded as noise-sensitive. Moreover, many of these uses are in air-conditioned structures that significantly attenuate exterior noises.

Background ambient noise levels measured in the vicinity of the project area indicate that areas along Beretania and Queen Emma Streets are in the "Significant Exposure, Normally Unacceptable" category for residences according to federal agency standards. There are currently no residences in these areas. Along Fort Street, Kukui Street and Pali Highway, existing traffic noise levels are in the "Moderate Exposure, Acceptable" category for residences.

Impacts and Mitigation Measures

In the short-term, audible construction noise will probably be unavoidable during the entire project construction period which is estimated to be three years. Such noise impacts will be mitigated to some degree by complying with the provisions of the State Department of Health Administrative Rules, Title 11, Chapter 46, "Community Noise Control". These rules require a noise permit if the noise levels from construction activities are expected to exceed the allowable levels stated in the Chapter 46 rules. It shall be the contractor's responsibility to minimize noise by properly maintaining noise mufflers and other noise-attenuating equipment, and to maintain noise levels below allowable regulatory limits. Also, the guidelines for the hours of heavy equipment operation and noise curfew times as set forth by the Department of Health noise control regulations must be adhered to. During construction, the specific location where construction activity will be occurring will change such that the actual length of exposure to construction noise from any particular receptor location will likely be less than the total construction time for the project. Table 3-1 lists the noise levels of various types of construction equipment when measured at a distance of 50 feet.

Table 3-1	
RANGES OF A-WEIGHTED SOUND LEVELS OF CONSTRUCTION EQUIPMENT AT 50 FEET DISTANCE	
Equipment	Sound Levels (dBA) Minimum/Maximum
Backhoes, Trencher	72 / 93
Compactors (rollers)	72 / 88
Compressors	68 / 87
Concrete Mixers	72 / 90
Front Loaders	72 / 96
Generators	70 / 82
Hoe Rams (Maximum Levels)	88 / 98
Jackhammers and Drills	75 / 98
Pavers	82 / 92
Pile Drivers (Maximum Levels)	89 / 105
Pneumatic/Hydraulic Hammers	85 / 98
Pumps	70 / 80
Saws	68 / 93
Scrapers, Graders	76 / 95
Steel Ball	74 / 85
Tractors	73 / 95
Trucks	70 / 95
Vibrators	70 / 81
Y. Ebisu & Associates; June 1998	

The *Acoustic Study for the Block "J" Redevelopment Project* (See Appendix B) discusses potential noise impacts associated with construction equipment, including sheet pile drivers. Based on the results of recent geotechnical investigations of the project site, however, it is anticipated that impact pile driving of any type will not be required. The building foundation will be on a mat footing consisting of a thick, reinforced concrete slab. The investigation also confirmed that excavation of the site can be accomplished without blasting and indicated that use of pneumatic hammering equipment such as hoe rams will not be required. Instead, hydraulic and mechanical excavation equipment can be used since the hardest material likely to be encountered are ancient coral layers. Moreover, sheet piling for shoring required during subsurface construction can be installed using vibratory pile drivers instead of impact pile drivers.

Alternatively, the site could be shored by boring and then filling a series of adjoining holes with a concrete/soil mix, thus forming an underground wall prior to excavation. All of these methods would avoid using equipment typically associated with generating high levels of noise.

Direct line-of-sight distances from locations at the project site where equipment will be operated during various stages of construction to existing residential and commercial buildings range from 10 to 400 feet. The closest neighboring uses are the business offices within the Queen Emma Building and adjacent smaller office buildings, and the Central Fire Station. These uses are not set back from the construction site by streets or roadways. The business offices are not likely to experience adverse noise impacts in the "public health and welfare" category since the construction work would be temporary, the business/commercial character of the activities, the prevalent use of air-conditioning which allows windows to be closed, and due to the administrative controls available for regulating construction noise. Similarly, day-time activities at the fire station are not characteristically noise-sensitive. Instead, the construction noise impacts will probably be limited to the temporary degradation of the quality of the acoustic environment in the immediate vicinity of the project site.

Ground vibrations typically associated with impact pile driving equipment has the potential for causing architectural and structural damage to structures. Although the potential for damage if impact sheet-pile driving equipment were used for the project was assessed in the *Acoustic Study for the Block "J" Redevelopment Project* (Appendix B), recent geotechnical investigations indicate that such equipment will not be required. Hence, no adverse impacts from ground vibration are anticipated.

Mitigation measures to address short-term construction noise impacts include:

- Using a mat foundation for the project structures instead of piles;
- Using, if feasible, a concrete soil mix shoring system or, secondarily, sheet piling installed with a vibratory driver;
- Avoiding the use of pneumatic hammering equipment such as hoe rams;
- Using properly muffled construction equipment on the job site; *and*
- *To the extent possible, schedule noisier earthwork activities in close proximity to schools during times when classes are not in session.*

In the long-term, increased traffic resulting from population growth on the island as well as development in the Downtown area, including the proposed project, will increase traffic-related noise in the vicinity of the project site. Future traffic noise was assessed in the *Acoustic Study for the Block "J" Redevelopment Project (Appendix B)* based on the *Block J Redevelopment Project Traffic Study (See Appendix C)*.

Predictions of future traffic noise levels were made using traffic volume assignments for the year 2002 "with" and "without" the project. The dominant traffic noise source in the project area will continue to be Beretania Street, but the predicted 0.4 dB increase in this noise source following project build-out is not expected to be significant. Of this increase, project-related traffic noise would account for 0.1 dB. The largest increase in traffic noise is predicted to occur on Fort Street between Kukui and Beretania Streets where an increase of 2.4 dB is predicted. This relatively large increase is attributable to the currently low levels of traffic noise and the relatively large increase in projected traffic along the street, much of it related to the proposed project, which would account for 2.0 dB of the increase. Nevertheless, traffic noise levels along this segment of Fort Street will remain very low; between 54 and 57 dB at 50 feet from the street's centerline. In general, the increases in traffic noise attributable to the project along all roadways except Fort Street are predicted to be less than 1.0 dB, which is considered to be minimal. This level of increase should not generate adverse noise impacts and will be in the range that is difficult to measure due to its small magnitude. For these reasons, risks of adverse noise impacts resulting from project traffic along the roadways servicing the project are considered to be insignificant. This includes impacts on noise-sensitive uses in the area.

Although project-related traffic noise would be insignificant, the existing and projected increase in traffic noise have implications on residential development for the proposed project. In particular, elevated residential units in the Southeast Tower which face Beretania and Queen Emma Streets are predicted to be exposed to noise levels between 67 to 69 Ldn, and will probably be in the "Significant Exposure, Normally Unacceptable" noise exposure category. Units facing the Pali Highway are predicted to be marginally above the 65 Ldn FHA/HUD noise standard for residences. Elevated residential units in the Northwest Tower of the project facing Kukui Street are predicted to be marginally below the 65 Ldn standard, but whether or not it would be outside of the "Significant Exposure, Normally Unacceptable" category cannot be accurately determined. All other residential units in the project will be in the "Moderate Exposure, Acceptable" category.

Mitigation measures to address long-term traffic noise impacts are limited to the proposed residential uses of the project and include consideration of alternatives such as:

- Utilizing noise-attenuating glazing and wall components and providing air-conditioning for the affected units such that windows can be closed when traffic noise levels are high; or,
- Relocating and reshaping the footprint of the Southeast Tower to buffer and shield units facing Beretania Street from traffic noise.

3.9 Access and Traffic

The Project site is presently used for metered public parking (208 stalls) and parking for City official and employee vehicles (about 75 stalls). At present, 205 and 273 vehicles enter or exit the site during the morning and afternoon peak traffic hours, respectively.

The roadway system in the vicinity of the project site includes:

- **Pali Highway:** This major State highway connects the Windward communities of Oahu to the Downtown Honolulu area. Pali Highway also provides access from the Diamond Head-bound lanes of the H-1 Freeway to the project area via an off-ramp located one block mauka of Vineyard Boulevard. Mauka of Kukui Street, Pali Highway is a two-way divided roadway with four to six through lanes. Between Kukui and Beretania Streets, Pali Highway is a one-way makai-bound roadway with two lanes located on either side of a landscaped median area. The segment of the highway adjacent to the project site is under City jurisdiction.

The roadway continues makai of Beretania Street as Bishop Street, also a City street.

- **Vineyard Boulevard:** This major State highway parallels and serves as a major collector-distributor roadway for the H-1 Freeway through the Downtown Honolulu area. Vineyard Boulevard provides access to/from the project site for the segment of the H-1 Freeway on the Diamond Head side of the Downtown area. Vineyard Boulevard is a median-divided roadway with three travel lanes in each direction and separate left-turn lanes at cross streets.
- **Beretania Street:** Beretania Street provides five to six ewa-bound lanes through the project area as part of a one-way street couplet with King Street. The State's *Bike Plan Hawaii* and the City's proposed *Honolulu Bicycle Master Plan* both designate a future bike lane along Beretania Street, although the location and configuration of the lane is undetermined at this time.
- **Alakea Street/Queen Emma Street:** This major street provides access from the Financial District mauka to Beretania Street, Pali Highway and to the H-1 Freeway. The segment makai of Kukui Street serves mauka-bound direction travel as part of a one-way street couplet with Bishop Street/Pali Highway. Mauka of Kukui Street, Queen Emma Street is a two-way street. On-street parking is permitted along the segment of Queen Emma Street near the project site, with three on-street stalls located along the project site frontage.
- **Kukui Street:** The one-way ewa-bound segment between Queen Emma Street and Pali Highway, located adjacent to the project site, provides access to Pali Highway for traffic exiting from the Downtown and Civic Center areas. This one-way segment's intersections with both Queen Emma Street and Pali Highway have raised traffic islands to separate traffic movements and permit continuous flow without any traffic signal or STOP sign controls. Pedestrian crosswalks are located at these two intersections. On-street parking is permitted along both sides of this one-way segment, with three stalls located on the makai side adjacent to existing buildings outside the project site and eight stalls located on the mauka side of the street.

Ewa of Pali Highway, Kukui Street is a two-lane, two-way collector street that provides access to the adjacent residential complexes. The raised traffic islands at the Pali Highway intersection do not permit ewa-bound traffic to cross Pali Highway or to turn mauka from the ewa section of Kukui Street.

- Fort Street: The one-block segment adjacent to Kamalii Park provides access to the Kukui Plaza porte cochere and functions as a right-turn lane for traffic turning from makai-bound Pali Highway onto Beretania Street. On-street parking is permitted along both sides of the street, with 12 stalls located adjacent to Kamalii Park and 9 stalls located along the ewa side of the street.

Counts of traffic movements at the key intersections near the project site were made by Wilson Okamoto & Associates in mid-May, 1998 while Central Middle School was still in session.

In the morning peak hour, the highest traffic volumes in the study area occurred at the intersection of Pali Highway with Vineyard Boulevard, with a total of approximately 4,400 vehicles entering the intersection. The second highest traffic volumes occurred at the intersection of Pali Highway with Beretania Street, with 4,100 vehicles entering the intersection.

In the afternoon peak hour, the highest traffic volumes occurred at the intersection of Beretania Street with Alakea Street, with a total of over 5,800 vehicles entering the intersection. The second highest volumes occurred at the intersection of Pali Highway with Vineyard Boulevard, with a total of over 4,600 vehicles.

Traffic conditions were analyzed for the key intersections during the weekday morning and afternoon peak traffic hours in the *Block J Redevelopment Project Traffic Impact Study* (See Appendix C).

The Transportation Research Board (TRB) evaluation concept of the level-of-service (LOS) was used to describe facility operations on a letter basis from A to F, which signify excellent to unacceptable conditions, respectively. The method generally compares traffic volumes on a facility to the facility's theoretical capacity. The comparisons are frequently referred to as the volume-to-capacity ratio (V/C).

The overall traffic conditions at the key intersections during the weekday morning and afternoon peak hours are summarized in Table 3-2.

In the morning peak hour, most of the intersections operate at very acceptable traffic conditions. The key constraint to traffic flow in the area is the intersection of Pali Highway and Vineyard Boulevard, with peak hour volumes approximating 98.2% of the estimated intersection capacity and average delays reflective of Level of Service (LOS) E conditions. The critical movements that experience the most delay are the makai-bound traffic on Pali Highway and the vehicles turning left from ewa-bound Vineyard Boulevard onto makai-bound Pali Highway.

Table 3-2 EXISTING TRAFFIC CONDITIONS AT KEY INTERSECTIONS Block J Redevelopment Project Traffic Impact Study						
Intersection	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Vineyard Blvd. & Queen Emma St.	0.711	28.5	D	0.793	**	**
Vineyard Blvd. & Pali Hwy.	0.982	47.8	E	0.893	41.9	E
Vineyard Blvd. & Nuuanu Ave.	0.794	31.0	D	0.788	**	**
Kukui St. & Nuuanu Ave.	0.671	9.8	B	0.726	10.9	B
Kukui St. & Pali Hwy.	*			*		
Beretania St. & Alakea St./Queen Emma St.	0.424	11.0	B	0.891	15.7	C
Beretania St. & Pali Hwy./Bishop St.	0.696	14.9	B	0.640	12.3	B
Beretania St. & Fort St.	0.311	9.9	B	0.379	7.9	B
Beretania St. & Bethel St.	0.326	10.2	B	0.417	8.2	B
Beretania St. & Nuuanu Ave.	0.443	9.3	B	0.398	11.6	C
King St. & Bishop St.	0.592	18.9	C	0.484	17.7	C
King St. & Alakea St.	0.579	10.9	B	0.667	14.2	B

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.
ADPV = Average delay per vehicle, in seconds.
LOS = Level of service.
* V/C is not calculated for intersections with STOP sign controls.
** Delay not calculated since unreliable where traffic substantially exceeds capacity for one or more traffic movements.

Wilbur Smith Associates; June 9, 1998.

In the afternoon peak hour, the Pali Highway-Vineyard Boulevard and Beretania Street-Alakea Street intersections have the highest proportion of the intersection capacity used by existing traffic volumes, with traffic approximating 89% of the intersection capacity. At the Pali Highway intersection, the longest delays occur for the through and left-turn traffic on mauka-bound Pali Highway, and the vehicles turning left from ewa-bound Vineyard Boulevard onto makai-bound Pali Highway. At the Alakea Street intersection, the longest delays occur for the traffic turning right from Beretania Street and the through traffic on Alakea Street.

Although the total entering traffic at the Vineyard Boulevard intersections with Queen Emma Street and with Nuuanu Avenue utilize only about 79% of the intersection capacity, several movements at each intersection experience long delays. Long delays occur for the left-turn traffic from both approaches of Nuuanu Avenue and Queen Emma Street since no separate protected signal phase is provided for these movements. On Queen Emma Street, the mauka-bound through and right-turn traffic also experience long delays. At both intersections, the Vineyard Boulevard through traffic is allocated a major portion of the signal green time and these movements operate at very good conditions (LOS B or C).

Impacts and Mitigation Measures

In the short-term, construction of the proposed project has the potential for affecting traffic flow in the vicinity of the project site. This would include impacts of construction vehicles hauling equipment and materials on roadways near the project site, as well as commuting construction workers. Construction activities will also require temporary lane closures of roadways surrounding the project site during various stages of construction. Construction of the underground parking structure beneath Pali Highway will entail removing the existing roadway. Pedestrian usage of the sidewalks adjacent to the project site will also likely be curtailed during various stages of construction for safety reasons. The loss of public and employee parking during construction will increase parking demands in Downtown.

Mitigation measures to address short-term construction impacts include:

- Restricting the movement of construction vehicles on roadways during peak traffic hours to limit the degree of inconvenience to motorists. As needed, traffic-control flagmen will be provided to control traffic during off-peak hour movement of construction vehicles.

- Providing off-site parking for construction workers and shuttling them to and from the job site. While the shuttling system will generate some peak-hour traffic, this will be more than offset by the reduction in traffic when the parking lot is closed for construction;
- Temporary lane closures around the site will be limited to off-peak traffic hours to minimize inconveniences to motorists. Appropriate signage and/or manned traffic control will be provided, as needed. Excavations may be temporarily covered with steel plates to keep lanes open during peak traffic hours.
- Any closure of sidewalks adjacent to the project site during construction will be coordinated with the City Department of Transportation Services to assure that alternate pedestrian routes are available.
- During the construction of the underground parking structure beneath Pali Highway and Kamalii Park, the travel lanes of the highway will be rerouted onto temporary roadways to be constructed within the project site. Up to four travel lanes during the peak traffic periods will be provided to replace the existing four lanes of the Highway. The number and configuration of the temporary travel lanes during various phases of construction will be determined based on consultation with the City and County of Honolulu Department of Transportation Services in developing a traffic management plan for the construction phase of the project. While the temporary roadways will help to maintain traffic flow, travel speeds will be slower due to the narrower lane widths (10 feet instead of the existing 12 feet), motorists' unfamiliarity with the route, and signage warning of on-going construction. This will result in increased traffic congestion in the area, particularly while commuting motorists become familiar with the modified traffic patterns which may change during the course of construction.
- Considering alternative approaches to accommodating parking demand created by the loss of public and employee parking at the project site, including: 1) informing the public of alternative parking locations in areas such as Alii Place, Kukui Plaza, Chinatown Gateway; and 2) working with the City to identify alternate employee parking locations such as the Blaisdell Center.

Long-term impacts of the proposed project on future traffic conditions were assessed in the *Block J Redevelopment Project Traffic Impact Study (Appendix*

C). The study forecasts traffic volumes and conditions without the project as a baseline from which to identify the incremental effects of the project. Although the project is anticipated for completion in the Fall of 2001, full occupancy is assumed by the Spring of 2002, which is used for the future assessment of traffic conditions.

Without the proposed project, traffic increases near the project site over the next four years are expected to result from increased occupancy levels at recent developments in or near Downtown Honolulu, or increases in traffic traveling through the Downtown area. There are also several redevelopment projects planned outside of the study area that may affect traffic growth, such as the redevelopment of the Downtown Post Office site on Richards Street and the expansion of facilities at the Queen's Medical Center. An area-wide traffic growth factor was used to reflect the traffic increases from both the increased levels of Downtown activity and the two projects outside the study area.

The Oahu Regional Transportation Plan Study (Oahu Metropolitan Planning Organization, 1995) forecasts an average increase in traffic in the vicinity of Downtown Honolulu of between 0.8% to 0.9% per year from 1990 to 2020. Historic traffic count data for the State Department of Transportation (DOT) at the intersection of Pali Highway and Vineyard Boulevard indicates no increase to increases as high as 2% per year. Other historic count information in the study area indicates declines to as much as 2% per year between 1990 and 1998.

For the Traffic Impact Study, an average increase of 1.5% per year was used to forecast 2002 peak hour traffic volumes without the project, which is about double the anticipated long-term growth rate. Applying this growth factor to all traffic movements at the key intersections near the project site resulted in the following significant changes without the project:

Morning Peak Hour

- At the Pali Highway-Vineyard Boulevard intersection, the increased traffic would exceed the intersection capacity by 4.4% and average delays would approach LOS F.
- At the intersection of Nuuanu Avenue with Vineyard Boulevard, the additional traffic would greatly worsen the left-turn movement from both Nuuanu Avenue approaches with LOS F conditions. The projected traffic would increase the proportion of capacity use to 93.2%.

Afternoon Peak Hour

- At the Pali Highway-Vineyard Boulevard intersection, the increased traffic would approximate 95% of the intersection capacity.
- At the ~~Pali Highway~~ *Vineyard Boulevard* intersection with Queen Emma Street, the mauka-bound traffic would exceed capacity for this approach by 8% with present signal phasing and timing.
- At the intersection of Beretania Street with Alakea/Queen Emma Streets, the increased traffic would approximate 94.8% of the intersection capacity.

Based on the proposed residential, retail and public parking uses at the project site, an estimated 933 vehicles would enter or exit the project during the morning peak hour, or a net increase of 728 vehicles over the number presently entering/exiting the two parking lots on the site. The residential and retail uses contribute about 45% of the increase, with the public parking facility attracting the majority of trips.

In the afternoon peak hour, an estimated 419 vehicles would enter the project and 768 vehicles would exit the project, not including the 66 pass-by vehicles. After adjustment for the existing parking lots, the project would add an additional 914 vehicle trips on the adjacent streets.

Vehicles using the public parking stalls included within the site, but whose drivers are actually visiting or working at an off-site location, would be the major source of traffic entering and exiting the project during the peak traffic hours. If this project were not developed, many of these vehicles may travel to the Downtown area and use alternative parking sites, and thus would not represent a traffic increase on the area streets as a result of the project. However, for this traffic study, the vehicles using the public parking stalls were considered a net increase on the study area streets and a contributor to the project impacts.

The resulting traffic volumes at the key intersections and the project driveways are shown in Tables 3-3 and 3-4 for the morning and afternoon peak hours, respectively.

The project traffic would worsen conditions at the existing problem intersections near the site:

Table 3-3

**2002 TRAFFIC CONDITIONS AT KEY INTERSECTIONS
WITHOUT PROJECT
Block J Redevelopment Project Traffic Impact Study**

Intersection	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Vineyard Blvd. & Queen Emma St.	0.764	31.3	D	0.852	**	**
Vineyard Blvd. & Pali Hwy.	1.044	58.6	E	0.950	46.6	E
Vineyard Blvd. & Nuuanu Ave.	0.932	**	**	0.866	**	**
Kukui St. & Nuuanu Ave.	0.726	11.8	B	0.781	13.9	B
Kukui St. & Pali Hwy.						
Beretania St. & Alakea St./Queen Emma St.	0.453	11.3	B	0.948	19.7	C
Beretania St. & Pali Hwy./Bishop St.	0.735	15.6	C	0.672	12.8	B
Beretania St. & Fort St.						
Beretania St. & Bethel St.						
Beretania St. & Nuuanu Ave.	0.471	9.4	B	0.423	16.1	C
King St. & Bishop St.	0.629	21.4	C	0.514	18.7	C
King St. & Alakea St.	0.615	11.3	B	0.717	15.1	C

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.

ADPV = Average delay per vehicle, in seconds.

LOS = Level of service.

* V/C is not calculated for intersections with STOP sign controls.

** Delay not calculated since unreliable where traffic substantially exceeds capacity.

Wilbur Smith Associates; June 9, 1998.

Table 3-4						
2002 TRAFFIC CONDITIONS AT KEY INTERSECTIONS WITH PROJECT						
Block J Redevelopment Project Traffic Impact Study						
Intersection	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Vineyard Blvd. & Queen Emma St.	0.815	33.8	D	0.864	**	**
Vineyard Blvd. & Pali Hwy.	1.103	**	F	0.994	54.5	E
Vineyard Blvd. & Nuuanu Ave.	1.021	**	F	0.892	**	**
Kukui St. & Nuuanu Ave.	0.780	19.9	C	0.787	14.7	B
Kukui St. & Pali Hwy.						
Beretania St. & Alakea St./Queen Emma St.	0.572	11.9	B	1.029	22.7	C
Beretania St. & Pali Hwy./Bishop St.	0.759	16.1	C	0.702	13.1	B
Beretania St. & Fort St.						
Beretania St. & Bethel St.						
Beretania St. & Nuuanu Ave.	0.473	9.5	B	0.430	17.4	C
King St. & Bishop St.	0.657	22.2	C	0.546	20.4	C
King St. & Alakea St.	0.646	12.0	B	0.730	17.0	C

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.
 ADPV = Average delay per vehicle, in seconds.
 LOS = Level of service.
 * V/C is not calculated for intersections with STOP sign controls.
 ** Delay not calculated since unreliable where traffic substantially exceeds capacity.

Wilbur Smith Associates; June 9, 1998.

- Vineyard Boulevard-Queen Emma Street: *During the morning peak hour, the project traffic would worsen delays for the left-turn movement from ewa-bound Vineyard Boulevard. Conditions could be improved for this movement by the allocation of more signal green time for this movement or the construction of a second (double) left-turn lane.*

The project traffic would increase delays for mauka-bound traffic on Queen Emma Street during the afternoon peak hour. Allocation of additional green time to this approach could reduce delay for the mauka-bound traffic while maintaining overall acceptable conditions at the intersection. Alternatively, more of the Koko Head-bound project traffic could use Pali Highway to travel Diamond Head and turn onto Vineyard Boulevard without affecting conditions at the Pali Highway intersection.

- Vineyard Boulevard-Pali Highway: In the morning peak hour, the year 2002 traffic would approximate 110% of intersection capacity with the project traffic versus 104% without the project. In the afternoon peak hour, the project traffic would increase the use of intersection capacity to 99.4% from 95% without the project. The traffic conditions could be improved by provision of a second left-turn lane on the mauka-bound Pali Highway and/or ewa-bound Vineyard Boulevard approaches. Provision of both additional turn lanes would improve future conditions to or better than existing conditions.
- Vineyard Boulevard-Nuuanu Avenue: The project traffic would worsen conditions for the left-turn movements from the Nuuanu Avenue approaches, particularly during the morning peak hour. These left-turn movements do not have protected left-turn phases. Conditions for the left-turn movements could be improved by modifying the signal phasing to provide a protected left-turn phase, particularly in the morning peak hour. *The State Department of Transportation is currently planning to modify the traffic signal to provide this protected left-turn phase.*
- Beretania Street-Alakea Street: The project would worsen conditions at this intersection during the afternoon peak hour, with the forecast traffic approximating 99.5% of the intersection capacity with the project, versus 94.8% without the project. The short section of the mauka-bound lane that extends from Beretania Street to Emma Lane (the future project driveway) should be maintained to permit the mauka-bound project traffic on Alakea Street to use the shared left-turn/through lane, which directs through traffic into this short lane segment mauka of the intersection. The

shared lane is less heavily used than the through lanes during the afternoon peak period, and project traffic use of this lane should have less impact on overall intersection conditions. *The project would also worsen conditions for the right-turn movement from ewa-bound Beretania Street.*

- **Kukui Street Connection to Mauka-bound Pali Highway:** The traffic islands at the Kukui Street intersection with Pali Highway should be reconstructed to provide two lanes for the right-turn movement from the ewa-bound one-way section of Kukui Street onto mauka-bound Pali Highway. The segment of Kukui Street between the project driveway and Pali Highway would be restriped to provide two right-turn lanes and one left-turn lane. This would require some restriction or removal of the on-street parking on the mauka curb.

Long-term impacts on on-street parking may include the removal or restriction of parking at several locations adjacent to the project site, depending upon which mitigation measures are implemented as a result of future discussions with the City and County of Honolulu Department of Transportation Services:

- **Queen Emma Street between Beretania Street and the project driveway:** The three existing stalls along the ewa side curb may be removed, and parking and stopping prohibited along this curb.
- **Kukui Street between Queen Emma Street and Pali Highway:** Four or more on-street stalls along the mauka curb between the project driveway and Pali Highway could be either removed or restricted from use during the afternoon peak period to provide two right-turn lanes from Kukui Street onto Pali Highway.
- **Fort Street between Kukui Street and Beretania Street:** The project driveway connection to Fort Street would require the removal of four or five on-street parking stalls along the curb adjacent to Kamalii Park.

3.9.1 Public Transportation

TheBus Service

TheBus provides fixed-route public transit service along each of the streets adjacent to the project site. Queen Emma Street and Pali Highway are used by suburban trunk routes serving Windward Oahu, and by many of the express bus routes serving Windward Oahu and East Honolulu. The mauka-bound buses along the Windward routes

also use the one-way segment of Kukui Street to travel from Queen Emma Street to Pali Highway.

Beretania Street is used for ewa-bound travel by several of the urban trunk routes (~~3, 9, 12, and 13~~ 11, 19 and 20), Leeward suburban trunk routes, and many of the Leeward express routes.

A major bus stop is located at the Beretania Street curb adjacent to the project site. A bus stop is also located along the ewa-side curb of Pali Highway mauka of the Beretania Street intersection.

TheHandi-Van Service

TheHandi-Van provides public transportation service to persons with disabilities who are unable to use the regular TheBus fixed-route service. TheHandi-Van vehicles are equipped with wheelchair lifts. The service is available seven days a week, with service starting at 5:00 AM (weekdays) or 6:00 AM (weekends and holidays) and extending to midnight. Reservations for service must be made 24 hours to two weeks in advance of the trip. The vehicles will pick-up passengers at appropriate pre-arranged locations along public streets, private roadways, or off-street passenger loading areas, such as porte cocheres for residential buildings.

Impacts and Mitigation Measures

TheBus Service: With respect to public transportation, the project would increase the number of public transit trips made to or from the Downtown Honolulu area on *TheBus* fixed bus routes that serve the project area. However, the project size and uses should not require an increase in transit services in the area.

The project should improve conditions at the existing Beretania Street bus stop located adjacent to the project site. The project would close the present driveway entrance from Beretania Street to the existing parking lots, which is located between the bus stop and the Pali Highway intersection crosswalks. The closure of this driveway would increase the length of the curb available for loading and unloading passengers, increase the area available for passengers waiting at the bus stop, and remove the vehicle crossing of the sidewalk between the bus stop and the Beretania Street-Pali Highway crosswalks.

TheHandi-Van Service: With a residential tower reserved for senior citizens, the project would likely have some effect on *TheHandi-Van* operations. The Senior Tower, with a planned approximately 475 units, would provide a central residence

location for a large population of existing and/or potential TheHandi-Van users who otherwise would likely reside at scattered locations across Oahu. This relocation to a residential tower may increase the number of person trips made on TheHandi-Van by some residents whose relocation to the project separates them from family/friends who have been providing their transportation needs, may allow more efficient service by TheHandi-Van operations due to a concentration of potential service users, and may result in shorter TheHandi-Van trips due to the project's central downtown location to services and social activities.

3.10 Utilities

3.10.1 Water System

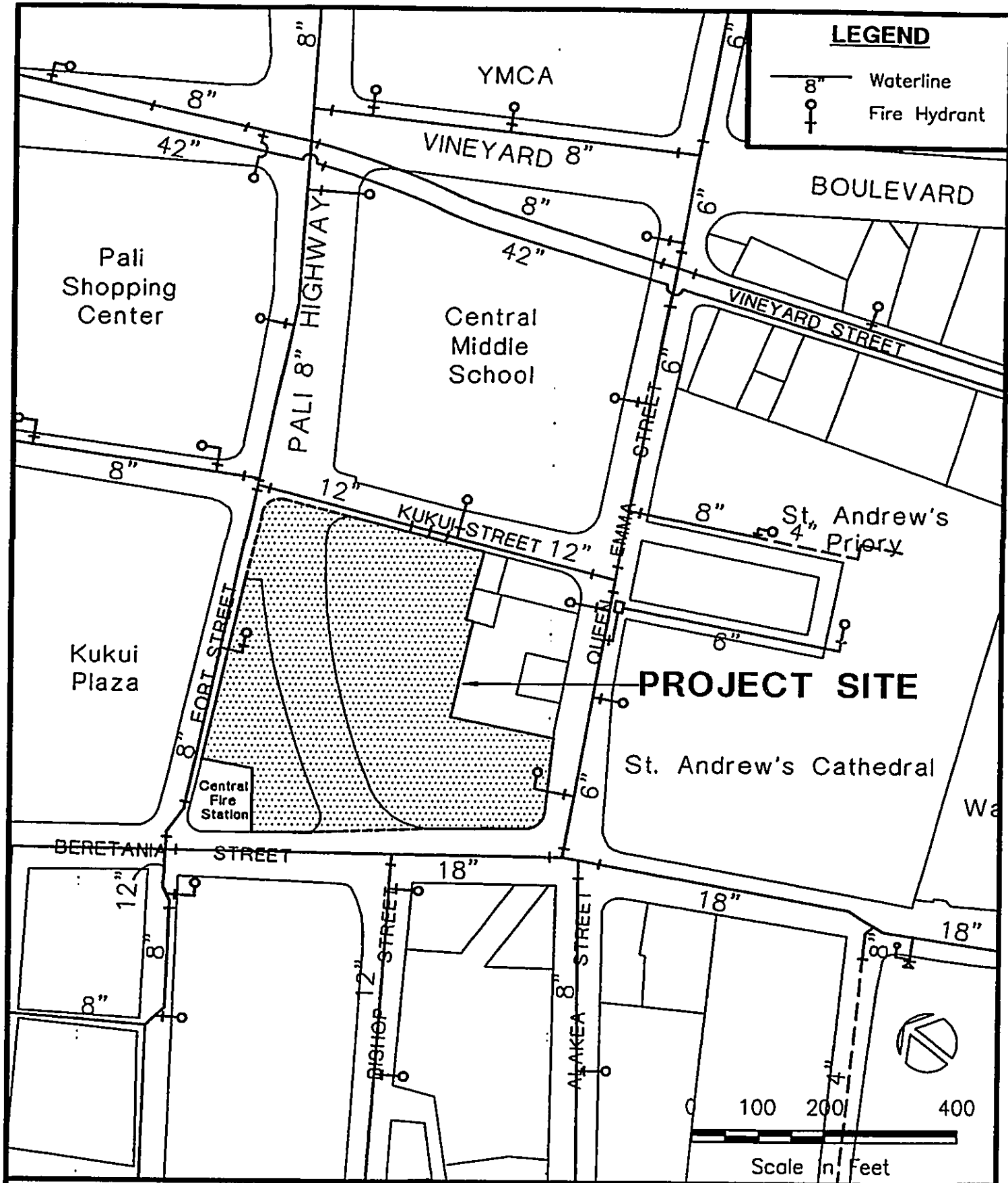
The project site is served by potable water from the Board of Water Supply's Honolulu District through its existing distribution system. Existing waterlines in the immediate vicinity of the project site include a 12-inch line along Kukui Street, an 8-inch line along Fort Street, an 18-inch main along Beretania Street, and a 6-inch line along Queen Emma Street (see Figure 3-1). According to the Board of Water Supply, there are existing 1- and 1-1/2-inch water meters serving the project site.

Impacts and Mitigation Measures

Preliminary flow calculations indicate that the proposed project's estimated water demand will be 285,900 gallons per day (gpd). The project's maximum daily and peak hour demands are estimated at 428,850 gpd and 857,700 gpd, respectively. According to the City Board of Water Supply, the off-site water system is presently adequate to accommodate the proposed development. The Board of Water Supply also indicated that development of a water source to serve the project will be required. Alternatively, the developer may pay a Regional Source Charge which is based on proposed regional water sources in the six-year Capital Improvement Program. *In addition to the Regional Source Charge, the developer may also be required to pay a special downtown assessment charge to upgrade the water mains in the downtown area. The developer will verify this requirement prior to submitting the building permit applications for review and approval.*

3.10.2 Wastewater System

Wastewater collection service within the project area is provided by the City and County of Honolulu's existing sewer system. Sewerlines in the immediate project area include 8-inch lines along Beretania, Queen Emma and Fort Streets and a portion of Kukui Street, a 6-inch line along Emma Lane, and a 6-inch line extending from Beretania Street



**BLOCK J
REDEVELOPMENT
PROJECT**

**EXISTING
WATER SYSTEM**

Fig. 3-1

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mauka through a portion of Pali Highway, and continuing in an easterly direction within the project site (see Figure 3-2).

The municipal wastewater system converges at the Sand Island Wastewater Treatment Plant. The Plant has an 82 mgd capacity, and provides advanced primary treatment. Treated effluent is discharged via an 84-inch diameter ocean outfall.

Impacts and Mitigation Measures

Based on the City ~~Department of Wastewater Management's (WWM)~~ *Department of Environmental Services'* design standards, the design average daily wastewater flow for the proposed project is estimated at 190,099 gpd. The design maximum wastewater flow is estimated at 831,746 gpd and the design peak flow is estimated at 834,709 gpd.

According to the City ~~WWM~~ *Department of Environmental Services*, the existing municipal sewer system is not adequate to support the proposed project. Consultation has been initiated with the City ~~WWM~~ *Department of Environmental Services* to determine the need for any sewerline improvements to accommodate the project.

The existing 6-inch sewerline crossing the project site will either need to be removed or relocated, as appropriate, to accommodate the proposed project once confirmation of the existing hook-ups to the line is made.

3.10.3 Drainage System

There are existing drainage facilities managed by the City and County of Honolulu ~~Department of Public Works~~ *Department of Facility Maintenance* in the vicinity of the project site. Surface run-off from the project site is collected at catch basins located at the Beretania and Alakea Street intersection, Kukui Street and Pali Highway intersection, and Pali Highway near its intersection with Fort Street (see Figure 3-3). Drainlines in the immediate project area include an 18-inch line within the Beretania and Alakea Street intersection, an 18-inch line connected to a 24-inch line within Kukui Street, and an 18-inch line connected to a 24-inch line crossing Fort Street near its intersection with Pali Highway and Kukui Street.

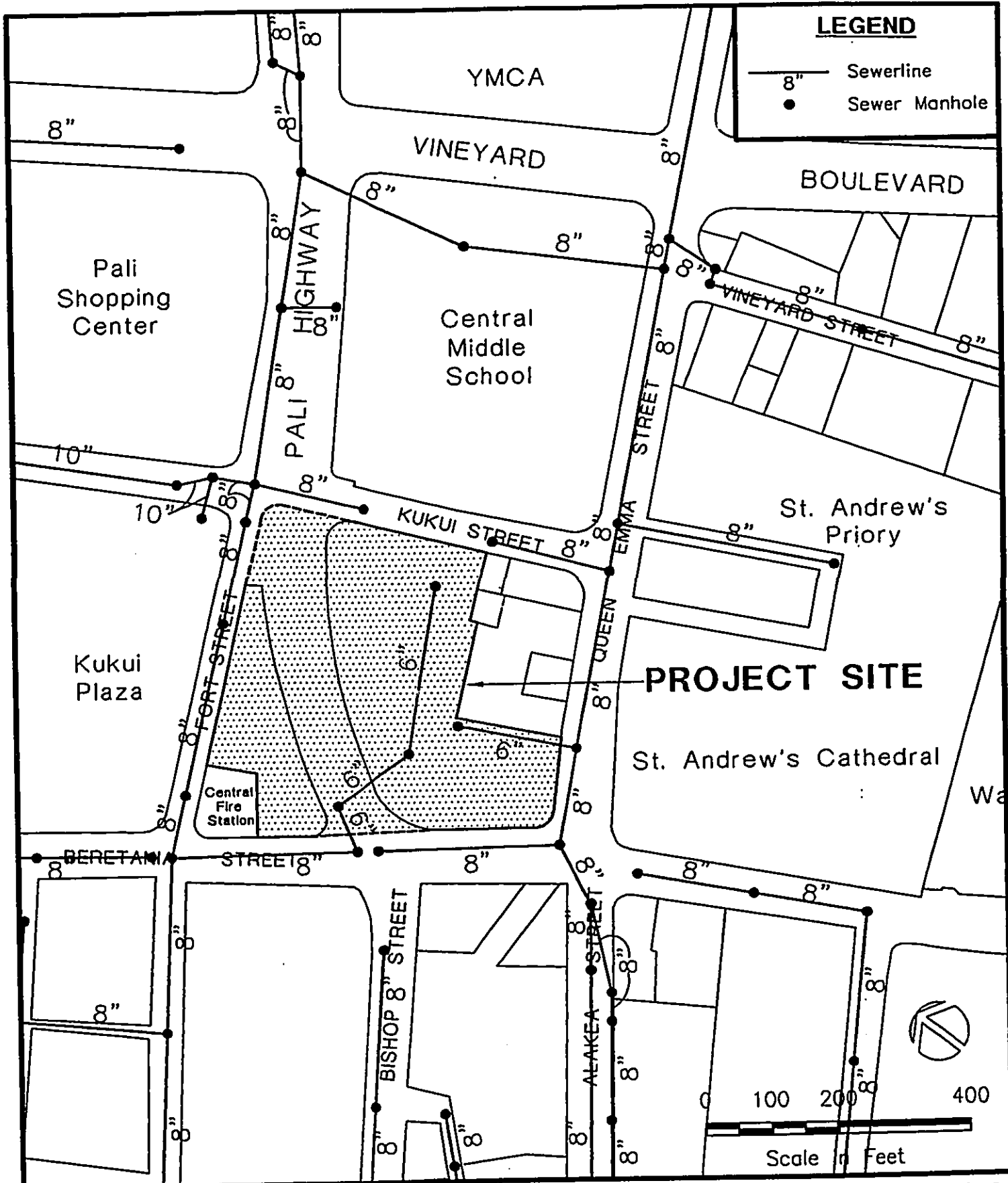


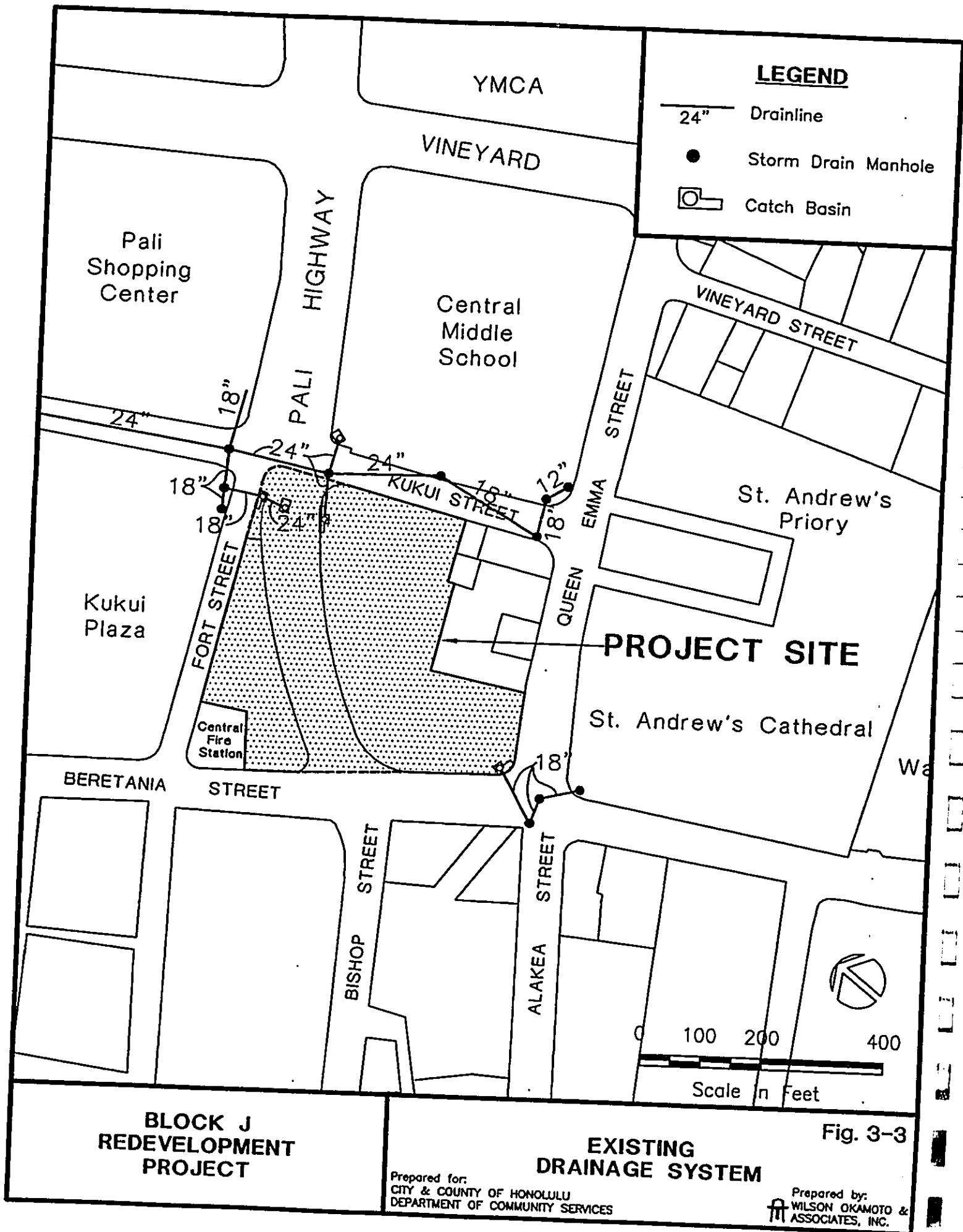
Fig. 3-2

**BLOCK J
REDEVELOPMENT
PROJECT**

**EXISTING
SEWER SYSTEM**

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Impacts and Mitigation Measures

During the project construction period, storm runoff may carry increased amounts of sediment into the storm drain system as a result of erosion from newly exposed land. This could potentially impact the water quality of nearshore areas, but should be adequately mitigated by compliance with the City's grading ordinance, as discussed in Section 3.2.

Dewatering during construction will be required for work on structures and utilities that will lie below the water table. As discussed in Section 3.2, a NPDES General Permit for Construction Activity Dewatering will be required for discharging dewatering effluent into City drainage systems and waters of the United States. The permit will require a BMP, erosion control plan, and water quality monitoring plan.

After construction, the volume of storm runoff from the proposed project will be no greater than present since most of the site is paved, preventing infiltration. With the addition of landscaping for the project, the amount of infiltration would increase, thereby reducing the volume of runoff. Storm runoff from the proposed project will be directed toward existing catch basins in the immediate vicinity of the site.

3.10.4 Other Utilities

Electrical, telephone, cable, and gas lines are presently available in the project area.

Electricity: Electrical service in the area is provided by Hawaiian Electric Company, Inc. (HECO) through a network of underground ductlines along Beretania, Queen Emma, Kukui, and Fort Streets. There is also an existing network of underground ductlines within the southeast portion of the project site extending from the adjacent HECO Substation.

Telephone: Telephone service in the project area is provided by GTE Hawaiian Telephone Company (HTCO). The project area is served by underground telephone lines along Beretania, Queen Emma, Kukui, and Fort Streets.

Cable: Cable television service in the project area is provided by Oceanic Cable. Existing underground cable lines in the project area are located along Beretania, Queen Emma, Kukui, and Fort Streets.

Gas: Gas service in the project area is provided by The Gas Company. Existing gas lines in the immediate vicinity of the project site include a 10-inch line along Beretania Street, a 2-inch line along Queen Emma Street, a 1-inch and a 3/4-inch line along the southern portion of Kukui Street, and a 2-inch line along Fort Street.

Impacts and Mitigation Measures

Hawaiian Electric Company, Inc. (HECO) has estimated that the power demand for the proposed project will be 3,200 kW. According to HECO, the project will either be serviced from the 11.5 kV radial system or the 25 kV system.

According to Oceanic Cable, the existing cable facilities along Kukui and Queen Emma Streets are not adequate to provide service to the project's two residential towers. The provision of service to the project's residential towers and potential commercial customers would require extension of cable facilities from Bishop Street to either Beretania Street or Pali Highway.

Consultation has been initiated with HECO, HECO, Oceanic Cable, and The Gas Company, respectively, to determine the adequacy of utility services to serve the needs of the proposed project. Required hook-ups to these systems will be coordinated with the respective utility companies to minimize any potential conflicts with existing services to adjacent areas.

3.11 Solid Waste

Solid waste in the project area is collected by the City and County of Honolulu *Department of Environmental Services'* Refuse Collection and Disposal Division or by private collection companies. The solid waste is transported to the Kapaa Transfer Station and then to the Honolulu Program of Waste Energy Recovery (H-POWER) facility at Campbell Industrial Park where it is converted to electricity. An alternative disposal site is the Waimanalo Gulch Sanitary Landfill near the Kahe Power Plant.

Impacts and Mitigation Measures

Construction of the proposed project will require grading and excavation activities for the underground parking garage and attendant foundation work, resulting in excess fill. It will be the responsibility of the project contractor to dispose of any excess fill.

As a result of Oahu's diminishing disposal capacity for solid waste, both the State and City and County of Honolulu have set aggressive waste reduction goals for

the next several years. The State, through Act 324, SLH 1991, intends to reduce solid waste by 50 percent less than 1991 levels by the year 2000. The objective of the City and County of Honolulu is to reduce solid waste by 75 percent by the year 2000. In order to help meet these waste reduction goals, the project's design will consider incorporating waste diversion and reduction activities into facility design. *According to the City Department of Environmental Services, solid waste collection services for the proposed project is required to be provided by a private refuse hauler.*

3.12 Archaeological/Historical Resources

The Archaeological Assessment of an Approximately 4.1-Acre Project Site in Downtown Honolulu (See Appendix D) chronicles the history of the project site and its environs. Background research suggests that, by the mid-19th century, the present project site accommodated both Hawaiian agricultural practices in the mauka portion and Hawaiian and western house sites along its perimeter at Beretania Street. Throughout the remainder of the 19th century and into the 20th century, the project site was increasingly used for western commercial, residential and religious purposes. By the 1920's, the project site formed an integral part of urban Honolulu, with tenements interspersed among commercial uses. Most of the area was levelled for construction of a municipal parking lot in the mid-1950s. Finally, construction of the Pali Highway corridor and Kamalii Park caused the removal of all historic surface structures.

No archaeological or historic sites are currently extant on the surface of the project site. Adjacent to the project site, however, is the Central Fire Station which has been placed on the Hawaii State and National Register of Historic Places.

Impacts and Mitigation Measures

No impacts on historic properties in the vicinity of the project site are anticipated. As discussed in Section 3.8 Noise, impact pile driving equipment capable of propagating ground vibrations that could potentially damage nearby structures such as the Central Fire Station will not be used during construction of the project.

Subsurface investigations at other City and County of Honolulu parking lots have indicated that very little ground disturbance had occurred during their construction. Therefore, excavation of the project site to the depths required for the proposed underground parking structure would impact any archaeological resources that may be present.

Mitigation measures to address potential impacts on archaeological resources include:

- *Conduct an archaeological inventory survey with subsurface testing of the project site prior to construction to determine the extent and nature of archaeological and historic deposits and features present. The testing program will be coordinated with the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources and the results made available for their review. If significant findings are encountered, an appropriate mitigation plan will be prepared and pursued. The plan could include data recovery and/or construction monitoring.*
- *Avoiding the use of impact pile driving equipment by: 1) using a mat foundation for the project structures instead of piles; and, 2) using, if feasible, a concrete soil mix shoring system or, secondarily, sheet piling installed with a vibratory driver;*

3.13 Visual Characteristics

The project site, located within a portion of the block bounded by Beretania, Queen Emma, Kukui, and Fort Streets, presently encompasses a municipal parking lot, Kamalii Park and a portion of Pali Highway. The site is adjacent to a mixture of high- and low-rise buildings, including the high-rise Kukui Plaza residential/commercial towers to the north, the low-rise Central Middle School, mid-rise Queen Emma Building, three low-rise commercial/office buildings, and the Hawaiian Electric substation to the east, the low-rise St. Andrew's Priory and Cathedral to the south, and high-rise office complexes to the west. Further makai of the project site are the high-rise office buildings of the downtown Financial District.

The City and County of Honolulu's Development Plan (DP) Common Provisions define public views as including "*views along streets and highways, mauka-makai view corridors, panoramic and significant landmark views from public places, views of natural features, heritage resources, and other landmarks, and view corridors between significant landmarks*" (§24-1.4, Revised Ordinances of Honolulu). The DP also states that "*the design and siting of all structures shall reflect the need to maintain and enhance available views of significant landmarks. No development shall be permitted that will block important views.*"

The Special Provisions for the DP's Primary Urban Center identify important views to be protected, including "*panoramic, mauka and makai and continuous views of the Koolau and Waianae mountain ranges, ridges, valleys, and coastline and the sea*" and

"views of natural landmarks, such as Diamond Head, Punchbowl, Pearl Harbor, and major streams and forest areas" (§24-2.2(2)(A) and (B), ROH). The Special Provision's Downtown Special Area, which the project site is located within, provides that "views from public streets and thoroughfares to the Aloha Tower, Honolulu Harbor, the mountains, and Hawaii Capital District shall be preserved and enhanced where feasible" (§24-2.2(b)(1)(H), ROH).

Of these important views, only portions of the mauka views of the Koolau Mountains and Punchbowl are currently visible from public vantage points in the vicinity of the project site. Along Beretania Street, a small section of the Koolau Mountains can be seen in the distance, while a portion of Punchbowl's south and southwest facing slope is visible, including the wall of the lookout. The Queen Emma Building blocks the rest of Punchbowl from this vantage point.

Along the Bishop Street corridor, about mid-block between Beretania and Hotel Streets, a segment of the Pauoa Ridge of the Koolau Range is visible between the high-rise Century Square building and the Queen Emma Building. Likewise, a portion of Punchbowl is visible from this vantage point, with the remaining views of this landmark blocked by the Queen Emma Building and the GTE Hawaiian Telephone building. Further makai on Bishop Street, the mauka view corridor narrows to a slot between flanking high-rise structures through which a small section of the Koolau Range and sky are visible.

Along the Alakea Street corridor, views toward the vicinity of the project site include a section of the Kapalama Ridge (Kamehameha Schools) of the Koolau Range from about mid-block between Beretania and Hotel Streets. Most of this view, however, is blocked by the Queen Emma Building. Punchbowl is located Diamond Head of this view, away from the project site.

Makai views along the Bishop Street corridor in the vicinity of the project site are dominated by high-rise buildings flanking the corridor, and the Aloha Tower Marketplace which blocks the view of the harbor at the makai end.

Views of Diamond Head from the area around the project site are obliterated by the high-rise development in the area.

From the Punchbowl Lookout, makai views toward Downtown are mostly dominated by the high-rise office buildings in the downtown Financial District and the high-rise residential towers in the Kukui District.

Impacts and Mitigation Measures

A visual impact analysis was conducted to depict the impacts of the proposed project structures on public views in the vicinity of the project site. The primary public vantage points affected by the project include mauka views from the Bishop Street and corridor, mauka views from the Alakea Street corridors near Beretania Street, and makai views from the Punchbowl Lookout.

Photographs were taken showing existing views from these public vantage points as might be seen by a typical motorist or pedestrian. Superimposed on each photograph was a three-dimensional, computerized simulated diagram of the project's two residential towers and retail structure as they will appear when fully developed. Figures 3-4 to 3-14 show the viewing locations and photographs depicting existing views and with-project views. The project's residential towers will be clearly visible from the surrounding area, and in part will block portions of the mauka public views from these designated vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl Lookout.

1. Bishop Street Corridor Looking Mauka: The project's two high-rise residential towers will be prominent, although they will be flanked by the high-rise Century Square and GTE Hawaiian Telephone buildings located along Bishop Street near Beretania Street (see Figures 3-5 and 3-6). The project's northwest residential tower will partially block available mauka views of the Koolau Mountains, while the southeast residential tower will block a portion of Punchbowl. The project's two-level retail structure will mostly block views of the Koolau Mountains from street level, although the top of Pauoa Ridge would remain visible. The retail structure would also slightly impede a portion of the mauka view of Punchbowl.

From the vantage point further makai along Bishop Street, the project's northwest tower will block *most of* the remaining view of the Koolau Range and sky visible between the existing high-rise structures along the street (see Figures 3-7 to 3-10).

2. Alakea Street Corridor Looking Mauka: The project's southeast residential tower will be prominent from this vantage point and will primarily block the remaining mauka view of the Kapalama Ridge ewa of the Queen Emma Building (see Figures 3-11 and 3-12). The tower will be flanked by the high-rise Kukui Plaza to the north and the mid-rise Queen Emma Building to the south.

3. Punchbowl Lookout Looking Makai: Views makai of the southeastern coastal shore from this elevated mauka vantage point will not be significantly affected by the project (see Figures 3-13 and 3-14). As viewed from Punchbowl, the project towers are set amidst mid- to high-rise towers in the downtown Financial and Kukui Districts. The project's northwest residential tower will partly intrude into the view of the coastal shore, although it would not penetrate the coastal skyline. The project, however, will unavoidably contribute to an increase in the visual density of this makai view.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's two high rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. Although the mass of the towers will be minimized by the neighboring high rise office buildings, the perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is set back to create a visual step-back from the retail structure located at ground level. Strategic landscaping will further minimize the overall mass of the tower and retail structures. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. Massing considerations for the above-ground structures are intended to minimize obstruction of views through the project site and to reduce the perception of building mass. Three tower configurations were examined, including a single double-loaded slab tower (double-loaded means each floor has a central access corridor along the length of the slab with units on both sides), dual point towers (point towers have basically a square floor configuration with units surrounding a central elevator and service spine), and a combination of a smaller slab tower and a point tower. A slab tower, though functionally more efficient, is visually more intrusive; the Marco Polo Building on Kapiolani Avenue being an extreme example. A point tower, on the other hand, is less visually intrusive, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed. The dual point tower configuration was selected as having the least visual impact, taking into account the vantage points from which the proposed

project may be viewed, including Bishop Street, the Punchbowl lookout and from Pali Highway.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. From the sidewalks adjacent to the podium, pedestrians' views of the towers are obscured by the podium. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of future residents, distance from Kukui Plaza for the privacy of residents in that development, distance from Pali Highway to reduce traffic noise for future residents at the north tower, and views of the north tower from Bishop Street. As in most architectural design decisions, tower siting for the proposed project is a compromise among these factors. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural details which minimize the visual impact of the project include those at the podium, the towers shafts and caps. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

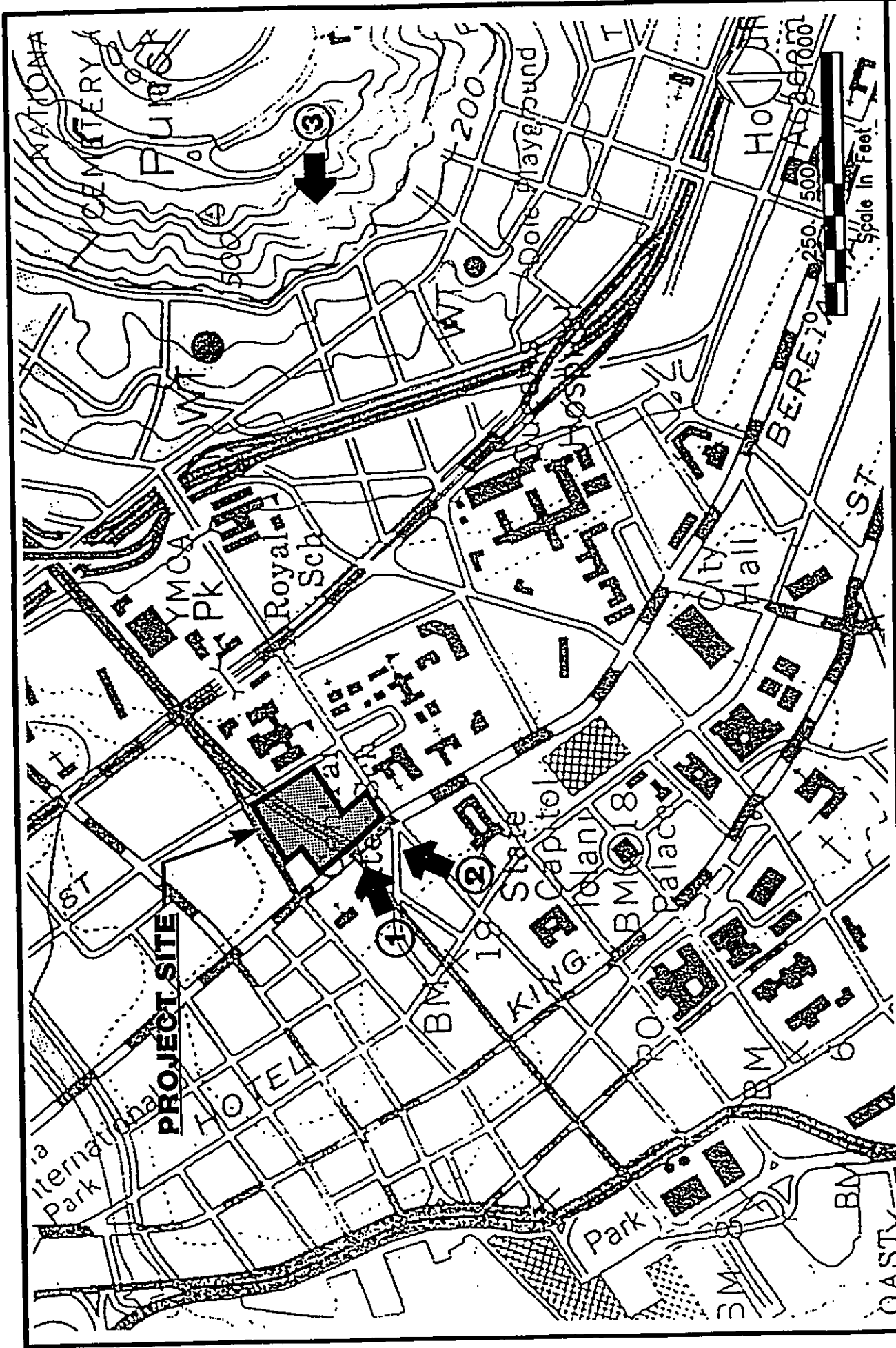


Fig. 3-4

VIEWING LOCATIONS

BLOCK J
REDEVELOPMENT
PROJECT

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DEPARTMENT OF COMMUNITY SERVICES

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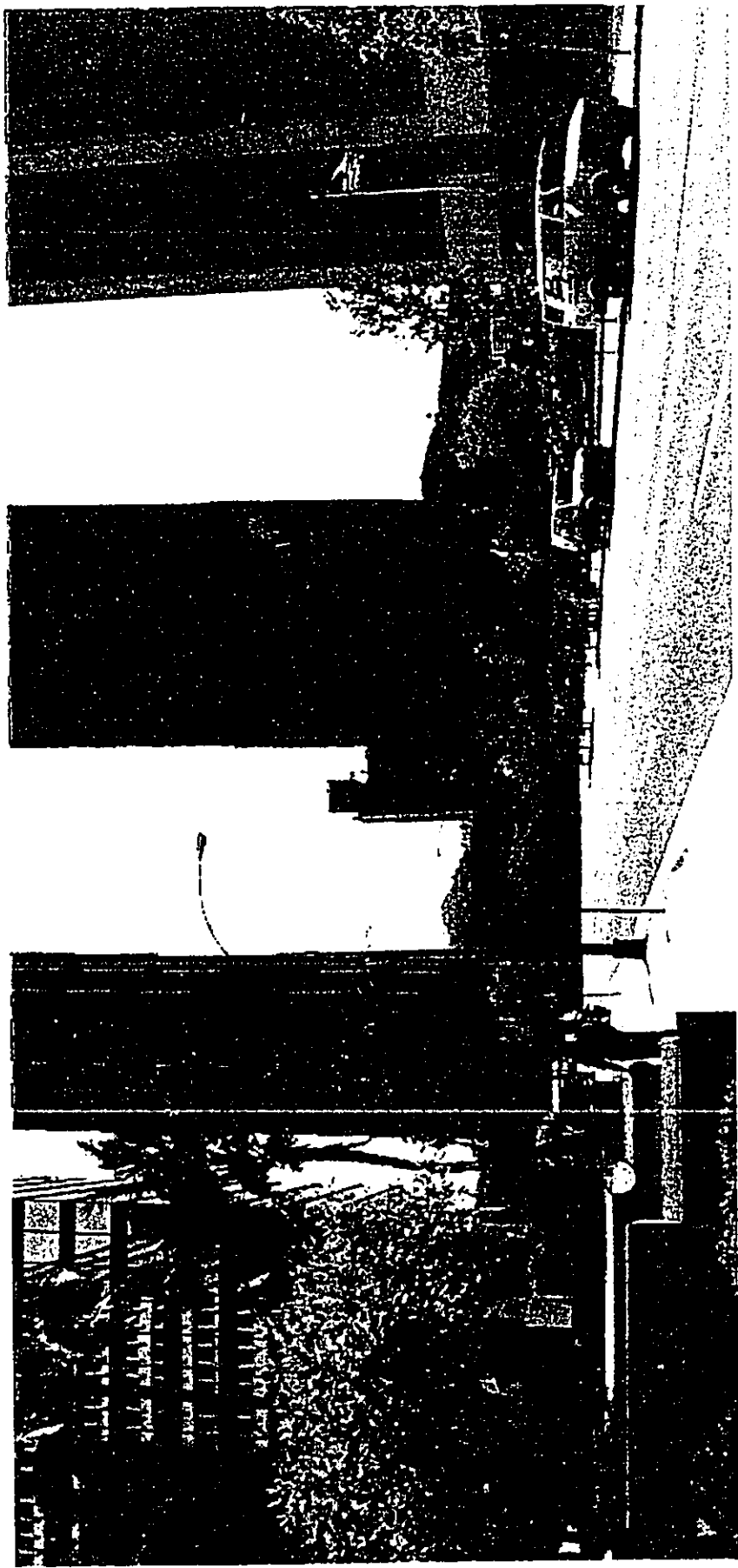
**BLOCK J
REDEVELOPMENT
PROJECT**

View from Bishop Street Looking Mauka - Existing

Fig 3-5

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REDEVELOPMENT
PROJECT**

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SERVICES

View from Bishop Street Looking Mauka - With Project

Fig 3-6

Prepared by:
**WILSON OKAMOTO &
ASSOCIATES**

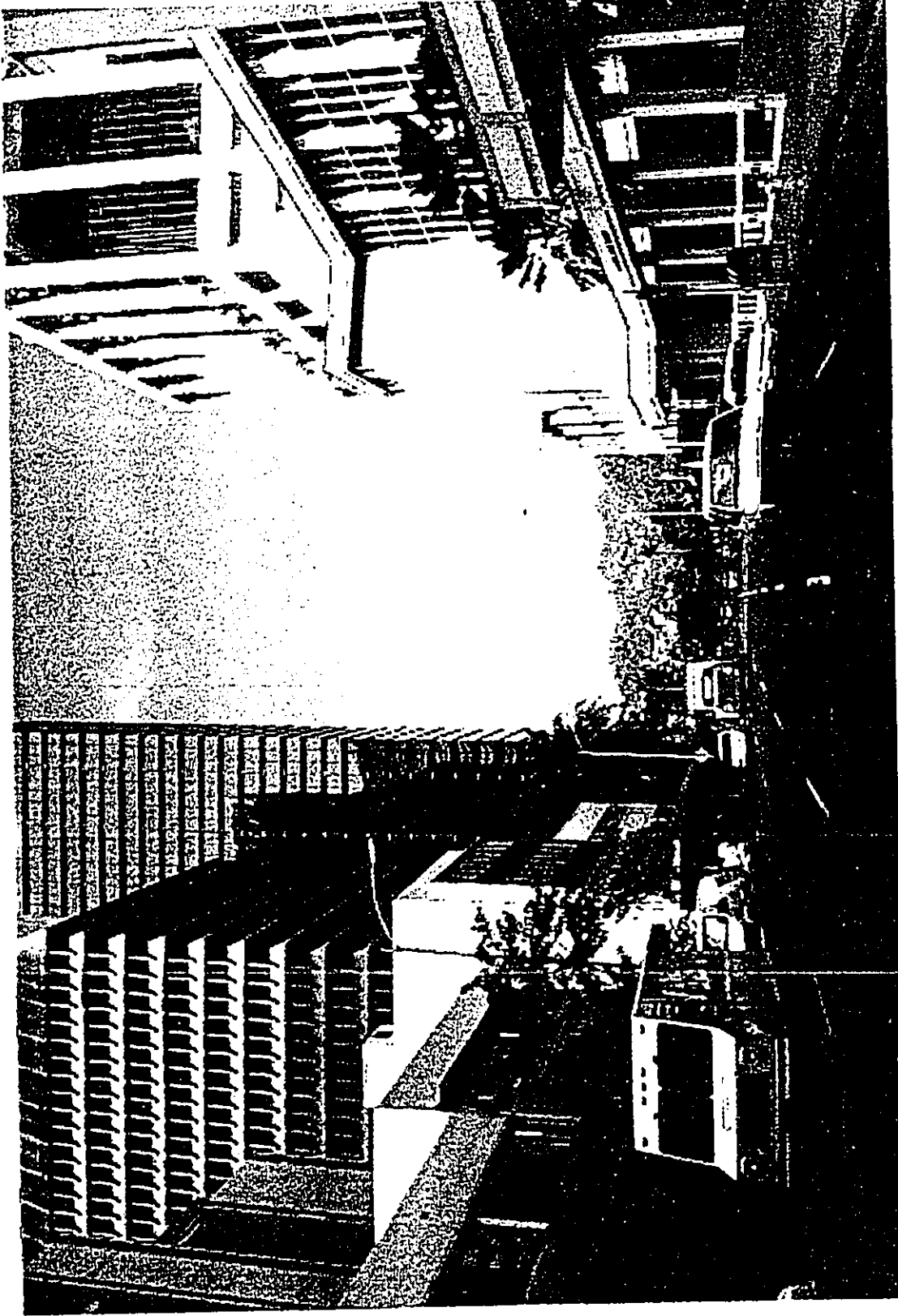


Fig 3-7

**View from Hotel Street at Bishop Street
Looking Mauka - Existing**

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REDEVELOPMENT
PROJECT**

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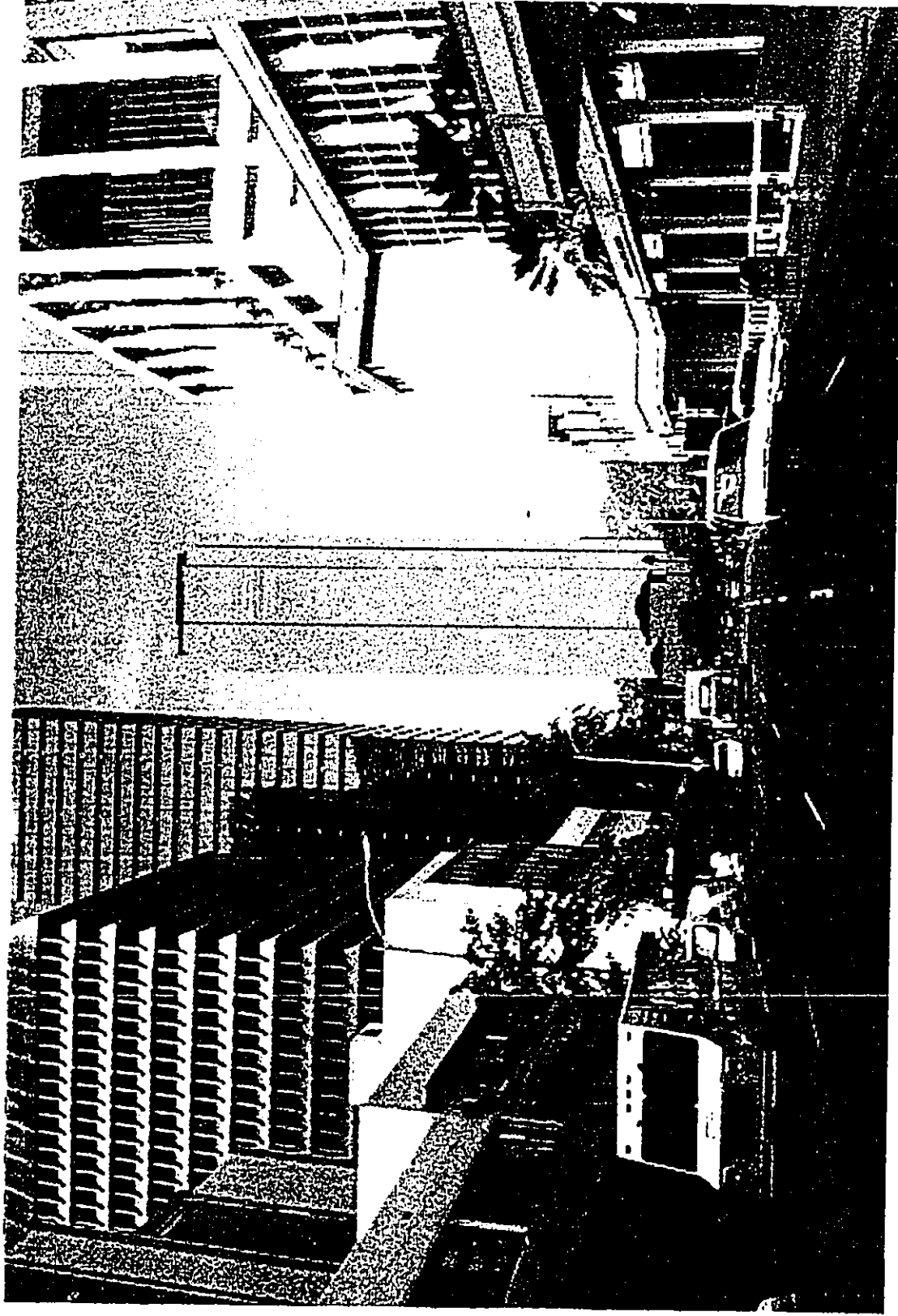


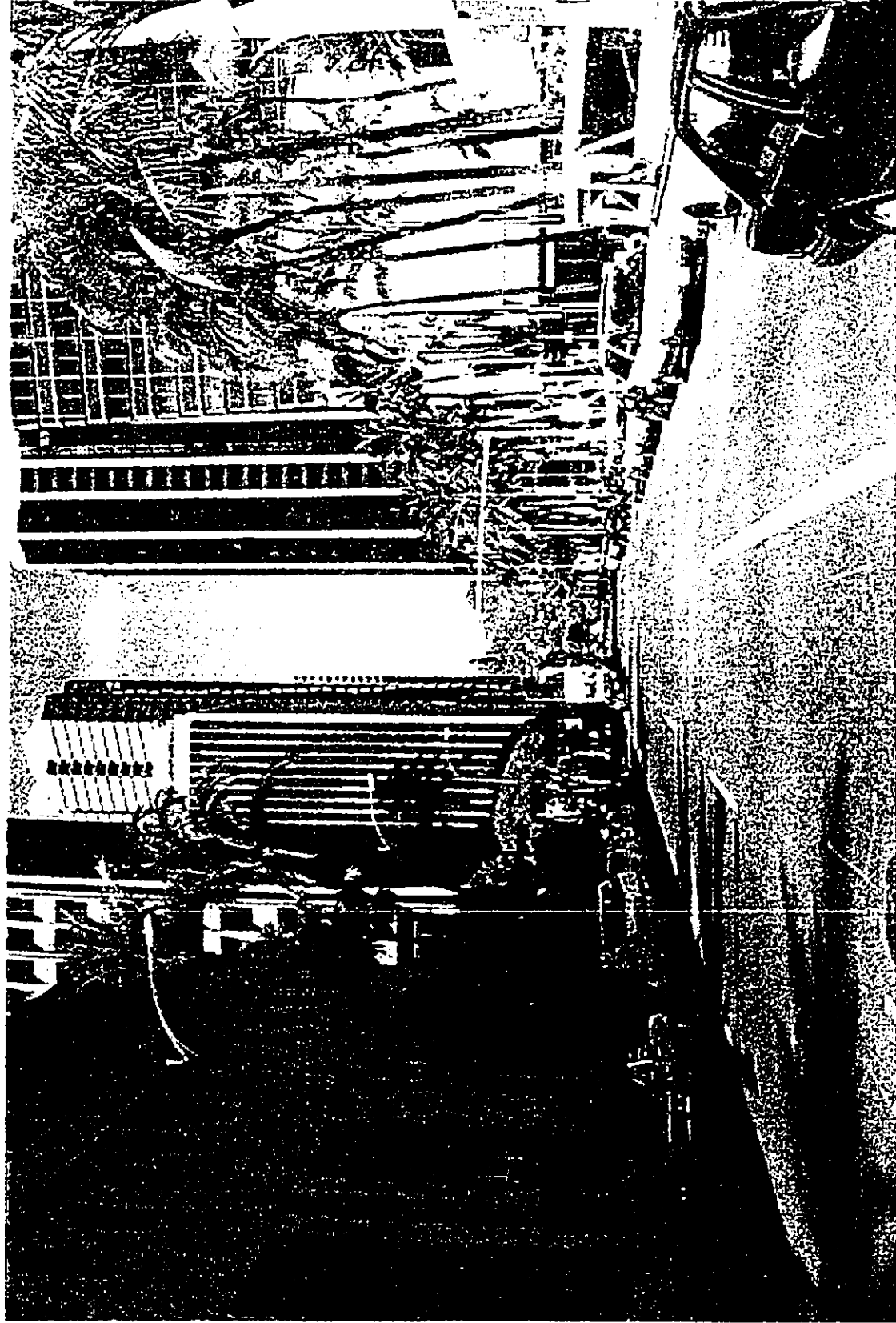
Fig 3-8

**View from Hotel Street at Bishop Street
Looking Mauka - With Project**

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DEPARTMENT OF COMMUNITY
SERVICES

Prepared by:
**WILSON OKAMOTO &
ASSOCIATES**

**BLOCK J
REDEVELOPMENT
PROJECT**



**BLOCK J
REDEVELOPMENT
PROJECT**

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY
SERVICES

**View from Queen Street at Bishop Street
Looking Mauka - Existing**

Prepared by:
**WILSON OKAMOTO &
ASSOCIATES**

Fig 3-9

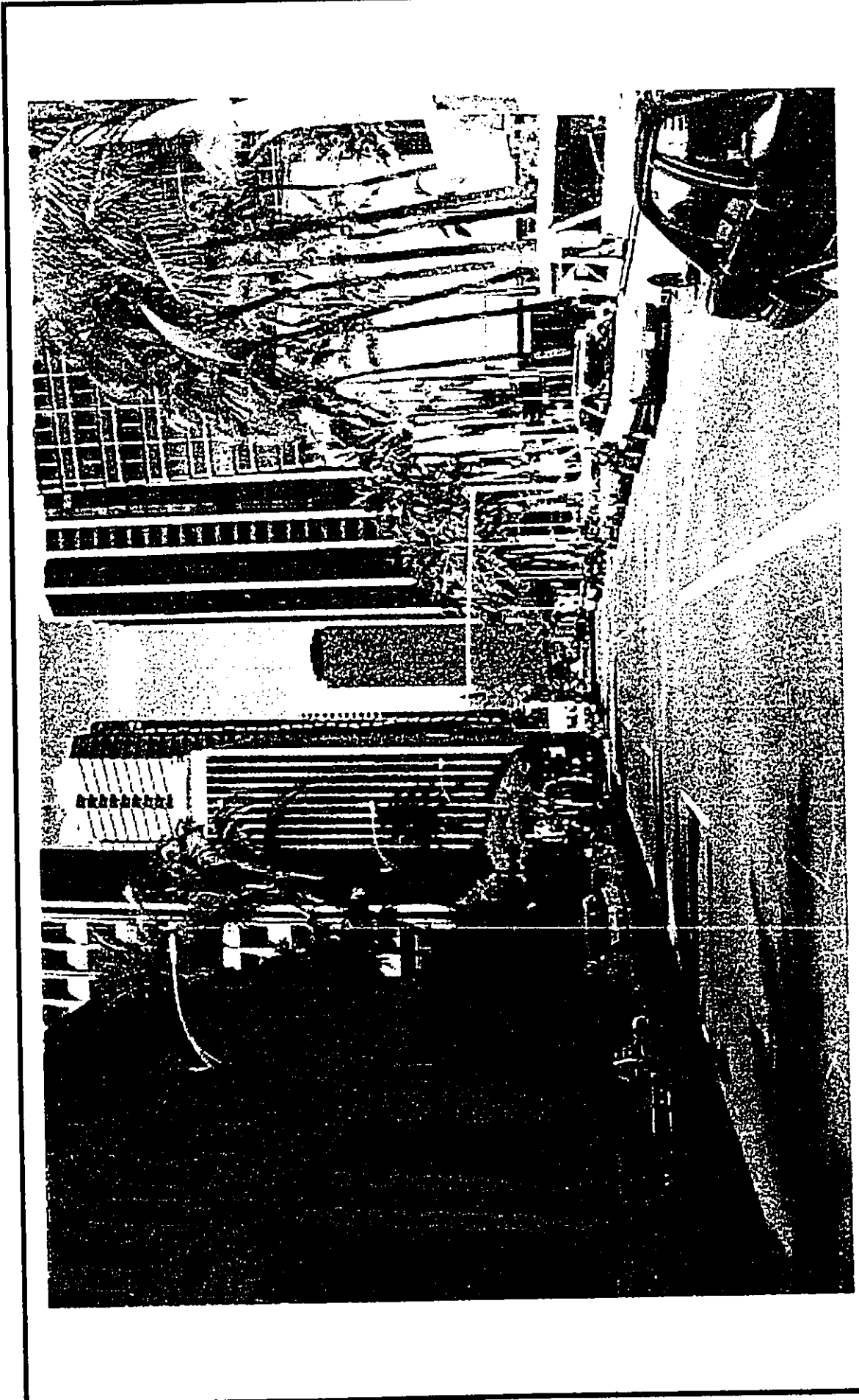


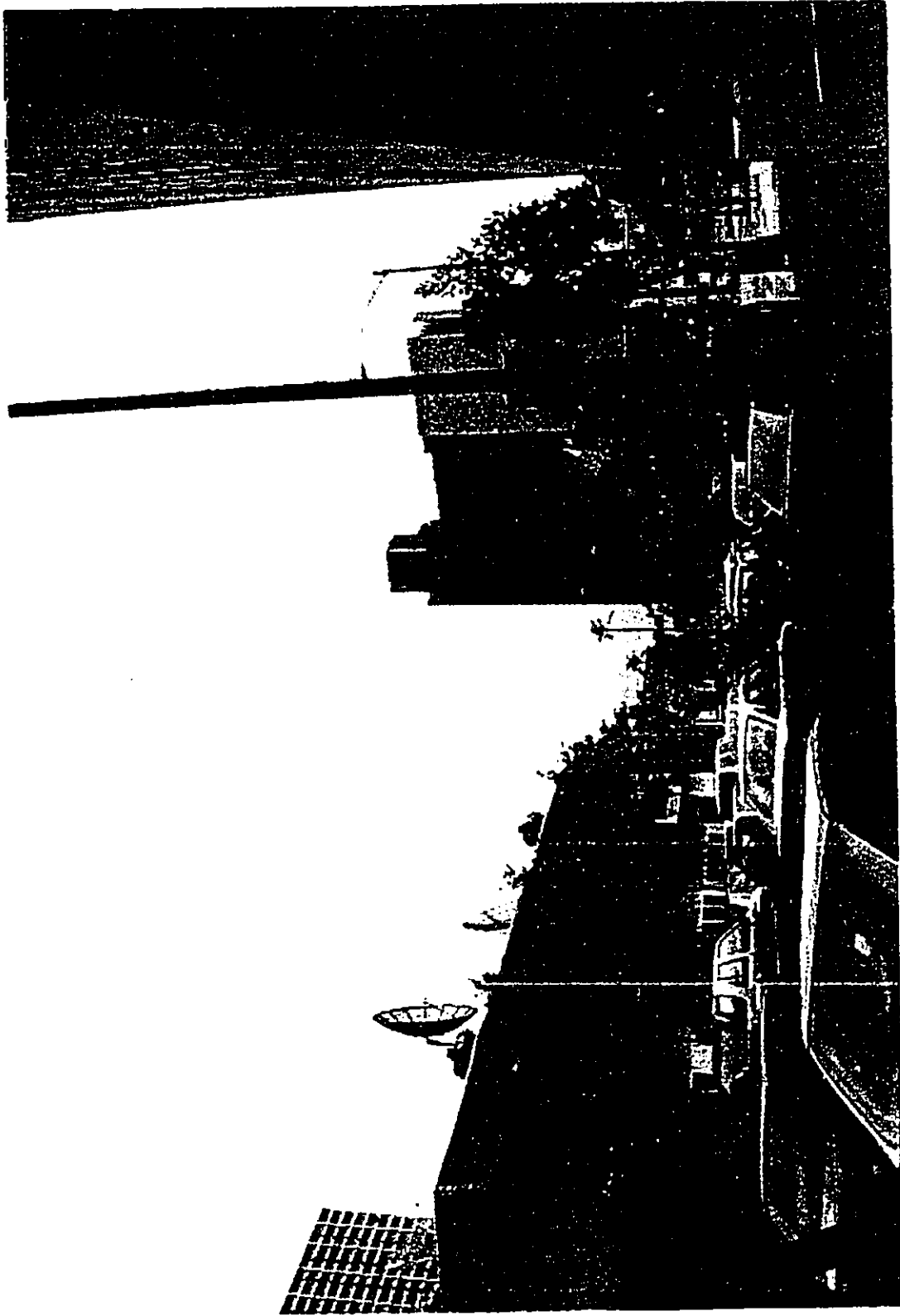
Fig 3-10

**View from Queen Street at Bishop Street
Looking Mauka - With Project**

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**BLOCK J
REDEVELOPMENT
PROJECT**



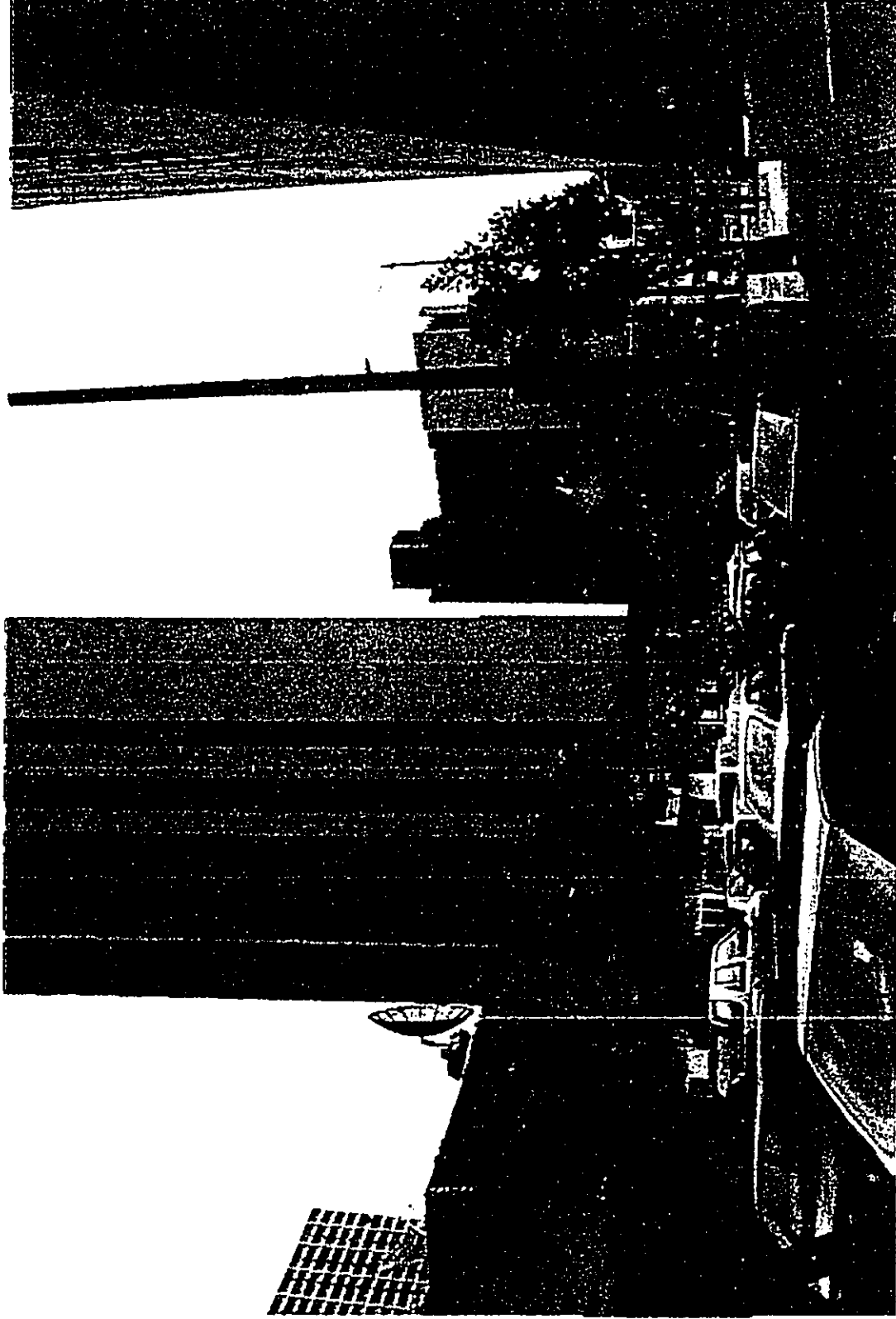
**BLOCK J
REDEVELOPMENT
PROJECT**

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View from Alakea Street Looking Mauka - Existing

Fig 3-11

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**BLOCK J
REDEVELOPMENT
PROJECT**

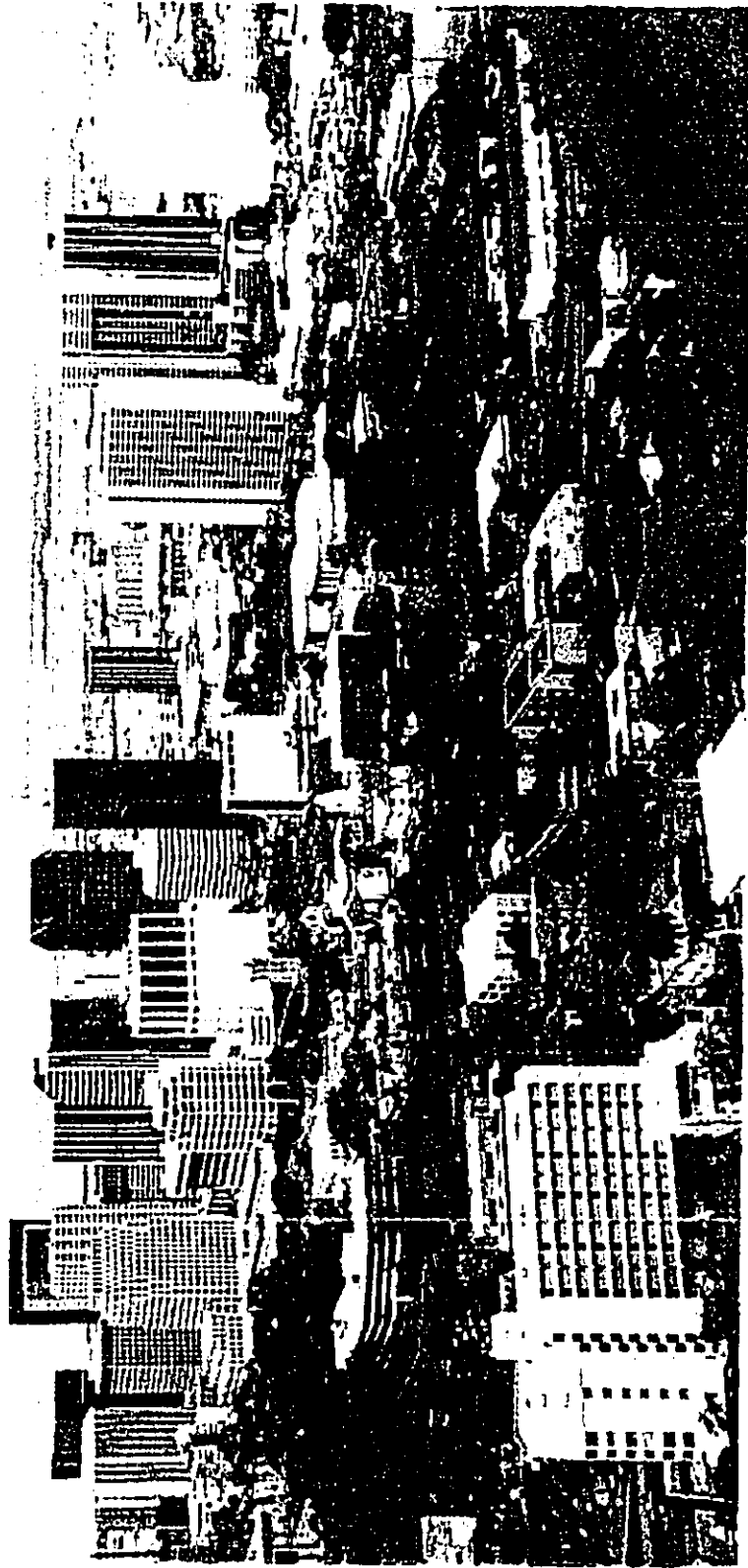
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SERVICES

Fig 3-12

View from Alakea Street Looking Mauka - With Project

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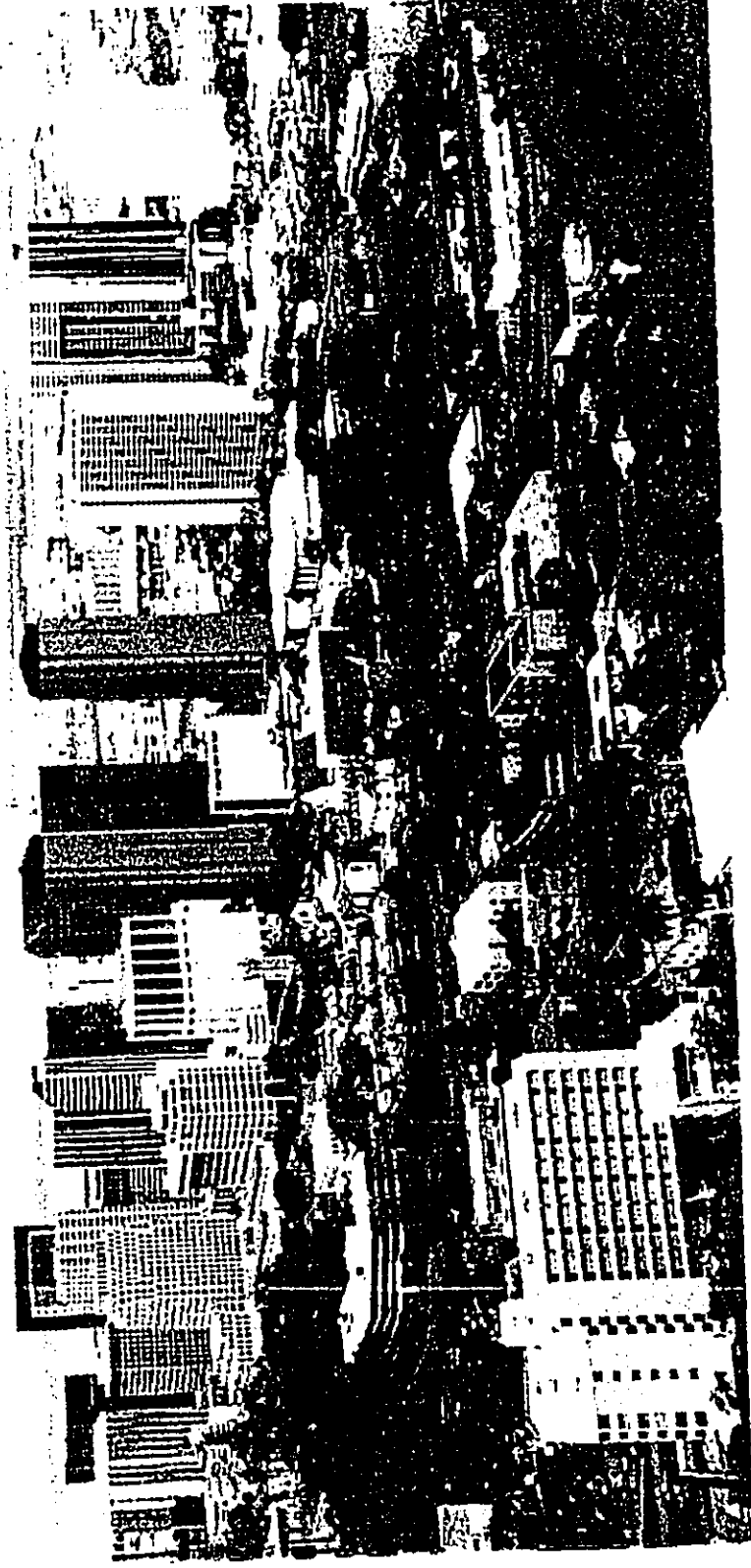
**BLOCK J
REDEVELOPMENT
PROJECT**

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Fig 3-13

View from Punchbowl Lookout Looking Makai - Existing

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PROJECT**

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Fig 3-14

View from Punchbowl Lookout Looking Makai - With Project

CHAPTER 4

**SOCIO-ECONOMIC ENVIRONMENT,
IMPACTS AND MITIGATION MEASURES**

4. SOCIO-ECONOMIC ENVIRONMENT/IMPACTS

4.1 Introduction

The *Socio-Economic Impact Assessment of the Block J Redevelopment Project* (See Appendix E) examines the various economic and social implications of the proposed project in the vicinity of the project site, as well as on the island of Oahu. This section includes excerpts from the assessment to summarize its approach and findings. Much of the information establishing the context of the community is based on U.S Census data while economic impacts are projected using economic models. Community concerns were identified through a series of interviews with various residents and stakeholders in the surrounding community. Notably, the concerns expressed were not necessarily based on an understanding of the project or its impacts as presented in this EIS. Therefore, perceptions of potential impacts expressed in this section may differ from the findings presented elsewhere in this EIS. Reviewers should refer to Appendix E for the complete discussion of the socio-economic impacts of the project and the context in which they are presented.

4.2 Existing Conditions

The project site is near the heart of urban Honolulu. The area mauka of this area was densely settled during the first half of the century. Under the City and County of Honolulu's Urban Renewal Plan for the Kukui Project, urban renewal led to redevelopment, notably the building of Kukui Plaza, next to the project site. The block bounded by Pali Highway, Beretania Street, Queen Emma Street, and Kukui Street was designated for commercial uses, and it now has a mix of office and parking on-site uses.

The project site itself is now occupied by parking lots. One is for City and County workers. The larger lot, with some 208 stalls, is metered. The stalls are reportedly much used by people visiting the Honolulu District Courts and visitors to the buildings on the block.

Buildings on Block J adjacent to the project site were erected during the period of urban redevelopment of the area in the early 1960s. Three are low, while the Queen Emma building has ten stories plus a basement with space rented out. Of the low buildings, both the Civic Center building and the Mirikitani Building have Kukui Street addresses but face the parking lots.

Tenants in the existing Block J buildings include State offices, many of which will be moving to Kapolei within a year, various commercial and medical offices, and technical

schools. An alarm company with many Downtown clients is located in the Queen Emma building.

While several major commercial buildings were built in Downtown Honolulu in the 1990s, little new residential development has occurred recently in the urban center. In the past decade, the great majority of new housing has been built in the Central Oahu and Ewa Development Plan areas. Most of that suburban housing has been priced to sell to families earning the median income or higher. As a result, little new housing has been available for families earning 60% of the median income or less.

4.2.1 Profile of the Existing Community

The project site and its surroundings can be characterized in terms of the following U.S. Census Tracts (CTs) which are collectively referred to in this Chapter as the Primary Study Area (PSA):

- CT 40: This tract is the Central Business District of Honolulu. It is bounded by Nuuanu Avenue, South Beretania Street, Richards Street, and the harbor front.
- CT 41: This tract is bounded by Queen Emma Street, Iolani Avenue, Ward Avenue, South King Street, Alapai Street, then South Beretania. It includes various uses to the east of the project - notably, the St. Andrew's Cathedral complex and outlying State office buildings (although the bulk of the State offices are in the Capitol District, south of Beretania Street).
- CT 42: This tract, bounded by Nuuanu Avenue, Iolani Avenue, Queen Emma Street, and South Beretania Street, includes the project site and nearby apartment buildings.

In the PSA, population growth stalled during the 1980s, and has changed little since 1990. The median age in all three Census Tracts is much higher than the island median. Family incomes vary, with Downtown residents (in CT 40) earning slightly more, on average, than the island median, but residents of the other tracts earning less. Similarly, no families living in the Downtown tract were below the poverty line in 1990, but 6.7% of the families in the other two tracts were, as compared to 5.4% of island families. Nearly three-quarters of the study area residential units were rented as of 1990.

4.2.2 Demographic Trends and Characteristics

Oahu has experienced population growth consistently from World War II to the early 1990s. The PSA lost population during the period of urban clearance. New construction in the 1970s brought a sharp increase in the PSA population, although it never returned to the level of 1950, before urban renewal. Since 1990, population growth has stalled at the State and County levels. There has been no major new construction in the PSA.

The PSA population, like that of the City and County as a whole, is ethnically mixed, with no single group forming a majority. Slightly less than half were Hawaii-born in 1990.

Over recent decades, Oahu's population has been aging, with the median age climbing to 32.2 years as of 1990. PSA median ages are much higher, with the highest being 44.6 years in CT 42, including the project site.

Income levels in the three different census tracts of the PSA have been quite different from each other in the past. The Downtown (CT 40) population was relatively affluent, while residents of CT 41 (east and north of the project site) had, on average, incomes well below the island norm. In all three census tracts, the trend has been for incomes to grow less quickly than for the island as a whole. When median incomes are viewed as percentages of the island median, they have fallen, and fallen below the island level in most of the PSA. As of 1989, the median income in CT 40 (Downtown) was 103% of the island median; in CT 42 it was 89%.

4.2.3 Housing Conditions

Over the past few decades, average household sizes in Hawaii have been declining. However, Hawaii households are large, compared to ones in other states. By comparison, however, households in the PSA tend to be much smaller than the state and island average. PSA household size has changed little in size from 1970 through 1990.

As of 1990, the PSA included 4,483 residential units, of which 4% were vacant. Three-quarters (73%) of the occupied units were rental units. Over recent decades, the physical condition of housing in the PSA had improved - only 1% lacked kitchen or bathroom plumbing inside the unit, as compared to 11.2% in 1970. Crowding of people in housing changed less, with 9% of units in 1990 having "very crowded" conditions (with more than 1.5 persons per room). This level of crowding was only slightly higher than the island average.

Rents in much of the PSA were slightly higher than the island average in 1990. Rental payments amounted to about a fifth of household incomes – slightly more than the island average.

4.3 Forces for Change

4.3.1 Island-level Trends

Hawaii's economy has stagnated since the early 1990s. The result has been slower population growth, much less demand for new housing, and lower housing prices. Long-term trends have not, however, disappeared:

- The population is aging, both in the sense that senior citizens are surviving longer and in the sense that the average age of the population is increasing.
- The number of one- and two-person households is still increasing, so the average household size -- 3.02 on Oahu in 1990 -- is getting smaller. This trend is nationwide, and is projected to continue at least through 2020.
- Population growth is likely to continue over the long-term, if at much slower rates than in the 1970s and 1980s.
- Oahu's transportation system, based on a single major highway (H-1) and feeder routes, is congested and will continue to be so. Steps being taken to manage the problem do not go far towards solving it. Moreover, new urban development in Ewa and Central Oahu has involved more residential areas than commercial or industrial ones, so many new Leeward Oahu residents must still commute to the Primary Urban Center for work.

Currently, little new housing development is occurring outside of the Honolulu area. Over the long term, plans call for additional housing in the Primary Urban Center (Honolulu to Pearl City), in Ewa and in Central Oahu.

4.3.2 Primary Study Area

As a central urban area that has already seen considerable redevelopment, the PSA will likely change little in the next few decades. Block J is the single area of its size remaining in the Kukui Redevelopment Area which could be the site of major

development. No residential development is planned within the study area. Other projects now under way or planned consist of:

- A commercial complex inside the old post office building (on King Street, at Richards), bringing new shops and restaurants to the Downtown area.
- Renovations at Queens Medical Center, planned to begin in late 1998, intended to expand outpatient services. Work will include building a new parking lot on Miller Street, and adding a lane to Punchbowl Street.
- Construction of a new elementary school at the site of the (now closed) Pohukaina School is under discussion. Such a school would serve Kakaako residents and lower demand for Royal School.

After the construction of several new office buildings in the early 1990s in Downtown Honolulu and the Kapiolani-King corridor, demand for office space is much lower than at the beginning of the decade. Currently, no plans for new office development have been announced.

4.4 Community Concerns

SMS Research conducted interviews with some 29 key informants and reviewed Neighborhood Board minutes and earlier Environmental Impact Statements from the area for this project. Key informants included area residents, stakeholders concerned with nearby properties, operators of businesses in the block, and educational administrators. Interviewees were asked to discuss their own operations or activities, and any concerns they or people they knew might have about the project.

Residents and other stakeholders in the primary study area expressed concern about impacts on traffic (during construction and afterwards) and the compatibility of the project, as an income-limited residential development, with neighboring land uses. Construction noise and the loss of parking during construction were of special concern to same-block landowners.

Many welcomed the new retail area and additional parking, but concern was also expressed that retail vacancy rates could be high if project commercial tenants do not attract a mix of local residents and commuters.

4.4.1 Concerns Independent of the Project

Ten years ago, many Downtown residents and landlords hoped for an urban renaissance, based on affluent condominium owners and a mix of entertainment. That hope was based on success of projects such as Honolulu Park Place and the renovation of Hawaii Theater. It seemed quite likely that the blocks below Beretania Street would fill with new office towers, and new condominiums would fill much of the space to the north of Beretania Street. Since then, the market for upscale condominiums has shrunk, and new entertainment venues have been located at Aloha Tower and sites outside the Downtown area. The Downtown Improvement Association, once a persistent voice for Downtown renewal, has dissolved after the retirement of its executive director.

While the hope for a vibrant Downtown remains, additional concerns have arisen during the 1990s. Residents speak of Beretania Street and nearby side streets as unsafe or unsavory at night. They mention the presence of prostitutes and mentally ill persons more than any threat of assault or robbery.

Traffic appears a more general concern now for Downtown stakeholders than it was ten years ago. At that time, much discussion was devoted to the route for a future light-rail system, to alleviate congestion to and from Downtown Honolulu. Funding for construction of such a system was not approved. Downtown stakeholders now speak of traffic congestion as bad, likely to get worse, and nearly impossible to control.

4.4.2 Concerns With Regard to the Project

Nearly all issues mentioned by stakeholders as concerns in connection with the project are listed in Table 4-1. Typically, interviewees mentioned one or two issues as critical, and went on to discuss additional concerns. It should be noted that interviewees were provided only with an overview of the project. Information on project impacts and mitigation measures were not provided.

Three themes were most mentioned as the major issues associated with the project:

- Construction period irritants (above all traffic disruption and noise);
- Concerns about additional, low-income residents in the Downtown area; and
- New retail amenities for the Downtown area.

Table 4-1
ISSUES AND CONCERNS MENTIONED BY STAKEHOLDERS

Stakeholders	Concerns	
	Construction Period	Operations Period
Same Block	<ul style="list-style-type: none"> • Loss of tenants already and during construction • Loss of parking • Vibration (pile driving) • Noise, dust • Traffic, access 	<ul style="list-style-type: none"> • Restricted access to buildings that face parking lot • Loss of open space, views • Want easy access to parking • Affordable rental use not appropriate in business center, in Block J • Expect project maintenance problems
Adjacent Blocks	<ul style="list-style-type: none"> • Traffic congestion • Vibration (pile driving) • Noise, dust • Interference with operations • Loss of parking – and more illegal parking nearby 	<ul style="list-style-type: none"> • New opportunities: parking, restaurants, other uses • Loss of view, open space • Intruders, vandalism, crime • Greater use of park space • Possible problems with students • Loss of demand for parking • New construction improves area
Neighborhood Residents, Business, Wider Community	<ul style="list-style-type: none"> • Traffic congestion • Noise 	<ul style="list-style-type: none"> • New parking, retail welcome • Affordable rental population thought not compatible with nearby residents • Seniors likely not to welcome much retail activity, children • Design may be obtrusive • Competition with area retail for tenants • Uncertain that project is needed • Some opposed to City role in affordable rentals • Increased traffic congestion • Elementary schools full already • Want more open space

SMS Research and Marketing Services, Inc.; June 1998.

4.4.2.1 Stakeholder Groups' Perspectives on the Project

Different stakeholder groups had only slightly different perspectives on the proposed project. Stakeholders with interests in the same block as the project had very specific concerns about traffic impacts and the effects of surrounding the existing buildings with a new project. Stakeholders associated with a few facilities adjoining the project site or a block away had similar concerns about construction, but less strongly-expressed concerns about the impacts of the project itself, once it is built. Others in the neighborhood viewed the project as enhancing or detracting from the neighborhood as a whole.

In accordance with the interview format, interviewees were not asked whether they supported or opposed the project. Nonetheless, a few of the stakeholders in the same block stated their opposition to the project. Many of the remaining interviewees treated the project as inevitable, making comments such as "you can't stop progress," and some voiced support for the proposed development.

4.4.2.2 Concerns about Anticipated Construction-Period Changes

- Owners of buildings in Block J believe that the first impact of the project is already being felt. They are losing tenants or are having to renegotiate rents with tenants who threaten to move, and they see the project as making it hard to rent out spaces in the same block.
- When construction begins, the 208 metered parking spaces on-site will be withdrawn. Several nearby businesses expect this loss to lower their customer volume and to make parking difficult for employees who use the existing lot.
- Construction activities are expected to cause considerable inconvenience and irritation. For the immediate area (including adjoining blocks), noise and dust are expected to be problems. Concern was expressed that vibration from pile driving could affect older structures, notably St. Andrew's Cathedral.
- Traffic is a concern for all except a few residents. The anticipated impact on the immediate area is increased congestion at peak hours. For Downtown workers and the wider community, constriction or closure of Pali Highway is of great concern.

4.4.2.3 Concerns about Anticipated Changes After Construction

Reactions to the project as a new element in the Downtown area were mixed. Many hoped that the project would bring new commercial amenities, such as a movie theater and new restaurants. Some saw a new building as welcome, and a clear improvement over existing conditions on the project site. Concern was expressed that the building design be attractive, and building materials be of high quality.

- Several viewed the project in relation to Honolulu's depressed economy. Believing retail and office vacancies in Downtown Honolulu to be high, they were concerned that: (a) the project retail area would have a high vacancy rate; and/or (b) it would attract tenants away from nearby buildings, increasing problems there.

(Comment: Downtown office and retail vacancy rates are much higher than in the early 1990s but appear to be in the 15% to 20% range. This is comparable to normal rates elsewhere in the country.)

- A few stakeholders were concerned that the retail area would attract young people, thereby irritating older residents of the project. Again, concern was expressed that some Central Middle School students would cross through the project site to and from school; project security and school administrators would need to find ways to minimize any intrusions.
- Some interviewees doubted whether there was need for a development of the size of the project, or that the project was appropriately located. The concept of a mixed-use building, adding both consumers and retail to the area, was welcome to some but questioned by others.
- Several raised concerns about the project as an affordable rental building located next to Honolulu's financial district.
- A few thought of the project population as a very low income group, and expected the project to attract gangs, crime, and drug use.

(Comment: The income requirement for affordable rentals - 60% of the HUD estimate of the median household income - comes to about \$30,000 per year. That is about 110% of the average annual wage in Hawaii [DLIR, 1997]. Families in the multi-family units will have one or two wage-earners. Many could be Downtown professional, technical and clerical personnel.)

- Most interviewees expected traffic impacts of the project as likely to add to existing problems, even after construction ends. A few thought that provision of ample parking in the project could lessen congestion slightly in the Downtown financial district to the south.
- The new project population was viewed by several stakeholders as adding to demand for very limited public facilities – parks and elementary schools.

4.5 Economic and Demographic Impacts

Except for construction employment, the economic impacts of the proposed project are modest because (a) the project is for residential housing and (b) it would be built and operated as an affordable housing project, largely exempt from General Excise Tax and Real Property Tax. Major findings include:

- The direct construction workforce amounts to 785 person-years (over a three-year period), earning \$35.7 million (1997 dollars);
- While many commercial operations could locate in the project, few of those jobs would be newly created and would count as an impact of the project;
- The City and County would receive an initial payment of \$8 million, followed by lease rents on the project and property taxes on the retail area. The total revenue stream will depend upon the development agreement, which is still being negotiated.
- The State of Hawaii would gain about \$6.3 million from taxes associated with project construction.

4.5.1 Employment and Incomes

The project involves short-term jobs related to construction and long-term jobs associated with continuing operations. For both construction and operations, employment impacts are of three types:

- Direct jobs are immediately created by construction of a project or, subsequently, by project operations. Direct jobs are not necessarily on-site: on-site construction supports jobs in offices and base yards elsewhere.
- Indirect jobs are created as businesses directly involved in a project purchase goods and services in the local economy.

- Induced jobs are created as workers spend their incomes for goods and services.

4.5.1.1 Construction

The project will involve approximately 32 months of construction, and a total construction cost estimated at \$110 million. This would result in a total construction jobcount of 785 person-years, for an average annual direct jobcount of 260 full-time jobs over three years.

Total direct, indirect, and induced employment associated with construction comes to some 2,000 person-years of employment over time.

Direct construction wages are estimated at \$35.7 million (1997 dollars) over the course of construction, and the total wages associated with construction would amount to nearly \$70 million.

4.5.1.2 Operations

The retail area will house most of the permanent jobs in the project, however, these jobs will not be created as a result of the project. Most will simply be moved to the site from other locations. Some could be new activities in Downtown Honolulu, or expansions that are made possible with the new space created in the project.

The type of retail use that occupies the project would determine the number of jobs, and overall social impacts of the retail area. One possibility is that entertainment uses could occupy much of the retail area, bringing many evening customers.

Personal and health care jobs will be associated with senior housing. Mostly these will consist of part-time jobs. These jobs are associated with the persons who receive care, not the project per se, so they do not count as new jobs in the island economy.

Operations jobs that, strictly speaking, count as new impacts are those jobs needed to manage and maintain the building, including the parking area. An estimated 19 jobs will be created when the project reaches a high, stable level of occupancy, a year or so after opening.

These 19 new jobs in the project would support another ten jobs in the economy in general. Incomes associated with the new direct jobs would total about \$480 thousand annually, while wages for the associated indirect and induced jobs would come to about \$275 thousand (1997 dollars).

4.5.2 Population and Housing

4.5.2.1 On-Site Population

The residential units in the project are expected to house approximately 1,250 persons after a brief start-up. With a senior tower and a second tower occupied by small families, relatively few children would be present in the project.

The project's population amounts to 14.8% of the Primary Study Area's 1990 population. Adding the project to the available housing stock will increase the Primary Study Area resident population by at least 10% over current levels, since there has been no major new housing built in the area since 1990.

Notably, the project will have no population impact at the island level - no one is expected to come to Oahu, as a resident or visitor, in order to live in the project.

The daily on-site population will include residents, persons working in the project, and visitors to the retail area. The retail-related customer numbers could be fairly small or could amount to several times the workforce, depending on the mix of activities in the complex. Small shops and offices would see relatively little visitor traffic; restaurants and amusements would likely attract more people.

4.5.2.2 Impacts on Housing Demand and Supply

Oahu has both measurable housing demand and a slow housing market. After a period of concerted development of single-family housing in Ewa and Central Oahu in the early 1990s, developers are increasingly turning to affordable multi-family buildings, especially facilities for senior citizens, as a relatively certain component of the housing market.

New housing demand on Oahu in the 50% to 80% of median income range is estimated as about 500 units per year (SMS Research & Marketing Services, Inc. and The Prudential Locations, Inc., 1997). The overall gap between supply and demand as of 1997 is estimated at 18,566 units. The share of pent-up demand in the 50% to 80% of median income range is likely to be at least 2,900 units. (Since income groups with less than median income usually have less choice of housing than groups with higher incomes, the group's share of new demand provides a minimal estimate of its total demand.)

The 438 units in the project's multi-family tower nearly equal new demand generated by the 50% to 80% of median income range in one year, and about one-sixth of the minimal pent-up demand from this income group. The project will contribute to

meeting demand, but is not expected to reduce greatly the continuing imbalance between supply and demand for low-moderate income housing.

The evidence of demand for senior housing is less clearcut than overall demand for housing by income group. The 1997 Housing Policy Study Update provided evidence of demand, and current demand for units at Kulana Hale at 91% occupancy (*based on data obtained subsequent to the Draft EIS*) (Personal communication, Laura Yamafuji, Coastal Rim Properties, Inc., June 1998) – reinforces the probability that demand for senior rental housing is far greater than existing supply.

The 475 units in the senior tower represent a major new contribution to the senior housing stock. The City estimated in late 1997 that some 1,215 units in buildings for seniors would be erected on Oahu from 1998 through 2000. With the project – not included in that list – the projected new supply increases by 40%.

4.5.2.3 Availability of Employment Near Housing

Many employment opportunities for residents of the proposed Block J development exist in the Primary Study Area (PSA) and surrounding area. Jobs far outnumber resident population in the central city, even when areas with many multi-family buildings are included.

The 1995 Oahu Regional Transportation Plan (Kaku Associates, 1995) prepared for the Oahu Metropolitan Planning Organization provided population and job count data based on the 1990 U.S. Census. Based on data from 25 Traffic Analysis Zones (TAZ), the area from Nuuanu Stream to Ward Avenue had a resident population of approximately 13,500 in 6,600 households. A total of 7,300 civilian workers lived in central Honolulu, where there were approximately 78,200 jobs. Central Honolulu had approximately 2 percent of the resident population and 19 percent of the job count for the City and County of Honolulu. The greatest number of jobs were in services; finance, insurance and real estate; government; and, retail.

Rentals at the project would be at levels affordable for families making 60 percent of the City and County median family income and below, as estimated by the U.S. Department of Housing and Urban Development (HUD). In 1996, the median family income for Oahu was estimated at \$55,900. It is estimated that approximately 27,300 households making 60 percent of the HUD median could be supported by jobs in central Honolulu. This is more than four times the number of households, at all income levels, in the central Honolulu area, and nearly four times the number of future households if the 913 proposed Block J households are added.

4.6 Public Facilities and Services

4.6.1 Police Protection

The project site is located in the Honolulu Police Department's Division 1. It is patrolled by officers stationed in the Downtown-Chinatown substation (at Nuuanu and Hotel Streets). Typically, one police officer is assigned to the beat including the project site per eight-hour watch. Officers patrol in three-wheel vehicles and automobiles. According to police officials called by SMS, the site poses no particular public safety problem at present (personal communication, Major Henry Lau, HPD).

Impacts

As a residential area, the project will demand greater police activity than the project site does now. Typically, police responses in residential areas deal with thefts or domestic disturbances. *Again, the commercial area and underground parking add to the density of activity on the site, and hence potential demand for police services.*

On the other hand, the project will house Oahu residents, not attract new residents. ~~It will not be a source of new demand for police services. Also, Building security personnel may provide a greater degree of safety for residents than they would have in other locations older buildings and, as a result, tend to lower need for police services.~~

In light of the mix of uses in the buildings - residential, retail and parking - building security will be a concern to be addressed by the project's operator. Even with effective building security on-site, demands for police service will be greater than for the site at present.

4.6.2 Fire Protection

Central Fire Station, located next to the project site, serves as the primary station for the area. The station includes the office of the Battalion Chief for one of five Oahu battalions, as well as an engine company. (Seven firefighters are assigned to the engine company per eight-hour shift.) The Kakaako Fire Station is the secondary station serving the area, with an engine company and a snorkel company.

Central Fire Station serves a district extending from the waterfront, to Richards Street, up to the slopes of Punchbowl and as far west as Akepa Lane, beyond Liliha Street. Because it is located on a one-way street, the engine sometimes must travel against

traffic, along Beretania Street (fronting the project site) to Queen Emma Street to respond to emergency calls.

In May 1998, the station responded to 60 calls, of which 41 were for medical assistance (personal communication, Captain Eric Adams, Central Fire Station, June 1998).

Impacts

As a new building meeting current codes, the project should house residents in conditions equal to or better than those of their previous homes, in terms of fire safety.

No impact on Fire Department operations is anticipated so long as the Central Fire Station truck can continue to travel against traffic on Beretania Street while responding to emergencies. Therefore, it will be important, during construction, to minimize intrusions into the right curb lane of Beretania Street. When the project is built, it will not extend into Beretania Street. No vehicular entrance on Beretania Street is planned within the proposed project.

4.6.3 Medical Services

Downtown Honolulu is served by Queen's Hospital, within a half-mile of the project site. Outside the Primary Study Area, Straub Hospital and the Kaiser Permanente Honolulu Medical Center are located a few blocks east, while St. Francis and Kuakini Hospitals are in the Liliha area to the west. These hospitals offer a full range of emergency and acute-care services. Physicians' offices are concentrated near Queen's Medical Center.

Emergency medical transport is provided to the vicinity of the project site by a City ambulance located at Queen's Medical Center.

Queen's Medical Center plans extensive changes within its campus (personal communication, Don Clegg, Analytical Planning Consultants, June 1998). Key elements of the plan include:

- Relocating emergency and outpatient services along Miller Street;
- Building a 606-car garage on Miller Street;
- Developing an additional lane on Punchbowl Street. When the Queen's Medical Center project is completed, there should be two lanes in each direction on

Punchbowl Street between Vineyard Avenue and Beretania Street, with a central lane for left turns.

The hospital will eventually be able to increase outpatient services appreciably, and bring the number of acute-care beds to its currently approved level -- 560 beds.

Impacts

The project will not add any demands for medical services, and will locate residents easily within reach of medical facilities. No impact on medical services is anticipated.

The Queen's Medical Center renovations and Block J project construction should both be ongoing in 1999 and 2000. Little or no impact of either one on the other is expected. Nearly all the Queen's Medical Center work will occur on its own campus. The proposed changes to Punchbowl Street will widen that roadway, as opposed to constricting it.

4.6.4 Education

The project is located in Honolulu District, in the McKinley High School service area. Central Middle School is in the block adjoining Block J. Royal School, on Queen Emma Street mauka of Vineyard Boulevard, is the nearest elementary school.

St. Andrew's Priory, a private school for girls, is located off Queen Emma Street, about 400 feet from the edge of the project site. It has about 500 students in its K to 12 program.

Hawaii Pacific University is located in Downtown Honolulu. Its administrative offices are on Fort Street Mall, across Beretania Street from Central Fire Station and the project site. Some commercial space in Kukui Plaza is used by the University, although most of Hawaii Pacific University's Downtown space is located on Fort Street and Bishop Street south of Beretania Street.

Over recent years, Honolulu schools saw lower enrollments and, on the whole, little crowding, at least as compared with other Oahu districts. Recently, however, growth of multi-family housing in Chinatown has brought increased enrollments at Royal School and McKinley High School. Currently, the Department of Education reports Royal School with some 37 students over capacity, and McKinley High School as having 10 students more than capacity. Central Middle School is well under capacity (Personal communication, S. Beppu, Facilities and Support Services Branch, Department of Education, June 1996).

Impacts

Based on the Primary Study Area's population in 1990, SMS estimated the school-age population as 51 persons (for the multi-family tower only). The Department of Education anticipates the project's public school population to be slightly larger:

Elementary school:	34 students
Intermediate Middle school:	10 students
High school:	12 students.

~~All elementary schools in the McKinley High School area enroll students through grade five; students enrolled in grades six through eight attend middle schools. Accordingly, the anticipated public school population listed above would likely be enrolled as follows:~~

Elementary school:	30 students
Middle school:	14 students
High school:	12 students.

The impact of the project is a matter of additional enrollments. Where schools are already at capacity, principals must consider alternative uses of space, to free up classroom space, or restrict the number of Geographic Exemptions. The District and Department may consider changes in school boundaries and/or use of portable classrooms. The new enrollments associated with the project amount to more than one elementary school classroom, and less than half a classroom at the higher grade levels.

The Department of Education is requesting a "fair share" contribution of \$1,125 per housing unit that could shelter schoolchildren. If the senior tower was for seniors only, and children could not live there, then the request would apply only to the multi-family tower (\$492,750). Otherwise, the request would apply to all units in the project (\$1,027,125).

Based on the number of students expected in the project and on ~~the likely impacts a review of the actual impacts~~ associated with the project, the DOE's estimate of a "fair share" contribution ~~appears to be disproportionately high in relation is not proportionate~~ to likely future impacts.

4.6.5 Early Childhood Education and Care

Early childhood education and care (ECEC) facilities are available at St. Peter's Church, on Queen Emma Street north of the project site, and at the City and County of Honolulu Child Care center, at Punchbowl and Beretania Streets.

In the late 1980s and early 1990s, considerable attention was given to the supply and quality of ECEC services in Hawaii. In part, this was due to problems of supply and cost; in part, it followed a recognition that early childhood learning can be crucial to intellectual and social development. The City and County of Honolulu opened its center next to the municipal office tower. The State of Hawaii's Open Doors program provided financial support for center-based care for four-year-olds. In recent years, center-based enrollments have declined. This trend seems largely due to declines in both family and government funds available to support ECEC services.

Impacts

It is projected that approximately 27 young children would live in the project. Based on historical trends, it is possible that 12% of these - three children - would be enrolled in center-based care (projected from Oahu data in the Simmons/SMS Hawaii Study of Media and Markets, 1991-1997). About the same share of the young children living in the Block J project could depend on care by non-relatives. Such care could be available in the building or nearby; it is often provided by neighbors willing to care for an additional child as well as their own.

The number of children living in the project needing services is too small to affect ECEC demand, both within the Primary Study Area and islandwide.

4.6.6 Recreation

Small parks are located near the project site: Kamalii Park, across Pali Highway from the site, and the half-acre open space within the roadway loop that runs from Queen Emma Street to and from St. Andrew's Priory. Additional open space is found on the grounds of Iolani Palace, about three blocks to the southeast, and in Foster Botanical Garden, about three blocks to the northwest. While these are special-use facilities, some urban residents use them as recreational space. Residential developments such as Kukui Plaza have open areas and recreation facilities available to tenants several floors above the street.

Kamamalu Playground, two blocks mauka of the project, on Vineyard Street and Queen Emma Street, has a basketball court, bathrooms, and grassy open space. It is the only

nearby space set aside for active recreation. (Other City parks outside the Primary Study Area include Aala Park and regional parks such as Ala Moana and Kapiolani Parks.)

Impacts

The project will provide about 32,000 square feet of open space above the retail area and some 25,000 square feet of landscaped open space at street level, replacing some 103,000 square feet of parking lot.

The project will house some 1,250 persons, including about 80 children. Currently, Kukui Plaza residents make little use of Kamalii Park. Its landscaping invites little use. Project residents, separated from that park by Pali Highway, are not likely to make much use of the space. The park area between Queen Emma Street and St. Andrew's Priory, however, is closer to the project and more open in appearance than Kamalii Park. Project residents are far more likely to use this park, along with students from the Priory and the preschool at St. Peter's.

Kamamalu Playground has open space for active play only two blocks away. However, it does not have the play equipment used by young children. Central Intermediate School and Royal School activities have priority in using this park, so project residents may find the park heavily used during school and A+ hours.

4.7 Other Social Impacts

Analysis of the project in relation to the surrounding area brings out the following social impacts as potentially significant:

- Loss of parking and related inconvenience during construction for users of existing Block J buildings;
- Traffic congestion, during and after construction;
- Increases in housing supply, leading to improved housing conditions;
- New population in a small area with limited open space and public facilities. Impacts are expected to be most noticeable at the small park between Queen Emma Street and St. Andrew's Priory.

4.7.1 Construction Period

During construction, tenants and owners of the existing buildings on Block J will likely suffer inconvenience and delays due to noise, dust, movement of construction equipment, traffic lane detours and closures, and the loss of nearby parking spaces. Contractors will be held to standards set by State and City and County rules, but considerable irritation will likely be felt in response to construction-period activity.

The claim that construction (including the loss of parking stalls) will add to the difficulty in filling nearby buildings with tenants is plausible, however, this impact is a short-term loss of an amenity, not withdrawal of facilities to which landowners and tenants have specific rights.

Two buildings that face the project site will have views and access limited during construction, as barriers will likely extend along the project boundary. After construction, they will have less open area in front of them than at present.

Traffic impacts will be felt in the immediate area in the form of congestion and extended peak hours. Traffic congestion will affect the larger community perhaps more strongly, since commuters to and from Windward Oahu will be most affected by slowdowns on Pali Highway due to project construction.

4.7.2 Operations Period

4.7.2.1 Expanded Housing Supply

The project provides new housing in response to both general need for additional housing on Oahu and demand for housing in the income segment targeted. Consequences of additional housing for the 60% of median segment are:

- Less crowding;
- The ability for individuals of all ages to form new households; and
- Lower pressure on rental supply, and hence lower likelihood that rents will rise.

As a rule, an expanded, new housing supply available at controlled rates can help to ease family tensions. The project's impact relative to demand, however, is small in the case of the multi-family units. As for the senior units, other new projects lack the two-bedroom units offered by the proposed project. Consequently, the chance that these units will help families avoid situations of crowding and family stress seems good.

4.7.2.2 Increased Density

The new Downtown resident population in the project will support local merchants. Some residents will become parishioners of nearby churches. For many local institutions, population growth downtown is desirable.

In the blocks near the project site, open space is largely incorporated in built-up areas, and little is open to the public at large. Project residents will use the recreational facilities of their building, but may also use adjacent areas that seem welcoming. Increased use of the small park between Queen Emma Street and St. Andrew's Priory seems likely, as noted earlier. Social consequences include:

- The park will be less available to Priory students and classes for use than it is now; and
- The Priory will seem less an isolated campus, set apart from Downtown. Consequently, concern that intruders may enter the Priory campus will likely increase, motivating additional security.

4.7.2.3 Responses to Homeless Persons in the Neighborhood

The impact of the project on the homeless population will be small. Local residents, landowners and tenants are concerned that this group has increased in numbers and visibility.

Construction and the long-term presence of the project is unlikely to increase the number of homeless persons, either on-site or nearby.

4.7.2.4 Interactions of Residents with Other Residents, Tenants, and Neighbors

Potential problems of compatibility among groups in the project or nearby can be foreseen, but these do not amount to a risk to public safety. Instead, problems of minimizing friction between different groups are likely to arise unless attention is paid in design and operation of the facility:

- Residents of the senior and multi-family towers will likely have a range of different lifestyles. Residents and the operator will develop procedures to minimize friction between young and old.

- In the event that the retail area attracts theaters and entertainment, a similar problem of controlling noise near the senior tower will arise.

There appears to be no basis for the concern that crime could increase in the surrounding neighborhood are a result of the project.

For neighbors at Kukui Plaza, the project will intrude in an open Diamond Head view.

4.8 Mitigation Measures

Potentially adverse impacts noted in this report can be mitigated, as follows:

- **Construction Impacts.** Construction will be subject to regulatory controls on noise and dust. Construction plans are being developed to allow Pali Highway traffic lanes to move through the construction site during peak traffic hours thereby, reducing the traffic congestion that will likely arise.

Development plans call for construction to begin as soon as possible and to last less than three years. While owners of units in Block J buildings may view this as a four-year period of reduced occupancy, the fact remains that the development process is being advanced as quickly as possible.

- **Impact on St. Andrew's Priory and Adjacent Park Space.** The major potential impact mentioned above is a change in the perception that the Priory is isolated. However, new users of the park space between the Priory and Queen Emma Street are likely to consist mainly of seniors and young parents with small children. Neither constitute a danger to the Priory and its students. New users will instead be observers who, by their presence, may lessen the chance that people will approach the school area and intrude on students or commit offenses. In short, the actual impact of the project will help to mitigate the perceived impact.
- **Potential Conflicts among Project Residents.** Planning will be needed to create separate recreation spaces for active play and for quieter activities. It may be appropriate to demarcate parts of the rooftop open space both architecturally and with landscaping. Building regulations will be needed to minimize conflicts over use of shared spaces.

CHAPTER 5

**RELATIONSHIP TO PLANS, POLICIES
AND CONTROLS**

5. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

This section discusses the State of Hawaii and City and County of Honolulu plans, policies and controls which affect the proposed project.

5.1 Hawaii State Plan

The Hawaii State Plan, embodied in Chapter 226, Hawaii Revised Statutes, serves as a guide for goals, objectives, policies, and priorities for the State. The State Plan provides a basis for determining priorities, allocating limited resources, and improving coordination of State and County plans, policies, programs, projects and regulatory activities. The proposed project is consistent with the following State Plan objectives, policies and priority guidelines:

Section 226-6 Objectives and policies for the economy--in general.

(a)(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people.

The Block J Redevelopment Project will create numerous short-term, as well as long-term employment opportunities. Short-term employment will be available during the construction period. In the long-term, increased social and economic opportunities will result with the development of new residential and retail space.

Section 226-13 Objectives and policies for the physical environment--land, air, and water quality.

(b)(7) Encourage urban developments in close proximity to existing services and facilities.

The Block J Redevelopment Project is located in an area which is served by existing infrastructure and is in close proximity to existing schools, parks and other community services.

Section 226-19 Objective and policies for socio-cultural advancement--housing.

(b)(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate income, and gap-group households.

(b)(3) Increase home ownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.

(b)(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.

(b)(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.

The Block J Redevelopment Project will provide for a more intensive use of the currently underutilized urban land. The publicly-owned parcel will be redeveloped into a mixed-use affordable residential, retail and public parking complex. All of the approximately 913 affordable rental units will be offered to households earning at or below 60 percent of the median income. Approximately 475 units will be offered to senior households, with the remaining 438 units offered to multi-family households. The residential component will include one- and two-bedroom units. Residing adjacent to Downtown Honolulu, residents will have convenient access to employment, public facilities, public transportation, services, and shops.

Part III. Priority Guidelines

The purpose of establishing priority guidelines is to address areas of statewide concern. The proposed project supports or conforms to the following priority guidelines:

Section 226-106 Affordable housing. Priority guidelines for the provision of affordable housing:

- (1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.*
- (6) Encourage public and private sector cooperation in the development of rental housing alternatives.*

The proposed project provides for the redevelopment of publicly-owned land which is currently underutilized. This provides the opportunity to develop affordable rental residential units available to households earning at or below 60 percent of the median income. Established through the RFP process, the project will be developed in cooperation with the public sector, represented by the City and County of Honolulu ~~Department of Housing and Community Development~~ *Department of Community Services*, and the private sector, represented by developer Block J & Associates, LLC, a Hawaii limited liability company, whose manager is Coastal Rim Properties.

5.2 State Functional Plans

The Statewide planning system requires the development of State Functional Plans which are approved by the Governor of Hawaii. The State Functional Plans guide the implementation of State and County actions in the areas of agriculture, conservation lands, education, energy, health, higher education, historic preservation, housing, recreation, tourism, water resources development, transportation, employment, and human services. The proposed project is consistent with the following objectives, policies and implementing actions:

State Housing Functional Plan

Objective B: Sufficient amount of affordable rental housing units by the year 2000 so as to increase the State's rental vacancy rate to at least 3%.

Policy B(1): Direct State, County and Federal resources toward the financing and development of rental housing projects.

Implementing Action B(1)(a): Participate in the development of below-market rental projects.

Policy B(2): Encourage increased private sector participation in the development of affordable rental housing.

Implementing Action B(2)(b): Form public/private partnerships and/or enter into public/private development agreements to develop affordable rental housing projects.

The Block J Redevelopment Project is designed to support implementation of these State Functional Plan policies by contributing approximately 913 units to the inventory of affordable rental housing units targeted to households earning at or below 60 percent of the median income. Initiated through the RFP process, the affordable rental units will be developed through a development agreement established between the public sector, represented by the City and County of Honolulu ~~Department of Housing and Community Development~~ *Department of Community Services*, and the private sector, represented by developer Block J & Associates, LLC, a Hawaii limited liability company, whose manager is Coastal Rim Properties. City, State, Federal, and private (equity contributions) funds will be used to finance the project.

Objective C(1): Increased development of rental housing units for the elderly and other special need groups to afford them an equal access to housing.

Policy C(1): Effectively use public resources to provide rental housing projects for elderly and handicapped persons.

Implementing Action C(1)(a): Develop affordable rental projects for elderly and handicapped persons.

About 475 of the approximately 913 affordable units proposed for the project will be offered to senior households earning at or below 60 percent of the median income. The residential units will be designed in compliance with the Americans With Disabilities Act (ADA) guidelines. City, State, Federal, and private (equity contributions) funds will be used to finance the project.

Objective E: Acquire and designate lands suitable for housing development in sufficient amount to locate the deficit in housing units by the year 2000.

Policy E(1): Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, employment and other concerns of existing communities and surrounding areas.

Implementing Action E(1)(a): Assess, delineate, and where feasible, acquire, master plan and develop lands suitable for future residential development.

The Block J Redevelopment Project is located within the City and County of Honolulu's Primary Urban Center near major businesses, services, public facilities, and recreational areas. The project will provide a number of affordable rental residential units and, combined with retail, parking and community uses, will provide a balanced downtown community. The project area is serviced by the City's bus system which would provide residents with easy access to and from the City core. Retail use, open space and recreational space are planned for the project which will provide increased economic and leisure opportunities for residents in the area.

Policy E(2): Where practical, develop affordable housing projects on public lands.

Implementing Action E(2)(a): Survey and reserve for future development State and County owned lands which are suitable for housing development.

The Block J Redevelopment Project will provide affordable rental residential units on publicly-owned land. The proximity of the project site to major businesses, services, public facilities, and recreational areas, coupled with its current underutilization, makes it suitable for housing development.

State Energy Functional Plan

Objective A: Moderate the growth in energy demand through conservation and energy efficiency.

Policy A(1): Promote and stimulate greater energy efficiency and conservation in non-transportation sectors.

The project will incorporate energy-efficient equipment and designs into the development where possible. Such design measures may include the use of individual meters for the residential and retail units to provide incentive for energy conservation, high efficiency motors and chillers, energy-efficient ballasts for fluorescent lamps, building design which maximizes indoor light without increasing indoor heat, use of insulation and double-glazed doors, and energy-efficient metal halide lights for outdoor lighting.

5.3 State Land Use District

The Hawaii Land Use Law of Chapter 205, Hawaii Revised Statutes, classifies all land in the State into four land use districts: Urban, Agricultural, Conservation, and Rural. The project site is designated within the Urban District. The proposed project is consistent with the Urban classification.

5.4 State Coastal Zone Management Program

Hawaii's Coastal Zone Management (CZM) Program, established pursuant to Chapter 205A, Hawaii Revised Statutes, as amended, is administered by the State of Hawaii Office of Planning (OP) and provides for the beneficial use, protection and development of the State's coastal zone. The objectives and policies of the Hawaii CZM Program encompass broad concerns such as impact on recreational resources, historic and archaeological resources, coastal scenic resources and open space, coastal ecosystems, coastal hazards, and the management of development. The applicability of the CZM objectives and policies to the Block J Redevelopment Project is as follows:

Objective: (2) Historic resources;
(A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies: (A) Identify and analyze significant archaeological resources;

- (B) *Maximize information retention through preservation of remains and artifacts or salvage operations; and*
- (C) *Support state goals for protection, restoration, interpretation, and display of historic resources.*

According to the *Archaeological Assessment of an Approximately 4.1-Acre Project Site in Downtown Honolulu* (See Appendix D) prepared for the project, no archaeological or historical sites are currently extant on the surface of the project site. Adjacent to the project site, however, is the Central Fire Station which has been placed on the Hawaii State and National Registers of Historic Places. No impacts on historic properties in the vicinity of the project site are anticipated. Impact pile driving equipment capable of propagating ground vibrations that could potentially damage nearby structures such as the Central Fire Station will not be used during construction of the project.

Excavation of the project site to the depths required for the project's proposed underground parking structure may potentially impact subsurface archaeological resources that may be present. Mitigation measures to address potential impacts on archaeological resources include *conducting an archaeological inventory survey with subsurface testing* of the project site prior to construction to determine the extent and nature of archaeological and historic deposits and features present. The testing program will be coordinated with the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources and the results made available for their review. If significant findings are encountered, an appropriate mitigation plan will be prepared and pursued. The plan could include data recovery and/or construction monitoring.

Objective: (3) *Scenic and open space resources;*
(A) *Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

Policies: (A) *Identify valued scenic resources in the coastal zone management area;*
(B) *Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline.*

The project site is adjacent to a mixture of high- and low-rise buildings, including the high-rise office buildings of the downtown Financial District further makai. The primary public vantage points affected by the project include mauka views of the Koolau Range and Punchbowl from the Bishop Street and Alakea Street corridors near Beretania Street,

mauka views of the Koolau Range from further makai on Bishop Street, and makai views from the Punchbowl Lookout. As indicated in Section 3.13, the project's residential towers will be clearly visible from the surrounding area, and in part will block portions of the mauka public views from these designated vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl Lookout.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's two high-rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. The perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is setback to create a visual step-back from the retail structure located at ground level. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression

of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

*Objective: (4) Coastal ecosystems;
(A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

Policies: (D) Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

Construction and operation of the proposed project will not significantly impact water quality in the nearshore waters. During construction, storm runoff may carry increased amounts of sediment into the storm drain system as a result of erosion from newly exposed land. In the Downtown area, the City's storm drains discharge into Honolulu Harbor. This could potentially impact the water quality of nearshore areas, but should be adequately mitigated by compliance with the City's grading ordinance, as discussed in Section 3.2.

Dewatering during construction will be required for work on structures and utilities that will lie below the *caprock* water table. As discussed in Section 3.2, a NPDES General Permit for Construction Activity Dewatering will be required for discharging dewatering effluent into City drainage systems and waters of the United States. The permit will require a BMP, erosion control plan, and water quality monitoring plan.

After construction, the volume of storm runoff from the proposed project will be no greater than present since most of the site is paved, preventing infiltration. With the addition of landscaping for the project, the amount of infiltration would increase, thereby reducing the volume of runoff. Storm runoff from the proposed project will be directed toward existing catch basins in the immediate vicinity of the site.

5.5 City and County of Honolulu General Plan

The General Plan for the City and County of Honolulu (adopted 1977) was amended by the City Council in 1992. The Plan is a statement of the long-range social, economic, environmental, and design objectives for the general welfare and prosperity of the people of Oahu. The Plan is also a statement of broad policies which facilitate the attainment

of the objectives of the Plan. Eleven subject areas provide the framework for the City's expression of public policy concerning the needs of the people and functions of government. These areas include population; economic activity; the natural environment; housing; transportation and utilities; energy; physical development and urban design; public safety, health and education; culture and recreation; and government operations and fiscal management. The relationship of the proposed project to the relevant objectives and policies of the General Plan are as follows:

III. Natural Environment

Objective B: To preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors.

Policy 2: Protect Oahu's scenic views, especially those seen from highly developed and heavily travelled areas.

The primary public vantage points affected by the project include mauka views of the Koolau Range and Punchbowl from the Bishop Street and Alakea Street corridors near Beretania Street, mauka views of the Koolau Range from further makai on Bishop Street, and makai views from the Punchbowl Lookout. As indicated in Section 3.13, the project's residential towers will be clearly visible from the surrounding area, and in part will block portions of the mauka public views from these designated vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl Lookout.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors, including the strategic siting of the residential towers to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. The perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is setback to create a visual step back from the retail structure located at ground level. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual

mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

IV. Housing

Objective A: To provide decent housing for all the people of Oahu at prices they can afford.

Policy 3: Encourage innovative residential development which will result in lower costs, added convenience and privacy, and the more efficient use of streets and utilities.

Policy 8: Encourage and participate in joint public-private development of low- and moderate-income housing.

Policy 12: Encourage the production and maintenance of affordable rental housing.

Policy 13: Encourage the provision of affordable housing designed for the elderly and the handicapped.

The Block J Redevelopment Project will provide approximately 913 affordable rental residential units which will be offered to households earning at or below 60 percent of the median income. Approximately 475 of the units will be offered to senior households, with the remaining 438 units offered to households of all ages. The residential units will be designed in compliance with the Americans With Disabilities Act (ADA) guidelines. The mixed-use Block J Redevelopment Project will maximize residential and commercial opportunities by using the existing and available infrastructure. The project will be developed in cooperation with the public sector, represented by the City and County of Honolulu ~~Department of Housing and Community Development~~ *Department of Community Services*, and the private sector, represented by developer Block J & Associates, LLC, a Hawaii limited liability company, whose manager is Coastal Rim Properties.

Objective C: To provide the people of Oahu with a choice of living environments which are reasonably close to employment, recreation, and commercial centers and which are adequately served by public utilities.

Policy 3: Encourage residential development near employment centers.

The Block J Redevelopment Project is located within the City and County of Honolulu's Primary Urban Center near major businesses, services, public facilities, and recreational areas. The project will provide a number of affordable rental residential units and, combined with retail, parking and community uses, will provide a balanced downtown community. Retail use, open space and recreational space are planned for the project which will provide increased economic and leisure opportunities for residents in the area. Residing adjacent to Downtown Honolulu, residents will have convenient access to employment, public and recreational facilities, services, and shops. The project will locate residents adjacent to the central business district and in close proximity to other employment centers such as Kakaako and Waikiki to the east, and Pearl Harbor, Kalihi and the Iwilei/Waterfront area to the west. Many of these employment centers are accessible by public transportation. The mixed-use development will maximize residential and commercial opportunities using the existing and available infrastructure and utilities.

VII. Physical Development and Urban Design

Objective A: To coordinate changes in the physical environment of Oahu to ensure that all new developments are timely, well-designed, and appropriate for the areas in which they will be located.

Policy 5: Provide for more compact development and intensive use of urban lands where compatible with the physical and social character of existing communities.

The site's existing municipal parking lot will be replaced by residential, retail and parking facilities providing for a more intensive use of the site. The proposed project's development concept affords a number of affordable rental residential units and, combined with retail, parking and community uses, provides a balanced downtown community. This synergistic social and economic environment considers the City's goals to revitalize the Kukui District, expand business and employment opportunities, and enhance the visual and social environs of the Urban core.

Objective B: To develop Honolulu (Waiialae-Kahala to Halawa), Aiea, and Pearl City as the Island's primary urban center.

Policy 3: Encourage the establishment of mixed-use districts with appropriate design and development controls to insure an attractive living environment and compatibility with surrounding land uses.

Policy 4: Provide downtown Honolulu and other major business centers with a well-balanced mixture of uses.

Policy 5: Encourage the development of attractive residential communities in downtown and other business centers.

The Block J Redevelopment Project provides for the redevelopment of an area which is currently underutilized. The project incorporates a mixture of residential and retail space and public parking. The project reinforces the existing development pattern along the Beretania Street corridor by continuing the pattern of residential and commercial mixed-use development along the mauka side of Beretania Street. The reconstructed Kamalii Park, and open space and landscaping within the project site are intended to create an attractive living environment for the project and area residents. Design controls will ensure the project's compatibility with the existing character of the surrounding area.

Objective E: To create and maintain attractive, meaningful, and stimulating environments throughout Oahu.

Policy 4: Require the consideration of urban-design principles in all development projects.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's~~

~~two high-rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. Although the mass of the towers will be minimized by the neighboring high-rise office buildings, the perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is setback to create a visual step-back from the retail structure located at ground level. Strategic landscaping will further minimize the overall mass of the tower and retail structures. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

5.6 City and County of Honolulu Development Plan

The City and County of Honolulu's Development Plan (DP) program provides a relatively detailed framework for implementing the objectives and policies of the General Plan on an areawide basis. Eight Development Plans have been adopted covering the entire island. The Development Plan Ordinance consists of Common Provisions applicable to all Development Plan areas, Special Provisions for each area, Land Use Map, and Public Facilities Map. The Development Plan Land Use Maps depict land use patterns which are consistent with the objectives and policies for the General Plan.

The project site is located within the Primary Urban Center (PUC) area which includes the communities from Waialae-Kahala to Pearl City. It is the most populated part of the State and is Oahu's largest employment center. The PUC Land Use Map designates the project site as Commercial Emphasis Mixed Use (TMK: 2-1-9:18) and Parks and Recreation (TMK: 2-1-9: 27) (see Figure 5-1). The Development Plan Common Provisions define Parks and Recreation and Commercial Emphasis Mixed Use as follows:

(j) *Parks and Recreation.*

Parks and recreation areas include all public parks and recreational facilities, including beach parks, playgrounds, playfields, district parks, botanical gardens, zoos, golf courses, and pedestrian malls as well as privately owned and/or operated park and recreational facilities which are provided as integral parts of developments.

(n) *Commercial Emphasis Mixed Use.*

Commercial uses may be the predominant type of development. Where appropriate, the ground floor may be designed primarily for commercial uses which support establishing a new or maintaining an existing pedestrian-oriented environment. Housing may also be provided.

The proposed project conforms with the DP Land Use Map designations of Commercial Emphasis Mixed Use and Parks and Recreation.

Areas to the north and west of the project site, including the nearby downtown Financial District, are also designated Commercial Emphasis Mixed Use. Areas to the east and south of the site are mostly designated Public Facilities and Parks and Recreation.

LEGEND

- P Parks and Recreation
- PF Public Facilities
- C Commercial

PF
YMCA

P

PF

VINEYARD

BOULEVARD

Central Middle School
PF

VINEYARD STREET **PF**

PALI

EMMA STREET

St. Andrew's Priory

KUKUI STREET

QUEEN STREET

P

PF

PROJECT SITE

Kukui Plaza

FORT STREET

P

Station

St. Andrew's Cathedral

Wa

BERETANIA STREET

COMMERCIAL EMPHASIS MIXED USE

ALAKEA STREET

C

PF



0 100 200 400

Scale in Feet

BLOCK J REDEVELOPMENT PROJECT

DEVELOPMENT PLAN LAND USE MAP

Fig. 5-1

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES

Prepared by:
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ASSOCIATES, INC.

Common Provisions

Relevant general urban design principles and controls include the following:

Section 24-1.4 General urban design principles and controls.

(a) Public Views.

Public views include views along streets and highways, mauka-makai view corridors, panoramic, and significant landmark views from public places, views of natural features, heritage resources, and other landmarks, and view corridors between significant landmarks.

Such public views shall be protected by appropriate building heights, setbacks, design and siting controls established in the LUO. These controls shall be determined by the particular needs of each view and applied to public streets and to both public and private structures.

The design and siting of all structures shall reflect the need to maintain and enhance available views of significant landmarks. No development shall be permitted that will block important views.

Special Provisions

Relevant urban design principles and controls for the PUC Development Plan include the following:

Section 24-2.2. Urban Design Principles and Controls for the Primary Urban Center

(a) Specific Urban Design Considerations

(2) Public Views

In order to promote pleasing and attractive urban living environments, and to protect and enhance the remaining natural environment of urban areas, views of landmarks and the natural environment from public places may be identified and protected by the Department of Land Utilization. Important views to be protected include, but are not limited to the following:

- (A) *Panoramic, mauka and makai, and continuous views of the Koolau and Waianae mountain ranges, ridges, valleys, and coastline and the sea.*
- (B) *Views of natural landmarks, such as Diamond Head, Punchbowl, Pearl Harbor, major streams and forest areas.*

Special provisions apply to several areas within the PUC. The Block J Redevelopment Project site is located within the Downtown Special Area. The Downtown Special Area is "a Commercial Emphasis Mixed Use area generally bounded by Nuuanu Stream, Vineyard Boulevard, Alakea Street, and Honolulu Harbor." Applicable principles and controls in the Downtown Special Area are as follows:

(b) *Principles and Controls for Special Areas*

(1) *Downtown*

- (G) *Urban park-like amenities, such as downtown malls, private walkways, landscaping and open space shall be encouraged.*
- (H) *Views from public streets and thoroughfares to the Aloha Tower, Honolulu Harbor, the mountains, and Hawaii Capital District shall be preserved and enhanced where feasible.*
- (I) *The general height limit for the area shall be 350 feet...*
- (J) *Special height, design and use controls may be applied where necessary to ensure the preservation of important views, landmarks and historical structures, and the compatibility of the mixture of uses within the area.*

The Block J Redevelopment Project will conform in part with the urban design principles and controls of the DP Common Provisions, and the Special Provisions and Downtown Special Area of the Primary Urban Center DP. The project will be developed within the 350-foot height limit established for the area, except for an approximately 30-foot wide portion of the project site along Queen Emma Street which lies within the Hawaii Capital Special District. The open space and landscaping to be incorporated within the proposed project are intended to create an attractive environment for the residents and surrounding community.

Of the important views previously identified, only portions of the mauka views of the Koolau Mountains and Punchbowl are currently visible from public vantage points in the vicinity of the project site. The primary public vantage points affected by the project include mauka views of the Koolau Mountains and Punchbowl from the Bishop Street and Alakea Street corridors near Beretania Street, mauka views of the Koolau Range from further makai on Bishop Street, and makai views from the Punchbowl Lookout. As indicated in Section 3.13, the project's residential towers will be clearly visible from the surrounding area, and in part will block portions of the mauka public views from these designated vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl Lookout.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's two high rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. Although the mass of the towers will be minimized by the neighboring high rise office buildings, the perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is setback to create a visual step back from the retail structure located at ground level. Strategic landscaping will further minimize the overall mass of the tower and retail structures. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize

visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

5.6.1 Development Plan Public Facilities Map

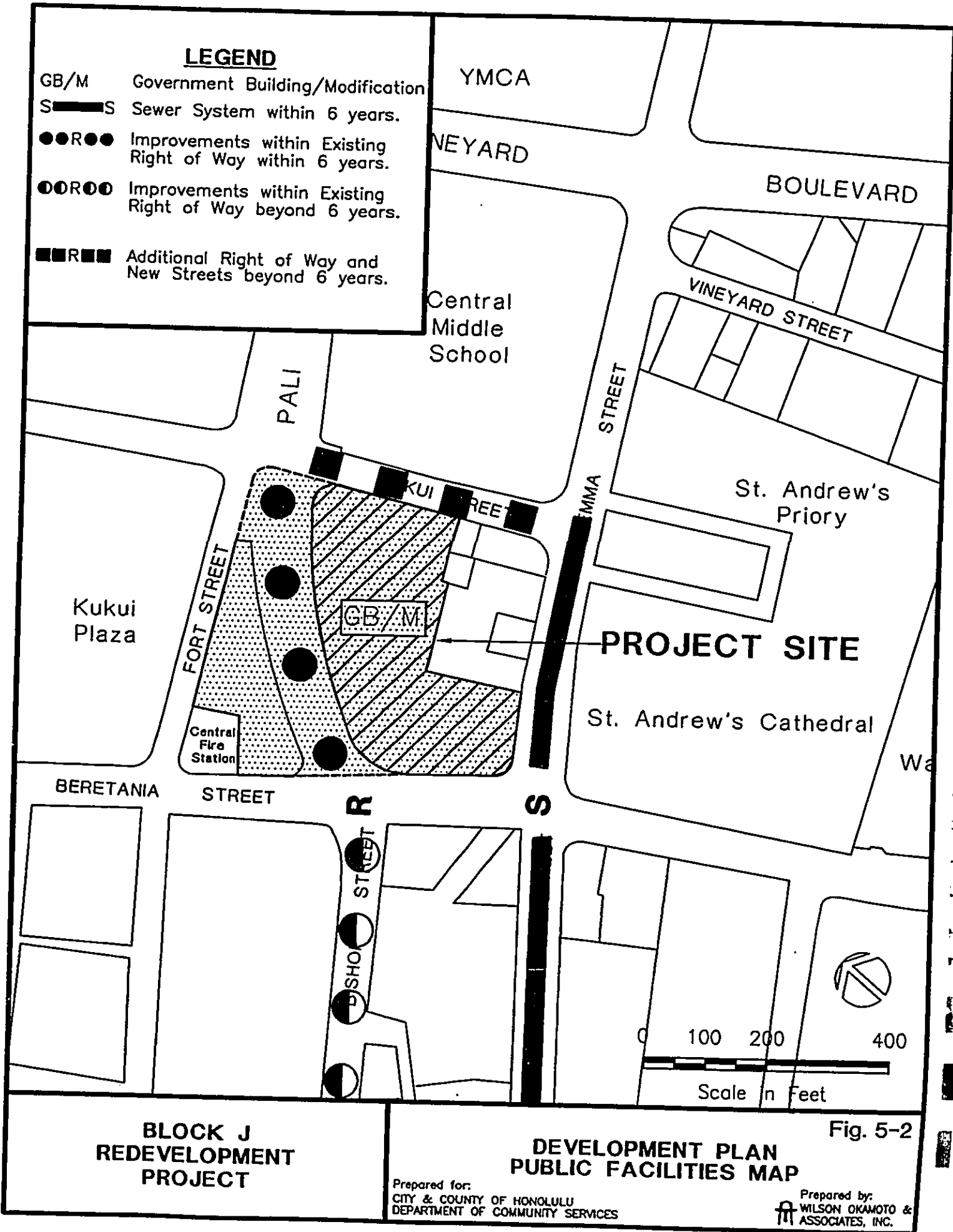
The Development Plan (DP) Public Facilities Map identifies public and private proposals for parks, streets and highways, major public buildings, utilities, terminals, and drainage. The DP Public Facilities Map for the PUC designates the portion of the project site identified as TMK: 2-1-9: 18 as Government Building/Modification (GB/M) which also includes government-initiated projects such as the Block J Redevelopment Project (see Figure 5-2). According to the City and County of Honolulu Planning Department, the GB/M symbol was placed on the site for future development which included public parking. Since the proposed mixed-use development includes public parking, the GB/M symbol should remain on the PUC DP Public Facilities Map.

The PUC DP Public Facilities Map identifies four major improvements in the general vicinity of the project site. These include:

- The segment of Pali Highway which traverses the project site is designated for improvements within the existing right-of-way within six years. The designated improvement includes removal of the existing landscaped median.
- The segment of Kukui Street located along the northern boundary of the project site is designated for additional right-of-way beyond six years. This includes designation of additional right-of-way of 14 feet along the mauka side of Kukui Street.
- Bishop Street, located makai of Pali Highway, is designated for improvements within the existing right-of-way beyond six years.

LEGEND

- GB/M Government Building/Modification
- S Sewer System within 6 years.
- R●● Improvements within Existing Right of Way within 6 years.
- R○○ Improvements within Existing Right of Way beyond 6 years.
- R■ Additional Right of Way and New Streets beyond 6 years.



**BLOCK J
REDEVELOPMENT
PROJECT**

**DEVELOPMENT PLAN
PUBLIC FACILITIES MAP**

Fig. 5-2

Prepared for:
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- Sewer improvements within the existing Queen Emma Street right-of-way adjacent to the project site, and extending makai along Alakea Street, are designated within six years. The designated improvement includes the installation of a relief sewer line to accommodate increased flows in the area.

The proposed Block J Redevelopment Project will not conflict with these designated improvements. As part of the proposed project, the above-referenced segment of Pali Highway will be reconstructed without the existing landscaped median following construction of the project's underground parking structure.

5.6.2 Primary Urban Center Development Plan Revision Program

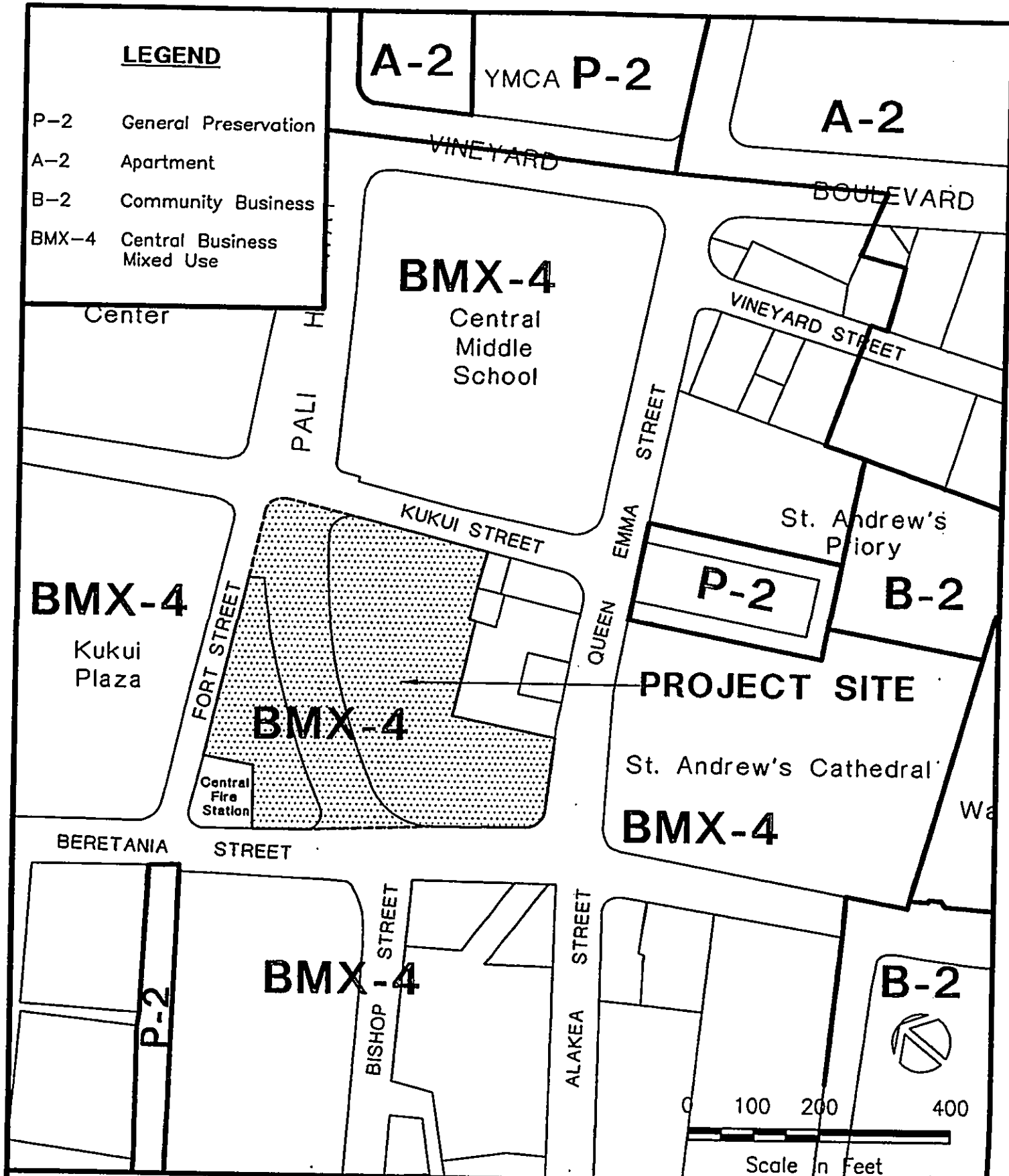
The existing DP for the Primary Urban Center is currently undergoing revision by the City and County of Honolulu's Planning Department as part of the Development Plan Revision Program initiated in 1993. The DP Revision Program entails comprehensive revisions of the eight DPs in response to a 1992 City Charter amendment to change the definition of DPs from "relatively detailed" plans to "conceptual schemes" for implementing General Plan development objectives and policies.

A public review draft of the revised Primary Urban Center DP is currently being prepared by the City Planning Department. Once adopted, the revised DP will guide growth and development within the Primary Urban Center over the next 20 years. Based on discussions at workshops, focus groups, and interviews and administration initiatives in 1997, several themes have emerged with form the broad vision for Honolulu's future. The proposed project concept is generally consistent with themes such as "The City of Livable Neighborhoods" and "The City for People; Not Cars", which will guide the growth and development policies for the Primary Urban Center to the year 2020.

5.7 City and County of Honolulu Land Use Ordinance and Zoning

The City and County of Honolulu Land Use Ordinance (LUO) regulates land use in accordance with adopted land use policies, including the Oahu General Plan and Development Plans. The provisions are also referred to as the zoning ordinance. Zoning designations are shown on the zoning maps for the City.

The project site is zoned BMX-4 Central Business Mixed Use District (see Figure 5-3). The intent of the BMX-4 Central Business Mixed Use District is to set apart that portion of Honolulu which forms the City's center for financial, office and governmental activities and housing. It provides the highest land use intensity for commerce, business and housing. The BMX-4 Central Business Mixed Use District permits a wide range of



**BLOCK J
REDEVELOPMENT
PROJECT**

ZONING MAP

Fig. 5-3

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uses, including residential and retail. The BMX-4 Central Business Mixed Use District zoning is appropriate for the proposed project.

The maximum building height in this district as indicated on the zoning map is 350 feet, except for an approximately 30-foot wide portion along Queen Emma Street located in the Hawaii Capital Special District which designates a maximum building height of 40 feet. The project will be developed within the 350-foot height limit established for the zoning district, except for the approximately 30-foot wide portion of the project site along Queen Emma Street located within the Hawaii Capital Special District.

The allowable standard maximum density of the BMX-4 Central Business Mixed Use District is 4.0 Floor Area Ratio (FAR) with a maximum FAR of 7.5 achievable with an open space bonus. *FAR refers to floor area ratio which is the ratio of a building's total floor area to the size of the lot on which it is built.* The project is proposed to be developed to a FAR of approximately 7.26 through an open space bonus to a total development floor area of approximately 748,800 square feet. The amount of open space that can be counted toward the bonus will need to be determined by the City Department of Land Utilization Department of Planning and Permitting. *The types of open space bonus and their location are currently under discussion with the City and may be modified as the design is refined.* Depending on the City's interpretation further design modifications, an exemption may need to be sought pursuant to the affordable housing provisions of Chapter 201E, HRS.

Section 201E-210 of the Hawaii Revised Statutes provides that:

"Housing development; exemption from statutes, ordinances, charter provisions, rules. (a) The corporation may develop, on behalf of the State or with an eligible developer, or may assist under a government assistance program in the development of housing projects which shall be exempt from all statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of units thereon'..."

The number of project parking stalls required to be provided by the LUO is as follows:

<u>Use</u>	<u>No. of Stalls</u>
City replacement parking - public	208
Residential -1 stall/unit	913
Guest - 10% of total unit/stall	91
Retail	<u>167</u>
Total	1,388

A total of approximately 1,896 parking stalls is proposed to be provided by the project. Although the proposed project will provide parking in excess of the total number of stalls required by the LUO, an exemption may be sought for the proposed number of stalls to be provided for the Senior Tower pursuant to the affordable housing provisions of Chapter 201E, HRS, to free up additional stalls for public parking.

In addition to the 208 replacement public parking stalls provided within the project, approximately 873 additional stalls will be made available to the public. These additional public stalls would accommodate any potential increase in parking requirements based upon final determination of specific retail uses for the project.

5.7.1 Conditional Use Permit Type 1

A Conditional Use Permit (CUP) Type 1 may be required for the proposed project to permit joint development of the two project parcels (TMKs: 2-1-09: 18 and 27) bisected by Pali Highway. A CUP Type 1 is required to allow conditional uses in specific zoning districts if they meet minimum standards specified in the LUO. The CUP Type 1 requirements are established pursuant to Chapter 46, HRS, Chapter 9 of the Revised City Charter, 1973 (1984 Editions), and the Revised Ordinances of Honolulu, Chapter 21, Land Use Ordinance. The CUP Type 1 application is administered by the City and County of Honolulu ~~Department of Land Utilization (DLU)~~ *Department of Planning and Permitting (DPP)*, requires a joint development agreement subject to the approval of the City's Corporation Counsel, does not require a public hearing, and a decision is rendered by the Director of ~~DLU~~ *DPP*.

5.7.2 Hawaii Capital Special District

Special Districts are designated by the LUO to guide development for certain areas of the community. These are areas which are in need of restoration, preservation, redevelopment, and/or rejuvenation to protect and/or to enhance the physical and visual aspects of the area for the benefit of the community as a whole. An approximately 30-

foot wide portion of the project site along Queen Emma Street lies within the northern portion of the Hawaii Capital Special District (see Figure 5-4).

The Hawaii Capital Special District is the civic core of the State government and the City and County of Honolulu. The District is characterized by its park-like setting, with expansive open space and a large number of State and City and County buildings. The District is divided into the Historic Precinct, containing the State Capitol, Honolulu Hale and Iolani Palace, and various other precincts which form transitional areas between parts of the City and the Historic Precinct. The portion of the project site located within the District lies within the perimeter precinct area which provides a transition in height, open space, density and design compatibility to the Historic Precinct.

Special Districts have more specific and restrictive design guidelines than those provided by zoning. An objective of the Hawaii Capital Special District is to *"preserve and enhance the park-like setting of the Hawaii Capital Special District, including its view from the Punchbowl Lookout."* The District guidelines encourage structures to be oriented so as to minimize intrusion into mauka-makai views, especially to and from Punchbowl. The open space and height limit requirements in the perimeter precincts are intended to protect the integrity of the Historic Precinct. The District imposes a height limitation of 40 feet and a 30-foot setback along Queen Emma Street.

The proposed project will be developed in conformance with the Hawaii Capital Special District guidelines, including the 40-foot height limit established within the portion along Queen Emma Street. At the southeast corner of the project site, improvements will extend approximately 1,900 square feet into the excess curb frontage at Queen Emma Street to provide for additional landscaping and pedestrian buffer areas in the transition to the adjacent Historic Precinct. Although a *Hawaii Capital Special District Minor Permit* may be required to implement proposed project improvements within the District, *including removal of trees with trunks over six inches in diameter and sidewalk improvements*, an exemption may be sought from the ~~process of the~~ Hawaii Capital Special District *Minor Permit process* pursuant to the provisions of Chapter 201E, HRS.

5.7.3 Punchbowl Special District

Although the project site is not located within the boundaries of the Punchbowl Special District as set forth in the LUO, the project site does fall within the purview of the following objective of this District: *"(c) Preserve and enhance significant public views to and from Punchbowl, especially those from the Punchbowl lookouts and long-range views of Punchbowl, by modifying construction projects that would diminish those views."*

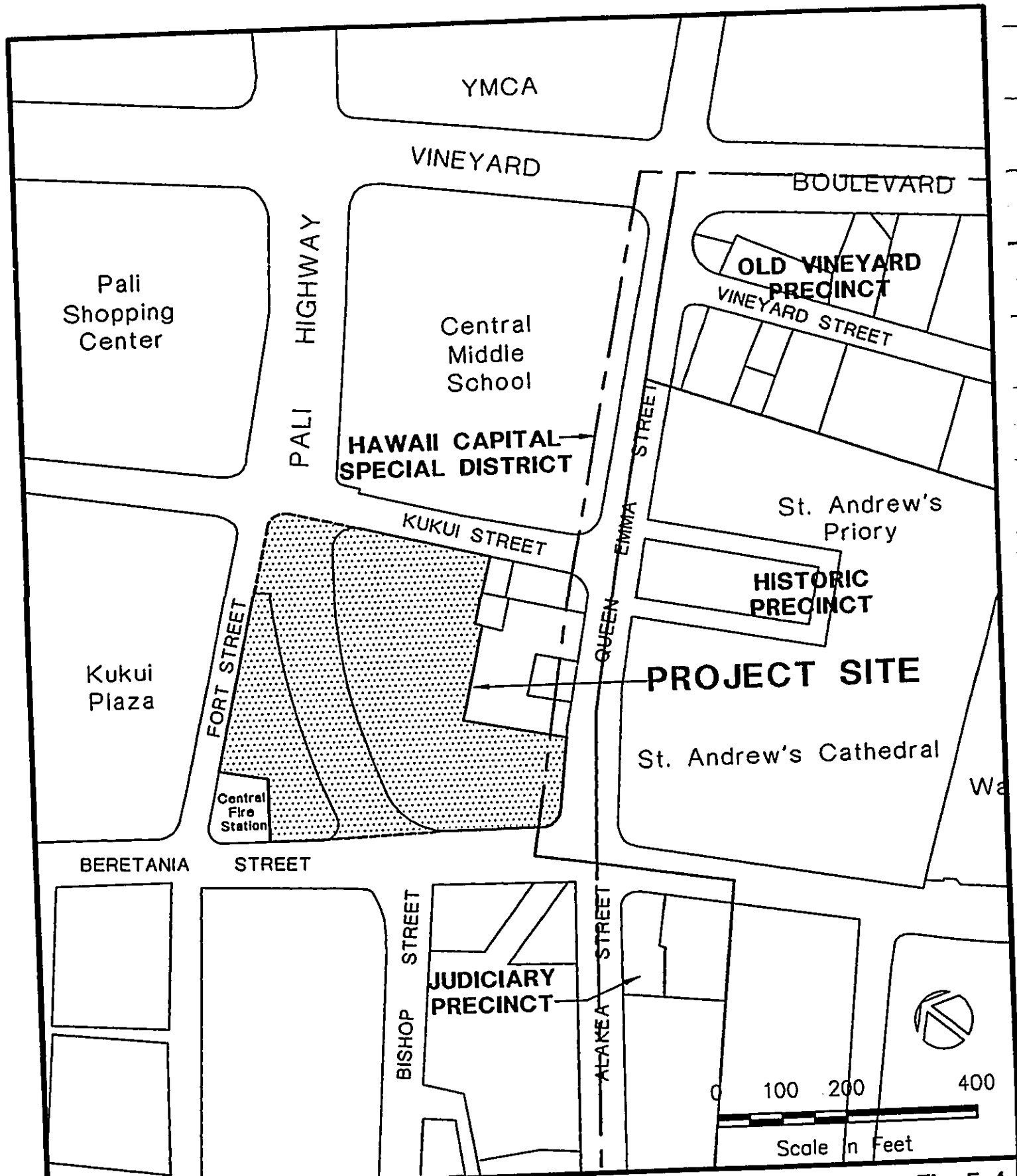


Fig. 5-4

**BLOCK J
REDEVELOPMENT
PROJECT**

**HAWAII CAPITAL
SPECIAL DISTRICT MAP**

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF COMMUNITY SERVICES

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.

The proposed project conforms in part with the aforementioned objective of the Punchbowl Special District. As viewed from the Punchbowl Lookout, views makai of the southeastern coastal shore from this elevated mauka vantage point will not be significantly affected by the project as the project towers are set amidst mid- to high-rise towers in the downtown Financial and Kukui Districts. The project's northwest residential tower will partly intrude into the view of the coastal shore, although it would not penetrate the coastal skyline. The project, however, will unavoidably contribute to an increase in the visual density of this makai view.

The project's residential towers will in part block portions of the mauka public views of Punchbowl from the vantage point of the Bishop Street corridor near Beretania Street. The project, however, incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from this major view corridor. The project's two high-rise residential towers are strategically sited to maintain maximum mauka views of Punchbowl from Bishop Street.

5.8 City and County of Honolulu Special Management Area

The Coastal Zone Management Act contains the general objectives and policies upon which all counties within the State have structured specific legislation which created Special Management Areas (SMA). Any development within the SMA requires a SMA Use Permit, which is administered by the City and County of Honolulu ~~Department of Land Utilization (DLU)~~ *Department of Planning and Permitting* pursuant to Ordinance No. 84-4.

The project site is located outside the boundaries of the City and County's SMA. Therefore, the proposed project is not subject to the provisions of the SMA Use Permit.

5.9 Park Dedication Ordinance

Since the proposed project will include rental housing units, the project will be subject to compliance with Park Dedication Ordinance No. 4621. The requirements may be satisfied through the provision of park land, payment of fees equal to the land area required, provision of privately maintained parks and playgrounds, or any combination equal to the dedication requirements. ~~Provision of the approximately 25,500 square feet of rooftop recreational deck over the retail space are proposed to satisfy the park dedication requirements. Currently, the approximately 32,000 square feet of rooftop recreational deck over the retail space is proposed in lieu of park dedication space.~~ Depending on the City's interpretation of the base number to be used in calculating park dedication requirements for the project, an exemption ~~may need to be sought in~~

~~complying with the~~ *from* the park dedication requirements pursuant to the provisions of Chapter 201E, HRS *may be pursued*.

5.10 Permits and Approvals

The following is a list of permits and approvals which may be required prior to construction of the proposed project:

State of Hawaii

Department of Health

- Noise Variance Permit
- Permit for Air Emissions
- National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activity Dewatering
- Commission on Persons with Disabilities (Review pursuant to Americans with Disabilities Act Accessibility Guidelines (ADAAG))

Department of Land and Natural Resources

- Chapter 6E, HRS, State Historic Preservation Law

Department of Transportation

- Permit to Perform Work Within State Highways

City and County of Honolulu

~~Department of Land Utilization~~ *Department of Planning and Permitting*

- Conditional Use Permit (CUP), Type 1 for Joint Development of *Two or More Adjacent Zoning Lots*
- *Hawaii Capital Special District Minor Permit for Removal of Trees Over Six Inches in Diameter*
- *Hawaii Capital Special District Minor Permit for Sidewalk Improvements*
- Grading and Drainage Permits
- Excavation Permit
- Permit to Excavate Public Right-of-Way
- Construction Permit
- Construction Dewatering Permit
- Wastewater Permits
- Sewer Connection Permits
- Sewer Extension, Oversizing and Relief Sewer Requirements
- Building Permit

Department of Planning and Permitting (cont.)

- Electrical Permit
- Plumbing Permit
- Sidewalk/Driveway Work Permit
- Certificate of Occupancy
- Street Usage Permit

Planning Department

- Environmental Impact Statement

Board of Water Supply

- Water and Water System Requirements for Developments

City Council

- Exemptions pursuant to Chapter 201E, HRS

Other

Utility Companies

- Utility Service Requirements
- Permit Regarding Work on Utility Lines

CHAPTER 6

ALTERNATIVES TO THE PROPOSED ACTION

6. ALTERNATIVES TO THE PROPOSED ACTION

6.1 No Action Alternative

The no action alternative will maintain current use of the project site for municipal parking and park purposes. It is probable that the project site would continue to be underutilized. City and County of Honolulu plans call for the development of the primary urban core to the fullest extent practicable to encourage urban growth in existing urban areas and to utilize existing resources efficiently. The no action alternative would continue to allow underutilization of valuable, highly visible land in the Downtown District of Honolulu, resulting in the loss of potential economic benefits to businesses in the area and tax revenues for the State and County governments.

The no action alternative would preclude all short- and long-term beneficial and adverse impacts described in this EIS. Construction-related environmental impacts, including those on traffic, air and noise, would be avoided. Furthermore, the high initial costs to construct the development would be avoided. However, the important benefits of the project would not be realized, including the provision of approximately 913 affordable rental units in close proximity to public transportation and major employment and service destinations, increased parking, and the provision of approximately 100,000 square feet of retail space to serve the development's residential component as well as the surrounding community.

6.2 Alternative Locations

Alternative locations for the proposed project were not considered. The feasibility of redeveloping the project site is inherent in that the site is currently owned by the City and County of Honolulu. The currently underutilized project site affords an opportunity to revitalize the area through the proposed project by optimizing the development potential of the site. Furthermore, the location of the project site is well-suited for the proposed residential, retail and public parking mixed-use redevelopment due to its proximity to employment, public transportation, community services, schools, health and medical institutions, and recreational facilities.

6.3 Alternative Site Development Concepts

A number of alternative site development concepts were developed in 1993 by the City and County of Honolulu Department of Housing and Community Development as part of a previous planning program to analyze and evaluate the desired density and allocation of land uses for the Block J site. The concepts were developed for a total site area of approximately 196,408 square feet which included the municipal parking lot, HECO

substation and Kamalii Park parcels. The program included the following development objectives, site parameters and building program which provided the basis for developing each of the site options:

Development Objectives:

- Optimize the development potential of the site.
- Determine the optimum density and allocation of uses.
- Provide a symbolic "announcement" into downtown Honolulu via Pali Highway.
- Assume "RFP" for the office tower and support retail.

Site Parameters:

- Preserve Bishop Street mauka view corridor.
- Realign Pali Highway.
- Incorporate exemptions from Hawaii Revised Statutes Section 201E, HRS.
- Incorporate HECO substation.
- Assume incorporation of part of Central Intermediate School site (City parcel identified as TMK: 2-1-09: 3).
- Acquire part of Queen Emma Street frontage at Beretania Street corner.
- Observe Capital District setbacks on Queen Emma Street frontage.
- Assume 350- to 420-foot height limit.

Building Program:

- Provide 60/40 ratio of affordable units to market units.
- Provide office and support retail/commercial component.
- Provide recreational facilities.
- Provide below-grade parking to maximize open space.
- Incorporate 208 stalls from the existing municipal parking lot.
- Include Governor's residence on the Diamond Head parcel.

A total of seven (7) conceptual site plans were developed and evaluated on the basis of fulfilling the development objectives, while most effectively achieving a balance between density, scale, massing, views, and open space, given the inherent site constraints. The site plan concepts are summarized below:

Option 1:

- Density 982,800 SF
- FAR 5.08
- Ewa Block Office Tower
- Diamond Head Block Residential Towers
- View Corridor Recreation Center/HECO Substation

Option 2:

- Density 982,800 SF
- FAR 5.00
- Ewa Block Office Tower/Recreation Center
- Diamond Head Block Residential Towers
- View Corridor HECO Substation

Option 3:

- Density 982,800 SF
- FAR 5.45
- Ewa Block Residential Towers
- Diamond Head Block Office Tower
(HECO Substation to Remain)
- View Corridor Recreation Center

Option 4:

- Density 982,800 SF
- FAR 5.45
- Ewa Block Residential Towers
- Diamond Head Block Office Tower
(HECO Substation to Remain)
- View Corridor Recreation Center

Option 5:

- Density 854,500 SF
- FAR 4.74
- Ewa Block Office Tower
- Diamond Head Block Residential Tower
- View Corridor Residential/Recreation Center/HECO
Substation

Option 6:

- Density 1,175,000 SF
- FAR 6.52
- Ewa Block Office Tower
- Diamond Head Block Residential Tower
(HECO Substation to Remain)
- View Corridor Recreation Center

Option 7:

- Density 1,076,500 SF
- FAR 5.48
- Ewa Block Office Tower/Recreation Center
- Diamond Head Block Residential Tower/HECO Substation
- View Corridor HECO Substation

Upon evaluation of these site concepts, Option 7 was selected as the preferred concept. Supporting determinants included the strategic placement of the office and residential towers within the site, and the perceived balance of scale, massing and integration of open space and buildings given the site constraints. The alternative site development concept incorporating the above building program and site parameters would have resulted in short- and long-term environmental impacts similar to or greater than those of the proposed project.

This planning program was eventually succeeded by the current development proposal.

6.4 Pacific Nations Center Development

A mixed-use development identified as the Pacific Nations Center was previously proposed for the project site in 1989 by the City and County of Honolulu Department of Housing and Community Development. The project site encompassed approximately 5.06 acres of the block bounded by Beretania Street, Fort Street, Kukui Street, and Queen Emma Street, with the exception of the Central Fire Station parcel. The project required acquisition of six privately-owned parcels and consolidation with the City-owned parcels. Components of the project included approximately 494 residential units, approximately 852,000 square feet of commercial office/retail space, a small-scale luxury hotel consisting of approximately 252,000 square feet, approximately 2,500 parking stalls within five underground levels, open space/park, an integrated Hawaiian Electric Company substation, and realignment and reconfiguration of Pali Highway to two-way traffic. The residential, commercial/office retail and hotel components would have been developed within three 350-foot tall towers. Total development floor area was

approximately 1,650,000 square feet. Total development cost for the project was estimated at \$350,000,000.

The potential impacts and proposed mitigation measures for the Pacific Nations Center project were assessed in an Environmental Impact Statement prepared in January 1989 by Parsons Hawaii. In addition to the environmental impacts associated with a project of this scale, development of the project would have required the displacement of over 60 tenants due to acquisition and demolition of the existing privately-owned office buildings within the project site.

CHAPTER 7

**RELATIONSHIP BETWEEN LOCAL SHORT-TERM
USES OF HUMANITY'S ENVIRONMENT AND
THE MAINTENANCE OF LONG-TERM
PRODUCTIVITY**

7. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF HUMANITY'S ENVIRONMENT AND THE MAINTENANCE OF LONG-TERM PRODUCTIVITY

7.1 Short-Term Uses

The proposed project will involve short-term uses of the environment during the construction phase. These uses will have both positive and negative impacts. Construction activities associated with the proposed project will create some temporary adverse impacts, including disruptions of traffic patterns, loss of parking, increased noise, and fugitive dust nuisances in the vicinity of the project site.

In the short-term, the project will also confer some positive benefits in the local area. Direct economic benefits will result from construction expenditures both through the purchase of material from local suppliers and through the employment of local labor. Indirect economic impacts may include benefits to local retail businesses resulting from construction activities.

While there are no existing plans for alternative uses of the project site, development of the project will preclude continuing use of the site by the City and County of Honolulu as a municipal parking lot. Potential uses of the land would not be curtailed, since the residential and retail facilities proposed are considered appropriate uses in terms of planning and zoning.

7.2 Long-Term Productivity

Long-term productivity of the site should be enhanced by the proposed project. The development involves a long-term commitment of land for the proposed uses. Once raised to a higher density use, it is unlikely that the land will revert to a lower intensity of usage in the foreseeable future.

The most significant measure of the long-term productivity of this project is the affordable rental residential units making more affordable housing available to the people of Oahu. Also in the long-term, the project will result in the increased availability of retail space for private businesses, increased parking, and open space, benefitting residents of the project and the community. The project will revitalize the neighborhood and provide an aesthetically pleasing environment for residents. Within the community, the businesses in the project vicinity can expect increased patronage from the additional resident population.

City and County of Honolulu plans call for the development of the primary urban core to the fullest extent practicable to encourage urban growth in existing urban areas and to utilize existing resources efficiently. The proposed action is expected to enhance the long-term vitality of this presently underutilized urban site by providing additional improvements and amenities for the project residents and surrounding community. The project is not expected to pose any long-term risks to health or safety.

In addition, secondary long-term benefits can be expected from the additional tax base created by the additional employment and services provided by the construction and operation of the project.

CHAPTER 8

**IRREVERSIBLE AND IRRETRIEVABLE
COMMITMENTS OF RESOURCES**

8. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

In the short-term, construction of the proposed development will require an irreversible and irretrievable commitment of a number of resources, including land, capital, construction materials, manpower, energy, and water. Financial, material and manpower resources will also be irretrievably committed to the planning and design of the improvements.

Land committed to this project is already urbanized; therefore, the proposed action represents an intensified use of existing land resources rather than a commitment of any new land resources. However, in the long-term, project development will commit the land to a higher density residential/retail use, which is unlikely to revert to a lower intensity use in the foreseeable future. Potential uses of the land would not be curtailed as the proposed uses, including residential and retail, are considered appropriate in terms of planning and zoning. It is likely that the proposed project will preclude future development of the site during the economic and physically useful life of the project.

Effective operation of the project when it is completed will also require irretrievable and irreversible commitments of labor, materials and resources (consumption of potable water, gas and petroleum-generated electricity).

Short-term and long-term environmental and socio-economic impacts are expected to be created by redevelopment of the site. Construction will, in the short-term, generate unavoidable fugitive dust, noise, traffic, and parking inconveniences for surrounding businesses and residents.

In the long-term, a change in the visual landscape is unavoidable, since a municipal parking lot will be replaced by low- and high-rise structures. Certain views from designated vantage points in the vicinity of the project site will be impacted due to the development of the high-rise residential towers. The project will also contribute to an increase in vehicular traffic; however, this could be partially offset by the provision of traffic improvements to accommodate project-related traffic. Mitigative measures and potential mitigation measures for both short-term and long-term impacts have been explored and are summarized in Chapters 3 and 4 and presented in full in appendices referenced in the report.

CHAPTER 9

**PROBABLE ADVERSE ENVIRONMENTAL
EFFECTS WHICH CANNOT BE AVOIDED**

9. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Adverse impacts can be defined as short-term and long-term effects relative to the construction and implementation of a specific use. Short-term impacts are usually construction-related which will occur during the course of construction and cease upon completion of the project. Long-term impacts generally result from the implementation of the proposed project.

9.1 Short-Term Effects

Unavoidable short-term impacts include those related to noise and air quality, and traffic inconveniences.

Audible construction noise will probably be unavoidable during the entire project construction period. Short-term increases in noise levels will result from construction activities, vehicles and equipment. The use of muffled equipment as well as adherence to State Department of Health regulations on noise mitigation will minimize construction and traffic-related noise.

Construction-related air quality impacts could result from site preparation and earth moving activities, the movement of construction vehicles on unpaved areas of the site, and the construction of structures. The construction contractor is responsible for complying with State Department of Health fugitive dust regulations which prohibit visible dust emissions at property boundaries. Nevertheless, the presence of nearby buildings suggests that open-air areas and naturally ventilated structures could be impacted by fugitive dust in spite of compliance with these regulations. Also, the temporary rerouting of Pali Highway during construction of the underground parking structure will reduce travel speeds of commuting vehicles during peak traffic hours, resulting in increased vehicular emissions in the vicinity.

Construction-related activities can increase traffic congestion in the streets adjacent to the project site. To avoid potential traffic congestion, movement of construction vehicles to and from the site and any lane closures will be restricted during the morning and afternoon peak traffic periods. The increased traffic from construction-related vehicles should be insignificant during off-peak traffic periods, but may cause inconveniences to businesses, residents and motorists in the vicinity. The use of flagmen or off-duty police officers to direct traffic during significant phases of construction will minimize traffic congestion.

During construction of the underground parking structure beneath Pali Highway and Kamalii Park, the travel lanes of the highway will be rerouted onto temporary roadways to be constructed within the project site. This will result in increased traffic congestion in the area, particularly while commuting motorists become familiar with the modified traffic patterns which may change during the course of construction.

The loss of public and employee parking during construction will increase parking demands in Downtown. The temporary shortage of stalls could hurt businesses in the immediate area during construction of the project. Alternative approaches to accommodating such demand will be considered, including informing the public of alternative parking in the area and working with the City to identify alternative employee parking locations, possibly outside of the Downtown area.

9.2 Long-Term Effects

Unavoidable long-term impacts resulting from development of the Block J Redevelopment Project include traffic, on-street parking, traffic noise, visual characteristics, and social.

Traffic Impacts: Traffic generated by the project together with a conservative assumption of growth in non-project related traffic will cumulatively impact future traffic conditions on roadways in the vicinity of the project site. The portions of the resulting impacts attributable to the project are summarized below. Potential mitigation measures discussed will be presented to the City Department of Transportation Services for consideration.

- Vineyard Boulevard-Queen Emma Street - *During the morning peak hour, the project traffic would worsen delays for the left-turn movement from ewa-bound Vineyard Boulevard. Conditions could be improved for this movement by the allocation of more signal green time for this movement or the construction of a second (double) left-turn lane.*

The project traffic would increase delays for mauka-bound traffic on Queen Emma Street during the afternoon peak hour. Allocation of additional green time to this approach could reduce delay for the mauka-bound traffic while maintaining overall acceptable conditions at the intersection. Alternatively, more of the Koko Head-bound project traffic could use Pali Highway to travel Diamond Head and turn onto Vineyard Boulevard without affecting conditions at the Pali Highway intersection.

- Vineyard Boulevard-Pali Highway - In the morning peak hour, the year 2002 traffic would approximate 110% of intersection capacity with the project traffic versus 104% without the Project. In the afternoon peak hour, the project traffic

would increase the use of intersection capacity to 99.4% from 95% without the project. The traffic conditions could be improved by provision of a second left-turn lane on the mauka-bound Pali Highway and/or ewa-bound Vineyard Boulevard approaches. Provision of both additional turn lanes would improve future conditions to or better than existing conditions.

- Vineyard Boulevard-Nuuanu Avenue - The project traffic would worsen conditions for the left-turn movements from the Nuuanu Avenue approaches, particularly during the morning peak hour. These left-turn movements do not have protected left-turn phases. Conditions for the left-turn movements could be improved by modifying the signal phasing to provide a protected left-turn phase, particularly in the morning peak hour. *The State Department of Transportation is currently planning to modify the traffic signal to provide this protected left-turn phase.*
- Beretania Street-Alakea Street - The project would worsen conditions at this intersection during the afternoon peak hour, with the forecast traffic approximating 99.5% of the intersection capacity with the project, versus 94.8% without the Project. The short section of mauka-bound lane that extends from Beretania Street to Emma Lane (the future project driveway) should be maintained to permit the mauka-bound Project traffic on Alakea Street to use the shared left-turn/through lane, which directs through traffic into this short lane segment mauka of the intersection. The shared lane is less heavily used than the through lanes during the afternoon peak period, and project traffic use of this lane should have less impact on overall intersection conditions. *The project would also worsen conditions for the right-turn movement from ewa-bound Beretania Street.*
- Kukui Street Connection to Mauka-bound Pali Highway - The traffic islands at the Kukui Street intersection with Pali Highway should be reconstructed to provide two lanes for the right-turn movement from the ewa-bound one-way section of Kukui Street onto mauka-bound Pali Highway. The segment of Kukui Street between the project driveway and Pali Highway would be restriped to provide two right-turn lanes and one left-turn lane. This would require some restriction or removal of the on-street parking on the mauka curb.

On-Street Parking Impacts: Long-term impacts on on-street parking may include the removal or restriction of parking at several locations adjacent to the project site, depending upon which mitigation measures are implemented as a result of future discussions with the City and County of Honolulu Department of Transportation Services:

- Queen Emma Street between Beretania Street and the project Driveway-The three existing stalls along the ewa side curb may be removed, and parking and stopping prohibited along this curb.
- Kukui Street between Queen Emma Street and Pali Highway - Four or more on-street stalls along the mauka curb between the project driveway and Pali Highway could be either removed or restricted from use during the afternoon peak period to provide two right-turn lanes from Kukui Street onto Pali Highway.
- Fort Street between Kukui Street and Beretania Street - The project driveway connection to Fort Street would require the removal of four or five on-street parking stalls along the curb adjacent to Kamalii Park.

Traffic Noise Impacts: Although future traffic noise attributable to the project would be insignificant, development of the proposed project will expose project residents to potentially significant levels of traffic noise based on existing and projected conditions. In particular, elevated residential units in the Southeast Tower which face Beretania and Queen Emma Streets are predicted to be exposed to noise levels between 67 to 69 Ldn, and will probably be in the "Significant Exposure, Normally Unacceptable" noise exposure category. Units facing the Pali Highway are predicted to be marginally above the 65 Ldn FHA/HUD noise standard for residences. Elevated residential units in the Northwest Tower of the project facing Kukui Street are predicted to be marginally below the 65 Ldn standard but whether or not it would be outside of the "Significant Exposure, Normally Unacceptable" category cannot be accurately determined. All other residential units in the project will be in the "Moderate Exposure, Acceptable" category.

Mitigation measures to address long-term traffic noise impacts are limited to the proposed residential uses of the project and include consideration of alternatives such as:

- Utilizing noise-attenuating glazing and wall components and providing air conditioning for the affected units such that windows can be closed when traffic noise levels are high; or,
- Relocating and reshaping the footprint of the Southeast Tower to buffer and shield units facing Beretania Street from traffic noise.

Visual Characteristics: Of the important views identified in Section 3.13, only portions of the mauka views of the Koolau Mountains and Punchbowl are currently available from public vantage points in the vicinity of the project site. The primary public vantage points affected by the project include mauka views of the Koolau Mountains and Punchbowl from the Bishop Street and Alakea Street corridors near Beretania Street,

mauka views of the Koolau Range from further makai on Bishop Street, and makai views from the Punchbowl Lookout. As indicated in Section 3.13, the project's residential towers will be clearly visible from the surrounding area, and in part will block portions of the mauka public views from these designated vantage points. The project's residential towers will not significantly affect makai views from the Punchbowl, although the towers will unavoidably contribute to an increase in visual density of this view.

~~The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors. The project's two high rise residential towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. Although the mass of the towers will be minimized by the neighboring high rise office buildings, the perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing. From street level along Beretania Street, the project's southeast tower is setback to create a visual step back from the retail structure located at ground level. Strategic landscaping will further minimize the overall mass of the tower and retail structures. Placing the project's parking in an underground structure is intended to further minimize visual impacts.~~

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. The twin tower configuration, though not as functionally efficient as a single slab configuration was selected because it has less visual mass, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of existing and future residents, distance from traffic noise on Pali Highway and views of the north tower from Bishop Street. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural detailing of the podium, the towers shafts and caps is intended to minimize their visual impact. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

Social Impacts - Potential long-term social impacts of the project include increased use of the small public park land across Queen Emma Street from the project. One result of this would be that St. Andrew's Priory would seem more a part of its urban surroundings.

The mixture of senior housing with multi-family and retail uses in a same development has the potential for conflicts that will need to be addressed by appropriate design segregating more active environments from quieter environments.

CHAPTER 10

SUMMARY OF UNRESOLVED ISSUES

10. SUMMARY OF UNRESOLVED ISSUES

Unresolved issues are invariably associated with projects in the planning and design stages. Consequently, the planning process, which includes this Environmental Impact Statement, attempts to identify these issues and to develop appropriate mitigative measures.

Project Plan and Design: The conceptual plan and detailed design features of the project remain to be finalized and may undergo revisions based on response to public input and to conform to applicable permits and other requirements. The City Department of ~~Housing and Community Development~~ *Department of Community Services* and the project developer will continue to consult and coordinate with applicable agencies and reviewers during the course of the planning process until the project plans are finalized.

Project Financing: Project financing for the project is currently in the process of being obtained.

Necessary Permits and Approvals: A number of permits and approvals will be required prior to construction of the project, and are listed in ~~Chapter 5~~ *Section 5.10 Permits and Approvals*. Among the approvals is the possible need to pursue exemptions from the amount of open space, the number of parking stalls for the Senior Tower, the *Hawaii Capital* Special District Minor Permit process, and park dedication requirements pursuant to the affordable housing provisions of Chapter 201E, HRS.

Archaeological/Historical Resources: Excavation of the project site to the depths required for the proposed underground parking structure would impact any archaeological resources that may be present. *An archaeological inventory survey with subsurface testing of the project site prior to construction to determine the extent and nature of archaeological and historic deposits and features present will be conducted in coordination with the State Historic Preservation Division. If significant findings are encountered, an appropriate mitigation plan will be prepared. The plan could include data recovery and/or construction monitoring.*

Traffic and Access: Mitigation measures to minimize the disruption of traffic during construction will need to be determined through the preparation of a traffic management plan in consultation with the City Department of Transportation Services which will approve the plan. The loss of public and employee parking during construction will increase parking demand in Downtown. Measures to address the increased demand, such as informing the public of alternative parking in the area and working with the City to identify alternative employee parking locations will need to be considered, and appropriate measures selected for implementation. In the long-term, project-related

traffic will additionally tax the capacity of key intersections that are projected to reach their capacities without the project. Various potential mitigation measures to address project-related traffic impacts will be presented for discussion to the City Department of Transportation Services to determine measures to be implemented.

Utilities: Consultation has been initiated with the Board of Water Supply, City ~~Department of Wastewater Management~~ *Department of Environmental Services*, and the utility companies to determine the adequacy of the respective infrastructure and utility services to accommodate and serve the needs of the proposed project.

Water Quality: Appropriate or applicable Best Management Practices (BMP) to reduce and control the discharge of sediment from construction dewatering effluent will be determined during the National Pollutant Discharge Elimination System (NPDES) permit application process.

CHAPTER 11

REFERENCES

11. REFERENCES

Aloha Tower Associates and Wilson Okamoto & Associates, Inc. *Final Environmental Impact Statement for the Waterfront at Aloha Tower*. Prepared for the State of Hawaii Aloha Tower Development Corporation. December 1990.

City and County of Honolulu. *Development Plans*. 1992.

City and County of Honolulu. *General Plan*. 1992.

City and County of Honolulu Department of Land Utilization. *Hawaii Capital Special District Design Guidelines*. April 1991.

City and County of Honolulu Department of Land Utilization. *Punchbowl Special District Design Guidelines*. June 1995.

Kober/Hanssen/Mitchell Architects. *Block J Downtown Parcels Final Report*. Prepared for the City and County of Honolulu Department of Housing and Community Development. December 1993.

Office of State Planning. *The Hawaii State Plan*. Chapter 226, Hawaii Revised Statutes. 1988.

Parsons Hawaii. *Environmental Impact Statement for the Pacific Nations Center*. Prepared for the City and County of Honolulu Department of Housing and Community Development. January 1989.

State of Hawaii Department of Business, Economic Development and Tourism. *The Hawaii State Plan - Energy. State Functional Plan*. 1991.

State of Hawaii Housing Finance & Development Corporation. *The Hawaii State Plan - Housing. State Functional Plan*. 1989.

Wilson Okamoto & Associates, Inc. *Final Environmental Impact Statement for the Pawa'a Redevelopment Project*. Prepared for the City and County of Honolulu Department of Housing and Community Development and State of Hawaii Housing Finance and Development Corporation. November 1993.

CHAPTER 12

PREPARERS OF THE EIS

12. PREPARERS OF THE EIS

12.1 Proposing Agency

City and County of Honolulu
~~Department of Housing and Community Development~~
Department of Community Services

~~Robert Agres, Jr.~~ *Abelina M. Shaw*
Keith Ishida

Director
Planner

12.2 Project Developer

Coastal Rim Properties, Inc.
Franco Mola
Laura Yamafuji

Makani Coila
Nick Denzer

President
Development Services
Manager
Project Manager
Construction Manager

12.3 Project Architect

Kober/Hanssen/Mitchell Architects
Kurt Mitchell

James Stone

Chairman/Chief Executive
Officer
Associate

12.4 EIS Consultant

Wilson Okamoto & Associates, Inc.
Earl Matsukawa, AICP
Frances Yamada
Troy Fujimoto
Denis Shiu, P.E.
Pete Pascua, P.E.
Ernest Takahashi
Airr Phanthip
Glynn Mayeshiro

Project Manager
Senior Planner
Planner
Civil Engineer
Traffic/Civil Engineer
CADD Specialist
CADD Specialist
Design Layout

12.5 EIS Technical Studies

J.W. Morrow, Environmental Management Consultant	
Jim Morrow	Air Quality
Y. Ebisu & Associates	
Yoichi Ebisu	Noise
Wilbur Smith Associates	
Terry Brothers	Traffic
Cultural Surveys Hawaii	
Hallett Hammatt, PhD.	Archaeology
SMS Research & Marketing Services, Inc.	
John Kirkpatrick	Socio-Economic

CHAPTER 13

CONSULTATION

13. CONSULTATION

13.1 Environmental Impact Statement Preparation Notice Consultation

The following agencies, organizations and elected officials were consulted and comments solicited for the Environmental Impact Statement Preparation Notice. As of June 24, 1998, a total of 19 comment letters and one verbal comment *from the U.S. Department of the Interior, Fish and Wildlife Service* were received. *Two comment letters from the State Department of Land and Natural Resources, Historic Preservation Division and City Department of Parks and Recreation were received after the 30-day comment period for the EIS Preparation Notice.* Of those who formally replied, some had no comments while others provided substantive comments as indicated by the * and **, respectively. All written comments and responses are reproduced herein.

Federal

- U.S. Army Engineer Division
- * U.S. Department of the Interior, Fish and Wildlife Service
- U.S. Department of Housing and Urban Development

State of Hawaii

- ** Department of Accounting and General Services
- Department of Business, Economic Development and Tourism
- Department of Business, Economic Development and Tourism, Energy, Resources & Technology Division
- ** Office of Planning
- Department of Defense
- ** Department of Education
- Department of Health
- Department of Land and Natural Resources
- ** Department of Land and Natural Resources, Historic Preservation Division
- Department of Transportation
- * Office of Hawaiian Affairs
- ** Office of Environmental Quality Control
- University of Hawaii Environmental Center
- * Land Use Commission

City and County of Honolulu

- ** Planning Department
- Department of Land Utilization
- ** Board of Water Supply
- Building Department
- * Department of Public Works
- Department of Transportation Services
- ** Department of Wastewater Management
- ** Department of Parks and Recreation
- Department of Finance
- ** Police Department
- * Fire Department

Organizations

- ** Downtown Neighborhood Board No. 13
- The Chamber of Commerce of Hawaii
- ** The Outdoor Circle

Elected Officials

Senator Rod Tam
Representative Kenneth T. Hiraki
Councilmember Jon Yoshimura
Councilmember Andy Mirikitani

Utility Companies

- ** Hawaiian Electric Company, Inc.
- ** GTE Hawaiian Telephone Company
- ** Oceanic Cable
- * The Gas Company

Individuals

- ** Ronald K.K. Lee

JUN 18 1998

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

RECEIVED
JUN 22 1998

Attention: Mr. Patrick Onishi

WILSON OKAMOTO & ASSOC., INC.

Gentlemen:

Subject: Block J. Redevelopment Project
Environmental Impact Statement (EIS)
Preparation Notice
Tax Map Key 2-1-09:18 and 27
Honolulu, Oahu, Hawaii

Thank you for the opportunity to review the subject EIS Preparation Notice which we received with Wilson Okamoto & Associates, Inc.'s May 20, 1998 letter.

Our comments follow:

1. The additional parking should decrease the vehicular traffic into and out of the downtown area because of the convenience of parking. But, a major concern is that the project will increase the traffic congestion into and out of the downtown area which will impact the State Capitol District.
2. Street and traffic improvements to improve traffic flow in the State Capitol District should be included as part of the overall project and be completed prior to completion of the Block J redevelopment.

If there are any questions, please have your staff contact Mr. Ronald Ching of the Planning Branch at 586-0490.

Sincerely,


GORDON MATSUOKA

Public Works Administrator

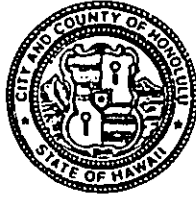
RC:jk

c: Department of Housing and Community Development
Wilson Okamoto & Associates, Inc.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-3498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Gordon Matsuoka
Public Works Administrator
Department of Accounting and General Services
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Matsuoka:

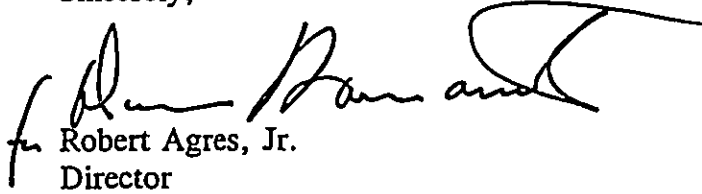
Thank you for your letter dated June 18, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

1. The Draft EIS includes a traffic impact study which accounts for the additional traffic associated with expanded public parking.
2. Potential mitigation measures are discussed which could address traffic congestion at key intersections affected by the project. These mitigation measures are subject to review and approval by the City Department of Transportation Services (DTS). The implementation schedule for these improvements will also be determined in consultation with the DTS since much of the projected traffic growth assumed in the study will occur independent of the project and are based on a conservative "worst-case" factor.

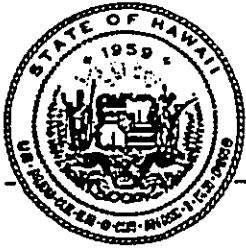
Letter to Mr. Gordon Matsuoka
June 25, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


for Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

BENJAMIN J. CAYETANO

GOVERNOR

SEIJI F. NAYA

DIRECTOR

BRADLEY J. MOSSMAN

DEPUTY DIRECTOR

RICK EGGED

DIRECTOR, OFFICE OF PLANNING

OFFICE OF PLANNING

235 South Beretania Street, 6th Flr., Honolulu, Hawaii 96813

Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Tel.: (808) 587-2846

Fax: (808) 587-2824

Ref. No. P-7493

June 10, 1998

Mr. Patrick T. Onishi
Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

RECEIVED
JUN 15 1998

WILSON OKAMOTO & ASSOC, INC.

Dear Mr. Onishi:

**Subject: Block J. Redevelopment Project, Environmental Impact Statement (EIS)
Preparation Notice, Tax Map Key 2-1-09: 18 & 27**

We have reviewed the Environmental Impact Statement Preparation Notice for the Block J Redevelopment Project, Honolulu, Oahu, Hawaii. Page 3-12 indicates that the project does not require a Special Management Area (SMA) Permit because it is outside of the SMA boundary. Nevertheless, the project will require an assessment of the potential impacts relative to the objectives and policies of Chapter 205A, Hawaii Revised Statutes, because the Coastal Zone is defined as all lands within the State.

In addition, because of the potential for polluted runoff from construction sites, the EIS should include mitigation measures to control polluted runoff during construction activities. Some recommended measures can be found in our Coastal Nonpoint Pollution Control Program Management Plan.

If there are any questions, please contact Steve Olive of our CZM Program at 587-2877.

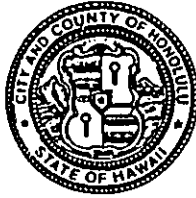
Sincerely,

Rick Egged
Director
Office of Planning

cc: Seiji F. Naya
Darwin Hamamoto
✓ Earl Matsukawa

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498



JEREMY HARRIS
MAYOR

ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Rick Egged, Director
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Egged:

Thank you for your letter dated June 10, 1998 (Ref. No. P-7493), concerning the subject EIS Preparation Notice.

Pursuant to your comment, the Draft EIS includes an assessment of the potential impacts of the project relative to the objectives and policies of Chapter 205A, Hawaii Revised Statutes. The Draft EIS also includes a discussion regarding measures to control polluted runoff during construction activities.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Agres, Jr.", is written over a horizontal line.

Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

Central Int.
FACILITIES' COPY

HERMAN M. AZAWA, Ph.D.
SUPERINTENDENT

SENT JUN 12 1998

OFFICE OF THE SUPERINTENDENT

June 8, 1998

Mr. Patrick T. Onishi
Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

RECEIVED
JUN 19 1998

WILSON OKAMOTO & ASSOC., INC.

Dear Mr. Onishi:

Subject: Block J Redevelopment Project EISPN

The Department of Education (DOE) offers the following comments on the subject environmental impact statement preparation notice (EISPN):

1. The proposed 913 affordable rental units are projected to have the following enrollment impact on area schools as indicated below:

<u>School</u>	<u>1997 Capacity</u>	<u>1997 Enrollment</u>	<u>Sustained Enrollment Impact</u>
Royal Elementary (K-5)	428	455	34
Central Middle (6-8)	906	482	10
McKinley High (9-12)	1,971	1,981	12

2. The DOE's fair-share requirement is \$1,125 per unit, or a total of \$1,027,125 for the 913 units. The \$1,125 fee would not apply to the 475 senior units if the leases for those units explicitly prohibit non-elderly residents. In that situation, the fair-share requirement would be \$492,750 for the 438 non-elderly units.

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

Mr. Patrick T. Onishi
Page 2
June 8, 1998

The fair-share contribution otherwise applies to all residential units regardless of affordability or renter demographics. The contributions would be used for capital improvement projects in the McKinley High School complex.

We emphasize the importance of having adequate school facilities in place for the future residents of Block J. In that regard, we welcome the opportunity to meet with representatives of the proposed project to further discuss the fair-share contribution.

If you have any questions, please call Mr. Sanford Beppu at 733-4862.

Sincerely,



Herman M. Aizawa, Ph.D.
Superintendent

HMA:hy(*AB*)

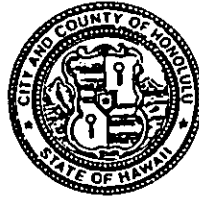
cc: A. Suga, OBS
M. Shishido, HDO
D. Hamamoto, HCD
E. Matsukawa, Wilson Okamoto & Associates, Inc. ✓

JUN 16 1 40 PM '98
FACILITIES BRANCH

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX (808) 527-5498

JEREMY HARRIS
MAYOR



June 25, 1998

ROBERT AGRES JR
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

Mr. Herman M. Aizawa, Ph.D.
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, Hawaii 96804

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Dr. Aizawa:

Thank you for your letter dated June 8, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

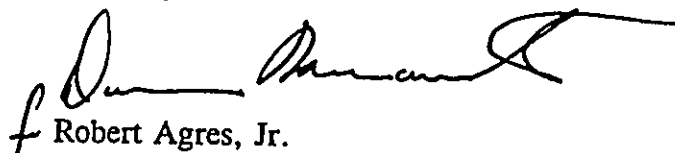
1. Thank you for providing the DOE's enrollment projections for the proposed project. These projections are included in the Draft EIS.
2. We acknowledge the applicability of the DOE's fair-share contribution requirement to the residential units in the proposed project and have included a discussion pertaining to the requirement in the Draft EIS.

The project developers have been informed of the fair-share contribution requirement and will be responsible for addressing it in consultation with your department.

Letter to Mr. Herman Aizawa, Ph.D.
June 25, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

June 22, 1998

RECEIVED
JUL 08 1998

WILSON ORAMOTO & ASSOC., INC.

Patrick T. Onishi
Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

LOG NO: 21563 ✓
DOC NO: 9806EJ14

Dear Mr. Onishi:

**SUBJECT: Historic Preservation Review -- Environmental Impact Statement Preparation
Notice (EISPN): Block J Redevelopment Project
Honolulu, Kona, O'ahu
TMK: 2-1-9:18 and 27**

Thank you for the opportunity to review the EISPN for the block J Redevelopment Project. A review of our records shows that there are no known historic sites at the project location. However, an assessment of the archaeological potential at the Block J parcel conducted in 1983 found that the probability of encountering subsurface historic sites is very high. Archaeological investigations in surrounding areas within the downtown Honolulu have uncovered both pre-contact and post-contact cultural deposits. Many of these archaeological deposits have been habitation deposits associated with the precontact and early historic use of Honolulu. Such deposits can contain very important information on the past. For example, other projects have uncovered information on the residences of Kamehameha's high ranking retainers and on earlier times. Burials associated with some of these residences have also been found.

Given the above information, we recommend that an archaeological inventory survey with subsurface testing be performed to determine if historic sites are present, and, if so, to gather sufficient information to evaluate their significance. A report of the finds should be submitted to the State Historic Preservation Division for review.

If significant historic sites are found during the survey, a mitigation plan may need to be developed and executed. This may involve archaeological salvage (data recovery) excavations.

Patrick T. Onishi

Page 2

Time should be allowed for planning for the survey, review of the report on findings, agreement on mitigation commitments and development of a scope for mitigation work, and the execution of the mitigation fieldwork. Survey test excavations and report write-up can involve a number of months (3-5 months). If the report needs revision before it acceptably documents the findings, 1-3 months might be involved in this step. A mitigation scope may take a month to fine-tune. Salvage excavations can take 1-2 months in the field, depending on the amount of work needed. It is important that the City & County allow enough time on these matters, so construction can begin without delays. The quicker the survey begins, clearly the more rapidly the project can move through the historic preservation process.

In addition, the Central Firestation adjoins the project area. New construction should be so designed as to not adversely effect this property either in a visual manner or structurally.

If you have any questions please call Sara Collins at 587-0013 or Elaine Jourdane at 587-0014, regarding archaeology or Carol Ogata at 587-0004 regarding architecture.

Aloha,

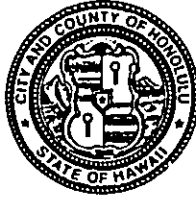

Don Hibbard, Administrator
State Historic Preservation Division

EJ:jen

cc: Darwin Hamamoto, Department of Housing and Community Development, City &
County of Honolulu, 650 South King St. Honolulu, Hawaii 96813
~~Earl Matsukawa, Wilson Okamoto, & Associates, Inc., 1907 S. Beretania Street,~~
Suite 400, Hon, HI 96826

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Hibbard:

Thank you for your letter dated June 22, 1998 (Ref. Log No.: 21563, Doc No.: 9806EJ14), concerning the subject EIS Preparation Notice. As your letter was received after the 30-day comment period for the EIS Preparation Notice, it was not included in the Draft EIS.

The archaeological assessment conducted for the project's Draft EIS affirms the high probability of encountering subsurface historic sites at this site.

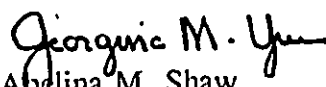
We have apprised the project developer of the need to conduct an archaeological inventory survey with subsurface testing to determine the presence of historic sites, to recommend mitigation, if needed, and to submit the report findings to your Department for review. If significant findings are encountered, an appropriate mitigation plan will be prepared and pursued. We appreciate your informing us of the anticipated timeframe involved in undertaking this process.

As discussed in Section 3.8 Noise of the Draft EIS, impact pile driving equipment capable of propagating ground vibrations that could potentially damage nearby structures such as the Central Fire Station will not be used during construction of the project. In the long-term, visual impacts on the Central Fire Station will be minimal since Kamalii Park will be reconstructed following construction of the underground parking garage. The proposed concept for the reconstructed park is to provide a visual transition from the "greenery" of the Pali Highway area mauka of the project site to the urban district near Beretania Street.

Letter to Mr. Don Hibbard
September 11, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Georgina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

JUN-16-98 TUE 13:41 PLANNING DEPT C&C

P. 02/03

6/98-1147

PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

June 04, 1998

Mr. Patrick T. Onishi
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

EIS No. 185

Subject: Environmental Impact Statement (EIS) Preparation Notice for Block J
Redevelopment Project, Honolulu, Island of Oahu

Dear Mr. Onishi:

Thank you for the opportunity to review the Environmental Impact Statement (EIS) Preparation Notice for Block J Redevelopment Project, Honolulu, Island of Oahu. The City & County of Honolulu is proposing to develop a mixed use affordable rental residential and retail complex in Downtown Honolulu, encompassing two parcels bounded by Beretania, Queen Emma, Kukui, and Fort Streets.

The Office of Hawaiian Affairs (OHA) has no objections at this time to the EIS Preparation Notice. But OHA intends to thoroughly review the EIS once the document is available for public review. Because of the size and scope of the development, OHA expects the applicant to fully address several potential adverse impacts on (i) adjacent urban areas, (ii) vehicular traffic, (iii) air quality and noise, and (iv) scenic resources.

Letter to Mr. Patrick T. Onishi
June 04, 1998
Page 2

Please contact Colin Kippen (594-1938), L.N.R. Officer, or Luis Manrique (594-1758), should you have any questions on this matter.

Sincerely yours,



Randall Ogata
Administrator



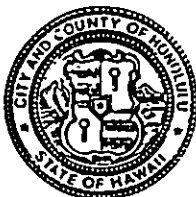
Colin Kippen
Officer,
Land and Natural
Resources Division

cc: Board of Trustees
OEQC

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Colin Kippen, Officer
Land and Natural Resources Division
Office of Hawaiian Affairs
State of Hawaii
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Kippen:

Thank you for your letter dated June 4, 1998, concerning the subject EIS Preparation Notice. The Draft EIS will fully address potential impacts on adjacent urban areas, vehicular traffic, air quality, noise, and scenic resources.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Agres, Jr.", is written over a printed name and title.

Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4186

RECEIVED
JUN 16 1998

June 12, 1998

WILSON OKAMOTO & ASSOC., INC

Robert Agres, Jr.
Department of Housing and Community Development
650 South King Street, 5th Floor
Honolulu, Hawaii 96813

Attention: Darwin Hamamoto

Dear Mr. Agres:

Subject: Environmental Impact Statement (EIS) Preparation Notice for Block J
Redevelopment Project, Honolulu

We have the following comments to offer:

1. Funding: The total project cost is given at \$110 million. Please disclose the source of the funding, including any federal funds flowing through the state or county.
2. Contacts: Notify the nearest neighbors or neighboring landowners of the proposed project, allowing them sufficient time to review the EIS prep notice and submit comments. Document all contacts in the draft EIS and include copies of any correspondence, including those received during the pre-consultation phase.
3. Resource conservation measures: Please describe any element or material being used in this project to promote environmentally sensitive and energy efficient design, such as low-flush toilets, solar panels or energy-efficient fixtures (such as compact fluorescent lights) or building designs allowing natural ventilation.
4. Construction impacts: In the draft EIS fully describe construction impacts and related mitigation measures.

Robert Agres, Jr.
June 12, 1998
Page 2

5. Visual impacts: Identify public viewpoints of the project site from which visual impacts may occur, especially of mauka and makai viewplanes. Show these impacts by superimposing a rendering of the proposed facility onto photographs taken from public vantage points. In particular, evaluate the visual impacts of the project to the Bishop Street and Alakea Street view corridors. We recommend that alternatives that widen or preserve the view corridors be considered.
6. Traffic impacts: Please describe whether any traffic lanes near the project site will be closed during construction. If so, the traffic impact assessment must evaluate traffic conditions with the lanes closed.
7. Capital Special District: In the draft EIS include a fuller discussion of the project in relation to this special district and the district parameters and limitations.

If you have any questions, call Nancy Heinrich at 586-4185.

Sincerely,

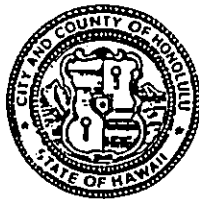


GARY GILL
Director

c: Patrick Onishi, CCH Planning Dept.
Earl Matsukawa, Wilson Okamoto

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498



JEREMY HARRIS
MAYOR

ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Gill:

Thank you for your letter dated June 12, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

1. Total development cost for the project, including construction cost, is estimated at \$154 million. Federal, State and City funds will be used to finance the project. This information will be included in the Draft EIS.
2. Neither Chapter 343, Hawaii Revised Statutes nor Title 11, Chapter 200, Hawaii Administrative Rules require that "neighbors", which could conceivably include landowners, leaseholders, condominium owners, lessees, tenants, and occupants be specifically notified of projects undergoing review through the EIS process. Moreover, there are no requirements for modifying prescribed review periods for accommodating reviews by such neighbors. The project was presented to the Downtown Neighborhood Board and the Board was provided with a copy of the EIS Preparation Notice. In addition, in the course of preparing the socio-economic impact assessment for the Draft EIS, SMS Research and Marketing Services, Inc. conducted several interviews with neighbors and other stakeholders, including owners of businesses in the vicinity of the proposed project.

All contacts related to the project have been documented in the Draft EIS.

3. The project architects are pursuing the principles of "green" building design which incorporates as much sustainable architecture as possible. All fixtures will be considered for energy efficiency and sustainability. The design will take into account the building color, window fenestration, natural ventilation, and exposure. The buildings are sited to allow maximum use of natural daylight and wind for ventilation. Use of heat pumps, low fixture toilets and other equipment that will allow high quality use at a relatively low cost will be considered.

4. The Draft EIS provides a complete description of relevant construction impacts and mitigation measures.

5. A computer simulation of the visual impact of the proposed project from key public viewpoints, including Bishop and Alakea Streets, is included in the Draft EIS with a discussion of relevant policies pertaining to the preservation of view corridors.

Various alternative building locations and configurations were considered in developing the current proposal, taking into account factors such as functions, aesthetics, and environmental and social impacts.

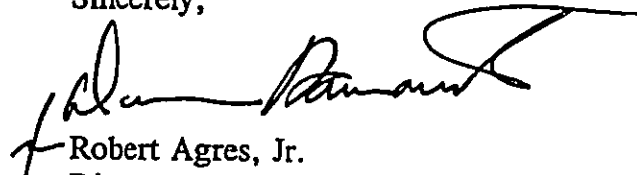
6. The Draft EIS will include a discussion of potential traffic lane closures during construction based on current construction considerations. A traffic management plan for the construction phase of the project will need to be prepared for approval by the City Department of Transportation Services (DTS). While discussions have been initiated with DTS, development of the plan will be on-going well beyond EIS processing. In general, the intent is to keep all traffic lanes open during peak traffic periods. This includes the traffic lanes of Pali Highway which will be rerouted within the project site during the construction of the underground parking structures.

7. The Draft EIS includes a discussion of the project in relation to the Hawaii Capital Special District, including the District's design parameters and limitations.

Letter to Mr. Gary Gill
June 25, 1998
Page 3

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,



Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.

BENJAMIN J. CAYETANO
GOVERNOR



ESTHER UEDA
EXECUTIVE OFFICER

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LAND USE COMMISSION

P.O. Box 2359
Honolulu, HI 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

May 22, 1998

RECEIVED
MAY 26 1998

WILSON OKAMOTO & ASSOC., INC.

Mr. Patrick T. Onishi
Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Onishi:

Subject: Environmental Impact Statement Preparation Notice
(EISPN) for the Block J Redevelopment Project,
Honolulu, Oahu, Hawaii, TMK 2-1-09: 18 and 27

We have reviewed the EISPN for the subject project and confirm that the project site, as represented on the location map, is designated within the State Land Use Urban District.

We have no further comments to offer at this time. We appreciate the opportunity to comment on the subject EISPN.

Should you have any questions, please feel free to call me or Bert Saruwatari of our office at 587-3822.

Sincerely,

A handwritten signature in cursive script, appearing to read "Esther Ueda".

ESTHER UEDA
Executive Officer

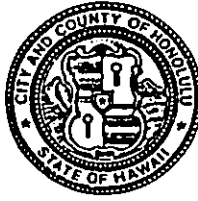
EU:th

cc: Darwin Hamamoto
Earl Matsukawa
OEQC

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Ms. Esther Ueda
Executive Officer
Land Use Commission
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Ms. Ueda:

Thank you for letter dated May 22, 1998, confirming that the project site is designated within the State Land Use Urban District.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Agres, Jr.", is written over a horizontal line. The signature is fluid and cursive.

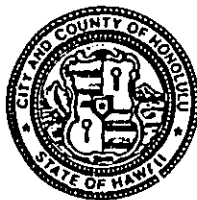
Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 8TH FLOOR • HONOLULU, HAWAII 96813-3017
PHONE: (808) 523-4533 • FAX: (808) 523-4950

JEREMY HARRIS
MAYOR



PATRICK T. ONISHI
CHIEF PLANNING OFFICER

DONA L. HANAIKE
DEPUTY CHIEF PLANNING OFFICER

RECEIVED
JUN 19 1998


TH 5/98-1076

June 15, 1998

WILSON OKAMOTO & ASSOC. INC

TO: ROBERT AGRES, JR., DIRECTOR
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

ATTN: PATRICIA TOMPKINS

FROM: PATRICK T. ONISHI 
CHIEF PLANNING OFFICER

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
(EISPN) FOR THE BLOCK J REDEVELOPMENT PROJECT,
HONOLULU, OAHU, HAWAII, TAX MAP KEY: 2-1-09:18 AND 27

In response to the letter from Wilson Okamoto & Associates, Inc., dated May 20, 1998, we have reviewed the subject EISPN and offer the following comments.

Project Description

1. In Section 1.5, the proposed project will consist of approximately 913 affordable one- and two-bedroom units located within two high-rise towers. However, there are no conceptual floor plans indicating the number and type of units per floor.

Additionally, the proposed project's site plan (Figure 1-3) and Pali Elevation Plan (Figure 1-4) appears quite detailed; however, the drawings do not convey enough information regarding access, parking, circulation of surrounding streets, building scale and amenities, and abutting properties.
2. Figure 1-3 appears to show only one driveway along Pali Highway to serve the proposed project.

3. Access to, and the location of the proposed 20 at-grade parking stalls and 10 loading stalls are not clearly identified in Figure 1-3. Furthermore, neither the site plan nor elevation provide details about the configuration of the 3-level underground parking structure. Furthermore, there is no information regarding potential impacts to, or the temporary closure of Kamalii Park during construction of the proposed project.
4. Figure 1-3 does not identify the number of lanes and the direction of traffic flow on Pali Highway, Beretania Street, Queen Emma Street and Kukui Street.
5. Both Figures 1-3 and 1-4 lack a graphic scale to help determine the approximate size of the project area.
6. Figure 1-4 does not identify certain measurements such as base elevations, floor-to-floor heights and overall building height. Furthermore, the elevation plan does not show the proposed project's height and mass in relation to surrounding structures.
7. The project description does not adequately explain what types of commercial uses are planned for the first two floors. Furthermore, there is no information regarding what types of pedestrian amenities will be provided on the ground floor, recreation deck and arcade area.

As such, we recommend that the draft EIS be revised to include the following information:

1. Section 1.5 should include information regarding the total number of one- and two-bedroom units proposed for the project, their relative size in square feet, and conceptual floor plans showing their layout.
2. Figure 1-3 needs to be revised to clearly identify all ingress and egress points to the proposed project. Also, we are concerned that the driveway along Pali Highway may impact traffic travelling on Pali Highway as they enter and/or exit the project.
3. Figure 1-3 should identify access to, and the location of the 20 at-grade and 10 loading stalls to be located on site. Additional drawings should be included to show the configurations for the two alternative 3-level underground parking structure concepts including circulation patterns and ingress/egress points.

The project description should explain whether Alternative 2 (p. 1-7) which will provide an additional 373 parking stalls under Kamalii Park will impact the public's use of the park during construction.

4. Figure 1-3 should be revised to clearly identify the number of lanes and direction of traffic on the sections of Pali Highway, Beretania Street, Queen Emma Street and Kukui Street which surround the project site.
5. Both Figures 1-3 and 1-4 should include a graphic scale in the margin to help determine the proposed project's approximate size.
6. Figure 1-4 should be revised to provide the following information: measurements including the height of the base elements such as building eaves and arches to provide a sense of pedestrian scale; floor by floor heights and the overall height for both high rise towers; and additional elevation perspectives of the proposed project from Beretania Street, Queen Emma Street and Kukui Street to better illustrate the project's height and mass in relation to surrounding structures. The additional perspective views should also show existing structures such as the Queen Emma Building on abutting properties.
7. The project description should explain what types of commercial activities are contemplated for the first two floors. Furthermore, the project description should describe the location and types of pedestrian amenities which will be provided on the ground level, recreation deck and arcade areas.

Access, Traffic and Utilities

1. The proposed project's close proximity to the central business district and its location along roadways on all four sides give the project significant advantages in terms of location and access.

First, the site's close proximity to government, business and financial institutions and retail establishments should encourage residents to walk to and from these establishments instead of driving.

Second, the project site is bounded by major rights-of-way such as Pali Highway and Beretania and Queen Emma Streets which are served by public transportation. For instance, an existing bus stop is located within the project boundary on the mauka side of Beretania Street between the intersections of Pali Highway/Bishop Street and Beretania Street, and Beretania and Queen Emma/Alakea Street.

Therefore, Section 2.9.1 of the draft EIS should explain where pedestrian and vehicular access to the proposed project will be located including access and loading areas for service vehicles. Second, the draft EIS should explain how its location would encourage residents to walk or use public transportation rather than driving. Third, the draft EIS should explain the feasibility of improving the existing bus stop on Beretania Street with a turn out to minimize traffic congestion during the morning and afternoon peak periods.

3. Pali Highway is a major arterial which bisects the project site. Although the Pali Highway right-of-way may not be directly impacted during construction, Section 2.9.1 of the EISPN does not mention whether there may be any short term impacts to the Pali Highway during construction.

Section 2.9.1 of the draft EIS and the separate traffic impact assessment should disclose any possible disruptions to Pali Highway and what mitigation measures are planned to minimize traffic congestion during construction.

City and County of Honolulu General Plan

The proposed mixed use development concept is consistent with the existing objectives and policies of the General Plan which are cited in Section 3.4. We recommend that the draft EIS include the following two General Plan policies because they address the requirement to protect public views of well known natural features such as Punchbowl and Diamond Head.

III. Natural Environment

Objective B: To preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors.

Policy 2: Protect Oahu's scenic views, especially those seen from highly developed and heavily travelled areas.

VII. Physical Development and urban Design

Objective E: To create and maintain attractive, meaningful, and stimulating environments throughout Oahu.

Policy 4: Require the consideration of urban-design principles in all development projects.

Public views along major rights-of-way and of significant natural features such as Punchbowl and Diamond Head Craters need to be protected, to the extent possible even in highly urbanized areas such as downtown. Therefore, we recommend that Section 3.5 of the draft EIS address how the developer intends to protect existing mauka-makai views as well as views of Punchbowl and Diamond Head Craters.

City and County of Honolulu Development Plan

1. The proposed project is located within the Primary Urban Center. Section 3.5 correctly identifies the project site's Development Plan (DP) land use designation as Commercial Emphasis Mixed Use and that the project site is within the Downtown Special Area. Furthermore, the proposed 350-foot height of the two high rise towers is consistent with the project site's general height limit of 350 feet as specified in Section 24-2.2(b)(1)(I) of the DP Special Provisions for the Primary Urban Center.

Additionally, the Pali Highway/Bishop Street and Alakea Street/Queen Emma Street roadways are considered major mauka-makai view corridors. Protection of public views, including views along streets and highways is an important urban design policy referenced in both Section 24-1.4(a) of the DP Common Provisions; and Sections 24-2.2(a)(2), 24-2.2(b)(H) and (J) of the DP Special Provisions for the Primary Urban Center. Section 24-2.2(b)(J) states:

"Special height, design and use controls may be applied where necessary to ensure the preservation of important views, landmarks and historical structures, and the compatibility of the mixture of uses within the area."

As such, the draft EIS should expand its discussion of the City's DP by disclosing these policies regarding public views and discuss how the project's design will protect or mitigate any adverse impacts on existing mauka-makai views along Pali Highway.

2. Section 3.5.1 and Figure 3-2 of the EISPN designates a portion of the project site as "Government Building/Modification," on the Primary Urban Center DP Public Facilities Map. Figure 3-2 also shows symbols for future utilities and facilities along portions of Pali Highway, Kukui Street, and Queen Emma Street. Additionally, the legend for Figure 3-2 incorrectly identifies the GB/M symbol as "Government building/Mall."

The existing Government Building/Modification symbol which covers TMK:2-1-09:18 was placed on the site for a future development which included public parking. Since the proposed mixed use development includes public parking, the Government Building/Modification symbol should remain on the Primary Urban Center DP Public Facilities Map. Also, the legend for Figure 3-2 should be corrected to properly identify the GB/M symbol as "Government Building/Modification."

3. The Planning Department is currently revising its existing DP for the Primary Urban Center. Once adopted, the revised DP, will guide growth and development within the Primary Urban Center over the next 20 years. Based on discussions at workshops, focus groups, and interviews and administration initiatives in 1997, several themes have emerged which form the broad vision for Honolulu's future. The proposed concept is generally consistent with themes such as "The City of Livable Neighborhoods," and "the City for People; not cars" which will guide the growth and development policies for the Primary Urban Center to the year 2020.

Exemptions to Development Standards

Although the project proposes a total of 1,896 on site parking stalls; 25,500 square feet of open space; and 50,000 square feet allocated for park dedication, there is no information provided on the minimum development standards which must be met under the City's Land Use Ordinance (LUO). The draft EIS needs to disclose whether the project's development program will meet or exceed the minimum development standards in the LUO regarding on-site parking, open space, and park dedication requirements and how these standards will be met. The draft EIS also needs to disclose whether the developer will be seeking exemptions to these or other standards.

Robert Agres, Jr., Director
Department of Housing and Community Development
June 15, 1998
Page 7

Alternatives to the Proposed Action

Section 4.3 states that a "number of alternative site development concepts were developed as part of the master planning process..." however, the number of alternatives developed and a description of each concept is unclear. Furthermore, the justification for selecting the proposed project over the other development concepts as the "preferred alternative" is also unclear.

Therefore, this section of the draft EIS should be revised in the following manner. First, the draft EIS should state the number of development concepts reviewed. Second, each development concept should be described separately, including the proposed project. Finally, there should be an explanation as to why the proposed project is considered the preferred alternative.

Thank you for the opportunity to comment on this matter. Should you have any questions, please contact Tim Hata of our staff at 527-6070.

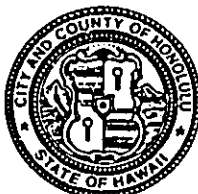
PTO:ft

c: ✓ Wilson Okamoto & Associates, Inc.
Attention: Mr. Earl Matsukawa

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR




ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

MEMORANDUM

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: *f* ROBERT AGRES, JR., DIRECTOR 
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated June 15, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

Project Description

1. More specific design information is tentative at this time and was not included in the Draft EIS since it does not have a direct bearing on the assessment of the environmental and social impacts of the project.
2. The Site Plan shown in Figure 1-3 of the EIS Preparation Notice has been revised in the Draft EIS to identify the proposed ingress and egress points to the proposed project. Further refinement of driveway locations and configurations to minimize impacts on traffic flow will be pursued with the City Department of Transportation Services, which will approve the final design.
3. The location of the at-grade parking and loading stalls has yet to be determined. The proposed ingress/egress points for the underground parking structure are shown in the Site Plan for the Draft EIS and the Traffic Impact Study accounts for the movement of vehicles at these points. A preliminary plan for the first level of the parking structure has been included in the Draft EIS.

Extension of the parking structure under Kamalii Park is no longer an alternative but part of the proposed project as described in the Draft EIS. The park will be demolished and the site will be excavated to build the parking structure, after which the park will be reconstructed over the structure. There will be no public use of the park during construction. The project designers will work with the City Department of Parks and Recreation on final designs for the reconstructed Kamalii Park.

4. The number of lanes and direction of traffic on Pali Highway, Beretania Street, Queen Emma Street and Kukui Street are shown in figures included in the Traffic Impact Study.
5. A graphic scale for the project Site Plan has been included in the Draft EIS, however, the scale for the Pali Highway elevation drawing was not available. The intent of the elevation drawing is to provide a sense of the overall visual character of the project.
6. While we appreciate your concern for the sense of pedestrian scale of the ground level structures, these architectural features have little bearing on the assessment of environmental and social impacts at levels addressed in the Draft EIS. Inasmuch as further refinement of the project's design will be pursued with the City, we welcome your continued input in these discussions.

A sense of the project's height and mass in relation to nearby structures, including the Queen Emma Building, is provided in Section 3.13 Visual Characteristics of the Draft EIS. This section includes photographic simulations of the project as viewed from key public vantage points.

7. The Draft EIS states that the retail component is currently envisioned as an entertainment complex, with establishments potentially including a theater complex, a major retailer and restaurants. The specific location and types of pedestrian amenities which will be provided on the ground level, recreation deck and arcade areas have yet to be determined. Again, we welcome your continued input in refining the project's design.

Access Traffic and Utilities

1. As mentioned previously, the Draft EIS will include the proposed locations of vehicular access to the project. The locations of pedestrian access and loading areas for service vehicles have yet to be determined and are subject to further input.

The Draft EIS discusses the location of the project with respect to the Downtown employment center and the public transit trunk lines. These advantages, however, were not considered in the Traffic Impact Study which is based on conservative assumptions regarding the amount of traffic generated by the project.

Section 3.9.1 Public Transportation of the Draft EIS discusses the improvement of conditions at the existing Beretania Street bus stop adjacent to the project site as a result of the proposed project. While a turn-out would allow traffic to flow around a bus while passengers are boarding and disembarking, given the amount of traffic on Beretania Street, buses would have difficulty re-entering the traffic lane. Therefore, a bus turn-out is not currently proposed.

2. The Draft EIS discusses a proposal to reroute traffic lanes of the Pali Highway within the project site during construction of the underground parking structure beneath the Highway and Kamalii Park. Up to four travel lanes during peak traffic hours will be provided to replace the existing four lanes of the Highway. The number and configuration of the temporary travel lanes during various phases of construction will be determined in consultation with the City Department of Transportation Services in developing a traffic management plan for the construction phase of the project. While the temporary roadways will help to maintain traffic flow, travel speed will be slower, and motorists' unfamiliarity with the routes, and signage warning of on-going construction will increase traffic congestion in the area.

City and County of Honolulu General Plan

Pursuant to your recommendation, the discussion of the project's relationship to the General Plan objectives and policies on the *Natural Environment* and *Physical Development and Urban Design* have been included in the Draft EIS. This discussion is supported by photographic simulations of the project as viewed from key public vantage points.

City and County of Honolulu Development Plan

1. Pursuant to your recommendation, the Draft EIS includes an expanded discussion of the project's design in relation to the City's DP policies regarding public views, including the Pali Highway/Bishop Street and Alakea Street/Queen Emma Street view corridors.
2. We appreciate your clarification of the GB/M symbol being consistent with the proposed project, as well as your correction of the legend in Figure 3-2. These have been incorporated in the Draft EIS.

Memorandum to Patrick T. Onishi
June 25, 1998
Page 4

3. We appreciate your update on the Primary Urban Center Development Plan Revision program. The Draft EIS will include a discussion of this program.

Exemptions to Development Standards

Due to the unique aspects of the project, including the inclusion of a segment of Pali Highway and the existing Kamalii Park within the project site, as well as the requirement to provide public parking, compliance with the applicability of certain minimum standards of the Land Use Ordinance to the project has yet to be determined by the Department of Land Utilization. A discussion of the considerations and the potential need to pursue exemptions from these standards is included in the Draft EIS.

Alternatives to the Proposed Action

The discussion of alternative site development concepts has been revised in accordance with your recommendations in the Draft EIS.

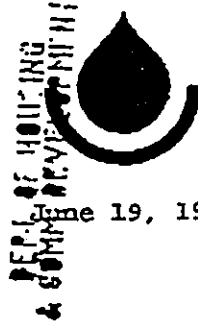
Your memorandum, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843
PHONE (808) 527-6180
FAX (808) 533-2714

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June 19, 1998

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman
EDDIE FLORES, JR.
KAZU HAYASHIDA
JAN M. L. Y. AMI
FORREST C. MURPHY
JONATHAN K. SHIMADA, PhD
BARBARA KIM STANTON

BROOKS H. M. YUEN, Acting
Manager and Chief Engineer

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: *Brooks H. M. Yuen*
BROOKS H. M. YUEN, ACTING MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE FOR THE BLOCK J
REDEVELOPMENT PROJECT, TMK: 2-1-09: 18, 27

Thank you for the opportunity to review the Environmental Impact Statement Preparation Notice for the proposed residential and commercial complex.

We have the following comments to offer: . . .

1. The off-site water system is presently adequate to accommodate the proposed development.
2. The proposed project demands are greater than 250,000 gallons per day. The developer will therefore be required to develop a source to serve the project. If developing water source is not feasible, the developer may pay our Regional Source Charge which is based on proposed regional water sources in our six-year Capital Improvement Program. Our regional cost is presently \$5.75 per gallon.

The availability of water will be determined when the Building Permit Applications are submitted for our review and approval. If water is made available, the applicant will be required to pay the Regional Source Charge if applicable, and our Water System Facilities Charges for transmission and daily storage.
3. There are existing 1-inch and 1-1/2-inch water meters serving TMK: 2-1-09: 18 and 2-1-09: 27, respectively.
4. If a three-inch or larger water meter is required, the construction drawings showing the installation of the meter should be submitted for our review and approval.
5. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.
6. Board of Water Supply approved reduced pressure principle backflow prevention assemblies are required to be installed immediately after each water meter serving the site.

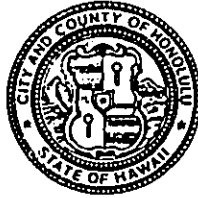
If you have any questions, contact Barry Usagawa at 527-5235.

cc: Department of Housing and Community Development
Wilson Okamoto & Associates, Inc.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR




ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

MEMORANDUM

TO: BROOKS H.M. YUEN, ACTING MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM: ROBERT AGRES, JR., DIRECTOR 
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated June 19, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

1. We appreciate your confirmation of the adequacy of the off-site water system to accommodate the proposed project.
2. We acknowledge your requirement for the development of a water source for the project or, alternatively, the payment of a Regional Source Charge and Water System Facilities Charge. This information will be provided to the project developer.
- 3-6. Your information regarding existing water meters serving the project site is appreciated and will be provided to the project designers. We will also apprise the project designers of the requirements for: a) obtaining BWS approval of construction drawings for 3-inch or larger water meters; b) coordinating on-site fire protection requirements with the Fire Prevention Bureau of the Honolulu Fire Department; and, c) installing BWS approved reduced pressure principle backflow prevention assemblies after each water meter serving the site.

Memorandum to Mr. Brooks H.M. Yuen
June 25, 1998
Page 2

Your memorandum, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4341 • FAX: (808) 527-3857

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JUN 05 1998

WILSON OKAMOTO & ASSOC., INC.

JEREMY HARRIS
MAYOR



JONATHAN K. SHIMADA, PhD
DIRECTOR AND CHIEF ENGINEER

ROLAND D. LIBBY, JR.
DEPUTY DIRECTOR

ENV 98-127

June 4, 1998

MEMORANDUM:

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: JONATHAN K. SHIMADA, PhD *J. Shimada*
DIRECTOR AND CHIEF ENGINEER

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION
NOTICE (EISPN), BLOCK J. REDEVELOPMENT PROJECT
TMK: 3-1-09: 18 AND 27

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

Should you have any questions, please contact Alex Ho at Local 4150.

cc: DHCD (Darwin Hamamoto)
Wilson Okamoto & Assoc. (Earl Matsukawa)

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET 5TH FLOOR • HONOLULU, HAWAII 96813
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JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

MEMORANDUM

TO: JONATHAN K. SHIMADA, Ph.D., DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: *for* ROBERT AGRES, JR., DIRECTOR 
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

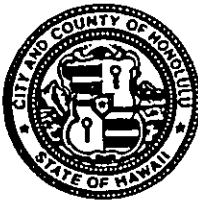
Thank you for your memorandum dated June 4, 1998, indicating that you have no comments on the subject EIS Preparation Notice.

Your memorandum, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 527-6663 • FAX: (808) 527-6675

JEREMY HARRIS
MAYOR



KENNETH E. SPRAGUE, P.E., Ph.D.
DIRECTOR

CHERYL K. OKUMA-SEPE, ESO.
DEPUTY DIRECTOR

RECEIVED
JUN 15 1998

In reply refer to:
WCC 98-108

June 10, 1998

WILSON OKAMOTO & ASSOC., INC.

MEMORANDUM

TO: MR. PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

CHERYL K. OKUMA-SEPE

FROM: KENNETH E. SPRAGUE, DIRECTOR
DEPARTMENT OF WASTEWATER MANAGEMENT

SUBJECT: **BLOCK J REDEVELOPMENT PROJECT**
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
HONOLULU, OAHU, HAWAII
TMK: 2-1-9: 18 AND 27

The existing municipal sewer system is not adequate to support the proposed project. The project will include two high-rise towers, containing 913 affordable one- and two-bedroom units and 100,000 square feet of retail space. Certain sewer lines will need to be improved by the developer, depending upon where the sewer connection is made. A detailed discussion of off-site sewer improvements and anticipated sewer flows should be included in the Draft EIS. Also note the existing 6-inch sewer line that runs across the subject property. The developer will need to confirm the sewer connections of all buildings on the block if this 6-inch line is removed.

This statement shall not be construed as confirmation of sewage capacity reservation. Sewage capacity reservation is contingent on submittal and approval of a "Sewer Connection Application" form. This project is liable for payment of a Wastewater System Facility Charge.

If you have any questions, please contact Ms. Tessa Ching of the Service Control Branch at 523-4956.

cc: Department of Housing and Community Development
Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
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JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

MEMORANDUM

TO: KENNETH SPRAGUE, DIRECTOR
DEPARTMENT OF WASTEWATER MANAGEMENT

FROM: *f* ROBERT AGRES, JR., DIRECTOR *Robert Agres Jr.*
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated June 10, 1998, concerning the subject EIS Preparation Notice. The Draft EIS will include an estimate of wastewater flows for the project, noting that the existing municipal system is not adequate to support the proposed project. The developer's consultants will pursue further discussions with your agency to determine appropriate off-site improvements that will be required to accommodate the project. The Draft EIS will mention the need to confirm existing hook-ups to the 6-inch line to determine if it will be removed or relocated to accommodate the proposed project.

We acknowledge that the project sewage capacity reservation is contingent upon the approval of a "Sewer Connection Application" form and that the project is liable for payment of a Wastewater System Facility Charge and will inform the project developer as to these requirements.

Your memorandum, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

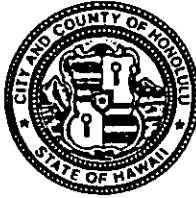
cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 10TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4182 • FAX: (808) 523-4054

JEREMY HARRIS
MAYOR

RECEIVED
JUN 29 1998



WILLIAM D. BALFOUR, JR.
DIRECTOR

MICHAEL T. AMII
DEPUTY DIRECTOR

June 24, 1998

WILSON OKAMOTO & ASSOC., INC.

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: WILLIAM D. BALFOUR, JR., DIRECTOR

SUBJECT: BLOCK "J" REDEVELOPMENT PROJECT
HONOLULU, OAHU, HAWAII
TAX MAP KEY 2-1-009:018 & 027

We have reviewed the Environmental Impact Statement Preparation Notice (EISPN) for the above-described project and offer the following comments and recommendations.

The proposal to satisfy park dedication requirements by providing approximately 25,500 square feet of "open space" and 50,000 square feet of "rooftop deck" over the retail space (see page 3-12, Section 3.8 of the EISPN) does not comply with the Park Dedication Rules and Regulations of the City and County of Honolulu.

Rule 10 (e) states that "Physical facilities shall be provided by the subdivider for active recreational use such as outdoor recreational courts (volleyball, basketball, tennis, handball, horseshoe, shuffleboard, lawn bowling); swimming pool; play field (baseball, softball, football); tot lot facilities, and/or playground apparatus to serve the subdivision and subject to approval of the Director." Also, Rule 10 (a) states that the site "...shall be on the ground level and shall not be covered..."

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

Patrick T. Onishi
Page 2
June 24, 1998

Please have your staff contact Mr. Lester Lai, Planner, of our Advance Planning Branch at extension 4696 to discuss the park dedication requirements or for any questions you may have.

W.D. Balfour, Jr.

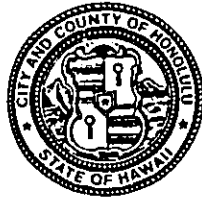
WILLIAM D. BALFOUR, JR.
Director

WDB:ei

cc: Department of Housing and Community Development
✓ Wilson Okamoto & Associates

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: WILLIAM D. BALFOUR, JR., DIRECTOR
DEPARTMENT OF PARKS AND RECREATION SERVICES

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated June 24, 1998, concerning the subject EIS Preparation Notice. As your memorandum was received after the 30-day comment period for the EIS Preparation Notice, it was not included in the Draft EIS.

We acknowledge that the approximately 25,500 square feet of open space and 50,000 square feet of rooftop deck over the retail space (subsequently reduced to approximately 32,000 square feet of rooftop recreational deck as reflected in the Draft EIS) proposed for the project would not satisfy requirements of the *Park Dedication Rules and Regulations of the City and County of Honolulu*. The discussion will be corrected in Section 5.9 Park Dedication Ordinance of the Final EIS.

The project developer is continuing discussions with the City and County of Honolulu regarding park dedication requirements. Currently, the approximately 32,000 square feet of rooftop recreational deck over the retail space is proposed in lieu of park dedication space. Depending on the City's interpretation of the base number to be used in calculating park dedication requirements for the project, an exemption from the park dedication requirements pursuant to the provisions of Chapter 201E, HRS may be pursued. This information will be included in the Final EIS.

Memorandum to William D. Balfour, Jr.
September 11, 1998
Page 2

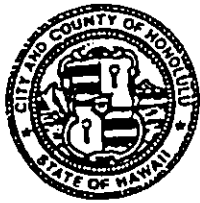
Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111

JEREMY HARRIS
MAYOR



LEE D. DONOHUE
CHIEF

RECEIVED

WILLIAM B. CLARK
DEPUTY CHIEF

JUN 15 1998

OUR REFERENCE BS-DL

June 9, 1998

WILSON OKAMOTO & ASSOC. INC.

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: LEE D. DONOHUE, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
BLOCK J REDEVELOPMENT PROJECT - DOWNTOWN, HONOLULU,
OAHU, HAWAII TAX MAP KEY: 2-1-09: 18 AND 27

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

The Honolulu Police Department has no objection to the development of the proposed project. When completed, it should provide some of the needed parking in the downtown area. However, we do envision potential problems during and after construction as well as criminal activity with this kind of project. Therefore, we would like to offer the following comments.

Principles of crime prevention through environmental design should be used as a guide in designing the proposed development to assist in minimizing crimes and calls for police service.

While the project is under construction, there will no longer be parking spaces available, so people who presently park their vehicles at the proposed site will be forced to seek other alternatives. Will there be measures in place to alleviate the already critical shortage in parking spaces in the downtown area? Dust and noise during construction usually generate complaint calls to police. We're confident that adequate measures to mitigate these problems will be adopted. As a further step, if the businesses and residents in the surrounding area can be notified of the dates and times, the duration of, and the kind of activity to anticipate, it may help to alleviate some of the complaint calls.

Mr. Patrick T. Onishi
Page 2
June 9, 1998

We recognize that the roadways surrounding the site are heavily used throughout the day. These roadways also serve as a corridor for Windward commuters. We are hoping that steps will be taken so that traffic flow in and around the area will be minimally impeded.

Finally, because of the nature of this project, residential mixed with retail businesses, in addition to a multi-level underground parking garage, we do anticipate a need for additional staffing to patrol the area and respond to calls for service.

If you have any questions, please call me at 529-3175 or Major Henry Lau of District 1 at 529-3386.

LEE D. DONOHUE
Chief of Police

By


JAMES FEMIA, Assistant Chief
Administrative Bureau

cc: Mr. Darwin Hamamoto
Dept. of Housing & Comm. Development

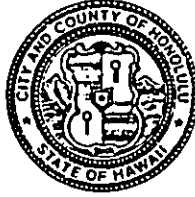
✓ Mr. Earl Matsukawa
Wilson Okamoto & Associates, Inc.

Major Henry Lau, District 1

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

MEMORANDUM

TO: LEE D. DONOHUE, CHIEF OF POLICE
POLICE DEPARTMENT

FROM: *[Signature]* ROBERT AGRES, JR., DIRECTOR
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated June 9, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

1. Your recommendation for incorporating principles of crime prevention through environmental design will be forwarded to the project designers.
2. The City is not requiring the project developer to provide replacement parking for stalls lost during the construction of the proposed project; however, the project's developer is willing to work with the community to identify alternative parking resources in the area.
3. Although the construction contractor is required to comply with Department of Health regulations pertaining to the generation of noise and dust, these nuisances are unavoidable impacts of construction. The developer will establish a procedure for notifying businesses and residents in the surrounding area of the schedule for construction activities. A telephone "hot line" will also be established to receive complaints and to provide information regarding construction activities.

Memorandum to Lee D. Donohue
June 25, 1998
Page 2

4. The Draft EIS will include a discussion of potential traffic impacts during construction based on current construction considerations. A traffic management plan for the construction phase of the project will need to be prepared for approval by the City Department of Transportation Services. In general, the intent is to keep all traffic lanes open during peak traffic periods. This includes the traffic lanes of Pali Highway which will be rerouted within the project site during construction of the underground parking structure.

Your memorandum, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

1125 KAPAPANEHLEI, SUITE 4425
HONOLULU, HAWAII 96813-1009

HEIHEI MAHINA
MAYHEI



ATTILIO K. LEONARDI
FIRE CHIEF
JOHN CLARK
DEPUTY FIRE CHIEF

May 27, 1998

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: ATTILIO K. LEONARDI, FIRE CHIEF

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION NOTICE
TMK: 2-1-09: 18 AND 27
HFD INTERNAL NO. OL 98-203

We have reviewed the EIS and have determined that the subject project will not adversely impact the fire protection services provided by our department. We concur that the construction plans shall be reviewed by our Plans Review personnel for fire code compliance.

If you need additional information, please contact Battalion Chief Charles Wassman of our Fire Prevention Bureau at 831-7778.

Handwritten signature of Attilio K. Leonardi in cursive.

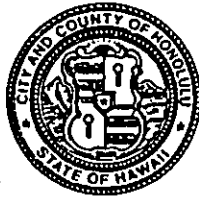
ATTILIO K. LEONARDI
Fire Chief

AKL/CW:jl

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR




June 25, 1998

ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

MEMORANDUM

TO: ATILIO K. LEONARDI, FIRE CHIEF
FIRE DEPARTMENT

FROM:  ROBERT AGRES, JR., DIRECTOR
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARATION
NOTICE
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated May 27, 1998, indicating that the subject project will not adversely affect the fire protection services provided by your department. The construction plans for the project will be submitted for review by your Plans Review personnel for fire code compliance.

Your memorandum, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)



DOWNTOWN NEIGHBORHOOD BOARD NO. 13

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

Planning Department
City & County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813
ATTENTION: Mr. Patrick T. Onishi

RECEIVED
JUN 22 1998

WILSON OKAMOTO & ASSOC., INC.

Dear Mr. Onishi,

The Downtown Neighborhood Board #13 (DNB) is appreciative having received the Environmental Impact Statement (EIS) Preparation Notice for the Block J Redevelopment Project for comment

On Thursday, 7 May 1998, Messrs. Ben Lee (Mayor's Chief of Staff) and Malcolm Tom (City Budget Director) provided a brief background on the Block J Project and introduced Mr. Franco Mola (Project Developer, Coastal Rim Properties) and Mr. Kurt Mitchell (Project Architect). It was moved and seconded, by DNB#13, to support the "the concept of this project in general", subject to completion of studies including traffic and parking. The motion carried, 6-1. Questions, answers and comments were noted in approved minutes.

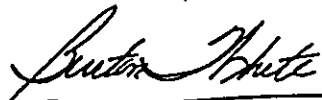
We have also been provided a letter (dated 1 June 1998) from Mr. Mervyn W. Lee, Esq. (Law Corporation), which represents Civic Center Properties. Civic Center Properties, via Mr. Lee, has expressed notable concerns and has mentioned seeking injunction until concerns are addressed

We hope that the talking points, as noted above, might be addressed to the satisfaction of those concerned and noted in the Project J Draft Environmental Impact Statement (DEIS).

We look forward to receiving a copy of the Draft Environmental Impact Statement (DEIS) and final Environmental Impact Statement (EIS), upon their availability, to allow us to advise accordingly.

Mahalo for your efforts.

Me ke aloha,


Burton White
Chair

cc: Mr. Mervyn W. Lee, Esq.- Civic Center Properties
Mr. Gary Gil/Ms. Nancy Heinrich- Office of Environmental Quality Control, State of Hawai'i
Mr. Darwin Hamamoto- City/County Dept. of Housing & Community Development
Honorable Jeremy Harris- Mayor, City/County of Honolulu
Mr. Earl Matsukawa- Wilson Okamoto & Associates, Inc.
Councilman Jon Yoshimura- City/County of Honolulu

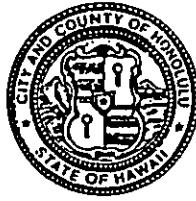


Oahu's Neighborhood Board System - Established 1973

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Burton White, Chair
Downtown Neighborhood Board No. 13
c/o Neighborhood Commission
City Hall, Room 400
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

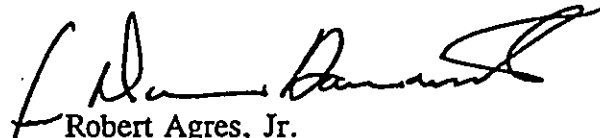
Dear Mr. White:

Thank you for letter concerning the subject EIS Preparation Notice, reporting that your Board has supported "the concept of this project in general", subject to completion of studies including traffic and parking. Both of these issues have been addressed in a traffic impact study included in the Draft EIS.

The concern expressed by Mr. Mervyn W. Lee, Esq. in a letter dated June 1, 1998 regards a legal issue which is beyond the scope of the EIS to address.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



THE OUTDOOR CIRCLE
1314 South King St., Suite 306 • Honolulu, HI 96814
Phone: 808-593-0300 Fax: 808-593-0525

June 9, 1998

RECEIVED
JUN 10 1998

WILSON OKAMOTO & ASSOC., INC.

Established 1912
A Non-profit Organization

BRANCHES

OAHU

Kaneohe
Lani-Kailua
North Shore
Waialae Kahala

HAWAII

Hilo
Kāu
Kona
Puna
Waimea

KAUAI

MAUI

MOLOKAI

GARDEN CIRCLE

Lani-Kai

Mr. Patrick Onishi
City and County of Honolulu
Planning Department
650 South King Street
Honolulu, HI 96813

RE: Environmental Impact Statement Preparation Notice, Honolulu Block J
Redevelopment Project

Dear Mr. Onishi:

We have reviewed the above referenced Environmental Impact Statement
Preparation Notice (EISPN) and offer the following comments:

- The Block J Redevelopment project includes two 350-foot tall towers. In addition to the studies already listed in the EISPN, we feel it is important to study the impacts these tall buildings will have on the view planes. Detailed computer generated drawings from mauka and makai perspectives, as well as others, must be included in the Draft Environmental Impact Statement (DEIS). As part of the Hawai'i Capitol Special District, views to Punchbowl Lookout must remain open. The DEIS needs to prove the Block J Redevelopment Project will not block significant view planes as claimed in the EISPN.
- In addition, we feel it is important to discuss in the DEIS who in the community will actually use the rooftop deck area for recreation. It is our experience that this space is generally viewed by the public as "private" and therefore cannot be counted as "public open space." Since the Block J Redevelopment Project site is located within the Downtown Special Area, it is important that the urban park-like amenities be at a level where people can use them. This space should not be allowed as park dedication space if it is not easily accessible to the public.
- Since the trees in Kamalii Park are not large (according to the EISPN), the DEIS should address their relocation rather than their destruction. Landscape plans for Block J should entail the replanting of as many of the

Block J Redevelopment Project

June 9, 1998

Page 2

trees on site as possible. Those that cannot be used on site should be moved to other, nearby City parks.

Thank you for the opportunity to comment. We look forward to reviewing the Draft Environmental Impact Statement when it is issued.

Sincerely,



Mary Steiner
CEO

cc: Darwin Hamamoto, Department of Housing and Community Development
Earl Matsukawa, Wilson Okamoto and Associates
Mr. Gary Gill, Office of Environmental Quality Control

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR
DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Ms. Mary Steiner, Chief Executive Officer
The Outdoor Circle
1314 South King Street, Suite 306
Honolulu, Hawaii 96814

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Ms. Steiner:

Thank you for your letter dated June 9, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

1. A computer simulation of the visual impact of the proposed project from key public viewpoints, including Bishop and Alakea Streets, is included in the Draft EIS with a discussion of relevant policies pertaining to the preservation of view corridors.
2. The rooftop recreation deck is not considered open space. The City and County of Honolulu Land Use Ordinance (LUO) only defines ground level open space as "open space." Such open space, however, does not need to be publicly accessible. The rooftop recreation deck, although not publicly accessible, counts as park dedication according to Park Dedication Ordinance No. 4621. Park dedication requirements may be satisfied through the provision of park land to the City for public use, payment of fees equal to the land area required, provision of privately owned and maintained parks and playgrounds, or any combination equal to the dedication requirements. The intent of dedicating privately owned and maintained park space is to accommodate the recreational demands of the residents, as opposed to having that demand made entirely on existing public parks.
3. To the extent feasible, existing trees on the project site will be retained or relocated to other areas of the site, depending on soil requirements. Trees removed from the project site, including those in the parking lot, the Pali Highway median and Kamalii Park, will be transplanted to other City parks or used for street landscaping, as determined in consultation with the City Department of Parks and Recreation.

Letter to Ms. Mary Steiner

June 25, 1998

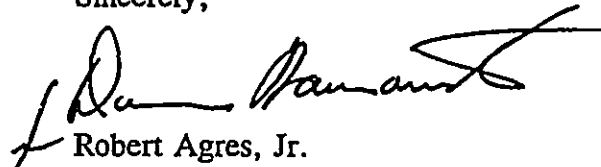
Page 2

Otherwise, existing vegetation will be disposed of when the project site is prepared for construction.

The reconstructed Kamalii Park will be re-landscaped and it is possible that some of the trees removed prior to construction could be replanted. Due to the construction of the parking structure beneath the park, available soil depth for future plantings will need to be taken into account in selecting future landscaping for the park.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,



Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



Scott W.H. Seu, P.E.
Manager
Environmental Department

RECEIVED
JUN 15 1998

WILSON OKAMOTO & ASSOC., INC.

June 12, 1998

Planning Department
City and County of Honolulu
650 South King Street
Honolulu, HI 96813
Attention: Mr. Patrick T. Onishi

Dear: Mr. Onishi

Subject: **Block J Redevelopment Project**

Thank you for the opportunity to comment on your May 1998 EIS Preparation Notice for the Block J Redevelopment Project, as proposed by the Planning Department, City and County of Honolulu. We have reviewed the subject document and have the following comments:

- We expect that the power demand for this project will be about 3200 kW.
- There are no HECO facilities under the Pali Highway portion of the proposed underground parking.
- Service will likely be from the 11.5 kV radial system. However, HECO will investigate the feasibility of servicing the project from the 25 kV system.

HECO shall reserve further comments pertaining to the protection of existing powerlines bordering the project area until construction plans are finalized. Again, thank you for the opportunity to comment on this EIS Preparation Notice.

Sincerely,

cc: Mr. Darwin Hamamoto
(Dept/Housg&Comm Dev)
Mr. Earl Matsukawa
(Wilson Okamoto Assoc)

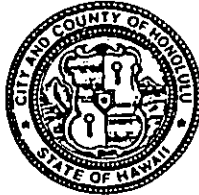
WINNER OF THE EDISON AWARD
FOR DISTINGUISHED INDUSTRY LEADERSHIP



DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Scott W.H. Seu, P.E.
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Seu:

Thank you for your letter dated June 12, 1998, concerning the subject EIS Preparation Notice. We appreciate your comments regarding the estimated power demand of the project and the availability of service for the project. We will provide this information to the project developer.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Agres, Jr.", is written over a horizontal line.

Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

Beyond the call

June 22, 1998

RECEIVED
JUN 23 1998

Mr. Patrick T. Onishi
Planning Department
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

WILSON OKAMOTO & ASSOC., INC.

Dear Mr. Onishi:

**Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Key: 2-1-09: 18 and 20
Honolulu, Oahu, Hawaii**

Thank you for the opportunity to review the subject document. Our comments are the following:

- 1) The majority of our underground facilities surround the project site on the outside perimeter. Our facilities do not appear to be affected at this stage of development. However, facilities may be impacted in the later stages of design and may require relocation. An existing underground system does provide service to the public pay station in the existing public parking area, which will require removal before construction begins.
- 2) Our Microwave Radio path, which operates between our Bishop Street building and two radio sites that are situated on Tantalus, will be blocked by both of the new 350-foot high twin towers. Our present point-to-point microwave antennas are mounted on the rooftop at the center of our building, which is 245 feet above ground level. We will need to review the new building roof top design, our antenna technical design, and RF radiation parameters. We will require the exact coordinates of the new towers to further determine the depth of impact to our system. The usage of cranes and the building height progression during construction will also interfere with the normal transmission path of our microwave system.
- 3) Our building may be impacted by:
 - a) A reduction in the existing water pressure which will necessitate reconfiguration and modification to our water supply pump system.

Mr. Patrick T. Onishi
June 22, 1998
Page 2

- b) Vibration due to pile driving and other associated construction activities may impact our Network and Customer Service Centers.
- c) Dust will impact our Network and Customer Service Centers through our ventilation system thus causing more frequent filter replacements.
- d) Pungent or strong unpleasant odors from the construction site that may enter our ventilation system.
- e) Further building settlement due to the displacement of ground water.

4. Our business during construction may be impacted by:

- a) A potential reduction in our Phone Mart sales and inconvenience to our customers due to the elimination of the municipal parking lot.
- b) Inconvenience to our employees who utilize the municipal parking lot for transitory business.
- c) Potential delays and inconveniences to our pick up and delivery services.

Should you have further questions, please call Mr. Jay Furukawa at 808/840-5888.

Sincerely,



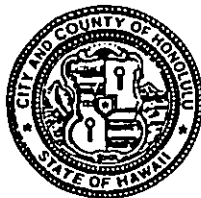
Susan K. Eichor
General Manager -
Infrastructure Provisioning

- c: Darwin Hamamoto - City & County of Honolulu
- Earl Matsukawa - Wilson Okamoto & Associates, Inc.
- Jay Furukawa - GTE Hawaiian Tel
- Vince Soeda - GTE Hawaiian Tel
- George Sproul - GTE Hawaiian Tel

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Ms. Susan Eichor, General Manager
Infrastructure Provisioning
GTE Hawaiian Telephone Company, Incorporated
P.O. Box 2200
Honolulu, Hawaii 96841

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii


Dear Ms. Eichor:

Thank you for your letter dated June 22, 1998, concerning the subject EIS Preparation Notice. We offer the following responses in the respective order of your comments:

1. We appreciate the information you have provided regarding your underground facilities. We will forward the information to the project designers who will be responsible for ensuring that these facilities will be considered during the construction phase.
2. The project designers will be providing you with the exact locations of the proposed towers once they have been determined. Prior to initiating construction, the project's construction contractors will consult with you regarding potential impacts on your microwave transmissions and any mitigation measures that may be effective in addressing this potential problem.
3. Potential impacts such as those you have listed regarding water pressure, vibration, dust and odors, building settlement, and loss of parking for your customers and employees are addressed in the Draft EIS.

Letter to Ms. Susan Eichor
June 25, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely, 
Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



200 Akamainui Street • Milliani, Hawaii 96789-3999 • Telephone: (808) 625-2100

June 10, 1998

Planning Department
City & County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Attention: Mr. Patrick T. Onishi

Subject: Block J Redevelopment Project

RECEIVED
JUN 12 1998

WILSON OKAMOTO & ASSOC., INC.

Dear Patrick,

Oceanic Cable has no objections to the Block J Redevelopment project. We currently have facilities of Kukui Street and Queen Emma Street, but these facilities are not adequate to provide service to the proposed twin towers. In order to provide service for both the residential towers and any possible commercial customers, we would have to extend our facilities from Bishop Street to either Beretania Street or Pali Hwy. Currently there are no facilities on the Pali Hwy side of the project.

Oceanic Cable leases conduit space from GTE Hawaiian Tel throughout the Downtown area. Conduit space availability and approvals will also play a factor in providing service to the project area. These details can be worked out later when the designers determine the location of the input feed to the project.

Oceanic will bring cable to the project area at no cost to the developer. The developer will be responsible for any infrastructure costs. This can be discussed later as noted earlier.

Should you have any questions, please feel free to contact me at 625-8346.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Randy Makizuru'.

Randy Makizuru
OSP Engineer

Cc: Mr. Darwin Hamamoto, Department of Housing & Community Development
Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



June 25, 1998

ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

Mr. Randy Makizuru, OSP Engineer
Oceanic Cable
200 Akamainui Street
Mililani, Hawaii 96789-3999

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Makizuru:

Thank you for your letter dated June 10, 1998, concerning the subject EIS Preparation Notice. We appreciate your comments regarding the provision of cable service for the proposed project. Future coordination with your company will be pursued by the developer as the project progresses through the design phase.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Agres, Jr.", is written over the typed name and title.

Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

THE GAS COMPANY 
Citizens Energy Services

June 10, 1998

Planning Department
City & County of Honolulu
650 S. King Street
Honolulu, HI 96813

RECEIVED
JUN 15 1998

WILSON OKAMOTO & ASSOC., INC.

Attn: Mr. Patrick T. Onishi

Subject: Block J Redevelopment Project
Comments to Environmental Impact Statement Preparation Notice

Dear Mr. Onishi:

Thank you for the opportunity to review and comment on the subject document. We have gas lines available to service the project on S. Beretania, Queen Emma, Fort Street and Kukui Streets. We have no utility gas lines on Pali Highway. We have submitted a copy of our gas site utility maps for the area to Wilson Okamoto & Associates, Inc.

If you or any of your project's consultants have any questions or require additional information, please contact me at (808) 594-5564. I look forward to reviewing the Environmental Impact Statement when it is published.

Very truly yours,



Eric M. Kashiwamura, P.E.
Engineering Services

cc: Mr. Darwin Hamamoto - Dept. of Housing & Community Development
Mr. Earl Matsukawa - Wilson Okamoto & Associates, Inc.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5458

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Eric M. Kashiwamura, P.E.
The Gas Company
515 Kamakee Street
Honolulu, Hawaii 96814

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Kashiwamura:

Thank you for your letter dated June 10, 1998, concerning the subject EIS Preparation Notice and for providing the project consultants with your gas site utility maps for the area. This information has been included in the Draft EIS for the project.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Agres, Jr.", is written over the typed name and title.

Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

Ronald K K Lee
98-367 Ponoehana Loop
Aiea, Hawaii 96701

June 18, 1998

Director
Department of Housing and Community Development
650 S. King Street
Honolulu, Hawaii 96813

Re: Request for public comments
Environmental Impact Statement Preparation Notice
Block J Redevelopment Project

98 JUN 19 P4:16

DEPT. OF HOUSING
& COMM. DEVELOPMENT

Mr. Robert Agres:

I have reviewed the EIS Preparation Notice for Block J and would like to voice a concern about the possibility of serious damage to the environmental quality of urban Honolulu. The Bishop Street view corridor presently offers a major mauka-makai vista with a view makai to the harbor and a mauka view to one of the most striking profiles of the Ko'olau Range. The area of Bishop Street in the vicinity of the Alexander and Baldwin Building is one of the most coherent places in Downtown with a "Hawaiian Sense of Place" not just because of the splendid architecture but because of the sense of its very specific placement between the harbor and the mountains.

Fig. 1-3, "Block J Redevelopment Project Site Plan, Conceptual Design" dated February 1998 indicates that one of the high rise residential towers is directly in line with the Bishop Street View Corridor. If this is the case, and the mauka view from Bishop Street focuses on a high rise building rather than the Ko'olau mountains, it will destroy one of our best environments in urban Honolulu.

The development of the EIS for this project must address this issue directly as it involves a substantial degradation of the environmental quality. A Hawaiian sense of place would be transformed into an undifferentiated urban jungle of steel and concrete. The mauka view up Bishop Street should be respected in any development taking place on Block J.

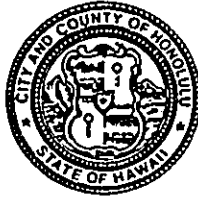
Yours very truly,


Ron Lee

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4427 • FAX: (808) 527-5498

JEREMY HARRIS
MAYOR



ROBERT AGRES JR.
DIRECTOR

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

June 25, 1998

Mr. Ronald K.K. Lee
98-367 Ponohana Loop
Aiea, Hawaii 96701

Subject: Block J Redevelopment Project
Environmental Impact Statement (EIS) Preparation Notice
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii


Dear Mr. Lee:

Thank you for your letter dated June 18, 1998 regarding the subject EIS Preparation Notice, in which you provided comments on the mauka view from Bishop Street.

As you have indicated, the proposed location of the project's northwest tower is aligned with Bishop Street; hence, it will block the remaining view of the Koolau Mountain Range and sky visible between the high-rise structures along this street. This visual impact will be disclosed in the Draft EIS.

Your letter, along with this response, will be reproduced in the forthcoming Draft EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Robert Agres, Jr.
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

13.2 Draft Environmental Impact Statement Consultation

The following agencies, organizations and elected officials were consulted and comments solicited for the Draft Environmental Impact Statement. As of September 4, 1998, a total of 28 comment letters were received. Of those who formally replied, some had no comments while others provided substantive comments as indicated by the * and **, respectively. All written comments and responses are reproduced herein.

Federal

- ** U.S. Army Engineer Division
- ** U.S. Department of the Interior, Fish and Wildlife Service
- U.S. Department of Housing and Urban Development

State of Hawaii

- ** Department of Accounting and General Services
- Department of Agriculture
- Department of Business, Economic Development and Tourism
- ** Department of Business, Economic Development and Tourism, Energy, Resources & Technology Division
- * Office of Planning
- * Department of Defense
- ** Department of Education
- * Department of Hawaiian Home Lands
- Department of Health, Environmental Planning Office
- * Department of Land and Natural Resources, Land Division
- ** Department of Land and Natural Resources, Historic Preservation Division
- Department of Land and Natural Resources, Oahu District Office
- ** Department of Transportation
- ** Office of Hawaiian Affairs
- ** Office of Environmental Quality Control
- ** University of Hawaii Environmental Center
- University of Hawaii Water Resources Research Center
- * Land Use Commission

City and County of Honolulu

- ** Planning Department
- ** Department of Planning and Permitting
- ** Board of Water Supply

City and County of Honolulu (cont.)

- ** *Department of Design and Construction*
Department of Facility Maintenance
- ** *Department of Transportation Services*
- ** *Department of Environmental Services*
- * *Department of Parks and Recreation Services*
Department of Finance
- ** *Police Department*
- ** *Fire Department*

Organizations

- ** *Downtown Neighborhood Board No. 13*
The Chamber of Commerce of Hawaii
The Outdoor Circle
Chinatown Merchants Association
Downtown/Chinatown Task Force

Elected Officials

Senator Rod Tam
Representative Kenneth T. Hiraki
Councilmember Jon Yoshimura
Councilmember Andy Mirikitani

Utility Companies

- * *Hawaiian Electric Company, Inc.*
GTE Hawaiian Telephone Company
- * *Oceanic Cable*
The Gas Company

Individuals

- ** *Ronald K.K. Lee*



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

July 14, 1998

Civil Works Branch

RECEIVED
JUL 14 1998

WILSON OKAMOTO & ASSOC, INC.

Mr. Keith Ishida
City and County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Dear Mr. Ishida:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement (DEIS) for the Block J Redevelopment Project, Honolulu, Oahu (Tax Map Keys 2-1-9: 18 and 27). The following comments are provided in accordance with U.S. Army Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

a. Based on the information provided, a DA permit will not be required for the project.

b. The flood hazard information provided on page 3-2 of the DEIS is correct.

Sincerely,

Paul Mizue, P.E.
Chief, Civil Works Branch

Copies Furnished:

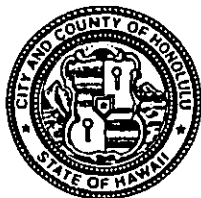
✓ Mr. Earl Matsukawa
Wilson Okamoto and Associates
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Mr. Patrick T. Onishi
City and County of Honolulu
Planning Department
650 South King Street
Honolulu, Hawaii 96813

Mr. Gary Gill
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Paul Mizue, P.E., Chief
Civil Works Branch
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440

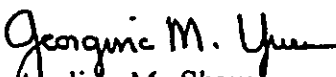
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Mizue:

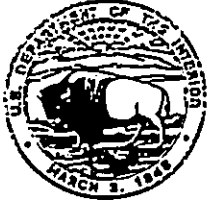
Thank you for your letter dated July 14, 1998, confirming that the proposed project, as described in the subject Draft EIS, will not require a Department of Army permit. We also appreciate your confirmation of the flood hazard information presented in the Draft EIS.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Ecoregion
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96850

In Reply Refer To: KF

AUG 18 1998

AUG 18 1998

Mr. Keith Ishida
City and County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Re: Draft Environmental Impact Statement for the Block J Redevelopment Project, Tax Map
Keys: 2-1-09: 18 and 27, Honolulu, Oahu, Hawaii

Dear Mr. Keith Ishida:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Statement (DEIS) for the above referenced action. The DEIS was prepared by Wilson Okamoto & Associates, Inc. for the City and County of Honolulu. The applicant is the City and County of Honolulu. This project will be funded, in part, by tax credits administered by the Federal Internal Revenue Service. This letter has been prepared under the authority of, and in accordance with provisions of the National Environmental Policy Act of 1969 [42 U.S.C. 4321 *et seq.*; 83 Stat. 852], as amended, the Fish and Wildlife Coordination Act of 1934 [16 U.S.C. 661 *et seq.*; 48 Stat. 401], as amended, the Endangered Species Act of 1973 [16 U.S.C. 1531 *et seq.*; 87 Stat. 884], as amended, and other authorities mandating Service concern for environmental values. Based on these authorities, the Service offers the following comments for your consideration.

The purpose of the project is to develop a block of Honolulu real estate for residential housing, retail business, and parking. The location of the construction site is bounded by Beretania, Queen Emma, Kukui, and Fort Streets, and bisected by the Pali Highway. Construction-related activities include the development of two high-rise residential towers, two above-grade levels of retail space, three levels of underground parking, reconstruction of the Kamalii Park, and reconstruction of a portion of the Pali Highway.

GENERAL COMMENTS

In general, the Service believes that the DEIS adequately describes the proposed action and the fish and wildlife resources located at the proposed project site. The Service believes that the preferred alternative is the action least likely to impact fish and wildlife resources, relative to the proposed action. Potential impacts to fish and wildlife resources have been adequately addressed in the DEIS.

Block J Redevelopment Project, DEIS
Honolulu, Oahu, Hawaii

SPECIFIC COMMENTS

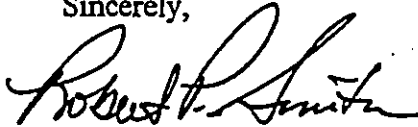
Page 3-3: Section 3.2 Geology and Hydrology

The Service understands that construction-related activities involve excavating down to depths where the water table will be encountered (e.g. 25 feet). The Service is concerned that the water table may be impacted from dewatered effluent. The DEIS states that a dewatering plan will be prepared in conjunction with the acquisition of a National Pollutant Discharge Elimination System (NPDES) permit for Discharges Associated with Construction Activity Dewatering. The Service concurs that the incorporation of Best Management Practices to conduct dewatering activities will reduce the level of short-term construction impacts. If dewatered effluents are found to contain levels of contaminants that exceed local, state or federal water quality regulations, the Service recommends that contaminated effluents be disposed of in accordance with pertinent regulations.

The Service believes that the incorporation of these measures into the project will greatly minimize the potential for project-related adverse impacts to fish and wildlife resources. Provided that the DEIS is conditioned to reflect our recommendations, we will not object to a Finding of No Significant Impacts.

The Service appreciates the opportunity to provide comments on the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist Kevin Foster at 808/541-3441 (fax: 808/541-3470).

Sincerely,

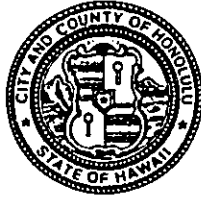


Robert P. Smith
Pacific Islands Manager

cc: NMFS-PAO, Honolulu
USEPA-Region IX, Honolulu
DAR-State of Hawaii
CZMP-State of Hawaii
CWB-State of Hawaii
PD-City and County of Honolulu
Wilson Okamoto & Associates, Inc.
EQC-State of Hawaii

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4781

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6284

September 11, 1998

Mr. Robert P. Smith
Pacific Islands Manager
Fish and Wildlife Service
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96850

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Smith:

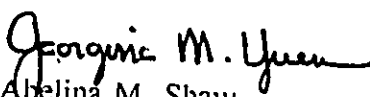
Thank you for letter dated August 18, 1998 (Ref. KF), concerning the subject Draft EIS. We appreciate your comments regarding the adequacy of the Draft EIS in addressing potential impacts to fish and wildlife resources. We offer the following response to your concern regarding potential impacts on the water table from dewatering effluent:

As discussed in Section 3.2 Geology and Hydrology - Impacts and Mitigation of the Draft EIS (page 3-3, paragraph 3), "The NPDES permit for dewatering activities will... address water quality impacts associated with the disposal of dewatering effluent. Appropriate characterization of any potential pollutants such as sediments and nutrients in the effluent will be required". This would include any effluent used to recharge the water table. It further states that "if any toxic or hazardous materials are discovered during environmental site assessments, as discussed in Section 3.5 Soils, the characterization must assure that appropriate remediation measures have been implemented to address water quality concerns associated with dewatering." As stated in the fifth paragraph, the Best Management Practices (BMP) plan will typically require "monitoring water quality of samples collected from designated points in the dewatering system" and, "preventing storm water runoff and erosion from surrounding areas from entering the excavation." With such measures in place, we feel confident that potential contamination of the water table can be avoided.

Letter to Mr. Robert P. Smith
September 11, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

(P) 1484.8

JUL 27 1998

City and County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Attention: Mr. Keith Ishida

RECEIVED
JUL 29 1998

Gentlemen:

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

WILSON OKAMOTO & ASSOC., INC.

Thank you for the opportunity to review the subject draft EIS which we received with your memorandum dated July 2, 1998.

Last month we had the opportunity to review and submit comments for the subject EIS Preparation Notice (see DAGS' letter No. (P)1368.8 in Chapter 13 of the draft EIS). Since several issues were not discussed in the draft EIS, we would like to reexpress our comments as follows:

1. A major concern is that the project will still increase traffic congestion into and out of the downtown area which will undoubtedly impact the State Capitol District.
2. Street and traffic improvements to alleviate traffic flow in the State Capitol District should be included as part of the overall project and should be completed prior to initial construction of the Block J redevelopment.
3. The City Department of Housing and Community Development should continue to consult and coordinate with the Department of Education and the Department of Transportation during the course of the planning process.

City and County of Honolulu
Page 2

Ltr. No. (P)1484.8

If you should have any questions, please contact Mr. Ronald Ching
of the Planning Branch at 586-0490.

Sincerely,



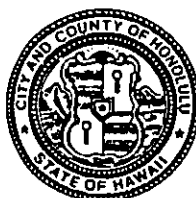
GORDON MATSUOKA
Public Works Administrator

RC/ET:jy

c: City and County of Honolulu, Planning Dept.
Wilson Okamoto & Associates, Inc.
State of Hawaii, OEQC

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

September 11, 1998

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

Mr. Gordon Matsuoka
Public Works Administrator
Department of Accounting and General Services
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Matsuoka:

Thank you for your letter dated July 27, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

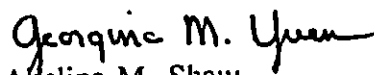
1. The Block J Redevelopment Project is estimated to increase traffic volumes in the Downtown Honolulu area by approximately 1.5% during the morning peak traffic hour and 2.8% during the afternoon peak traffic hour. The estimated project increases along Beretania Street near Punchbowl Street are 1.7% and 1.0% during the morning and afternoon peak commute hours, respectively. The additional traffic on King Street within the Civic Center area is 1.3% and 1.4% during the morning and afternoon peak hours, respectively. These levels of additional traffic should not result in a perceptible degradation in traffic conditions at intersections in the Downtown and Civic Center areas, other than those existing problem intersections which are located close to the project site and are expected to have much larger proportional increases in peak hour traffic as a result of the project. Impacts on these intersections were assessed in the Traffic Impact Study conducted for the project.
2. The estimated project traffic increases on the streets within the Civic Center should not be sufficient to necessitate additional street modifications beyond those currently in planning for the area. Queen's Medical Center is planning to widen Punchbowl Street adjacent to its site, which will include improvements to the Vineyard Boulevard intersection. The City and County of Honolulu is studying additional modifications to Punchbowl Street that should further improve traffic flow in the Civic Center area.

Letter to Mr. Gordon Matsuoka
September 11, 1998
Page 2

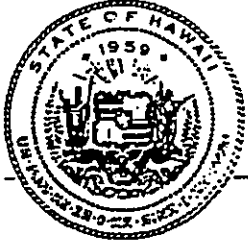
3. The project developer will continue to consult and coordinate with the Department of Education and Department of Transportation during the course of the project's planning process.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


for Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

BENJAMIN J. CAYETANO
GOVERNOR
SEIJI F. NAY
DIRECTOR
BRADLEY J. MOSSMAN
DEPUTY DIRECTOR

ENERGY, RESOURCES, AND TECHNOLOGY DIVISION
235 South Beretania St., 5th Flr., Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Tel.: (808) 587-3807
Fax: (808) 586-2536

July 28, 1998

City & County of Honolulu
Department of Community Services
715 South King St., Suite 311
Honolulu, Hawaii 96813
Attn.: Mr. Keith Ishida

RECEIVED
JUL 31 1998

WILSON OKAMOTO & ASSOC., INC.

Dear Mr. Ishida:

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (DEIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Thank you for the opportunity to comment on the DEIS for the Block J Redevelopment Project proposed to be located at Beretania and Alakea Streets. We understand that the major elements of the development will be:

- Approximately 913 affordable rental one-and two-bedroom units located within two 350 feet high residential towers;
- 100,000 square feet of retail space;
- Approximately 1,896 on-site parking stalls, some of which will be available for public parking; and
- Approximately 25,500 square feet of ground level open space.

Our comments are addressed to (1) State energy conservation goals, (2) recycling and recycled-content products, (3) recreational space and safety.

(1) Energy conservation goals. As you are aware, Draft Supplemental Environmental Statements should comply with the requirements found in State laws for evaluating any energy impacts that the project will have. The mandate for such an evaluation is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226 ("Hawaii State Planning Act"). In particular, we would like to call to your attention HRS 226 18(c)(4) which includes a State objective of promoting all cost-effective energy conservation through adoption of energy-efficient practices and technologies.

The State Energy Functional Plan is not discussed in the DEIS. We would like to have the developer address the Plan and specifically how energy efficient practices and technologies will be included in this project. The developer should contact Hawaiian Electric Company, Inc., to obtain information on rebates and incentives that are available for energy conservation measures under its New Construction Demand-side Management Program. In addition, we would like to remind you of the requirements of the Honolulu Energy Code.

Department of Community Services
Mr. Keith Ishida
Page 2
July 28, 1998

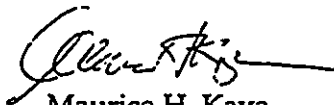
(2) Recycling and recycled-content products. The following are generic recommendations from the Clean Hawaii Center:

- Develop a job-site recycling plan for the construction phase of the project and recycle as much construction and demolition waste as possible;
- Incorporate provisions for recycling into the built project – a collection system and space for bins for recyclable;
- Specify and use products with recycled-content such as: steel, concrete aggregate fill, drywall, carpet and glass tile; and
- Specify and use locally produced products such as plastic lumber, hydromulch, soil amendment and glass tile.

(3) Recreational space and safety. It is our goal that development projects in Hawaii preserve the "Hawaiian sense of space", and the proposed project will add to the overcrowded appearance of the downtown area. The availability of recreational space should be of greater concern to the planners. The DEIS states that the grounds of Iolani Palace and Foster Botanical Gardens can be used as recreational space. Has anyone contacted Iolani Palace and Foster Botanical Gardens regarding this recommendation? We would recommend that you investigate other uses for the site, such as a park for the Kukui area residents and downtown workers with underground parking.

Since there will be a substantial number of seniors in the development, we would recommend that the developer work closely with the City & County to ensure that street crossings are safe for seniors. This is especially true for the crossings at Beretania and Bishop, Beretania and Alakea (Ewa side of Alakea), and Queen Emma and Vineyard (Diamond Head-side of Queen Emma).

Sincerely,

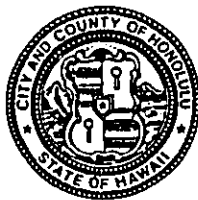


Maurice H. Kaya
Energy, Resources, and Technology
Program Administrator

c: Mr. Patrick T. Onishi, City & County of Honolulu
Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
OEQC

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Maurice H. Kaya
Energy, Resources, and Technology Division
Department of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Kaya:

Thank you for your letter dated July 28, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. Energy Conservation Goals

Section 5.2 State Functional Plans of the Final EIS will include the following discussion of the applicable objective and policy of the State Energy Functional Plan as they relate to the project:

State Energy Functional Plan

Objective A: Moderate the growth in energy demand through conservation and energy efficiency.

Policy A(1): Promote and stimulate greater energy efficiency and conservation in non-transportation sectors.

The project will incorporate energy-efficient equipment and designs into the development where possible. Such design measures may include the use of individual meters for the residential and retail units to provide incentive for energy conservation, high efficiency motors and chillers, energy-efficient ballasts for fluorescent lamps, building design which maximizes indoor light

without increasing indoor heat, use of insulation and double-glazed doors, and energy-efficient metal halide lights for outdoor lighting.

We have apprised the project developer of your suggestion to contact Hawaiian Electric Company, Inc. to obtain information on rebates and incentives available for energy conservation measures. The developer will comply with the applicable requirements of the Honolulu Energy Code.

2. Recycling and Recycled-Content Products

We have apprised the developer of the generic recommendations from the Clean Hawaii Center. The project's design will consider incorporating waste diversion and reduction activities and recycling measures into facility design.

3. Recreational Space and Safety

We believe that any discussion on the optimum use of a property must consider the needs of the community, existing land use plans and policies, and the feasibility of various development alternatives. The "Block J" designation for the project site speaks to the site's history as an urban renewal area. We feel that the location and size of the property makes the redevelopment of the existing underutilized parking lot a unique opportunity to gain substantial benefits for the City and community, making this an appropriate action for the City and County to pursue. The proposed project is consistent with the existing BMX-4 zoning and, as described in Chapter 5 of the Draft EIS, implements many of the goals and objectives of the City's general plan and development plan, as well as State plans. The proposed project will continue and strengthen the residential and residential/commercial mixed-use development pattern of the *mauka* side of Beretania Street which currently exists in the form of Kukui Plaza, Honolulu Park Place, Honolulu Tower, and Beretania North. As such, from a land use planning and policy perspective, the project is entirely consistent.

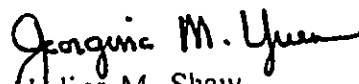
The Block J Redevelopment Project will provide some recreational space for its residents with approximately 32,000 square feet of rooftop recreational deck over the retail space and about 25,500 square feet of ground level open space. As a point of clarification, the Draft EIS indicates that the grounds of Iolani Palace and Foster Botanical Garden provide additional open space, and further indicates that while these are special-use facilities, some urban residents use them as recreational space.

Letter to Mr. Maurice H. Kaya
September 11, 1998
Page 3

The project developer will coordinate with the appropriate City and County agencies during the design phase regarding measures for safe pedestrian crossings along the streets fronting the project site.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


← Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

BENJAMIN J. CAYETANO
GOVERNOR
SEIJI F. NAYA
DIRECTOR
BRADLEY J. MOSSMAN
DEPUTY DIRECTOR
RICK EGGED
DIRECTOR, OFFICE OF PLANNING

OFFICE OF PLANNING

235 South Beretania Street, 6th Flr., Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Tel.: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-7576

July 17, 1998

RECEIVED
JUL 22 1998

Mr. Keith Ishida
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813

WILSON OKAMOTO & ASSOC., INC.

Dear Mr. Ishida:

Subject: Draft Environmental Impact Statement (DEIS) for the Block J Redevelopment Project, Honolulu, Oahu, Hawaii

We have reviewed the Draft Environmental Impact Statement for the Block J Redevelopment Project, Honolulu, Oahu, Hawaii. The DEIS includes an assessment of the potential impacts relative to the objectives and policies of Chapter 205A, HRS. It also includes mitigation measures to control polluted runoff during and after construction activities. We have no further comments at this time.

If there are any questions, please contact Steve Olive of our Coastal Zone Management (CZM) Program at 587-2877.

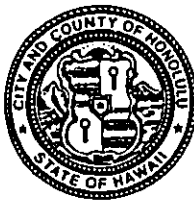
Sincerely,

Rick Egged
Director
Office of Planning

cc: Patrick T. Onishi, Planning Department, City & County of Honolulu
Gary Gill, Office of Environmental Quality Control
Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Seiji F. Naya

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

September 11, 1998

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

Mr. Rick Egged, Director
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

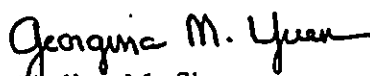
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Egged:

Thank you for your letter dated July 17, 1998 (Ref. No. P-7576), indicating that you have no comments to offer on the subject Draft EIS.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Georgina M. Yuen
for Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR

MAJOR GENERAL EDWARD V. RICHARDSON
DIRECTOR OF CIVIL DEFENSE

ROY C. PRICE, SR.
VICE DIRECTOR OF CIVIL DEFENSE



PHONE (808) 733-4300
FAX (808) 733-4287

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

July 20, 1998

RECEIVED
JUL 21 1998

WILSON OKAMOTO & ASSOC., INC.

TO: Wilson Okamoto & Associates, Inc.
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

ATTENTION: Mr. Earl Matsukawa

FROM: Roy C. Price, Sr.
Vice Director of Civil Defense

SUBJECT: BLOCK-J REDEVELOPMENT PROJECT, DRAFT ENVIRONMENTAL
ASSESSMENT

We appreciate this opportunity to comment on the City and County of Honolulu, Department of Community Services, Block-J redevelopment project, Honolulu, Oahu, Hawaii, TMK: 2-1-09: 18 and 27.

State Civil Defense (SCD) has no comments on the "Block-J redevelopment." The siren coverage in the area is marginal, because of all the air-conditioned high-rises in the area. SCD recommends that a siren be placed in the park area of the development behind the "Central Fire Station." The approximate location is annotated in red on the enclosed Fig. 1-2, TMK 2-1-09:18 and 27. This siren should be solar powered and have four (4) 117 dB directional speaker arrays mounted on it.

Just as parks, schools, fire hydrants, underground/overhead utilities and sidewalks are planned as integral parts of planned developments, so must an emergency warning system and support infrastructure be purchased and installed by the developer for the safety and well-being of the residents.

Our SCD planners and technicians are available to discuss any concerns your staff may have. Please contact Mr. Norman Ogasawara of my staff at 733-4300.

We appreciate your consideration and such expressions of interest you may have on this matter.

Enc.

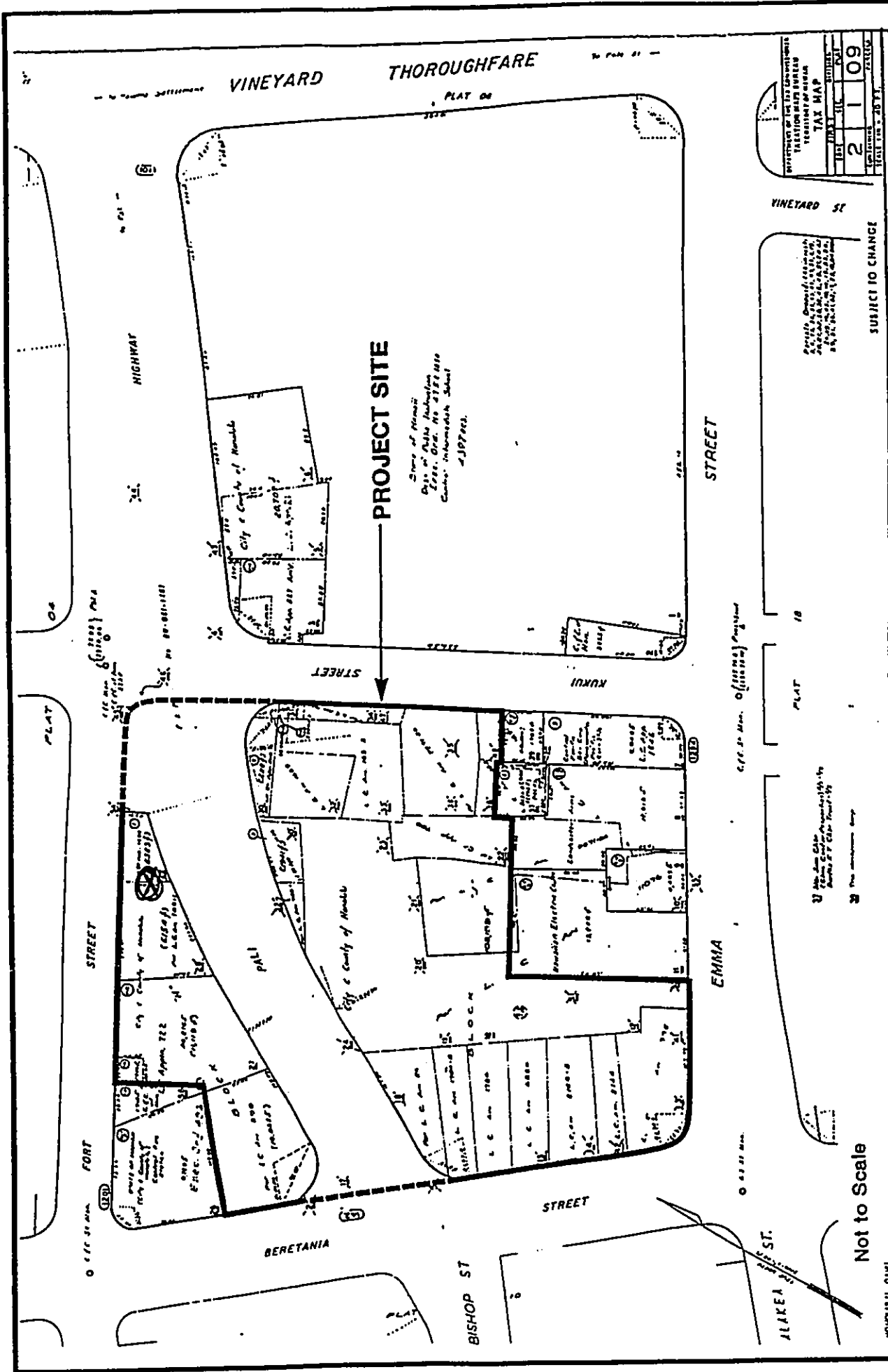


Fig. 1-2

TAX MAP KEY
2-1-09:18 and 27

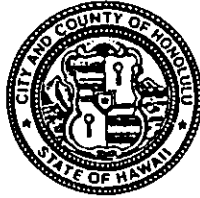
BLOCK J REDEVELOPMENT PROJECT

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF HOUSING AND
COMMUNITY DEVELOPMENT

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

September 11, 1998

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

Mr. Roy C. Price, Sr.
Office of the Director of Civil Defense
Department of Defense
State of Hawaii
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

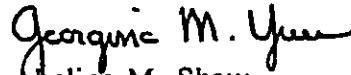
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Price:

Thank you for your letter dated July 20, 1998, commenting on the subject Draft EIS. We will apprise the developer of the proposed project of your recommendation for the installation of a siren as described in your letter.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


— Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2380
HONOLULU, HAWAII 96804

FACILITIES' COPY

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
Alfred K. Suga
Interim Superintendent
SENT JUL 27 1998

OFFICE OF THE SUPERINTENDENT

July 21, 1998

Ms. Abelina M. Shaw, Director
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813

RECEIVED
JUL 31 1998

WILSON OKAMOTO & ASSOC., INC.

Attention: Mr. Keith Ishida

Dear Ms. Shaw:

Subject: Block J Draft EIS

The subject draft environmental impact statement expresses concern that the Department of Education's (DOE) fair-share requirement of \$1,125 per unit is disproportionately high.

Note that this figure is not based on actual enrollment projections, but rather on *average* enrollment impact from residential developments, average land costs, and acreage requirements for schools.

We welcome the opportunity to meet with the developer to further discuss the DOE's fair-share requirement. If you have any questions, or to arrange a meeting, please call Mr. Sanford Beppu at 733-4862.

Thank you for the opportunity to comment.

Sincerely,

Alfred K. Suga
Interim Superintendent

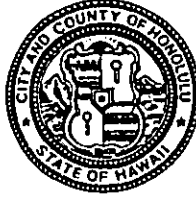
AKS:hy SB LH

cc: OBS
M. Shishido, HDO
P. Onishi, PD/C&C
E. Matsukawa, Wilson Okamoto & Associates, Inc. ✓
OEQC

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
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ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
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5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Dr. Paul LeMahieu, Superintendent
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, Hawaii 96804

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

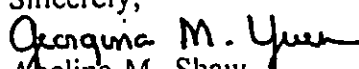
Dear Dr. LeMahieu:

This is in response to the letter dated July 21, 1998 from Mr. Alfred K. Suga, Interim Superintendent, concerning the subject Draft EIS.

We acknowledge that the Department of Education's (DOE) fair-share requirement of \$1,125 per unit is based on average enrollment impact from residential developments, average land costs, and acreage requirements for schools.

We appreciate your Department's willingness to meet with the project developer to further discuss the DOE's fair-share requirement and have apprised the developer of this opportunity.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

1a-Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAVETANO
GOVERNOR
STATE OF HAWAII



KALI WATSON
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JOE M. K. M. YAMAGUCHI
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1879
HONOLULU, HAWAII 96805

July 24, 1998

RECEIVED
JUL 24 1998

Mr. Keith Ishida
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813

WILSON OKAMOTO & ASSOC., INC.

Dear Mr. Ishida:

Subject: Block J Redevelopment Project, Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27, Honolulu, Oahu, Hawaii

Thank you for allowing our review of the draft EIS for the proposed Block J project. The Department of Hawaiian Home Lands anticipates no significant impacts upon our programs and projects from the proposed development.

If you have any questions, please call Joe Chu of our Planning Office at 587-6421.

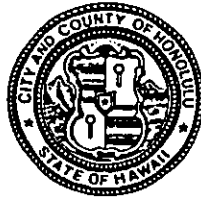
Aloha,

Daniel Yagodin
KALI WATSON, Chairman
Hawaiian Homes Commission

Cc Office of Environmental Quality Control
Honolulu Planning Department
Wilson Okamoto & Associates

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Kali Watson, Chairman
Hawaiian Homes Commission
Department of Hawaiian Home Lands
State of Hawaii
P.O. Box 1879
Honolulu, Hawaii 96805

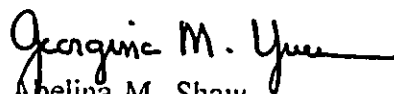
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Watson:

Thank you for your letter dated July 24, 1998, indicating that your Department anticipates no significant impacts upon your programs and projects from the proposed development.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

RECEIVED
JUL 27 1998

WILSON OKAMOTO & ASSOC., INC.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

JUL 24 1998

Ref.:LD-PEM

LD Ref.:BLOCKJRD.COM

Mr. Keith Ishida
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Dear Mr. Ishida:

Subject: Request for Comments - Draft Environmental Impact Statement, Block J
Redevelopment Project, Honolulu, Oahu, Tax Map Key: 2-1-09:18 and 27

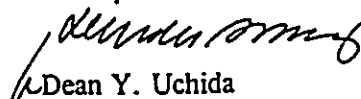
We have reviewed the subject Draft Environmental Impact Statement for the subject project and would like to offer the following comments:

Land Division - Engineering Branch

We confirm that the proposed project is located in Zone X, an area located outside the 500-year flood plain.

Thank you for the opportunity to review the Draft Environmental Impact Statement for the subject project, we have no further comments to offer at this time. Should you have any questions, please contact Patti Miyashiro of our Land Division at 587-0430.

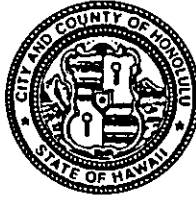
Very truly yours,


Dean Y. Uchida
Administrator

c: Oahu District Land Office
Ld Div-Engineering Branch
Patrick T. Onishi,
C&C of Honolulu, Png Dept.
✓Earl Matsukawa
Wilson Okamoto & Associates, Inc.
OEQC

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

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HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Dean Y. Uchida, Administrator
Land Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

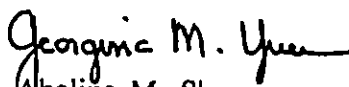
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Uchida:

Thank you for your letter dated July 24, 1998 (Ref.: LD-PEM), confirming that the proposed project is located in Zone X, an area outside the 500-year flood plain.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYetano
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

July 16, 1998

Mr. Keith Ishida
City and County of Honolulu
Department of Community Services
715 S. King Street, Suite 311
Honolulu, Hawaii 96813

RECEIVED
JUL 28 1998

LOG NO: 21815 ✓
DOC NG: 9807EJ16

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

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GILBERT COLOMA-AGAAAN

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RESOURCES ENFORCEMENT

CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Dear Mr. Ishida:

WILSON OKAMOTO & ASSOC., INC.

**SUBJECT: Chapter 6E-8 Historic Preservation Review -- Draft Environmental Impact Statement (DEIS): Block J Redevelopment Project
Honolulu, Kona, O'ahu
TMK: 2-1-9:18 and 27**

Thank you for the opportunity to review the DEIS for this project. We apologize for our late comments on the EIS preparation notice. Our comments were issued on July 7, 1998, too late for inclusion in the DEIS. Our comments on the DEIS therefore, reiterate those prepared in response to the EISPN (SHPD log 21563). In addition we note that the DEIS includes a recent archaeological assessment, conducted by Cultural Surveys Hawaii, for the Block J Redevelopment Project which affirms the high probability for encountering subsurface historic sites at this parcel. We note that there was a prior study by M. Tomonari-Tuggle, which was quite good, which already reached the same conclusions.

Based on the Tomonari-Tuggle assessment (which the Cultural Survey study simply re-affirmed), the probability of encountering subsurface historic sites (archaeological sites) in the Block J project area is very high. Archaeological investigations in surrounding areas within the downtown Honolulu have uncovered both pre-contact and post-contact archaeological deposits. Many of these archaeological deposits have been habitation deposits associated with the precontact and early historic use of Honolulu. Such deposits can contain very important information on the past. For example, other projects have uncovered information on the residences of Kamehameha's high ranking retainers and on earlier times. Burials associated with some of these residences have also been found.

Given the above information, we believe that an archaeological inventory survey with subsurface testing needs to be performed to determine if historic sites are present, and, if so, to gather sufficient information to evaluate their significance and to recommend mitigation, if needed. A report of the finds should be submitted to the State Historic Preservation Division for review.

Mr. Ishida

Page 2

If significant historic sites are found during the survey, a mitigation plan may need to be developed and executed. This may involve archaeological salvage (data recovery) excavations and/or archaeological monitoring of construction work at the site.

Time should be allowed for planning for the survey, review of the report on findings, agreement on mitigation commitments, and the development of a scope for mitigation work, and the execution of the mitigation fieldwork. Survey test excavations and report write-up can involve a number of months (3-5 months). If the report needs revision before it acceptably documents the findings, 1-3 months might be involved in this step. A mitigation scope may take a month to fine-tune. Salvage excavations can take 1-2 months in the field, depending on the amount and kinds of work needed. It is important that the City & County allow enough time on these matters, so construction can begin without delays. The quicker the survey begins, clearly the more rapidly the project can move through the historic preservation process.

In addition, the Central Firestation adjoins the project area. New construction should be so designed as to not adversely effect this project either in a visual manner or structurally.

If you have any questions please call Sara Collins at 587-0013 or Elaine Jourdane at 587-0014, regarding archaeology or Carol Ogata at 587-0004 regarding architecture.

Aloha,



Don Hibbard, Administrator
State Historic Preservation Division

EJ:je

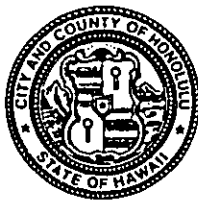
c: ~~Earl Matsukawa, Wilson Okamoto & Associates, Inc., 1907 S. Beretania Street, Suite 400, Honolulu, HI 96826~~

Patrick Onishi, Planning Department, City and County of Honolulu
650 South King Street, Honolulu, HI 96813

Office of Environmental Quality Control, 235 S. Beretania St. Room 702, Honolulu, HI 96813

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Hibbard:

Thank you for your letter dated July 16, 1998 (Ref. Log No.: 21815, Doc No.: 9807EJ16), concerning the subject Draft EIS. We reiterate our responses provided to you in reply to your letter dated June 22, 1998 (SHPD Log No. 21563) commenting on the project's EIS Preparation Notice.

We acknowledge that the archaeological assessment conducted for the project's Draft EIS affirms the high probability of encountering subsurface historic sites at this site.

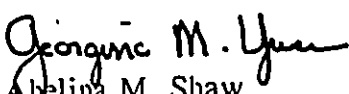
We have apprised the project developer of the need to conduct an archaeological inventory survey with subsurface testing to determine the presence of historic sites, to recommend mitigation, if needed, and to submit the report findings to your Department for review. If significant findings are encountered, an appropriate mitigation plan will be prepared and pursued. We appreciate your informing us of the anticipated timeframe involved in undertaking this process.

As discussed in Section 3.8 Noise of the Draft EIS, impact pile driving equipment capable of propagating ground vibrations that could potentially damage nearby structures such as the Central Fire Station will not be used during construction of the project. In the long-term, visual impacts on the Central Fire Station will be minimal since Kamalii Park will be reconstructed following construction of the underground parking garage. The proposed concept for the reconstructed park is to provide a visual transition from the "greenery" of the Pali Highway area mauka of the project site to the urban district near Beretania Street.

Letter to Mr. Don Hibbard
September 11, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


1- Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

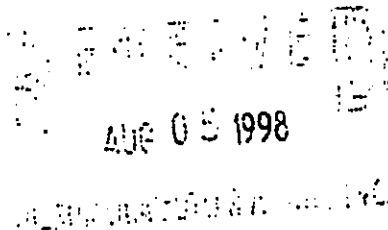
AUG - 4 1998

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAJI
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-PS
2.0399

Mr. Keith Ishida
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813



Dear Mr. Ishida:

Subject: Draft Environmental Impact Statement (DEIS) for the
Block J Redevelopment Project, Honolulu
TMK: 2-1-09: 18 and 27

Thank you for the opportunity to review the subject DEIS. We have the following comments:

1. We are currently designing an upgrade of the traffic signals at the Nuuanu Avenue/Vineyard Boulevard intersection to provide a protected phase for left-turn movements from both Nuuanu Avenue approaches.
2. The DEIS Traffic Impact Study should determine whether projected peak morning left turns from westbound Vineyard Boulevard to Makai-bound Queen Emma Street justify lengthening the existing left-turn storage or constructing a double left-turn lane. The City should provide required improvements at no cost to the State.
3. At no cost to the State, as recommended in the DEIS Traffic Impact Study, the City should construct double left-turn lanes for left turns from westbound Vineyard Boulevard to makai-bound Pali Highway and from mauka-bound Pali Highway to westbound Vineyard Boulevard.

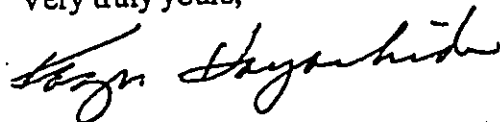
Mr. Keith Ishida

Page 2

AUG - 4 1998

4. All plans for work within the State highway right-of-way must be submitted to our Highways Division for review and approval.

Very truly yours,



KAZU HAYASHIDA
Director of Transportation

c: Mr. Mel Hirayama
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

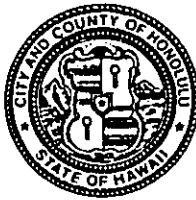
Mr. Patrick T. Onishi, Director
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

✓ Mr. Earl Matsukawa
Wilson Okamoto & Associates, Inc.
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Mr. Gary Gill, Director
Office of Environmental Quality Control
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
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ELDERLY AFFAIRS DIVISION
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WORKHAWAII DIVISION
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Kazu Hayashida
Director of Transportation
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Hayashida:

Thank you for letter dated August 4, 1998 (Ref. HWY-PS 2.0399), concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. Based on discussions by our traffic engineering consultants with your Department, the traffic signal upgrade being designed by your Department for the intersection of Vineyard Boulevard with Nuuanu Avenue should provide acceptable traffic conditions at that intersection through year 2002 with the addition of the Block J Redevelopment Project. We anticipate that no further traffic improvements would be necessary within this timeframe.
2. The existing left-turn storage lane on the westbound approach of Vineyard Boulevard at Queen Emma Street provides a useable storage length of about 250 feet. An assessment was made of the length needed to minimize the stacking of left-turn vehicles into the adjacent through lane. The assessment was based on the morning peak hour volume, a normal distribution of vehicle arrivals, and a 95% probability that the vehicles arriving during any signal phase would not exceed the storage length. The estimated storage requirements are as follows:

For 1998 Existing Volume	360 feet
2002 Without Project	380 feet
2002 With Project	440 feet

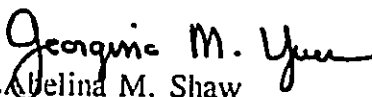
Letter to Mr. Kazu Hayashida
September 11, 1998
Page 2

Thus, the existing lane should be 110 feet longer to accommodate present volumes at the 95% probability. The project traffic would increase the storage length by 60 feet, based on all of the westbound project traffic on Vineyard Boulevard turning left at this intersection.

3. The intersection of Pali Highway with Vineyard Boulevard is congested with existing traffic volumes, and the forecast 2002 morning peak hour volumes without the Block J Redevelopment Project would exceed the intersection capacity. The project would contribute to a worsening of this problem location, but would not be the cause of the problems at the intersection. Therefore, we feel that the project should not be responsible for the implementation of the improvements to address existing problems.
4. We have apprised the project developer of the requirement to submit all plans for work within the State highway right-of-way to the Highways Division for review and approval.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Georgina M. Yuen
Helina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

PHONE (808) 594-1888

8/98-1637
FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

August 11, 1998

Mr. Patrick T. Onishi
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813

EIS # - 185

Re: Draft Environmental Assessment for the Block J Redevelopment Project

Dear Mr. Onishi:

Thank you for the opportunity to review the Draft Environmental Assessment for the Block J Redevelopment Project.

The proposed Block J Redevelopment Project involves the section of Pali Highway which acts as the focal point for all Pali traffic both entering and leaving the inner-city. The Draft Environmental Assessment (DEA) does not give specific information on the duration of traffic disruption.

Section 3-37, #1, paragraph 2 "From the vantage point further makai along Bishop Street, the project's northwest tower *will block the remaining view of the Koolau Range and sky visible between the existing high-rise structures along the street*". There is a dark and final ring to this paragraph. How many workers in our business community will lament that recharge no longer provided due to the permanent lost of visual connection with the Koolau Range and sky?

Should you have any questions concerning our comments, please contact Colin Kippen, Land and Natural Resources Division Officer or Richard Messier, Natural Resource Specialist, at 594-1758.

Sincerely,

Randall Ogata
Administrator

Colin Kippen
Land and Natural Resources Division Officer

cc: Board of Trustees

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

October 29, 1998

Mr. Colin Kippen
Land and Natural Resources Division Officer
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Kippen:

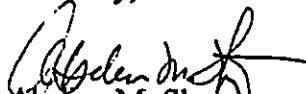
Thank you for your letter dated August 11, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. Section 2.2 of the Draft EIS (page 2-7) estimates that the construction period will extend from the beginning of 1999 to the Fall of 2001. Although there is no specific estimate of how long the Pali Highway may be affected by various stages of construction, it is likely that impacts on the highway would extend through most of the construction period. It should be noted, however, that recent modifications in the project proposal would eliminate the need to demolish and reconstruct the adjoining section of Pali Highway since the underground parking garage would not extend under the highway.
2. As required, the Draft EIS provides a concise disclosure of the project's visual impact. There was no intent to shade this disclosure with a "dark and final ring." Moreover, while there is no appropriate method for quantifying "how many workers in the business community would lament the recharge no longer provided due to the permanent loss of visual connection with the Koolau Range and sky," Section 5.6 of the Draft EIS discusses this visual impact with respect to the City's policies on Public Views as contained in its Development Plan for the Primary Urban Center. Due to concerns expressed about the project's impact on this view, Section 5.6 of the Final EIS includes additional discussion of this impact.

Letter to Mr. Colin Kippen
October 29, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abeline M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4186

August 24, 1998

Robert Agres, Jr.
Department of Community Services
Housing Division
715 South King Street, #311
Honolulu, Hawaii 96813

Attention: Keith Ishida

Dear Mr. Agres:

Subject: Draft Environmental Impact Statement (EIS) for Block J Redevelopment Project, Honolulu

In order to reduce the bulk of the final EIS document and to save paper, we encourage the submission of documents with pages printed on both sides. In addition we have the following comments to offer:

1. Affordable rents: The income requirement is listed on page 4-9 as about \$30,000 a year. What will be the actual rental amounts for this project?
2. Impacts on the project: In the impacts section of the final EIS include a discussion of natural and human environmental impacts on this project. Examples of natural impacts include those from hurricanes, tsunamis, earthquakes, and volcanic hazards; and human environmental impacts, including population shifts or increases, and increasing or decreasing urbanization.
3. Visual impacts:
 - a. Depiction in the draft EIS: The mauka views (existing and the "with project" scenarios) from the *centerline* of Bishop Street are not depicted. The final EIS

Robert Agres, Jr.
August 24, 1998
Page 2

must provide photographs from the following locations:

- ▶ Bishop Street (centerline) at Hotel Street intersection
- ▶ Bishop Street (centerline) at Queen Street intersection

We believe that the mauka views from the centerline of Bishop Street will be blocked by the proposed project. Please consider alternatives that would preserve mauka views. If an alternative preserving mauka views is not selected, include the justification for not selecting it.

b. Mitigation measures: On page 3-38 and several other places throughout the draft EIS, the following sentence appears: "Although the mass of the towers will be minimized by the neighboring high-rise office buildings, the perceived size and bulk of the residential towers will be reduced through sensitive massing, visual stepping and architectural detailing." Please explain and illustrate the terms *sensitive massing, visual stepping and architectural detailing* and how they will reduce these impacts.

4. Analysis of alternatives: Section 6 synthesizes seven site plan options but does not include a description and analysis of each, nor an explanation of why option 7 was the preferred option. In the final EIS please provide this description and analysis. Also indicate what the abbreviation FAR stands for in the options list on pages 6-3 and 6-4.

If you have any questions, call Nancy Heinrich at 586-4185.

Sincerely,

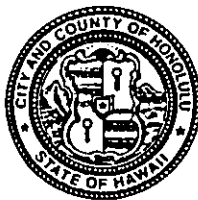


GARY GILL
Director

c: Patrick Onishi, CCH Planning Dept.
Earl Matsukawa, Wilson Okamoto

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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JEREMY HARRIS
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SPECIAL PROJECTS SECTION
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MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Gill:

Thank you for your letter dated August 24, 1998, concerning the subject Draft EIS. We share your concern for saving paper and will print the Final EIS using both sides. We offer the following responses to your numbered comments:

1. The actual rent amounts for the project have yet to be determined.
2. **Section 3.2 Geology and Hydrology**, in paragraph 4 notes that the project site is designated as Zone X, an area determined to be outside the 500-year flood plain, and that it is not in a designated tsunami zone.

Section 3.4 Earthquake notes that Oahu is in Seismic Zone 2A and that all project structures will be designed in accordance with Zone 2A requirements.

Volcanic hazards are primarily a concern for projects on the island of Hawaii where the U.S. Geological Survey has designated volcanic hazard zones. According to Stearns (*Geology of the State of Hawaii, 1966*), the most recent volcanic activity on Oahu was in the late Pleistocene Epoch, over 30,000 years ago. Hence, discussion of potential volcanic hazards impacting the proposed project within its 65-year functional life seems trivial.

Letter to Mr. Gary Gill
September 11, 1998
Page 2

With regard to hurricane impacts, the Uniform Building Code (UBC), which is applicable to all new structures on Oahu, includes consideration of hurricane force winds. Section 3.4 Earthquake of the Final EIS will mention that the project will meet applicable UBC requirements.

The impacts on population and urbanization were discussed in the project's socio-economic impact assessment (Appendix E).

3a. and 3b.

Section 3.13 Visual Characteristics of the Final EIS will include photographic depictions of the project from the centerline of Bishop Street at Hotel and Queen Streets as demanded in your letter. In response to your concerns, the Final EIS will include the following discussion:

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. Massing considerations for the above-ground structures are intended to minimize obstruction of views through the project site and to reduce the perception of building mass. Three tower configurations were examined, including a single double-loaded slab tower (double-loaded means each floor has a central access corridor along the length of the slab with units on both sides), dual point towers (point towers have basically a square floor configuration with units surrounding a central elevator and service spine), and a combination of a smaller slab tower and a point tower. A slab tower, though functionally more efficient, is visually more intrusive; the Marco Polo Building on Kapiolani Avenue being an extreme example. A point tower, on the other hand, is less visually intrusive, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed. The dual point tower configuration was selected as having the least visual impact, taking into account the vantage points from which the proposed project may be viewed, including Bishop Street, the Punchbowl lookout and from Pali Highway.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking

the visual connection between the tower and the ground. From the sidewalks adjacent to the podium, pedestrians' views of the towers are obscured by the podium. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of future residents, distance from Kukui Plaza for the privacy of residents in that development, distance from Pali Highway to reduce traffic noise for future residents at the north tower, and views of the north tower from Bishop Street. As in most architectural design decisions, tower siting for the proposed project is a compromise among these factors. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural details which minimize the visual impact of the project include those at the podium, the towers shafts and caps. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

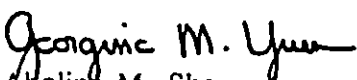
Since the project configuration is at the conceptual stage of design, adjustments to mitigate potential visual or other impacts is still possible. This will be determined as the project design is refined, taking into account concerns expressed in the EIS process.

4. The available documentation of the City's 1993 evaluation of the seven site development concepts for the project site is limited to the description and discussion provided in the Draft EIS. The abbreviation FAR refers to floor area ratio which is the ratio of a building's total floor area to the size of the lot on which it is built. We will include this definition in Section 5.7 City and County of Honolulu Land Use Ordinance and Zoning of the Final EIS.

Letter to Mr. Gary Gill
September 11, 1998
Page 4

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


for Abeline M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.



University of Hawai'i at Mānoa

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 • 2550 Campus Road • Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

Aug. 24, 1998

RE:0692

Keith Ishida
Department of Community Services
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Dear Mr. Ishida;

Draft Environmental Impact Statement
Block J Redevelopment Project
Honolulu, Oahu

The City and County of Honolulu Department of Housing and Community Development Corporation proposes this expansion on leased City land. The project is proposed for "Block J," bounded by Beretania, Queen Emma, Kukui, and Fort Streets and bisected by Pali Highway. The site encompasses 178,285 square feet of land, including an approximately 44,870 square foot portion of Pali Highway. It will include a mixed-use of affordable rental residential, retail, and public parking complex in Downtown Honolulu.

The proposed project will include two high rise residential towers (350 foot height limit) for households earning at or below 60 percent of the median income split between seniors and households of all ages. The applicants propose 100,000 square feet of retail space within two above grade levels, and 1,896 parking stalls. All but 20 of these stalls will be located at three underground levels. The applicants propose 25,500 square feet of open space, and additional rooftop recreation areas, arcade areas, and reconstruction of Kamalii Park. The total development cost is estimated at \$154 million.

The Environmental Center has reviewed the document with the assistance of Panos Prevedouros, Civil Engineering; Dean Watase, Urban and Regional Planning; and Victoria Cullins of the Environmental Center.

An Equal Opportunity/ Affirmative Action Institution

Keith Ishida
August 24, 1998
Page 2

Need for Project

Although the proponent claims that inner-city housing for seniors and low income families would be beneficial with inherent proximity to shopping, schools, jobs, and medical services, our reviewers question the need for additional residential or retail units at this location. Statistics on the current and projected occupancy rates should be included in the Final EIS. The occupancy rates should span a range of income levels, and include both residential and retail units in the downtown area. The occupancy rates of Kukui Plaza would be of special consideration. Also, what would the maintenance costs be for the proposed units? Would these costs be fully amortized by the rental income?

The references used on page 4-12 listing SMS Research and The Prudential Locations as sources are not cited in the reference section of DEIS.

Alternatives

Alternative locations for the project were not considered. Our reviewers do not agree that optimal development of the project site is residential and retail use. This area could be considered a "gateway" to Downtown Honolulu. It does not seem in the State's best interest to place monolithic edifices here. This area could alternatively be utilized as a future hub for a mass-transit system, incorporating innovative urban planning and design considerations, including the "City for People; not Cars" theme.

If the demand for low-rent units in Downtown Honolulu does in fact exceed the current supply, reconstruction of Mayor Wright Housing may be a preferable method of providing these units. Our reviewers suggest that it would be more cost effective to rebuild these units, increasing their capacity, than to redevelop Block J as proposed.

Socio-Economic Impacts

The principal advantage of residential development in the city center would be to provide housing for people who work in the financial district. However, the DEIS fails to discuss employment-related housing demand statistics. The Final EIS should discuss the availability of employment in Downtown Honolulu for the proposed occupants.

Keith Ishida
August 24, 1998
Page 3

The project also does not seem to be in accordance with the long range development plan of the State to develop Kapolei as the "Second City," relocating jobs and residents to the Ewa Plains area.

In the comments section of the DEIS, the Downtown Neighborhood Board No. 13 submits concerns raised by a letter from Mervyn W. Lee, Esq. The applicant responded stating the letter regarded a legal issue "which is beyond the scope of the EIS to address." As the EIS system is one of broad applicability, our reviewers contend that any legal issues such as encumbrances on the land or impending conjunctions are of socio-economic importance and subject to full disclosure requirements.

Noise

On page 4-15, it is stated that St. Andrew's Priory is 400 feet from project site. Central Middle School is in the block adjoining Block J. Royal Elementary School is on Queen Emma Street mauka of Vineyard Boulevard. Will there be any particular noise mitigation concerning school sessions?

Traffic

The review of the traffic component did not reveal any flaws in the study itself which is well written, uses the proper methodology and makes reasonable assumptions. Our reviewers, however, voiced strong criticism toward the City and County Department of Housing for planning a project which: 1) largely guarantees a parking stall for households which earn an income of 60% or less than the median income and will reside in subsidized apartments, and, 2) goes against mass transit objectives and exacerbates traffic congestion problems by offering an additional 700 parking stalls. Until a substantive analysis is provided on the need for 1,900 parking stalls at this time, the plan will be considered irresponsible. Also, it is proposed that Pali Highway will be rerouted *though* the construction area during construction. Please discuss in the Final EIS how this will be accomplished

Aesthetics

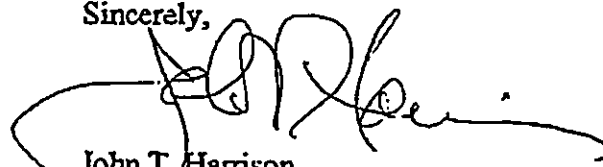
The aesthetic impacts of the proposed project are considerable. Relevant views addressed in existing viewplane plans and policies are those towards Punchbowl and the Koolau Range. Replacement of these views by monolithic structures severely compromises the "Hawaiian sense of place." The Final EIS should discuss in detail how the "perceived size and bulk . . . will be reduced through sensitive massing, visual stepping and architectural detailing."

Keith Ishida
August 24, 1998
Page 4

Conclusion

Thank you for the opportunity to review this Draft Environmental Impact Statement. The Final EIS would be substantially improved by incorporation of the comments that our reviewers have provided.

Sincerely,

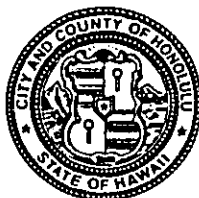


John T. Harrison
Environmental Coordinator

c: OEQC
Roger Fujioka
Wilson Okamoto & Associates, Inc.
City and County of Honolulu Planning Department
Dean Watase
Panos Prevedouros
Victoria Cullins

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
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JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
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September 11, 1998

Mr. John T. Harrison
Environmental Coordinator
Environmental Center
University of Hawaii
2250 Campus Road, Crawford 317
Honolulu, Hawaii 96822

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Harrison:

Thank you for letter dated August 24, 1998 (Ref. RE:0692), concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

Need for Project

It should be noted that the City's solicitation of design-build proposals was not based on fulfilling a need for affordable housing or retail space. As stated in **Section 1.4 Purpose and Need for Action** of the Final EIS, the City's objectives included better utilization of the project site, providing for the long-term viability of Downtown Honolulu and assisting in stimulating the local economy through private sector investments. The winning proposal is a private sector offer to develop a profitable project which would also meet the City's need. The ability to market the residential and retail space is accounted for by the developer in his negotiation of an acceptable development agreement with the City. Similarly, maintenance costs and projected rental income have been accounted for by the developer. Since the disclosure of detailed financial information on the project would impinge upon the developer's position in finalizing details of the development agreement, such information is necessarily proprietary.

Letter to Mr. John T. Harrison
September 11, 1998
Page 2

The market analysis used in estimating the demand for residential units and retail space in the proposed Block J project was not based on occupancy rates in the vicinity of the project; hence, such information was not compiled. Inasmuch as a variety of factors influence residential and retail demand, we question the basis of your opinion that such information should be provided in the EIS and how it should be interpreted in assessing the need for the project.

The impacts of the project on housing demand and supply is discussed in Section 3.3.2 of the Socio-Economic Impact Assessment (Appendix E in the Draft EIS) and summarized in Section 4.5.2.2. of the Draft EIS. Information and statistics pertaining to the demand for the residential units are included in those sections.

Alternatives

The City and County of Honolulu does not own or control any other site in the Primary Urban Center which can accommodate the proposed project.

We believe that any discussion on the optimum use of a property must consider the needs of the community, existing land use plans and policies, and the feasibility of various development alternatives. The "Block J" designation for the project site speaks to the site's history as an urban renewal block. We suggest that the location and size of the property makes the redevelopment of the existing underutilized parking lot an appropriate action for the City and County to pursue. The proposed project is consistent with the existing BMX-4 zoning, and as described in Chapter 5 of the Draft EIS, implements many of the goals and objectives of the City's general plan and development plan, as well as State plans. The proposed project will continue and strengthen the residential and residential/commercial mixed-use development pattern of the *mauka* side of Beretania Street which currently exists in the form of Kukui Plaza, Honolulu Park Place, Honolulu, Tower, and Beretania North. As such, from a land use planning and policy perspective, the project is entirely consistent.

The suggestion to reconstruct Mayor Wright Homes is overly simplistic and unrealistic, considering that the Hawaii Housing Authority has invested millions of dollars of public funds to renovate the project. When the financial and human cost of displacing hundreds of families to accommodate a reconstruction of Kuhio Park Terrace are taken into account, we do not believe it would be more cost-efficient than the proposed action. The Hawaii Housing Policy Study 1997 Update projected that between 1997 to 2016, there will be a need for over 20,000 new housing units for

households earning less than 80 percent of the median income. Block J's 913 units could provide nearly 4 percent of this need.

Development of the proposed project will not preclude the construction of mass transit improvements in the future. However, given Honolulu's recent history with fixed rail mass transit proposals, we are not optimistic that such a system will be developed in the near future.

Socio-Economic Impacts

In response to your recommendation that the Final EIS should discuss the availability of employment in downtown Honolulu for the proposed occupants, an additional analysis of jobs and population was undertaken for central Honolulu. U.S. Census data for 1990 show that within the central city area (Census Tracts 39 to 42 and 51 and 52), the resident population was approximately 13,500, two percent of the resident population of the City and County of Honolulu. Some 6,600 households were located in the area. There were an estimated 78,200 jobs located in the area and only 7,300 workers. These jobs represented approximately 19% of the total job count for the City and County. By 1996, the central Honolulu job count likely climbed to about 81,300.

Of those jobs, some 14,800 would likely pay between 50% and 60% of the median household income as defined by the U.S. Department of Housing and Urban Development (\$27,950 and \$33,540 in 1996, the most recent year for which industry salaries are available). A total of 52,200 jobs would pay 60% of the median or less. Hence, some 14,800 Oahu households in the 50% to 60% income range could be supported by single jobs in central Honolulu. However, most working households have more than one income. Counting both multiple- and single-income households, the number of households in the income range that could be supported by central Honolulu jobs alone climbs above 25,000. This is three to four times greater than the number of nearby households plus the additional households in the Block J project. These calculations indicate that many work opportunities for moderate-income households are available in the central Honolulu area. The analysis will be detailed in Section 3.3.3 of the Socio-Economic Impact Assessment and summarized in Section 4.5.2.3 Availability of Employment Near Housing in the Final EIS.

The development of Kapolei as a secondary urban center remains a priority of the City and County of Honolulu. However, the development of Kapolei is one of many goals established by the City's General Plan. As articulated in Chapter 5 of the Draft

EIS, the proposed project implements many aspects of State and City plans and policies relating to the development of the Primary Urban Center including the revision of affordable housing, the location of housing near employment centers, and the use of public lands to facilitate public-private partnerships for affordable housing.

Regarding the concerns raised by a letter from Mervyn W. Lee, Esq., we have confirmed that development of the Block J Redevelopment Project is permitted within the site under the City and County of Honolulu's Urban Renewal Plan for the Kukui Project (Project No. T.H. R-2).

Noise

As discussed on page 3-11 of the Draft EIS, State Department of Health rules regarding construction noise holds the contractor responsible for maintaining noise levels below regulatory limits. Notably, the mitigation measures listed on page 3-12 include using methods of construction that minimize the amount of noise generated. Due to the proximity and sensitivity of the St. Andrew's Priory and Central Middle School to construction noise impacts, Section 3.8 Noise of the Final EIS will include the following additional mitigation measure:

- To the extent possible, schedule noisier earthwork activities in close proximity to schools during times when classes are not in session.

Traffic

Of the 1,896 parking stalls, all but 873 will be used to support the planned commercial and residential uses, and to replace the existing 208 stalls.

While providing less parking as a means of reducing traffic is logically appealing, communities have insisted that affordable rental properties include an adequate number of parking stalls for residents to prevent an overflow of cars onto neighborhood streets. A family which resides in an affordable rental unit in no way surrenders its right to own an automobile. For many in this income group, an automobile may be required to secure employment or address a family situation.

In addition to accommodating residential and on-site commercial parking, on numerous occasions downtown residents and businesses have stated that there are shortages of parking for employees and patrons. The additional parking stalls can help meet this need. As a matter of policy, the City promotes the use of mass transit.

We believe that due to the convenient location of the project, many residents may choose to walk to work or shopping, or take the bus.

Given these factors, we do not believe that providing the proposed number of stalls is irresponsible. To the contrary, many in the community may believe that providing an *inadequate* number of parking stalls to support a proposed project to be the irresponsible action.

During construction, traffic will be rerouted through the project site in the area between the existing Pali Highway alignment and the project's northwest residential tower structure, and the Diamond Head portion of Kamalii Park. The actual configuration of the roadway will change during the course of construction, but will provide up to four travel lanes during the peak traffic periods.

Aesthetics

In response to your concerns, Section 3.13 Visual Characteristics of the Final EIS will be revised to include the following discussion:

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. Massing considerations for the above-ground structures are intended to minimize obstruction of views through the project site and to reduce the perception of building mass. Three tower configurations were examined, including a single double-loaded slab tower (double-loaded means each floor has a central access corridor along the length of the slab with units on both sides), dual point towers (point towers have basically a square floor configuration with units surrounding a central elevator and service spine), and a combination of a smaller slab tower and a point tower. A slab tower, though functionally more efficient, is visually more intrusive; the Marco Polo Building on Kapiolani Avenue being an extreme example. A point tower, on the other hand, is less visually intrusive, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed. The dual point tower configuration was selected as having the least visual impact, taking into account the vantage points from which the proposed project may be viewed, including Bishop Street, the Punchbowl lookout and from Pali Highway.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. From the sidewalks adjacent to the podium, pedestrians' views of the towers are obscured by the podium. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of future residents, distance from Kukui Plaza for the privacy of residents in that development, distance from Pali Highway to reduce traffic noise for future residents at the north tower, and views of the north tower from Bishop Street. As in most architectural design decisions, tower siting for the proposed project is a compromise among these factors. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

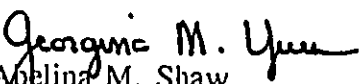
Architectural details which minimize the visual impact of the project include those at the podium, the towers shafts and caps. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

Since the project configuration is at the conceptual stage of design, adjustments to mitigate potential visual or other impacts is still possible. This will be determined as the project design is refined, taking into account concerns expressed in the EIS process.

Letter to Mr. John T. Harrison
September 11, 1998
Page 7

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR



ESTHER UEDA
EXECUTIVE OFFICER

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
P.O. Box 2359
Honolulu, HI 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

July 7, 1998

RECEIVED
JUL 08 1998

WILSON OKAMOTO & ASSOCIATES, INC.

Mr. Keith Ishida
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Dear Mr. Ishida:

Subject: Block J Redevelopment Project - Draft
Environmental Impact Statement

We have reviewed the subject Draft Environmental Impact Statement (DEIS) as transmitted by a letter dated July 2, 1998 from Wilson Okamoto & Associates, Inc., and confirm that the project site as shown in various maps and figures within the DEIS, and identified as TMKs: 2-1-09: 18 and 27, is within the State Land Use Urban District.

We have no further comment to offer at this time.

Thank you for the opportunity to provide comments on the subject DEIS.

If you have any questions in regards to this matter, please feel free to contact me or Leo Asuncion of my staff at 587-3822.

Sincerely,

A handwritten signature in cursive script, appearing to read "Esther Ueda".

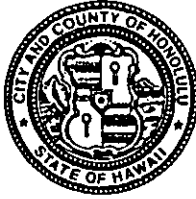
ESTHER UEDA
Executive Officer

EU:th

cc: OEQC
Mr. Patrick T. Onishi
Mr. Earl Matsukawa

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Ms. Esther Ueda
Executive Officer
Land Use Commission
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804-2359

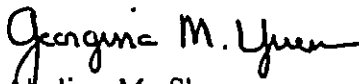
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Ms. Ueda:

Thank you for letter dated July 7, 1998, confirming that the proposed project site, as described in the subject Draft EIS is within the State Land Use Urban District.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,

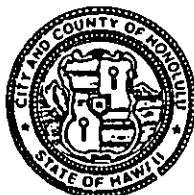

Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 8TH FLOOR • HONOLULU, HAWAII 96813-3017
PHONE: (808) 523-4533 • FAX: (808) 523-4950

JEREMY HARRIS
MAYOR



PATRICK T. ONISHI
CHIEF PLANNING OFFICER

DONA L. HANAIKE
DEPUTY CHIEF PLANNING OFFICER

MH 7/98-1348

September 2, 1998

TO: ABELINA SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

ATTN: KEITH ISHIDA
PLANNING/COORDINATION/ELIGIBILITY BRANCH CHIEF

FROM: PATRICK T. ONISHI *[Signature]*
CHIEF PLANNING OFFICER

SUBJECT: BLOCK J REDEVELOPMENT PROJECT DRAFT ENVIRONMENTAL
IMPACT STATEMENT (DEIS), TAX MAP KEYS: 2-1-009: 018 AND 027,
HONOLULU, OAHU, HAWAII

In response to your department's request of July 2, 1998, we have reviewed the subject DEIS and have the following comments to offer:

1. Based on our review of Figures 3-5, 3-6 and a visual inspection along both sides of Bishop Street, it appears that the proposed building placements would affect mauka view opportunities along the existing mauka view corridor. Specifically, the existing view of Punchbowl from the west side of Bishop Street will be reduced, and the existing view of Pacific Heights and the Koolau mountain range from the east side of Bishop Street will be reduced.

To examine the effect on the Pacific Heights/Koolau view, we suggest that another set of figures be prepared from the perspective of the east side of Bishop Street and included in the Final Environmental Impact Statement.

2. Additionally, the DEIS should have included a view study taken from the southeast corner of the Alakea Street/Beretania Street intersection so that the potential effect of the view toward the Kapalama Ridge (Koolau Range in the background) could be assessed.

Abelina Shaw, Director
Department of Community Services
September 2, 1998
Page 2

To achieve this, we suggest that the Final Environmental Impact Statement should also include a view study prepared from this position to examine this potential view impact.

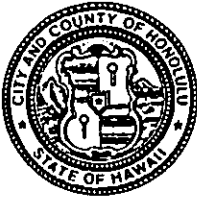
3. Finally, we note that while reduction of mauka views would be unavoidable when placing two towers at the site, we have also noticed that the project towers have been positioned as far Diamond Head on the site as possible to minimize mauka view impacts. In light of the observations, however, we suggest that the applicant consider the following as possible measures to further decrease mauka view impacts.
 - a. Reducing the tower floor sizes ("footprint");
 - b. Changing the shape of the towers to allow more mauka views;
 - c. Turning the towers, possibly 45 degrees, to reduce the surface presented to a viewer standing makai and to increase the apparent distance between them; and
 - d. Providing strategic breaks in the low-rise platform to allow mauka views through the property.

Should you have any questions, please contact Matthew Higashida of our staff at 527-6056.

PTO:ft

c: / Wilson Okamoto & Associates, Inc.
Office of Environmental Quality Control
Department of Planning and Permitting

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU
STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
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September 11, 1998

MEMORANDUM

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated September 2, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. and 2.

It is acknowledged that the proposed project towers will be visible from various vantage points around the site and will impact mauka views to an extent. The photographic simulations in the Draft EIS are representative of views which we feel are the most significant in terms of the project's visual impact -- mainly those from Bishop Street and Alakea Street looking mauka and from the Punchbowl Lookout looking makai. In addition, due to specific concerns regarding views directly up Bishop Street further makai, the Final EIS will include photographic simulations of the project from the centerline of Bishop Street at Hotel and Queen Streets as requested by the State Office of Environmental Quality Control.

3. While your suggestions to further decrease mauka view impacts are appreciated, Section 3.13 Visual Characteristics of the Final EIS will include the following detailed description of the aesthetic considerations taken into account, including necessary compromises, in developing the proposed building concept:

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. Massing

considerations for the above-ground structures are intended to minimize obstruction of views through the project site and to reduce the perception of building mass. Three tower configurations were examined, including a single double-loaded slab tower (double-loaded means each floor has a central access corridor along the length of the slab with units on both sides), dual point towers (point towers have basically a square floor configuration with units surrounding a central elevator and service spine), and a combination of a smaller slab tower and a point tower. A slab tower, though functionally more efficient, is visually more intrusive; the Marco Polo Building on Kapiolani Avenue being an extreme example. A point tower, on the other hand, is less visually intrusive, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed. The dual point tower configuration was selected as having the least visual impact, taking into account the vantage points from which the proposed project may be viewed, including Bishop Street, the Punchbowl lookout and from Pali Highway.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. From the sidewalks adjacent to the podium, pedestrians' views of the towers are obscured by the podium. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of future residents, distance from Kukui Plaza for the privacy of residents in that development, distance from Pali Highway to reduce traffic noise for future residents at the north tower, and views of the north tower from Bishop Street. As in most architectural design decisions, tower siting for the proposed project is a compromise among these factors. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural details which minimize the visual impact of the project include those at the podium, the towers shafts and caps. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building

Memorandum to Patrick T. Onishi
September 11, 1998
Page 3

mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

Since the project configuration is at the conceptual stage of design, adjustments to mitigate potential visual or other impacts is still possible. This will be determined as the project design is refined, taking into account concerns expressed in the EIS process.

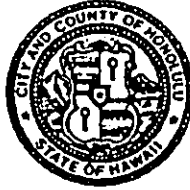
Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

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JEREMY HARRIS
MAYOR



JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

98-05023 (ASK)
98 EA Comments Zone 2

August 24, 1998

MEMORANDUM

TO: ABELINA MADRID SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

ATTN: KEITH ISHIDA

FROM: JAN NAOE SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
BLOCK J REDEVELOPMENT PROJECT
TAX MAP KEYS: 2-1-9: 18 AND 27

We have reviewed the above project and offer the following comments:

Special District

1. The portion of the project site located within 30 feet of Queen Emma Street is within the Hawaii Capital Special District and is subject to Section 7.30-4 of the Land Use Ordinance related to general design controls (i.e., providing landscaped yards and street trees within the sidewalk area - False Olive at 20'-0" o.c.).
2. A minor special district permit is required for removal of trees with trunks over 6" in diameter and sidewalk improvements (i.e., paving materials and patterns that provide a sense of scale and rhythm appropriate to the surrounding area).
3. A more detailed site plan showing the proposed improvements would be required in order to better assess its compliance with the special district regulations.

August 24, 1998

Parks

The proposal to satisfy park dedication requirements by providing approximately 25,000 square feet of "open space" and 32,000 square feet of "open space above the retail area" (see pages 4-18, Section 4.7 and 5-24, Section 5-24) does not comply with the Park Dedication Rules and Regulations of the City and County of Honolulu. Rule 10(e) states that "Physical facilities shall be provided by the subdivider for active recreational use such as outdoor recreational courts (volleyball, basketball, tennis, handball, horseshoe, shuffleboard, lawn bowling); swimming pool; play field (baseball, softball, football); tot lot facilities, and/or playground apparatus to serve the subdivision and subject to approval of the Director." Rule 10(a) also states that the site "...shall be on the ground level and shall not be covered."

Land Use Ordinance (LUO)

1. The LUO permits a maximum floor area ratio (FAR) of 4.0 in the BMX-4 Business Mixed Use District, with a possible maximum FAR of 7.5 with an open space bonus. The Draft EIS states that the project's proposed FAR will be approximately 7.26 with an open space bonus.

While it is understood that project plans are preliminary at this stage, the final EIS should identify the location and characteristics of the open space bonus by which the development proposes to obtain the 7.26 FAR.

2. The Draft EIS states that the project will contain approximately 100,000 square feet of retail space and that 167 parking stalls will be required for these retail uses. It appears that this parking calculation was based on the general BMX-4 retail requirement of 1 stall per 600 square feet.

We note, however, that the project may include other uses with greater parking requirements, such as eating and drinking establishments and a theater complex. Therefore, the final EIS should indicate the potential increase in parking requirements based upon final determination of specific retail uses for the project.

3. There are references throughout the Draft EIS of potential exemptions from LUO provisions which may be sought for the project (i.e., open space, parking, etc.) under the affordable housing provisions of Chapter 201E, Hawaii Revised Statutes.

As project planning progresses, we look forward to working with the developer on a comprehensive list of reasonable exemptions that will help ensure a successful affordable housing/mixed use project.

Traffic

1. The traffic impact report currently identifies the cumulative levels-of-service (LOS) for a number of intersections in the vicinity of the project. Using the operational analysis method, this should be further refined to include the LOS for each critical approach and turning movement. It appears that several of these may be operating under saturated conditions and should be identified and analyzed separately. A more detailed review of the potential impacts could then be provided and used to establish possible mitigative measures for these individual movements.
2. Driveways servicing the project should be designed where the left and right turn movements are reversed to eliminate potential conflicting maneuvers into and out of the parking areas. The driveways for each movement should be sufficiently separated to avoid confusion for motorists entering and exiting the site. Of particular concern is the driveways on Pali Highway and Kukui Street where egressing vehicles may impede vehicles ingressing the site causing queues onto these streets during peak periods of traffic. Auxiliary lanes should also be considered to further mitigate potential impacts from vehicles turning into these driveways.
3. Pali Highway should be realigned to provide a smoother transition to Bishop Street to the greatest extent practical. Consideration should be given to utilize a portion of Queen Emma Street in an effort to further shift the alignment of Pali Highway toward Bishop Street.
4. Parking areas within this development should be interconnected to allow motorists to use any of the driveways for access to avoid using surface streets for traffic circulation.
5. Sidewalks internal to the site should be designed to direct pedestrians to street intersections to minimize the potential for mid-block crossings.

6. Landscaping and structures in the vicinity of all driveways should be designed to provide adequate sight to pedestrians and other vehicles.
7. The traffic management plan should identify possible detour routes for motorists during construction. Of particular concern is the possible closure of Pali Highway during the construction of the underground parking area. Depending on the duration of the closure, an analysis of the impacts to the surrounding street system during construction should also be addressed.
8. The project's developer and other representatives should continue their close coordination with the City throughout the progress of this project.

Visual Impacts, Pages 3-35 to 3-38

1. We are concerned that the project will result in adverse impact to public views. Further, the project appears to be inconsistent with City and County of Honolulu's Development Plan (DP) and Special Provisions for the DP's Primary Urban Center provisions for maintaining and enhancing public views.
2. Page 3-38 states that the project "incorporates strategic building placements and special design and massing considerations" to mitigate visual impact along major view corridors. It is not clear how these techniques were incorporated into the project. The final EIS should discuss the specific siting and massing measures and why these were preferable to other alternatives.

Construction of a single tower, instead of two, should be discussed as an alternative. Please include visual comparisons with this alternative.

Plans

Kamalii Park should be labeled on the Site Plan, Figure 2-1.

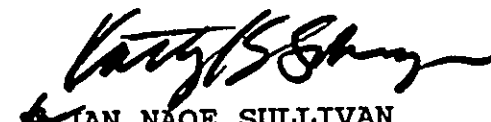
Noise, Page 3-15

According to page 3-15 of the Draft EIS, proposed mitigation includes structural measures and air-conditioning, or relocating and reshaping the footprint of the multi-family tower.

ABELINA MADRID SHAW, DIRECTOR
PAGE 5
August 24, 1998

The final EA should identify the selected alternative. If the footprint of the multi-family tower is relocated or reconfigured, the information on visual impact should be updated to reflect the revised site plan.

Should you have any questions regarding the above, you may contact Ardis Shaw-Kim of our staff at 527-5349.


JAN NAOE SULLIVAN
Director of Planning
and Permitting

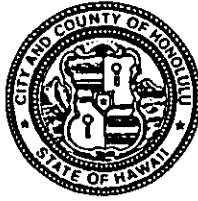
JNS:am

cc: Planning Department
Earl Matsukawa, Wilson Okamoto
& Associates, Inc.
Office of Environmental Quality Control

g:zd\blockj.ask

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: JAN NAOE SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 24, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

Special District

1. Section 5.7.2 Hawaii Capital Special District of the Draft EIS identifies the portions of the project lying within the Hawaii Capital Special District and discusses the applicability of its design controls to that portion of the project.
2. The Final EIS will include the requirement for a minor special district permit for the removal of trees with trunks over 6 inches in diameter and for sidewalk improvements in Section 5.7.2 Hawaii Capital Special District and Section 5.10 Permits and Approvals.
3. We acknowledge that more detailed plans of the development will be required to assess compliance with special district regulations. This will be coordinated with your Department during the project's design phase.

Parks

We acknowledge the error in describing the applicability of park dedication requirements in the Draft EIS, particularly with respect to facilities that are not on ground level. The discussion will be corrected in Section 5.9 Park Dedication

Ordinance of the Final EIS. As a point of clarification, reference to open space within the project site on page 4-18 of the Draft EIS is intended to indicate areas which could be used for recreational purposes.

Land Use Ordinance (LUO)

1. **Section 5.7 City and County of Honolulu Land Use Ordinance and Zoning** of the Final EIS will indicate that the types of open space bonus and their location are currently under discussion with the City and may be modified as the design is refined. Most recent discussions with the City indicate that the project can meet the open space requirements without an exemption pursuant to the provisions of Chapter 201E, HRS. The possibility of requesting a 201E exemption, however, will be included in the Final EIS since this matter has not been completely resolved.
2. In addition to the 208 replacement public parking stalls provided within the project, approximately 873 additional stalls will be made available to the public. These additional public stalls would accommodate any potential increase in parking requirements based upon final determination of specific retail uses for the project. This information will be included in the Final EIS.
3. We appreciate your willingness to work with the developer in developing a comprehensive list of reasonable exemptions to ensure a successful affordable housing/mixed-use project. We, likewise, look forward to working with you on this matter.

Traffic

1. The Traffic Impact Study was based on the operational analysis method. Although the report tables only identify the impact on the overall intersection conditions, the analyses included each approach and traffic movement at each of the study intersections. The report describes the impact on most of these approaches, including traffic movements that would be significantly affected by the project traffic, particularly if it would create a new problem location or if it would exacerbate an existing problem. For several locations, the results for individual movements were not specifically described in the report. To address your concerns, narrative has been added to the section of the Traffic Impact Study entitled "Traffic Conditions at Key Intersections" to cite conditions on specific approaches or movements for the following:

- Vineyard Boulevard at Queen Emma Street, westbound left-turn movement in the morning peak hour;
 - Vineyard Boulevard at Pali Highway, several movements in both peak hours; and
 - Beretania Street at Alakea Street, westbound right-turn in afternoon peak hour.
2. We have apprised the project developer of your Department's recommendations regarding turning movements at the project driveways, adequate separation of driveways, and the provision of auxiliary lanes. The developer will coordinate these recommendations with your Department and the Department of Transportation Services during the design phase.
 3. The Traffic Impact Study recommends that the Pali Highway approach lanes at Beretania Street will be realigned to provide for a smoother transition to Bishop Street. Due to the site's L-shaped configuration which imposes constraints on siting of the buildings and associated setbacks, there is limited flexibility to accommodate any major realignment of Pali Highway. All modifications will be coordinated with and approved by the Department of Transportation Services.
 4. To the extent possible, parking areas within the development will be interconnected to allow motorists to use any of the driveways for access. Vehicular flow and type of use will be a major focus for access planning.
 5. To the extent possible, sidewalks internal to the project site will be designed to direct pedestrians to street intersections to minimize the potential for mid-block crossings.
 6. To the extent possible, landscaping and structures in the vicinity of all driveways within the project site will be designed to provide adequate driver sight lines to pedestrians and other vehicles.
 7. During construction, a temporary road will be provided near the existing alignment of Pali Highway between Beretania and Kukui Streets to replace up to the same number of lanes on the existing Pali Highway and provide nearly the same roadway operational capacity. Detour routes will not be necessary since a connection between the Pali Highway/Beretania Street intersection and the Pali Highway/Kukui Street intersection will be provided. An impact analysis of the surrounding street system

would also not be necessary since no significant diversion of vehicular trips is expected.

8. As mentioned previously, the developer looks forward to working out details of the project to ensure a successful development with your Department.

Visual Impacts, Pages 3-35 to 3-38

1. and 2.

The Final EIS will include photographic depictions of the project looking mauka from the centerline of Bishop Street at the intersections of Hotel and Queen Streets. In response to your concerns, the Final EIS will include the following discussion:

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. Massing considerations for the above-ground structures are intended to minimize obstruction of views through the project site and to reduce the perception of building mass. Three tower configurations were examined, including a single double-loaded slab tower (double-loaded means each floor has a central access corridor along the length of the slab with units on both sides), dual point towers (point towers have basically a square floor configuration with units surrounding a central elevator and service spine), and a combination of a smaller slab tower and a point tower. A slab tower, though functionally more efficient, is visually more intrusive; the Marco Polo Building on Kapiolani Avenue being an extreme example. A point tower, on the other hand, is less visually intrusive, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed. The dual point tower configuration was selected as having the least visual impact, taking into account the vantage points from which the proposed project may be viewed, including Bishop Street, the Punchbowl lookout and from Pali Highway.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. From the sidewalks adjacent to the podium, pedestrians' views of the towers are obscured by the

podium. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of future residents, distance from Kukui Plaza for the privacy of residents in that development, distance from Pali Highway to reduce traffic noise for future residents at the north tower, and views of the north tower from Bishop Street. As in most architectural design decisions, tower siting for the proposed project is a compromise among these factors. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

Architectural details which minimize the visual impact of the project include those at the podium, the towers shafts and caps. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

Since the project configuration is at the conceptual stage of design, adjustments to mitigate potential visual or other impacts is still possible. This will be determined as the project design is refined, taking into account the PUC Development Plan Special Provisions and concerns expressed in the EIS process.

Construction of a single residential tower instead of two towers was initially considered, however, this resulted in a visually obtrusive structure. The twin tower design is proposed in light of City administration, City Council and community comments.

Plans

Figure 2-1 in the Final EIS will label Kamalii Park as you have recommended.

Memorandum to Jan Naoe Sullivan
September 11, 1998
Page 6

Noise; page 3-15

As the project is in the conceptual design stage, final noise mitigation measures have not yet been determined. At this time, however, the project developer is considering either air-conditioning the affected units or implementing structural means to mitigate noise impacts. Due to the site's L-shaped configuration, there is limited flexibility in relocating the multi-family tower within the site.

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843
PHONE (808) 527-6180
FAX (808) 533-2714



August 7, 1998

JEREMY HARRIS Mayor **COPY**

EDDIE FLORES, JR. Chairman
FORREST C. MURPHY, Vice Chairman
KAZU HAYASHIDA
JAN M. L. Y. AMII
JONATHAN K. SHIMADA, PhD
BARBARA KIM STANTON
CHARLES A. STED

CLIFFORD S. JAMILE
Manager and Chief Engineer

TO: ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

ATTN: KEITH ISHIDA

FROM: CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE BLOCK J
REDEVELOPMENT PROJECT, HONOLULU, OAHU, TMK: 2-1-09: 18, 27

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the proposed residential and commercial complex.

Our previous comments in our letter of June 19, 1998 have been adequately addressed in the DEIS. However, we have the following additional comments to offer:

1. In addition to the regional source charge, the developer may also have to pay a special downtown assessment charge to upgrade the water mains in the downtown areas. The developer should verify this requirement prior to submitting the Building Permit Applications for review and approval.
2. Section 3.2 lists five potable well sources in the project vicinity. We are aware of only the Board of Water Supply Beretania and the Queen's Hospital wells. The DEIS should specify all five site locations and include the respective State well identification numbers.

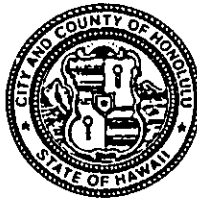
In addition, references to the "water table" should be clarified to indicate that it refers to the caprock water table. This will avoid confusion with the deeper artesian source within the Koolau basalts.

If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Wilson Okamoto and Associates, Inc.
Office of Environmental Quality Control
Planning Department

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
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September 11, 1998

MEMORANDUM

TO: CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 7, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. We have apprised the developer of the potential requirement to pay a special downtown assessment charge to upgrade the water mains in the downtown area. This requirement will be verified by the developer prior to submitting Building Permit applications. This information will be included in Section 3.10.1 Water System of the Final EIS.
2. In Section 3.2 Geology and Hydrology of the Final EIS, the description of the location of the five wells in the vicinity of the project site will include their respective State well identification numbers.

In addition, the Final EIS will specify that the water table that will be encountered during excavation for the proposed project is the caprock water table.

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DC-82

August 19, 1998

MEMO TO: ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES

ATTN: KEITH ISHIDA

FROM: RANDALL K. FUJIKI, DIRECTOR

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27
HONOLULU, OAHU, HAWAII

This is in response to your request of July 2, 1998 to review and comment on the subject document.

There are 78 parking stalls for City and County employees with the Departments of Community Services, Budget and Fiscal Services, Mayor's Office of Customer Services and Prosecuting Attorney that will be impacted by the project. We request that the EIS disclose the long-term disposition of these stalls.

The City's microwave transmission between the Honolulu Municipal Building (HMB) and the Kalihi Police Station may be impacted since the proposed development appears to be directly in line. Please confer with the Department of Design and Construction to determine the potential impact and the resultant project requirements that may be necessary.

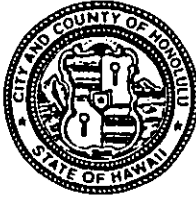
Thank you for the opportunity to review and comment on the subject document. Should there be further questions, please have your staff contact Douglas Collinson at ext. 6375.


RANDALL K. FUJIKI
Director

RKF:jo
cc: Planning Department
Wilson Okamoto & Associates (E. Matsukawa) ✓
Office of Environmental Quality Control

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

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JEREMY HARRIS
MAYOR

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DIRECTOR

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SPECIAL PROJECTS SECTION
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MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
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5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: RANDALL K. FUJIKI, DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 19, 1998, concerning the subject Draft EIS.

The project's Request for Proposals (RFP) required replacement of the existing *public* parking stalls with at least the equivalent number of new parking stalls. The RFP did not require replacement of the 78 stalls for City employees. In addition to replacement of the 208 public stalls, approximately 873 more hourly and monthly municipal stalls within the project will be available at municipal rates. City and County employees such as the Departments of Community Services, Budget and Fiscal Services, Mayor's Office of Customer Services, and the Prosecuting Attorney could benefit from this new parking. The final number of stalls available for hourly or monthly parking will be determined based upon need.

Prior to initiating construction, the project's construction contractors will consult with your Department regarding potential impacts on the City's microwave transmission between the Honolulu Municipal Building and the Kalihi Police Station, and any mitigation measures that may be effective in addressing this potential problem.

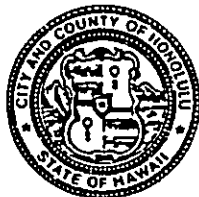
Memorandum to Randall K. Fujiki
September 11, 1998
Page 2

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

PACIFIC PARK PLAZA • 711 KAPIOLANI BOULEVARD, SUITE 1200 • HONOLULU, HAWAII 96813
PHONE: (808) 523-4529 • FAX: (808) 523-4730



JEREMY HARRIS
MAYOR

CHERYL D. SOON
DIRECTOR

JOSEPH M. MAGALDI, JR.
DEPUTY DIRECTOR

August 25, 1998

TSP7/98-04054R
TPD98-00490/531

MEMORANDUM

TO: ABBY SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

ATTN: KEITH ISHIDA

FROM: CHERYL D. SOON, DIRECTOR

SUBJECT: BLOCK J REDEVELOPMENT PROJECT

RECEIVED
AUG 27 1998

WILSON OKAMOTO & ASSOC., INC.

In response to the July 2, 1998 letter from Wilson Okamoto & Associates, Inc., the draft environmental impact statement for the subject project was reviewed. The following comments are the result of this review:

1. On Page 3-21, the second bullet in the Afternoon Peak Hour section incorrectly refers to the Pali Highway intersection with Queen Emma Street. It should be the Vineyard Boulevard intersection with Queen Emma Street.
2. On Page 3-26, in Section 3.9.1 Public Transportation, it is incorrectly stated that Routes 3, 9, 12 and 13 use Beretania Street for ewa-bound travel. These routes use Hotel Street.
3. The second paragraph on Page 2-1 of Appendix C, Traffic Impact Study, should state that Kamalii Park currently occupies the portion of the project site on the "ewa side", not the "Diamond Head side" of Pali Highway.
4. The Public Transportation Section of Chapter 2, Existing Conditions, of Appendix C, Traffic Impact Study, should include a discussion of TheHandi-Van, which provides paratransit service to persons with disabilities who meet the Americans with Disabilities Act paratransit eligibility criteria.

Abby Shaw, Director
Page 2
August 25, 1998

5. The Public Transportation Section of Chapter 4, 2002 Conditions with Project, of Appendix C, Traffic Impact Study, should discuss any impacts on TheHandi-Van service. With the development of a seniors residential tower, there may be an increase in TheHandi-Van usage. The developer needs to provide for passenger loading zone(s) that can accommodate TheHandi-Van vehicles and other wheelchair lift-equipped vehicles.
6. The sidewalks to be constructed must have wheelchair ramps.
7. Resident and visitor parking must have an adequate number of stalls for disabled persons parking.
8. Bus shelters and appropriate furniture for the two major bus stops should be incorporated into the project.

Should you have any comments regarding this matter, please contact Faith Miyamoto of the Transportation Planning Division at Local 6976.

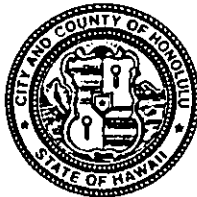


CHERYL D. SOON

cc: Patrick T. Onishi, Planning Department
Gary Gill, Office of Environmental Quality
Control
✓ Earl Matsukawa, Wilson Okamoto &
Associates Inc.

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
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ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: CHERYL D. SOON, DIRECTOR
DEPARTMENT OF TRANSPORTATION SERVICES

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 25, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. We appreciate your calling this incorrect street reference to our attention. The correct reference to Vineyard Boulevard will be included in the Final EIS.
2. The Final EIS will correctly note that Routes 11, 19, and 20 use Beretania Street.
3. The Traffic Impact Study (Appendix C) will correctly note that Kamalii Park is located on the ewa side of Pali Highway.
4. The following discussion concerning TheHandi-Van service provided by the City and County of Honolulu has been added to Chapter 2, the Existing Conditions section of the Traffic Impact Study and Section 3.9.1 Public Transportation of the Final EIS:

TheHandi-Van provides public transportation service to persons with disabilities who are unable to use the regular TheBus fixed-route service. TheHandi-Van vehicles are equipped with wheelchair lifts. The service is available seven days a week, with service starting at 5:00 AM (weekdays) or 6:00 AM (weekends and holidays) and extending to midnight. Reservations for service must be made 24 hours to two weeks in advance of the trip. The vehicles will pick-up passengers at appropriate pre-arranged locations along public streets, private roadways, or off-street passenger loading areas, such as porte cocheres for residential buildings.

5. A discussion concerning TheHandi-Van service provided by the City and County of Honolulu has been added to Chapter 4, the section describing conditions with the project, of the Traffic Impact Study and Section 3.9.1 Public Transportation of the Final EIS. In brief, the residential tower for senior citizens would provide a central location for a large population of existing and/or potential TheHandi-Van users who otherwise would likely reside at locations scattered across Oahu. The following impacts may result:

- The project may increase the number of person trips on TheHandi-Van by some residents whose relocation to the project separates them from family and/or friends that had been providing for all or a portion of their transportation needs.
- The project's senior citizen tower may allow more efficient service by TheHandi-Van operation since a higher proportion of potential service users would permit more frequent grouping of several person-trips in a single vehicular trip.
- The project's location in the Downtown Honolulu area, centrally located to many of the health care facilities, social service providers, and shopping and recreational attractions, may result in shorter TheHandi-Van trips for those users who previously resided in less centrally located areas of Honolulu.

Passenger loading zone(s) that can accommodate TheHandi-Van vehicles and other wheelchair lift-equipped vehicles will be provided within the project, as necessary, in accordance with the Americans With Disabilities Act (ADA) guidelines.

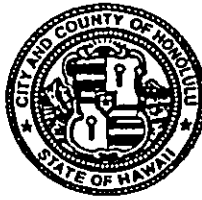
6. The sidewalks fronting the project site will be constructed to include wheelchair ramps in accordance with the Americans With Disabilities Act (ADA) guidelines.
7. The project's resident and visitor parking will have an adequate number of stalls for disabled persons parking.
8. The project will provide City standard bus stop amenities for the major bus stops fronting the project site.

Memorandum to Cheryl D. Soon
September 11, 1998
Page 3

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU HI 96813



JEREMY HARRIS
Mayor

KENNETH E. SPRAGUE
Director

CHERYL K. OKUMA-SEPE, ESQ.
Deputy Director


ENV 98-158

August 25, 1998

MEMORANDUM

TO: MS. ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

ATTENTION: MR. KEITH JSHIDA

FROM: 
KENNETH E. SPRAGUE, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL SERVICES

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)
BLOCK J REDEVELOPMENT PROJECT
TMK: 2-1-09: 18 AND 27

RECEIVED
AUG 26 1998

WILSON OKAMOTO & ASSOC., INC.

We have reviewed the subject DEIS and have the following comments:

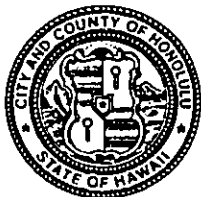
1. Should the effluent of the construction dewatering discharge to City drainage system, construction dewatering permits from the State Department of Health and the City Department of Environmental Services will be required.
2. During construction, proper best management practices (BMPs) should be employed to control and reduce discharge of pollutants.
3. Private refuse hauler will be required for refuse collection.
4. Since the existing municipal sewer system is not adequate to serve the proposed project, sewerline improvements, such as a relief sewer may be required. Construction plan for sewerline improvements should be submitted to the City for review and approval.

Should you have any questions, please contact Alex Ho, Environmental Engineer, at extension 4150.

cc: Wilson Okamoto & Assoc. (Earl Matsukawa) ✓
State - Office of Environmental Quality Control (OEQC)

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: KENNETH E. SPRAGUE, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL SERVICES

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 25, 1998 (Ref. ENV 98-158), concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. As discussed in the second paragraph of Section 3.4 Geology and Hydrology Impacts and Mitigation Measures of the Draft EIS (Page 3-3), a National Pollutant Discharge Elimination System (NPDES) permit for Discharges Associated with Construction Activity Dewatering (Notice of Intent Form G) will be required. The permit is administered by the State Department of Health. The fifth paragraph (page 3-4) states the "(d)isposal of dewatering effluent into the municipal storm drain system will require a permit from the City and County of Honolulu Department of Public Works." Due to the City's reorganization since the Draft EIS was published, we will clarify in the Final EIS that the permit is currently processed by the Department of Planning and Permitting.
2. The fourth paragraph of Section 3.4 Geology and Hydrology Impacts and Mitigation Measures of the Draft EIS discusses the requirement for preparing a Best Management Practices (BMP) plan, and several typical measures that such a plan would include for the proposed project.

Memorandum to Kenneth E. Sprague
September 11, 1998
Page 2

3. Section 3.11 Solid Waste discusses the overall impact of the project with respect to the solid waste disposal. We will include in the Final EIS a reference to your letter stating solid waste collection services for the proposed project is required to be provided by a private refuse hauler.
4. Section 3.10.2 Wastewater System Impacts and Mitigation Measures discusses the inadequacy of the municipal sewer system for supporting the proposed project. As stated in this section, the project developer will continue consultation with the City to determine the need for sewerline improvements to accommodate the project. The Final EIS will note that due to the City's reorganization, this consultation will be with the Department of Environmental Services, as opposed to the Department of Wastewater Management, as stated in the Draft EIS.

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 10TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4182 • FAX: (808) 523-4054



Jeremy Harris
MAYOR

William D. Balfour, Jr.
DIRECTOR

Michael T. Amii
DEPUTY DIRECTOR

August 14, 1998

TO: ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

ATTENTION: KEITH ISHIDA AUG 19 1998

FROM: WILLIAM D. BALFOUR, JR., DIRECTOR

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27
HONOLULU, OAHU, HAWAII

We have reviewed the environmental assessment for the above-described project and have no comment to offer.

Thank you for the opportunity to review the project.

Please have your staff contact Mr. John Eveland, Executive Assistant, at 527-6038, if you have any questions.

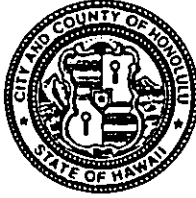
W.D. Balfour, Jr.
WILLIAM D. BALFOUR, JR.
Director

WDB:cu
(158GT)

cc: Department of Planning and Permitting
✓ Wilson Okamoto & Associates, Inc.
State of Hawaii, Office of Environmental Quality Control

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
713 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
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FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: WILLIAM D. BALFOUR, JR., DIRECTOR
DEPARTMENT OF PARKS AND RECREATION SERVICES

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

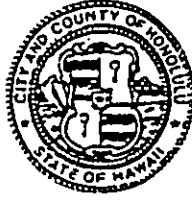
SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 14, 1998, indicating that you have no comments to offer on the subject Draft EIS.

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111



JEREMY HARRIS
MAYOR

LEE D. DONOHUE
CHIEF

WILLIAM B. CLARK
MICHAEL CARVALHO
DEPUTY CHIEFS

OUR REFERENCE CS-DL

August 12, 1998

TO: KEITH ISHIDA, BRANCH CHIEF
DEPARTMENT OF COMMUNITY SERVICES

FROM: LEE D. DONOHUE, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 and 27
HONOLULU, OAHU, HAWAII

Thank you for the opportunity to review the subject document. We have noted that our comments to the EIS Preparation Notice have been addressed. However, there is a statement on page 4-13, Item 4.6.1, Police Protection, under the subheading, Impacts, which requires comment. It reads as follows:

"Also, building security personnel may provide a greater degree of safety for residents than they would have in other locations, and, as a result, tend to lower need for police services."

The first part of the statement may be valid, however, we question the conclusion that is reflected in the second part of the statement. As our response to the EIS Preparation Notice indicates that, the nature of this project, with its mix of residents with retail business and a multi-level underground parking garage, the need for additional staffing to patrol the area and to respond to calls for police service is anticipated.

If there are any questions, please call me at 529-3175 or Major Henry Lau of District 1 at 529-3386.

LEE D. DONOHUE
Chief of Police

By 

JAMES FEMIA
Assistant Chief
Administrative Bureau

cc: Major Henry Lau
District 1

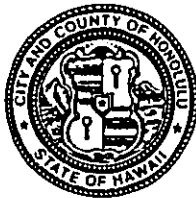
Mr. Patrick T. Onishi
Planning Dept.

✓ Mr. Earl Matsukawa
Wilson Okamoto & Associates, Inc.

State Ofc. of Environmental Quality Control

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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MAYOR

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DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: LEE D. DONOHUE, CHIEF OF POLICE
POLICE DEPARTMENT

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

Thank you for your memorandum dated August 12, 1998, concerning the subject Draft EIS. In response to your concern regarding the level of need for police services, the statement in Section 5.2.1 Police Protection of the Socio-Economic Impact Assessment (Appendix E) and Section 4.6.1 Police Protection of the Final EIS will be revised to read as follows:

In light of the mix of uses in the buildings - residential, retail and parking - building security will be a concern to be addressed by the project's operator. Even with effective building security on-site, demands for police service will be greater than for the site at present.

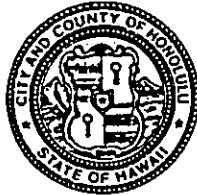
Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

3375 KOAPAKA STREET, SUITE H425
HONOLULU, HAWAII 96819-1869

JEREMY HARRIS
MAYOR



July 17, 1998

ATTILIO K. LEONARDI
FIRE CHIEF

JOHN CLARK
DEPUTY FIRE CHIEF

RECEIVED
JUL 22 1998

WILSON OKAMOTO & ASSOC., INC.

Mr. Earl Matsukawa
Project Manager
Wilson Okamoto & Associates, Inc.
1907 S. Beretania Street
Honolulu, Hawaii 96826

Dear Mr. Matsukawa:

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
TMK: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii
TMK: OL 98-249

We received your letter of July 2, 1998, regarding the Draft Environmental Impact Statement (EIS) for the Block J Redevelopment Project and would like to comment on the following:

1. Should the project be approved, it is mandatory that you comply with the Fire Code of the City and County of Honolulu. Our personnel will have the opportunity to review the construction plans when they are submitted to the Department of Planning and Permitting's Building Division.
2. If a flammable and combustible tank with a capacity greater than 60 gallons is installed, the Honolulu Fire Department requires an Application and Permit for Tank Installation form to be submitted.
3. Additional on-site fire appliances may be necessary if the closest off-site fire hydrant is more than 150 feet from the proposed structures.
4. On-site fire apparatus accessibility shall be provided. The on-site roadway shall be a minimum unobstructed width of 20 feet and be constructed of all-weather terrain material.

Mr. Earl Matsukawa
Page 2
July 17, 1998

Should you need additional information, please contact Battalion Chief Charles Wassman
of our Fire Prevention Bureau at 831-7778.

Sincerely,

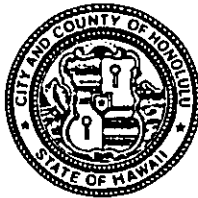


ATTILIO K. LEONARDI
Fire Chief

AKL/CW:bh

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
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ELDERLY AFFAIRS DIVISION
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SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

MEMORANDUM

TO: ATTILIO K. LEONARDI, FIRE CHIEF
FIRE DEPARTMENT

FROM: *Georgina M. Yuen*
ABELINA M. SHAW, DIRECTOR
DEPARTMENT OF COMMUNITY SERVICES

SUBJECT: BLOCK J REDEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)
TAX MAP KEYS: 2-1-09: 18 AND 27

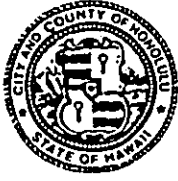
Thank you for your memorandum dated July 17, 1998, concerning the subject Draft EIS. We offer the following responses in the respective order of your comments:

1. The developer of the project is aware that the project must comply with the Fire Code of the City and County of Honolulu. When the construction plans for the proposed project are prepared, they will be submitted to the Department of Planning and Permitting's Building Division for review by your personnel.
2. At this time, no installation of a flammable or combustible tank greater than 60 gallons is being contemplated for the proposed project. If the installation of such a tank is necessary, an Application and Permit for Tank Installation form will be submitted to your Department.
3. The need for on-site fire appliances will be determined when the design for the proposed project progresses to the point that the distance of the proposed structures from off-site fire hydrants can be determined.
4. Access to on-site fire apparatus will be provided as required by the Fire Code. In addition, the on-site roadway will meet the minimum unobstructed width and be constructed of materials specified in the Fire Code.

Memorandum to Attilio K. Leonardi
September 11, 1998
Page 2

Your memorandum, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

cc: Wilson Okamoto & Associates, Inc. (Mr. Earl Matsukawa)
State Office of Environmental Quality Control (Mr. Gary Gill)



DOWNTOWN NEIGHBORHOOD BOARD NO. 13

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

Planning Department
City & County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813
ATTENTION: Mr. Patrick T. Onishi

21 August 1998

RE: BLOCK J DRAFT ENVIRONMENTAL IMPACT STATEMENT

Aloha!

The Downtown Neighborhood Board #13, at its regular meeting held 6 August 1998, heard the public presentation on the Block J Draft Environmental Impact Statement by Mr. Franco Mola of Coastal Rim Properties. The Board was informed that the City Council would begin review of the project in Committee on 10 September 1998 and by the full Council on 23 September 1998.

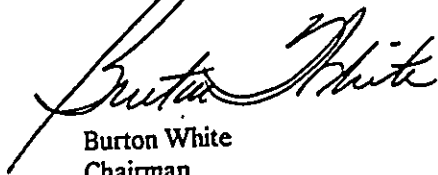
After presentation, notice of public comment/concerns and Board discussion, a motion was made for the Downtown Neighborhood Board #13 to support the Draft Environmental Impact Statement, subject to the addressing of public and private concerns submitted to the Board. These public/private comments and concerns have been outlined to the City and County of Honolulu in previous correspondence. Discussion followed regarding the lawsuit threatened by an adjoining property owner. Councilman Jon Yoshimura also noted his encouragement that the project managers are attending to particular concerns held by the Councilman.

This motion carried unanimously.

Further information on the discussion of this topic can be found in the regular Board meeting minutes as filed with the City Clerk's Office of the City and County of Honolulu for June and July of 1998.

Mahalo for the opportunity to advise on this project.

Me ke aloha pumehana,



Burton White
Chairman

cc: Mr. Gary Gil/Ms. Nancy Heinrich- Office of Environmental Quality Control, State of Hawai'i
Mr. Darwin Hamamoto- City/County Dept. of Housing & Community Development
Honorable Jeremy Harris- Mayor, City/County of Honolulu
Mr. Earl Matsukawa- Wilson Okamoto & Associates, Inc.
Councilman Jon Yoshimura- City & County of Honolulu
Mr. Mufi Hanneman- City Council Chair, City & County of Honolulu



Oahu's Neighborhood Board System - Established 1973



DOWNTOWN NEIGHBORHOOD BOARD NO. 13

c/o NEIGHBORHOOD COMMISSION • CITY HALL ROOM 400 • HONOLULU, HAWAII 96813

City & County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, Hawai'i 96813
Attention: Mr. Keith Ishida

RECEIVED
SEP 03 1998

WILSON OKAMOTO & ASSOC., INC.

2 September 1998

RE: BLOCK J DRAFT ENVIRONMENTAL IMPACT STATEMENT- SUPPLEMENTAL LETTER OF CORRECTION

Aloha!

On 21 August 1998, I had sent a letter to be included in the EIS for the Block J Project and the Downtown Neighborhood Board #13's current position. It has come to my attention that I did not accurately state the Board's motion in the letter of the 21st. Please accept this letter as a supplemental clarification of the Board's position, along with my sincere apologies for the error.

The paragraph noting the motion and vote action should read as follows:

After presentation, notice of public comment/concerns and Board discussion: a motion was made for the Downtown Neighborhood Board #13 to support the Draft Environmental Impact Statement. satisfied that the public and private concerns submitted to the Board had been addressed. These public/private comments and concerns have been outlined to the City and County of Honolulu in previous correspondence. Discussion followed regarding the lawsuit threatened by an adjoining property owner. Councilman Jon Yoshimura also noted his encouragement that the project managers are attending to particular concerns held by the Councilman.

This motion carried unanimously.

Once again, mahalo for the opportunity to advise on this project.

Me ke aloha pumehana,

Burton White
Chairman

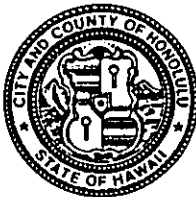
cc: Mr. Gary Gil/Ms. Nancy Heinrich- Office of Environmental Quality Control, State of Hawai'i
Mr. Darwin Hamamoto- City/County Dept. of Housing & Community Development
Honorable Jeremy Harris- Mayor, City/County of Honolulu
Mr. Earl Matsukawa- Wilson Okamoto & Associates, Inc.
Councilman Jon Yoshimura- City & County of Honolulu
Mr. Mufi Hanneman- City Council Chair, City & County of Honolulu



Oahu's Neighborhood Board System-Established 1973

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

ABELINA MADRID SHAW
DIRECTOR

GEORGINA M. YUEN
DEPUTY DIRECTOR

ADMINISTRATION
2ND FLOOR: (808) 527-5311
FAX: (808) 523-4074

ELDERLY AFFAIRS DIVISION
HONOLULU COMMITTEE ON AGING
5TH FLOOR: (808) 523-4761

WORKHAWAII DIVISION
5TH FLOOR: (808) 523-4120

SPECIAL PROJECTS SECTION
HONOLULU COUNTY COMMITTEE ON THE STATUS OF WOMEN
MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Burton White, Chairman
Downtown Neighborhood Board No. 13
c/o Neighborhood Commission
City Hall, Room 400
Honolulu, Hawaii 96813

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

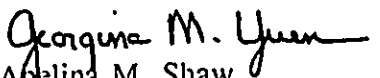
Dear Mr. White:

Thank you for your letter dated August 21, 1998 and supplemental letter dated September 2, 1998, concerning the subject Draft EIS.

We appreciate the Downtown Neighborhood Board's expression of support for the subject Draft EIS, and its satisfaction that the public and private concerns submitted to the Board have been addressed.

Your letters, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



July 22, 1998

Scott W.H. Seu, P.E.
Manager
Environmental Department

RECEIVED
JUL 23 1998

WILSON OKAMOTO & ASSOC., INC.

Mr. Keith Ishida
Department of Community Services
City & County of Honolulu
715 South King Street - Suite 331
Honolulu, HI 96813

Dear Mr. Ishida:

Re: **Block J Redevelopment Project**

Thank you for the opportunity to comment on the June 1998 draft EIS for the Block J Redevelopment Project, as proposed by the Department of Housing and Community Development, City and County of Honolulu. We have reviewed the subject document and have no comments at this time.

HECO shall reserve further comments pertaining to the protection of existing powerlines bordering the project area until construction plans are finalized. Again, thank you for the opportunity to comment on this draft EIS.

Sincerely,

cc:
OEQC

City and County of Honolulu
Planning Department
650 South King Street
Honolulu, HI 96813
Attention: Mr. Patrick T. Onishi

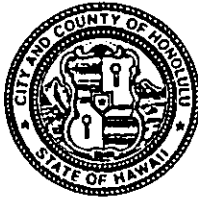
Wilson Okamoto & Associates, Inc.
1907 S. Beretania St.
Honolulu, HI 96826
Atten: Mr. Earl Matsukawa

WINNER OF THE EDISON AWARD
FOR DISTINGUISHED INDUSTRY LEADERSHIP



DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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SPECIAL PROJECTS SECTION
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MAYOR'S COMMITTEE FOR PERSONS WITH DISABILITIES
MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Scott W.H. Seu, P.E.
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

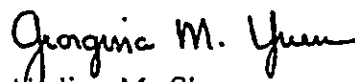
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Seu:

Thank you for your letter dated July 22, 1998, indicating that you have no comments to offer on the Draft EIS. We have apprised the developer of the proposed project of the need to coordinate review of construction plans with Hawaiian Electric Company to protect existing powerlines in the immediate vicinity.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control



200 Akamainui Street • Mililani, Hawaii 96789-3999 • Telephone: (808) 625-2100

July 14, 1998

City and County of Honolulu
Department of Community Services
715 South King Street, Suite 311
Honolulu, Hawaii 96813

RECEIVED
JUL 15 1998

Attention: Mr. Keith Ishida

WILSON OKAMOTO & ASSOC., INC.

**Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 21-09:18 and 27
Honolulu, Oahu, Hawaii**

Dear Mr. Ishida,

Thank you including Oceanic Cable in the review process of the Block J Redevelopment Project. We received the Environmental Impact Statement draft and have it on file. Oceanic Cable has no further comments at this time. Should you have any further questions, please contact me at 625-8346.

Sincerely,

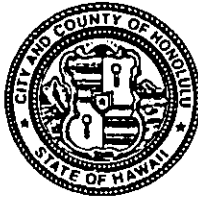
A handwritten signature in cursive script that reads 'Randy Makizuru'.

Randy Makizuru
OSP Engineer

Cc: City and County of Honolulu, Planning Dept. - Mr. Patrick T. Onishi
Wilson Okamoto & Associates, Inc. - Mr. Earl Matsukawa
State of Hawaii, Office of Environmental Quality Control

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
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MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Randy Makizuru, OSP Engineer
Oceanic Cable
200 Akamainui Street
Mililani, Hawaii 96789-3999

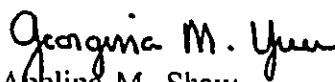
Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Makizuru:

Thank you for your letter dated July 14, 1998, indicating that you have no comments on the subject Draft EIS.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

Ronald K K Lee
98-367 Ponohana Loop
Aiea, Hawaii 96701

August 8, 1998

City and County of Honolulu
Department of Community Services
715 South King Street, suite 311
Honolulu, Hawaii 96813
Attention: Mr. Keith Ishida

Re: Request for comments
Draft Environmental Impact Statement
Block J Redevelopment Project

Dear Mr. Ishida:

I have reviewed the Draft Environmental Impact Statement for Block J and would like to raise the concern that this project as presented will do serious damage to the environmental quality of urban Honolulu.

The City and County of Honolulu General Plan calls for protection of Oahu's scenic views, *"especially those seen from highly developed and heavily travelled areas."* And the City and County of Honolulu's Development Plan (DP) Common Provisions states that, *"No development shall be permitted that will block important views."*

The mauka view of the Bishop Street view corridor is threatened by the placement of a high-rise residential tower which has been placed in direct alignment with Bishop Street which will destroy one of the most important scenic views in downtown Honolulu. Page 3-36 of the Draft EIS identifies this view:

"Further makai on Bishop Street, the mauka view corridor narrows to a slot between flanking high-rise structures through which a small section of the Koolau Range and sky are visible."

This view of *"a small section of the Koolau Range"* is too significant to be over looked and destroyed.

The importance of the Bishop Street view corridor was recognized in the report on park and city planning for the City and County Park Board in 1938 by Lewis Mumford. The

respected planner, author, and humanitarian identified the natural assets of Honolulu and gently suggested means of conserving these assets. Bishop Street is mentioned twice in relation to makai and mauka vistas. In a discussion of weaknesses in Honolulu's plan he wrote:

"Though the native life of Honolulu is close to the water, the city plan scarcely discloses that fact. No attempt has been made, curiously, to preserve the approaches to the water and to give vistas of the sea at the end of the makai-pointed streets and avenues. Bishop Street is potentially one of the fine business streets of the world; and the major element that contributes to its beauty is that its lower end shows the harbor in a frame of palm trees."

The enhancement of the mauka vista was discussed in the need for intelligent planning of the business district:

"The obstacles toward comprehensive planning in the business district areserious: but they should not result in an apathetic acceptance of the present inefficient layout. One of the first steps that suggests itself is the widening and planting of the mauka end of Bishop Street, the provision of a well designed parking area, and the wiping away of the miscellaneous collection of buildings that spoils the magnificent vista toward the mountains. This whole process would be a relatively inexpensive one: yet overnight it would turn Bishop Street into one of the most attractive thoroughfares of its kind in the world."

*Lewis Mumford, "Whither Honolulu"
City and County of Honolulu Park Board, 1938*

This report was written before there were any high rise buildings in Honolulu. Today, the last remaining view of the mountains between the towers that line Bishop Street assumes even more importance that it did in 1938. It is this view that draws visitors into the city from the Aloha Tower development area. It is the small but essential release from the urban grid for city workers who cross Bishop Street several times a day. It is what defines Bishop Street as being of Honolulu, distinct from any other mainland city.

The Draft EIS stated that, *"The project incorporates strategic building placements and special design and massing considerations to mitigate its visual impact from the major view corridors"* but the plans show no evidence that building placements and massing actually protected any mauka views. Figure 3-5, *"View from Bishop Street Looking Mauka - Existing"* and Figure 3-6, *"View from Bishop Street Looking Mauka -With Project"* show that the *"strategic building placements"* did little to mitigate the loss of view from this vantage point at the mauka end of Bishop Street.

But the most important vista is not directly presented in the Draft EIS. The two sketches attached to this letter show what the Bishop Street view corridor looks like today, and what it might look like if the project is built without modification as shown in the Draft

EIS. This cannot be allowed to happen. Are we being told that there is no alternative but to shut off the soul of Honolulu? For those who respect the environment, the placement of a high-rise which blocks the flow of mana from the mountains to the harbor, is an insensitive short sighted, destructive mistake. In 1938 Mumford advised,

"No other city that I know would proportionately yield such high returns to rational planning as Honolulu.....And in the end, who loves this city best? - He who seeks to improve it, or he who is content to muddle along in the familiar grooves, exercising a minimum of foresight, intelligence, and imagination? History allows no doubt as to the answer: that which makes a city dear to later generations is the power to master its own destiny and express its best ideals in the transformation of its environment."

It is not too late to find an alternative means of developing this project without destroying one of the most important natural assets of Honolulu.

Yours very truly,


Ron Lee

Attachment

Copies:

Mr. Patrick T. Onishi
City and County of Honolulu, Planning Department

Mr. Earl Matsukawa
Wilson Okamoto & Associates, Inc.

State of Hawaii
Office of Environmental Quality Control

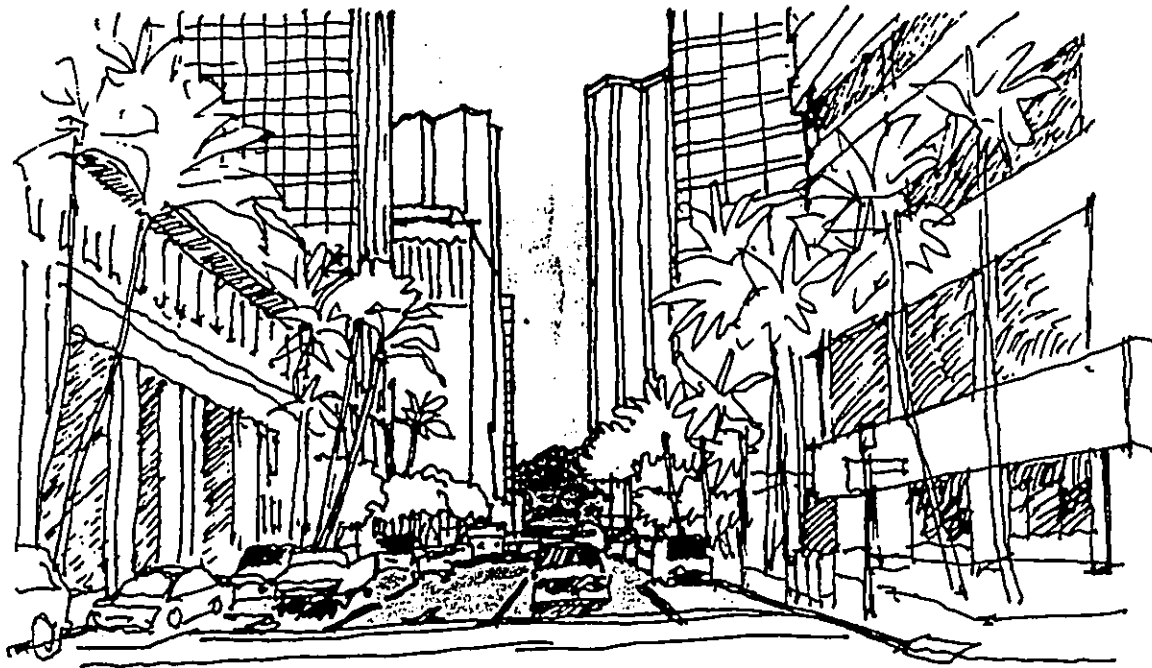


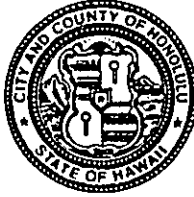
Figure 1. Mauka view of existing Bishop Street view corridor.



Figure 2. Mauka view with proposed high rise.

DEPARTMENT OF COMMUNITY AND SOCIAL RESOURCES
CITY AND COUNTY OF HONOLULU

STANDARD FINANCE BUILDING
715 SOUTH KING STREET
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MAYOR'S CHILD CARE ADVISORY BOARD
5TH FLOOR: (808) 527-6264

September 11, 1998

Mr. Ronald K.K. Lee
98-367 Ponohana Loop
Aiea, Hawaii 96701

Subject: Block J Redevelopment Project
Draft Environmental Impact Statement (EIS)
Tax Map Keys: 2-1-09: 18 and 27
Honolulu, Oahu, Hawaii

Dear Mr. Lee:

Thank you for your letter dated August 8, 1998 regarding the subject Draft EIS, in which you provided comments on the Bishop Street mauka view corridor.

Regarding your comments concerning Figures 3-5 and 3-6 of the Draft EIS, the project's two high-rise towers are strategically sited to maintain maximum mauka views of the Koolau Mountains and Punchbowl from Bishop Street near the Beretania Street intersection. Due to the site's L-shaped configuration, there is limited flexibility in siting the towers. The siting of the project's northwest tower, which is aligned with Bishop Street, is intended to provide a visual separation between the two towers, between the project and neighboring buildings, and to provide sufficient distance from Pali Highway to reduce noise impacts.

To depict the potential visual impacts of the project on the Bishop Street mauka view corridor, Section 3.13 Visual Characteristics of the Final EIS will include photographic depictions of the project from the centerline of Bishop Street at Hotel and Queen Streets. In response to your concerns, the Final EIS will include the following discussion:

The proposed project's design incorporates massing considerations, strategic building placement and architectural detailing to minimize its visual impact from major view corridors. A significant reduction in building mass is achieved by accommodating parking in the below-ground structure. Massing considerations for the above-ground structures are intended to minimize obstruction of views through the project site and to reduce the perception of building mass. Three tower configurations were examined, including a single double-loaded slab tower (double-loaded means each floor has a central access corridor along the length of the slab with units on both sides), dual point towers (point towers have basically a square floor configuration

Letter to Mr. Ronald K.K. Lee
September 11, 1998
Page 2

with units surrounding a central elevator and service spine), and a combination of a smaller slab tower and a point tower. A slab tower, though functionally more efficient, is visually more intrusive; the Marco Polo Building on Kapiolani Avenue being an extreme example. A point tower, on the other hand, is less visually intrusive, providing a compact profile that does not vary significantly with respect to the vantage point from which it is viewed. The dual point tower configuration was selected as having the least visual impact, taking into account the vantage points from which the proposed project may be viewed, including Bishop Street, the Punchbowl lookout and from Pali Highway.

Another aspect of reducing visual building mass is achieved by placing the towers on the 40-foot podium containing the retail component. From surrounding streets, this de-emphasizes the height of the towers by breaking the visual connection between the tower and the ground. From the sidewalks adjacent to the podium, pedestrians' views of the towers are obscured by the podium. The visual mass of the podium is softened by ground-level setbacks, open spaces and landscaping.

Siting of the towers considered several factors, including tower separation for the privacy of future residents, distance from Kukui Plaza for the privacy of residents in that development, distance from Pali Highway to reduce traffic noise for future residents at the north tower, and views of the north tower from Bishop Street. As in most architectural design decisions, tower siting for the proposed project is a compromise among these factors. Potential adjustments in tower siting to minimize visual impacts while considering the other factors could be pursued as the project design is refined.

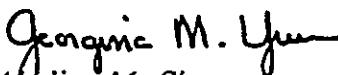
Architectural details which minimize the visual impact of the project include those at the podium, the towers shafts and caps. At the podium, details include arcades and arched window treatments reflecting architecture found at the neighboring cathedral and historic buildings. Detailing on the tower shafts is drawn from a similar palette of materials as the podium to provide visual unity. Their use on the tower shafts reduces the impression of building mass by grouping windows to create recesses on the vertical face and the corners of the towers, softening their appearance. Bands around the shafts help to reduce their vertical impression. Lastly, the tower caps provide a visual limit on the tower shaft and tie in with the matching metal roofing utilized on the podium below, thereby presenting a unified, visually bounded impression of the project.

Letter to Mr. Ronald K.K. Lee
September 11, 1998
Page 3

Since the project configuration is at the conceptual stage of design, adjustments to mitigate potential visual or other impacts is still possible. This will be determined as the project design is refined, taking into account concerns expressed in the EIS process.

Your letter, along with this response, will be reproduced in the forthcoming Final EIS. We appreciate your interest and participation in the consultation phase of the environmental review process.

Sincerely,


Georgina M. Yuen
Abelina M. Shaw
Director

cc: Mr. Earl Matsukawa, Wilson Okamoto & Associates, Inc.
Mr. Gary Gill, State Office of Environmental Quality Control

APPENDIX A

AIR QUALITY IMPACT REPORT

J.W. Morrow
Environmental Management Consultant

AIR QUALITY IMPACT REPORT (AQIR)

**BLOCK J REDEVELOPMENT PROJECT
HONOLULU, OAHU, HAWAII**

June 1998

PREPARED FOR:

Wilson Okamoto & Associates, Inc.

PREPARED BY:

**J. W. MORROW
Environmental Management Consultant
1481 South King Street, Suite 548
Honolulu, Hawaii 96814**

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2	Air Quality Data - Department of Health Monitoring Sites, 1996
3	Annual Joint Frequency Distribution of Wind Speed and Direction Honolulu International Airport
4	Summary of Typical Wind Conditions During Peak Traffic Hours, Honolulu, Oahu
5	Estimates of Annual Emissions from Offsite Sources

LIST OF FIGURES

<u>NUMBER</u>	<u>TITLE</u>
1	Project Location
2	Existing Site Conditions (Pali Highway, Beretania Street and Queen Emma Street)
3	Existing Site Conditions (Kamali'i Park and South Kukui Street)
4	A.M. Peak Hour Conditions, Pali Highway at Kamali'i Park, 3 June 1998
5	P.M. Peak Hour Conditions, Pali Highway at Kamali'i Park, 4 June 1998
6	P.M. Peak Hour Conditions, Beretania Street at Queen Emma Street, 4 June 1998
7	A..M. Peak Hour Conditions, Beretania Street at Queen Emma Street, 5 June 1998
8	January Wind Rose - Honolulu International Airport
9	August Wind Rose - Honolulu International Airport
10	Estimates of Maximum 1-Hour Carbon Monoxide Concentrations: Pali Highway at Vineyard Boulevard, Peak Traffic Hours, 1998-2002
11	Estimates of Maximum 1-Hour Carbon Monoxide Concentrations: Pali Highway at Beretania Street, Peak Traffic Hours, 1998-2002
12	Estimates of Maximum 1-Hour Carbon Monoxide Concentrations: Beretania Street at Queen Emma Street, Peak Traffic Hours, 1998-2002

1. INTRODUCTION

The City & County of Honolulu Department of Housing and Community Development, is proposing to lease City property for the development of a mixed-use affordable rental residential and retail complex in downtown Honolulu (Figure 1). The project site includes two parcels (TMK 2-1-09: 18 and 27) bordered by Beretania, Fort, Kukui, and Queen Emma Streets and is bisected by Pali Highway. It covers a total area of approximately 178,285 square feet. Existing uses include a municipal parking lot on the portion east of the Pali Highway and a public park, Kamali'i Park on the west side (Figures 2 and 3).

The proposed project will include two high-rise residential towers, two levels of retail space, and three levels of underground parking with the following major elements (numbers are all approximate):

- approximately 913 one and two-bedroom rental units
- approximately 100,000 ft² of retail space in two stories at the ground level
- approximately 1,900 parking stalls, including 1,880 stalls in three underground levels and 20 stalls at grade level
- approximately 25,500 ft² of open space
- approximately 32,000 ft² of rooftop recreational deck over the retail space
- approximately 1,700 ft² arcade area

Construction could begin in early 1999 with housing available to tenants in late 2001.

The purpose of this report is to assess the impact of the proposed development on air quality on a local and regional scale. The overall project can be considered an "indirect source" of air pollution as defined in the federal Clean Air Act¹ since its primary association with air quality is its inherent attraction for mobile sources, i.e., motor vehicles. Much of the focus of this analysis, therefore, is on the project's ability to generate traffic and the resultant impact on air quality. Air quality impact was evaluated for existing (1998) and future (2002) conditions with and without the proposed development.

A project such as this also has offsite impacts due to increased demand for electrical energy which must be met by the combustion of some type of fuel and the incineration of solid waste generated by project residents. Both these processes result in pollutant emissions to the air which have been addressed in this report.

Finally, air pollutant emissions will be generated onsite due to vehicular movement, grading, and general dust-generating construction activities as well as offsite due to concrete and asphalt batching. These impacts have also been addressed.

FIGURE 1
PROJECT LOCATION

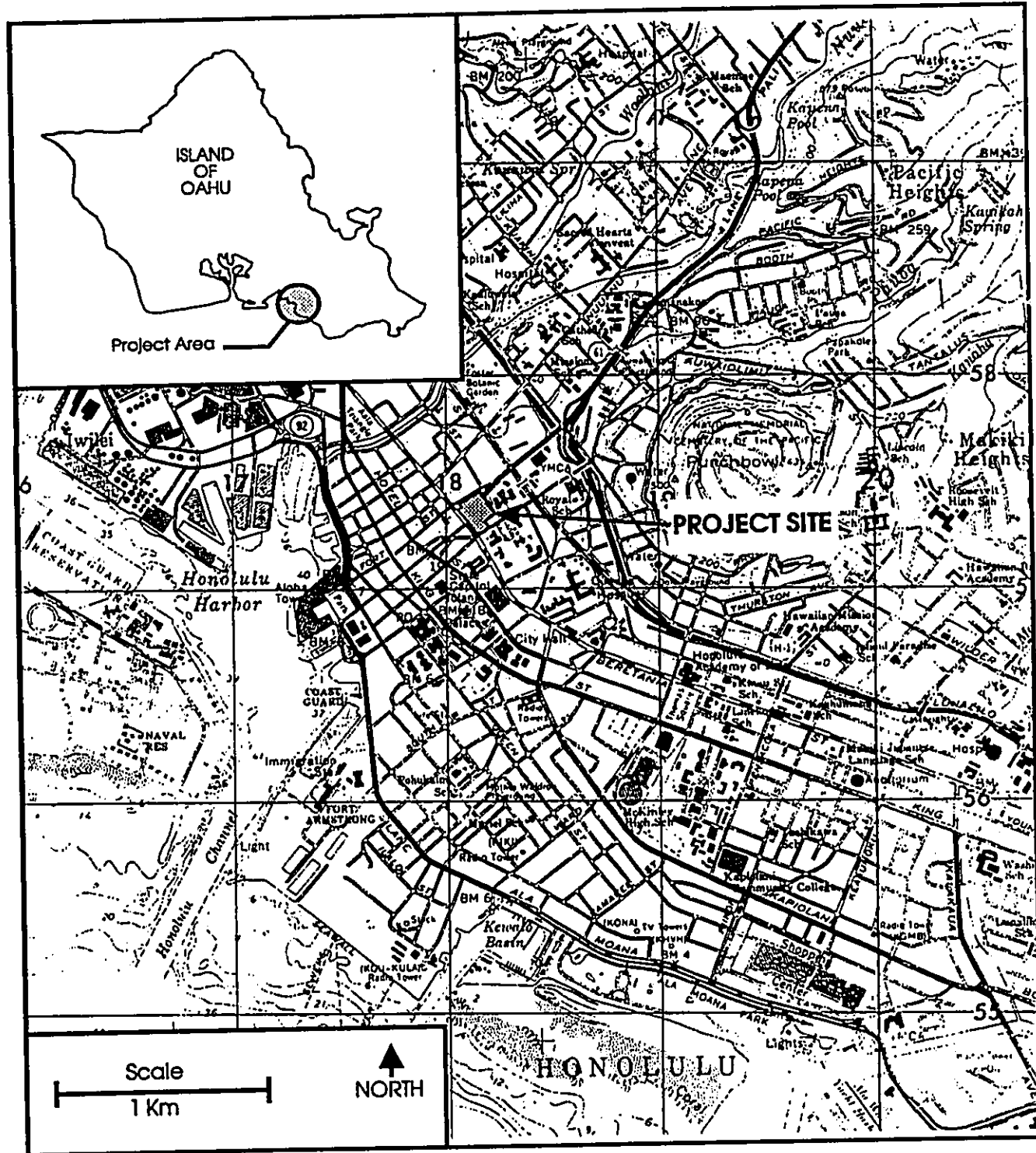
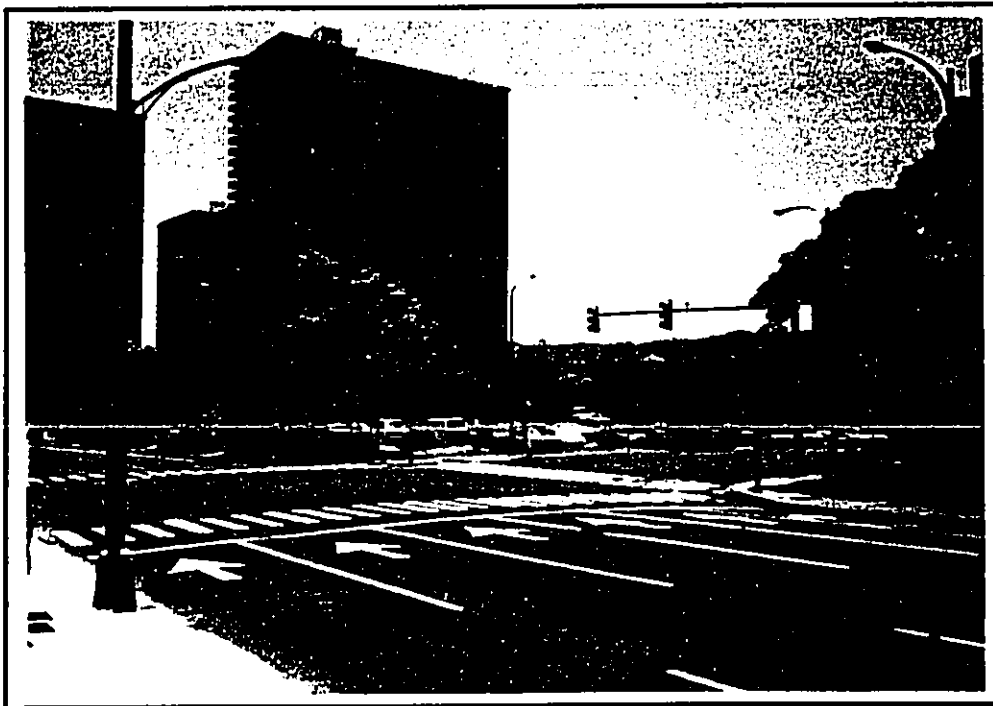
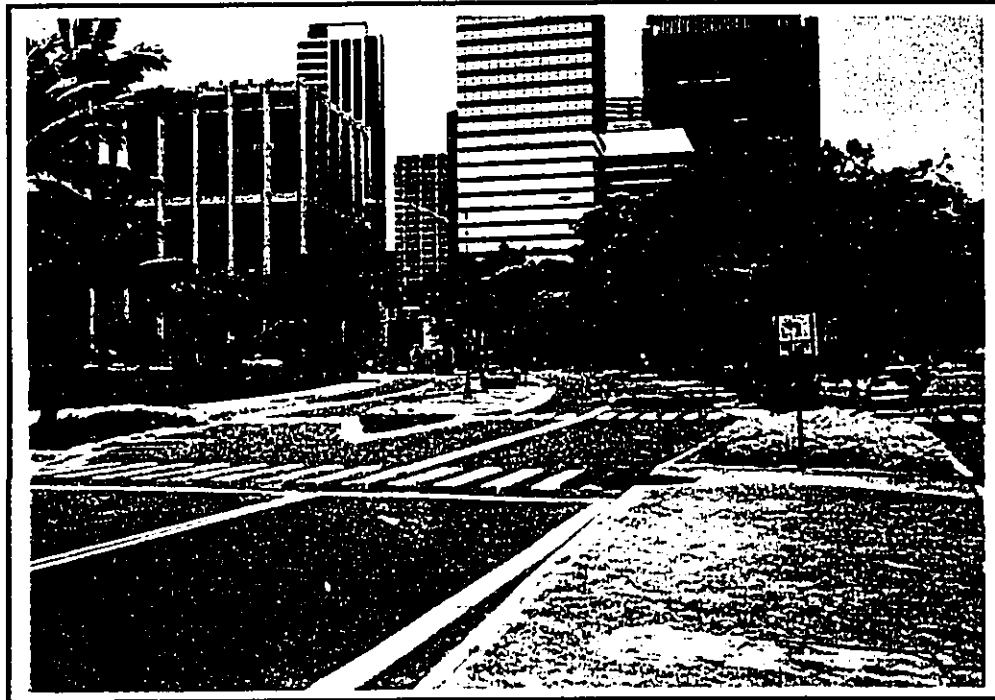


FIGURE 2
EXISTING SITE CONDITIONS

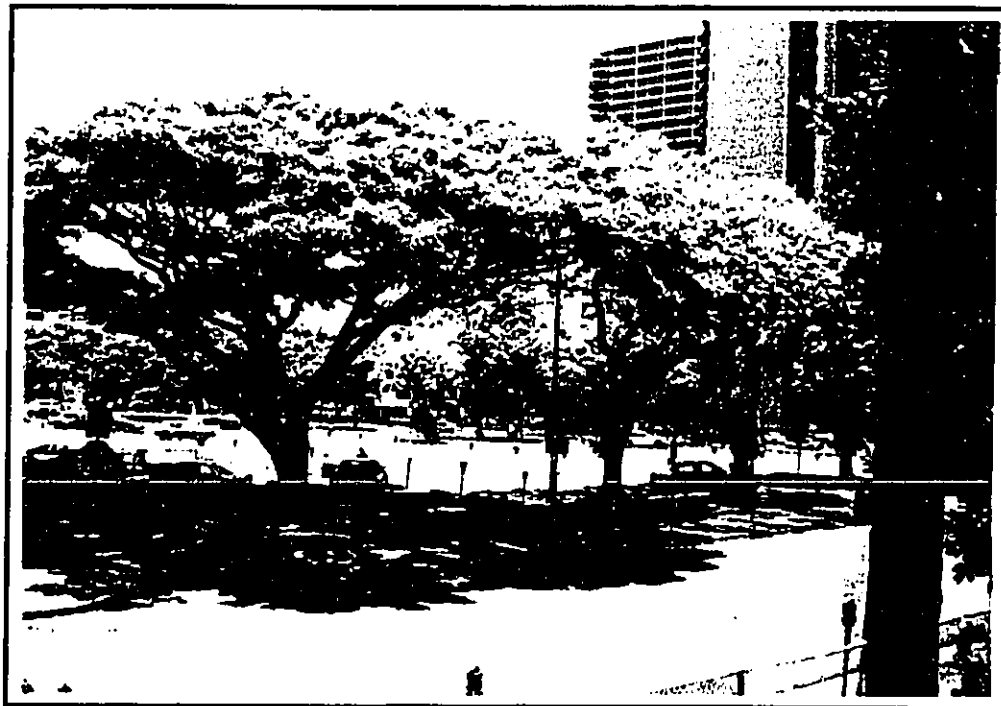
Pali Highway at Kukul Street
(facing southwest)



Beretania Street at Queen Emma Street
(facing north)

FIGURE 3
EXISTING SITE CONDITIONS

Beretania Street at Kamali Park
(facing northeast)



South Kukui Street
(facing southwest)

2. AIR QUALITY STANDARDS

A summary of State of Hawaii and national ambient air quality standards is presented in Table 1.^{2,3} Note that Hawaii's standards are not divided into primary and secondary standards as are the federal standards.

Primary standards are intended to protect public health with an adequate margin of safety while secondary standards are intended to protect public welfare through the prevention of damage to soils, water, vegetation, man-made materials, animals, wildlife, visibility, climate, and economic values⁴.

Some of Hawaii's standards (CO, NO₂, and O₃) are clearly more stringent than their federal counterparts but, like their federal counterparts, may be exceeded once per year. In the case of the automotive pollutants [carbon monoxide (CO), nitrogen dioxide (NO₂), and ozone (O₃)], there are only primary standards.

Until 1983, there was also a hydrocarbons standard which was based on the precursor role hydrocarbons play in the formation of photochemical oxidants rather than on any unique toxicological effect they had at ambient levels. The hydrocarbons standard was formally eliminated in January 1983⁵.

The U.S. Environmental Protection Agency (EPA) is mandated by Congress to periodically review and re-evaluate the federal standards in light of new research findings¹. The latest review resulted in an EPA proposal to tighten the ozone standard from 235 to 160 micrograms/cubic meter (ug/m³) and also implement PM_{2.5} standards for particulate matter⁶. The carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen dioxide (NO₂) standards have been reviewed in the past, but no new standards have been proposed.

Finally, the State of Hawaii also has fugitive dust regulations for particulate matter (PM) emanating from construction activities⁷. There simply can be no visible emissions from fugitive dust sources.

3. EXISTING AIR QUALITY

3.1 General. The State Department of Health (DOH) maintains a limited network of air monitoring stations around the State to gather data on the following regulated pollutants:

- particulate matter \leq 10 microns (PM₁₀)
- total suspended particulate matter (TSP)
- sulfur dioxide (SO₂)
- nitrogen dioxide (NO₂)
- carbon monoxide (CO)
- ozone (O₃)
- lead (Pb)

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

POLLUTANT	SAMPLING PERIOD	NAAQS PRIMARY	NAAQS SECONDARY	STATE STANDARDS
PM ₁₀	Annual	50	50	50
	24-hr	150	150	150
SO ₂	Annual	80	—	80
	24-hr	365	—	365
	3-hr	—	1,300	1,300
NO ₂	Annual	100	—	70
CO	8-hr	10	—	5
	1-hr	40	—	10
O ₃	1-hr	235	—	100
H ₂ S	1-hr	—	—	35
Pb	Calendar Quarter	1.5	—	1.5

KEY: NAAQS - national ambient air quality standards
 PM₁₀ - particulate matter ≤ 10 microns
 SO₂ - sulfur dioxide
 NO₂ - nitrogen dioxide
 CO - carbon monoxide
 O₃ - ozone
 H₂S - hydrogen sulfide
 Pb - lead

All concentrations in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) except CO which is in milligrams per cubic meter.

In the case of PM_{10} , measurements are made on a 24-hour basis to correspond with the averaging period specified in state and federal standards. Samples are collected once every six days in accordance with U.S. Environmental Protection Agency (EPA) guidelines. Carbon monoxide, sulfur dioxide, and ozone, however, are measured on a continuous basis due to their short-term (1- and 3-, and 8-hour) standards. Nitrogen dioxide is measured with continuous instruments and averaged over a full year to correspond to its annual standards. Lead concentrations are determined from particulate matter (TSP) samples.

3.2 Department of Health Monitoring. The DOH monitoring station nearest to the project site is located at the DOH building on the corner of Punchbowl and Beretania Streets in downtown Honolulu. A summary of the most recent published air quality data from that station and the nearest other stations measuring pollutants not monitored at the DOH building is presented in Table 2.

3.3 Onsite Carbon Monoxide Sampling. In conjunction with this project, air sampling was conducted during the 3 - 5 June 1998 period in the vicinity of the project site. A continuous carbon monoxide (CO) instrument was set up and operated during the a.m. and p.m. peak traffic hours. An anemometer and vane were also installed to record onsite surface winds during the air sampling. A simultaneous manual count of traffic was performed. The variability of each of the parameters measured during the peak hours is clearly seen in Figures 4 - 6.

Sampling was conducted at Kamali'i Park during the afternoon peak hour of 3 June 1998. Weather conditions were characterized by partly cloudy skies and light northeasterly trade winds averaging 5.7 mph. Total traffic along the segment of Pali Highway fronting the project site was about 98% of the p.m. peak hour volume found in a project-related traffic study⁸. CO concentrations measured were low, averaging less than 1.0 mg/m^3 due to the steady winds and generally free flowing traffic conditions. See Figure 4.

On the morning of 4 June 1998, sampling was again conducted at Kamali'i Park. Northeasterly winds were of lower velocity than they had been the previous afternoon, averaging 1.7 mph. Skies were again partly cloudy. Total traffic was 119% of the existing a.m. volume found in the aforementioned traffic study⁸. The CO level was higher than the p.m., averaging 2.1 mg/m^3 , due primarily to the lower wind speed, and greater traffic volume which resulted in queues extending back from the Beretania Street intersection. See Figure 5.

The sampling equipment was moved to the City employees parking lot on the south corner of the project site on the afternoon of 4 June 1998. Weather conditions at that time were mostly cloudy with light winds averaging 4.4 mph, shifting 180 degrees between northerly and southerly directions. Traffic volumes on Beretania and Queen Emma Streets were comparable (97%) to previous counts⁸. The effect of such wind direction variability on CO levels was clearly evident as shown in Figure 6. When the winds were northerly, CO levels dropped to almost zero, but when the winds turned southerly and carried emissions from the nearby Beretania Street traffic, CO levels rose to 3 mg/m^3 . The mean value for the peak hour at that location was less than 1.0 mg/m^3 .

The morning of 5 June 1998 was overcast with light and variable winds averaging 1.4 mph. Traffic volumes were again comparable (95%) to previous counts⁸ and were about 50% of the previous

TABLE 2
AIR QUALITY DATA
DEPARTMENT OF HEALTH MONITORING SITES
1996

Pollutant	Concentration ($\mu\text{g}/\text{m}^3$)
Particulate matter \leq 10 microns (PM ₁₀) 24-hr (max) Annual	28 14
Sulfur dioxide (SO ₂) 3-hr (max) 24-hr (max) Annual	73 18 3
Carbon monoxide (CO) 1-hr (max) 8-hr (max) Annual	4,589 2,127 936
Ozone (O ₃) 1-hr (max) Annual	92 27
Lead (Pb) Quarterly (max) Annual	0.0 0.0
Notes: 1. CO, PM ₁₀ , SO ₂ , and Pb are from the DOH building. 2. O ₃ data are from the Sand Island site.	

FIGURE 4

P.M. PEAK HOUR CONDITIONS
PALI HIGHWAY AT KAMALI'I PARK
3 JUNE 1998

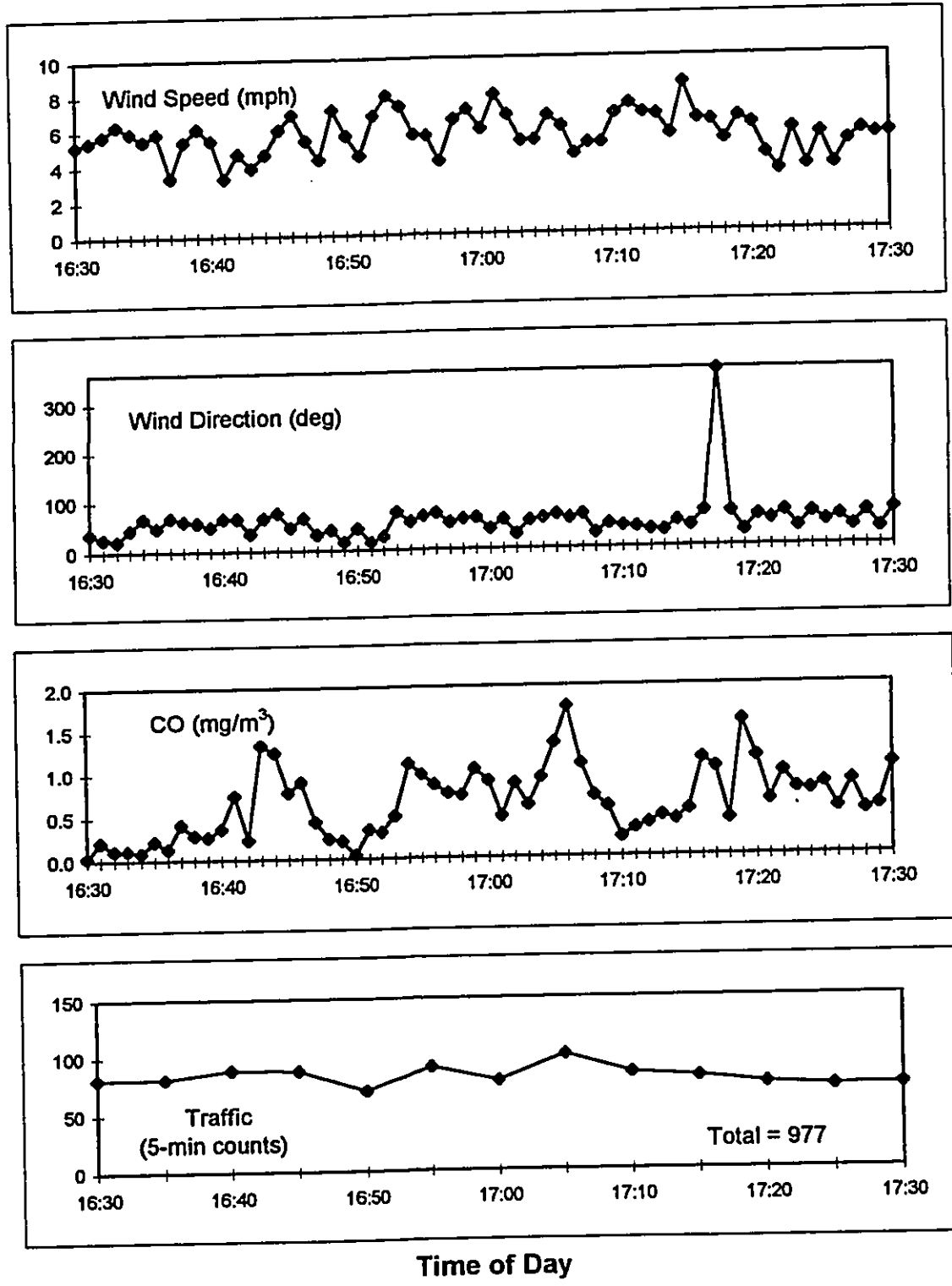


FIGURE 5

A.M. PEAK HOUR CONDITIONS
PALI HIGHWAY AT KAMALI'I PARK
4 JUNE 1998

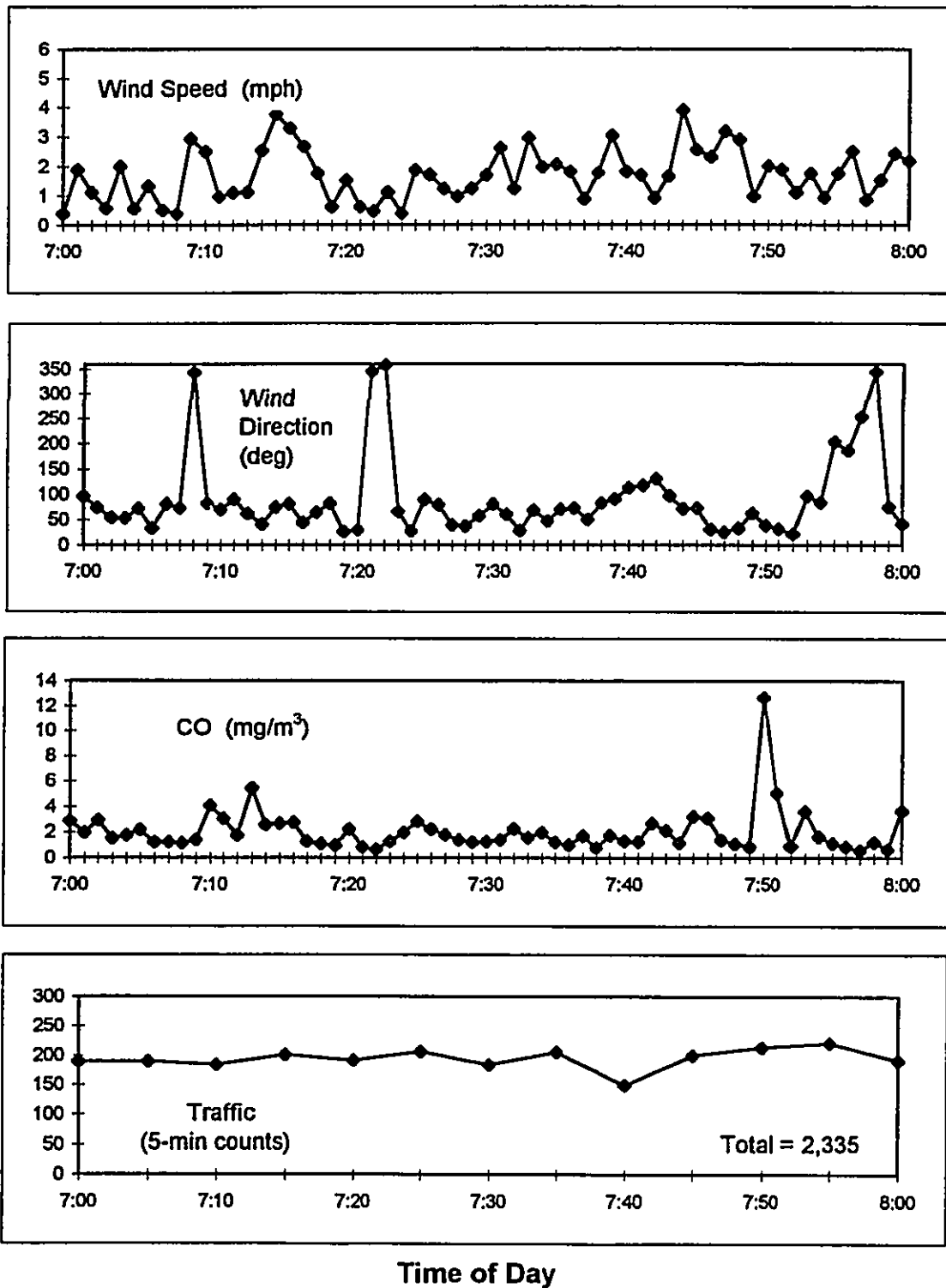
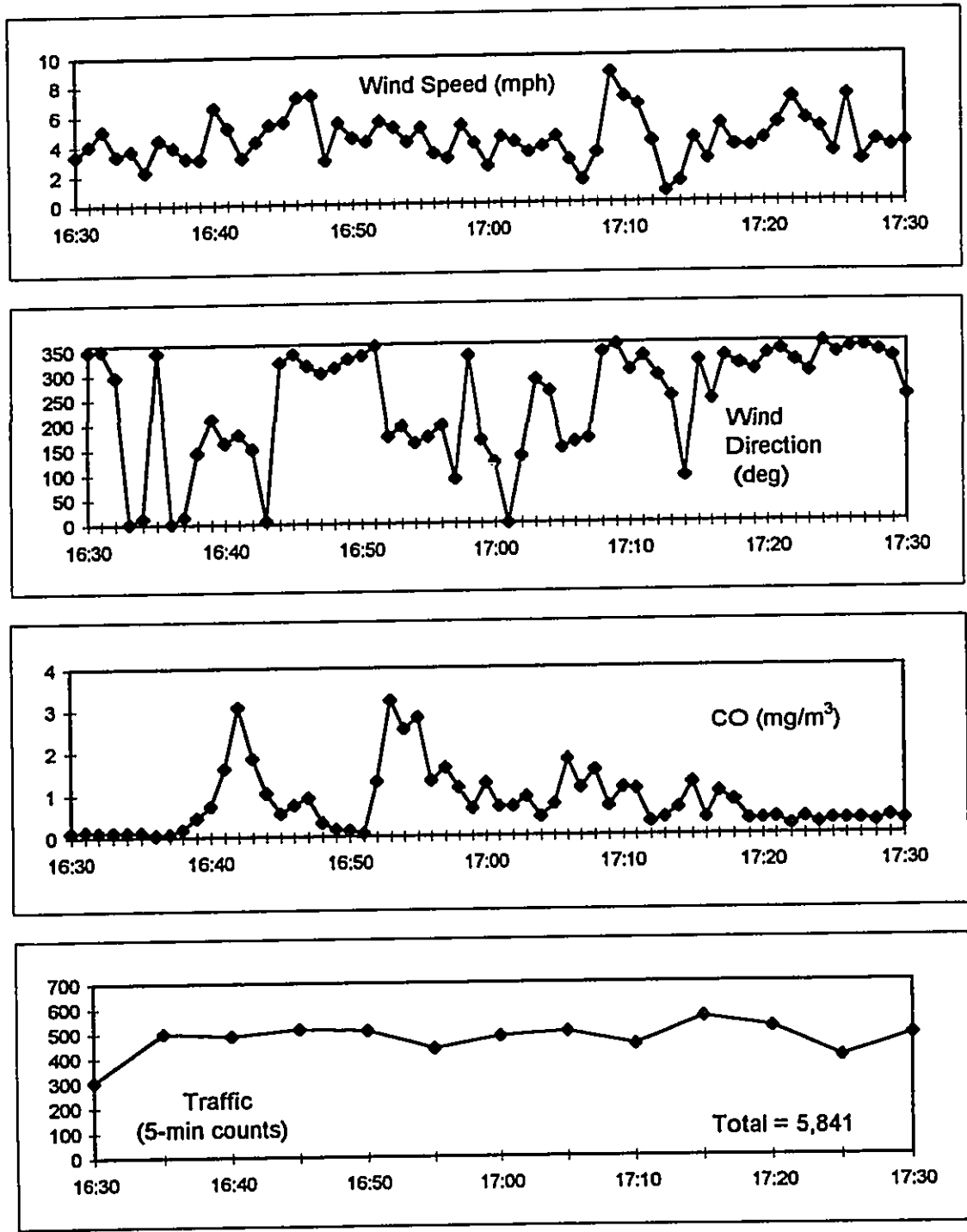
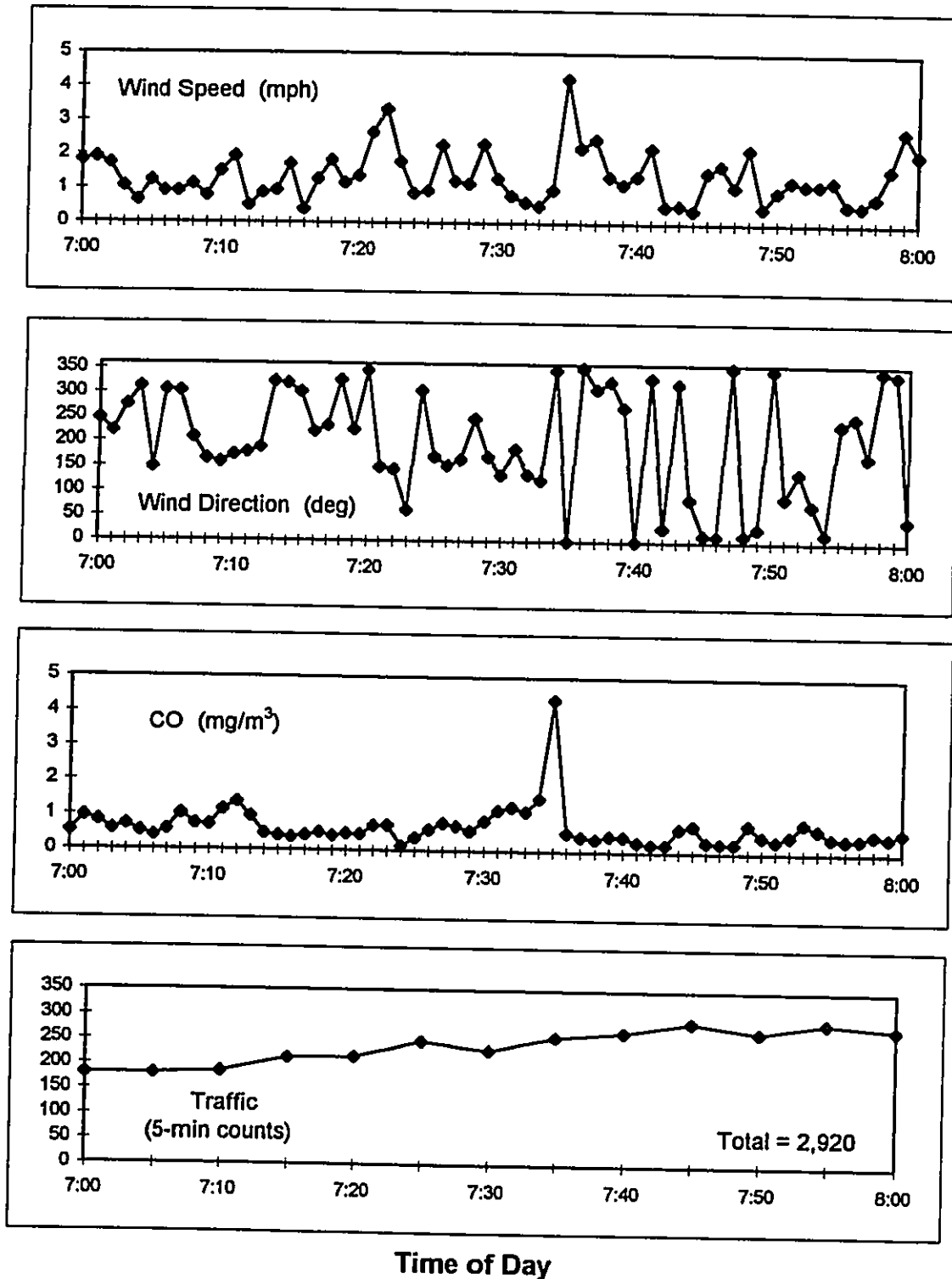


FIGURE 6
P.M. PEAK HOUR CONDITIONS
BERETANIA STREET AT QUEEN EMMA STREET
4 JUNE 1998



Time of Day

FIGURE 7
A.M. PEAK HOUR CONDITIONS
BERETANIA STREET AT QUEEN EMMA STREET
5 JUNE 1998



afternoon's volume. The variable winds, much of which were northerly and thus not carrying emissions from the nearby Beretania Street, coupled with the reduced traffic volume, resulted in low CO concentrations, i.e., less than 1.0 mg/m³.

4. CLIMATE AND METEOROLOGY

4.1 Temperature and Rainfall. Temperatures in the project area are expected to be similar to those found elsewhere in Hawaii. The nearest long-term weather station operated by the National Weather Service is located at the Honolulu International Airport. Data from that station indicate that the range of temperatures is only about eight (8) degrees between the warmest months (August and September) and the coolest months (January and February). As an annual average, the day/night variation is about 14 degrees. Daily maxima range from the low 80's in the winter to the high 80's in the summer. Daily minima ranged from the mid-60's to the low 70's. The historical high at the airport is 95 degrees while the low is 53^{9,10}.

Historical data from the National Weather Service at Honolulu International Airport indicate that annual rainfall on the leeward side of Oahu averages 22.0 inches^{9,10}. In accordance with Thornwaite's scheme for climatic classification¹¹, the area would therefore be considered semi-arid with a precipitation/evaporation (P/E) Index = 26.9.

4.2 Surface Winds. Meteorological data records were reviewed from the Honolulu International Airport and Hickam Air Force Base. The annual prevalence of northeasterly trade winds is clearly shown in Table 3. A closer examination of the data, however, indicates that low velocities (less than 10 mph) occur frequently and that the "normal" northeasterly trade winds tend to break down in the Fall giving way to more light, variable wind conditions through the Winter and on into early Spring. It is during these times that Honolulu generally experiences elevated pollutant levels. This seasonal difference in wind conditions can be easily contrasted by comparing August and January wind roses (Figures 8 and 9).

Of particular interest from an air pollution standpoint were the stability wind roses prepared for Hickam Air Force Base¹². These data indicated that stable conditions, i.e., Pasquill-Gifford stability categories E and F¹³, occur about 28% of the time on an annual basis and 36% of the time during the peak winter month (January). Our own more recent analysis of five years of meteorological data from the Honolulu International Airport (1987 - 91) revealed a 32.7% annual frequency of E and F stabilities. It is under such conditions that the greatest potential for air pollutant buildup from groundlevel sources, e.g., motor vehicles, exists.

5. SHORT-TERM IMPACTS

5.1 Onsite Impacts. The principal source of short-term air quality impact will be construction activity. Construction vehicle activity will increase automotive pollutant concentrations along the existing streets as well as on the project site itself. With the exception of nearby Vineyard Boulevard intersections, other intersections in the area are currently operating at a level of service (LOS) "B" or "C"¹¹ during the peak hours and at higher levels during offpeak hours and should be able to accommodate the temporary construction-related traffic.

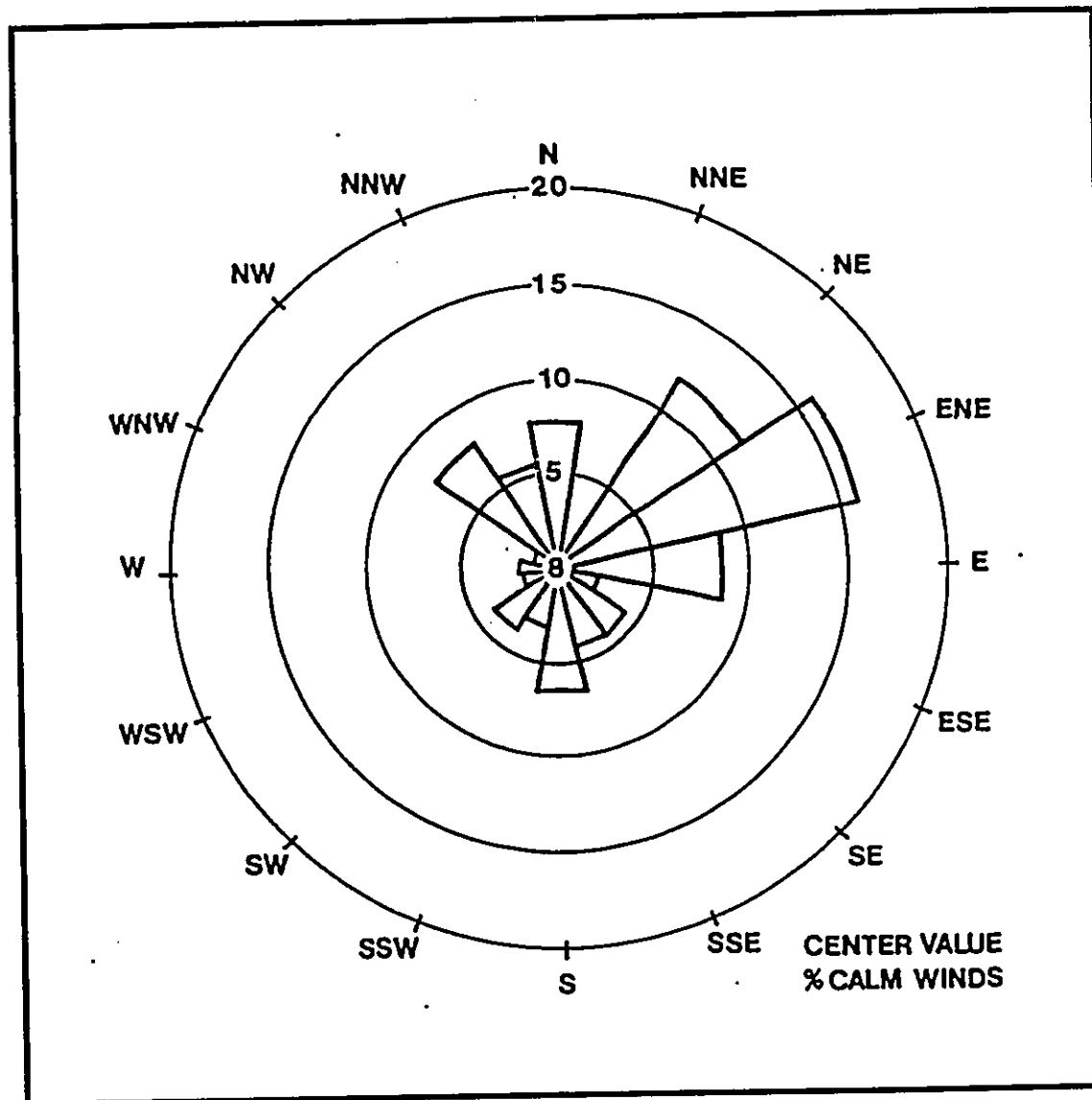
TABLE 3

ANNUAL JOINT FREQUENCY DISTRIBUTION
OF WIND SPEED AND DIRECTION
HONOLULU INTERNATIONAL AIRPORT

Dir (deg)	Wind Speed (m/sec)						All
	< 3.1	< 4.5	< 5.8	< 7.2	< 8.5	>= 8.5	
10	0.0065	0.0038	0.0023	0.0016	0.0009	0.0001	0.0151
20	0.0082	0.0041	0.0025	0.0023	0.0011	0.0001	0.0183
30	0.0100	0.0061	0.0051	0.0038	0.0028	0.0007	0.0286
40	0.0188	0.0157	0.0258	0.0222	0.0174	0.0040	0.1039
50	0.0268	0.0290	0.0449	0.0385	0.0307	0.0054	0.1752
60	0.0344	0.0289	0.0436	0.0273	0.0238	0.0041	0.1621
70	0.0250	0.0181	0.0197	0.0122	0.0096	0.0009	0.0855
80	0.0113	0.0081	0.0065	0.0039	0.0009	0.0003	0.0310
90	0.0073	0.0049	0.0040	0.0009	0.0008	0.0000	0.0179
100	0.0031	0.0016	0.0014	0.0006	0.0002	0.0000	0.0068
110	0.0027	0.0019	0.0010	0.0007	0.0005	0.0001	0.0069
120	0.0027	0.0013	0.0019	0.0009	0.0003	0.0003	0.0075
130	0.0022	0.0032	0.0018	0.0015	0.0007	0.0002	0.0096
140	0.0034	0.0033	0.0039	0.0018	0.0011	0.0006	0.0141
150	0.0022	0.0030	0.0019	0.0003	0.0002	0.0005	0.0081
160	0.0024	0.0033	0.0023	0.0010	0.0005	0.0000	0.0094
170	0.0031	0.0046	0.0023	0.0007	0.0003	0.0000	0.0109
180	0.0055	0.0042	0.0018	0.0008	0.0005	0.0000	0.0128
190	0.0065	0.0038	0.0013	0.0002	0.0000	0.0000	0.0117
200	0.0057	0.0032	0.0011	0.0001	0.0000	0.0000	0.0101
210	0.0076	0.0038	0.0016	0.0001	0.0000	0.0000	0.0131
220	0.0083	0.0077	0.0016	0.0001	0.0001	0.0000	0.0179
230	0.0076	0.0049	0.0014	0.0001	0.0001	0.0000	0.0141
240	0.0042	0.0016	0.0013	0.0000	0.0000	0.0000	0.0071
250	0.0040	0.0010	0.0003	0.0000	0.0000	0.0000	0.0054
260	0.0064	0.0023	0.0005	0.0000	0.0000	0.0000	0.0091
270	0.0065	0.0010	0.0005	0.0002	0.0000	0.0000	0.0082
280	0.0099	0.0005	0.0002	0.0000	0.0000	0.0000	0.0106
290	0.0123	0.0003	0.0002	0.0001	0.0000	0.0000	0.0130
300	0.0167	0.0018	0.0011	0.0000	0.0000	0.0000	0.0197
310	0.0235	0.0022	0.0015	0.0001	0.0000	0.0000	0.0272
320	0.0200	0.0022	0.0013	0.0006	0.0001	0.0000	0.0241
330	0.0121	0.0023	0.0011	0.0005	0.0000	0.0000	0.0159
340	0.0094	0.0010	0.0003	0.0001	0.0000	0.0000	0.0109
350	0.0082	0.0025	0.0016	0.0002	0.0000	0.0000	0.0125
360	0.0093	0.0027	0.0022	0.0006	0.0005	0.0001	0.0154
All	0.3537	0.1898	0.1917	0.1240	0.0932	0.0174	0.9698
						Calms:	0.0302

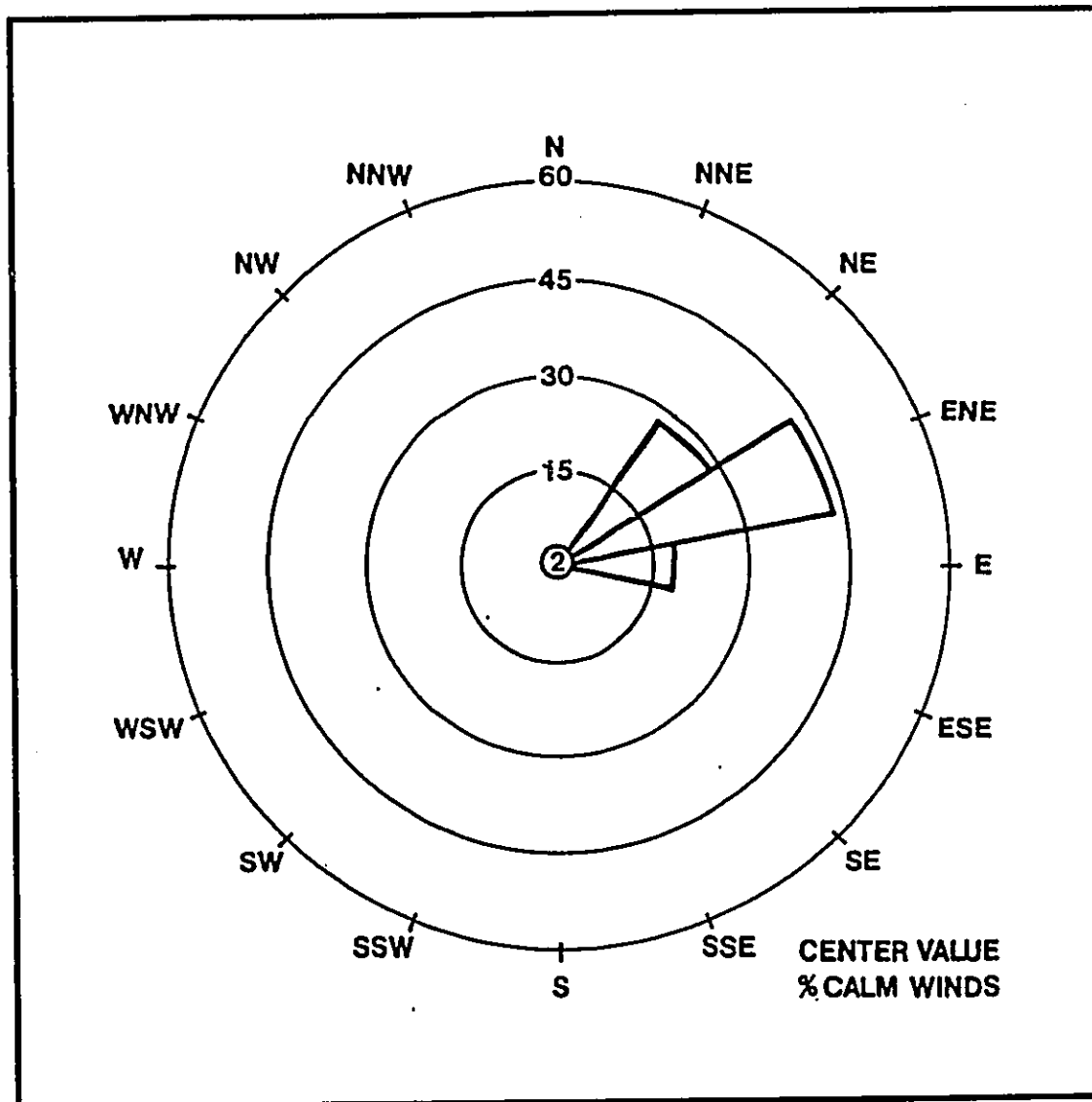
SOURCE: National Weather Service, 1992

FIGURE 8
JANUARY WIND ROSE
HONOLULU INTERNATIONAL AIRPORT



SOURCE: National Weather Service
Historical Records, 1940-57

FIGURE 9
AUGUST WIND ROSE
HONOLULU INTERNATIONAL AIRPORT



SOURCE: National Weather Service
Historical Records, 1940-57

The site preparation and earth moving will create particulate emissions as will construction of the buildings. Construction vehicle movement on unpaved on-site areas will also generate particulate emissions. EPA studies on fugitive dust emissions from construction sites indicate that about 1.2 tons/acre per month of activity may be expected under conditions of medium activity, moderate soil silt content (30%), and a precipitation/ evaporation (P/E) index of 50^{11,15}. The close proximity of occupied buildings around the project site suggests potential dust impact

The temporary rerouting of Pali Highway traffic during construction of the underground garage is also likely to result in increased emissions due to reduced vehicle speeds.

5.2 Offsite Impacts. In addition to the onsite impacts attributable to construction activity, there will also be offsite air quality impacts due to the operation of concrete and asphalt batching plants needed for construction. Such plants routinely emit particulate matter and other gaseous pollutants. It is too early, however, to identify the specific facilities that will be providing these materials and thus the discussion of air quality impacts is necessarily generic. The batch plants which will be producing the concrete for foundations, curbing, etc. and the asphalt for roadways must be permitted by the Department of Health Clean Air Branch pursuant to state regulations⁷. In order to obtain these permits, they must demonstrate their ability to continuously comply with both emission⁷ and ambient air quality³ standards. Under the recently promulgated federal Title V operating permit requirements¹⁶, now incorporated in Hawaii's rules⁷, air pollution sources must regularly attest to their compliance with all applicable requirements.

6. MOBILE SOURCE IMPACTS

6.1 Mobile Source Activity. The traffic studies^{8,14} prepared for the proposed project served as the basis for this mobile source impact analysis. Existing peak-hour traffic volumes and projections for 2002 for the principal intersections serving the project area were provided. This analysis focused on the three intersections with the greatest potential for air pollution impacts due to their traffic volumes and level of service:

- Pali Highway at Vineyard Boulevard
- Pali Highway at Beretania Street
- Beretania Street at Queen Emma Street

6.2 Emission Factors. Automotive emission factors for carbon monoxide (CO) were generated for calendar years 1998 and 2002 using the Mobile Source Emissions Model (MOBILE-5B)¹⁷. To localize the emission factors as much as possible, the March 1992 age distribution for registered vehicles in the City & County of Honolulu¹⁸ was used in lieu of national statistics. That same age distribution was the basis for the distribution of vehicle miles traveled as well.

6.3 Worst-case Screening Modeling. Due to the present state-of-the-art in air quality modeling, analyses such as this generally focus on estimating concentrations of non-reactive pollutants. For projects involving mobile sources as the principal source, carbon monoxide is normally selected for

modeling because it has a relatively long half-life in the atmosphere (about 1 month)¹⁹, and it comprises the largest fraction of automotive emissions.

Using the traffic data provided, a screening analysis was initially performed for the aforementioned intersections for 1998 and 2002 (with and without the project). A stable atmosphere (Category "F")¹³ for the a.m. peak hour, neutral atmosphere (Category "D")¹³ for the p.m. peak hour, and a 1 meter per second (m/sec) wind speed were all assumed for "worst-case" conditions.

The EPA guideline model CAL3QHC^{20, 21} was employed to estimate near-intersection carbon monoxide concentrations. An array of 40 receptor sites at a distance of 10 meters from the street edge and spaced at 10 meter intervals were entered in the model. Because the area is urban, a background CO concentration of 1.0 milligrams per cubic meter (mg/m³) was assumed. The model uses an iterative process to identify the wind direction producing the maximum CO concentration at each receptor location.

6.4 Typical Conditions Modeling. The modeling was repeated using the same technique and input data described above with the exception of wind data. Typical Honolulu wind speeds and directions were used instead of the worst-case 1 m/sec wind speed and computer-generated wind directions. These were based on an analysis of peak hours wind data over a 12-month period. A summary of the results of that analysis is presented in Table 4.

6.5 Results: 1-Hour Concentrations. The results of both the worst-case screening and the typical conditions modeling are presented in Figures 10, 11, and 12. Each figure depicts the locations of the 40 receptor sites around the respective intersections. Maximum estimated concentrations in milligrams per cubic meter (mg/m³) for each of the evaluated scenarios are also presented along with the particular receptor location at which they were predicted.

The worst-case screening modeling indicates that the federal 1-hour CO standard is currently being met at all three intersections and will continue to be met with or without the proposed project. In the case of the State standard, however, the opposite situation is suggested. The standard may already be exceeded under worst-case conditions, and that possibility continues to exist with or without the proposed project, although the difference is very small.

The results under typical Honolulu wind conditions indicate that both federal and state CO standards are presently being met and will continue to be met with or without the project. Again, the difference between the "with project" and "without project" scenarios is quite small.

6.6 Results: 8-Hour Concentrations. Estimates of 8-hour CO concentrations can be derived by applying a "persistence" factor to the maximum 1-hour concentrations. This "persistence" factor accounts for the fact that the worst-case 1-hour meteorology and traffic volumes do not persist for 8 hours. EPA recommends calculation of a persistence factor based on actual 1-hour and 8-hour CO measurements. A local persistence factor was computed from Department of Health data for a recent project²² in the Honolulu area and used here to estimate 8-hour concentrations by applying it to the higher of the a.m. or p.m. peak hour concentrations.

TABLE 4
SUMMARY OF TYPICAL WIND CONDITIONS
DURING PEAK TRAFFIC HOURS
HONOLULU, OAHU

Period	Direction Quadrant	Annual Frequency (%)	Mean Wind Speed (m/sec)
A.M. Peak	NE	67.1	4.1
7:00 - 8:00 a.m.	SE	4.8	3.9
	SW	3.3	2.9
	NW	24.4	1.8
P.M. Peak	NE	78.8	6.0
4:00 - 6:00 p.m.	SE	7.1	4.2
	SW	10.1	3.3
	NW	3.9	4.8

Notes: 1. Frequencies may not total 100% due to rounding.
2. Based on 1991 Honolulu International Airport data.
3. A.M. frequency for winds 1.5 m/s = 3.7%
4. P.M. frequency for winds 1.5 m/s = 0.27%
5. Wind speeds not reported at 1.0 m/s.

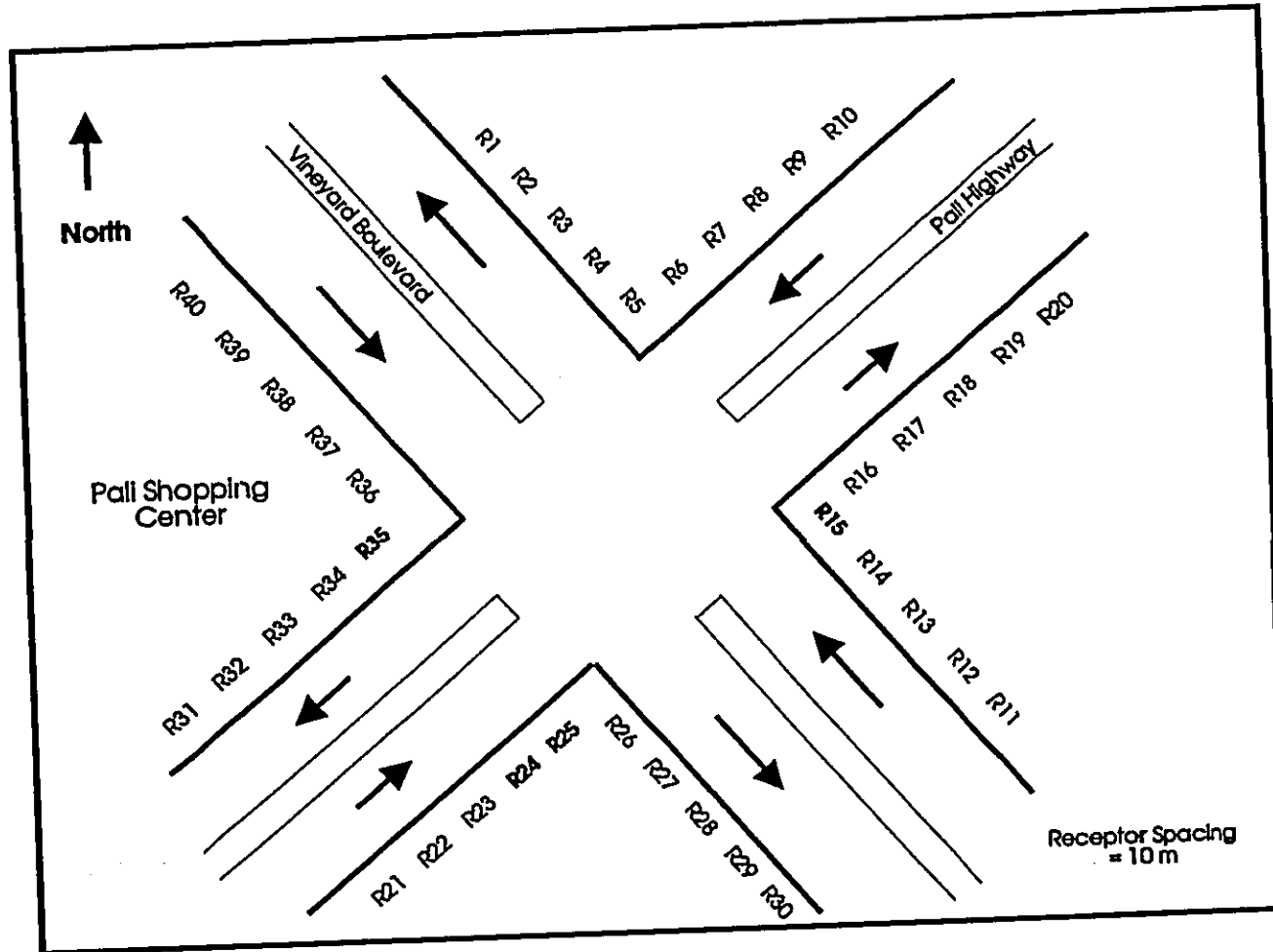
The results, also depicted in Figures 10 - 12, are identical to the 1-hour results in that the conservative screening analysis indicates compliance with the federal standard but suggests the possibility of state standard violations. On the other hand, compliance with both federal and state standards is indicated under typical Honolulu wind conditions.

6.7 Parking Garage. As noted in the *Introduction*, the proposed development includes a 3-level underground parking garage with a capacity of some 1,900 stalls for tenants, guests, and retail customers. Parking garages are classic "indirect sources" in that they attract motor vehicle activity into an area. Pollutant emissions resulting from this activity are attributable to the approach and departure movements, potential queuing at entry/exit gates, and vehicle operation within the garage itself.

Impacts associated with the approach and departing traffic have already been accounted for in the previous modeling analysis since the traffic consultant had included such activity in his study, and the volumes were therefore input to the CAL3QHC model.

An analysis of the additional impact due to vehicle activity within the proposed garage and the subsequent venting of emissions into the ambient air of the area was conducted. The first step was to estimate the total emission strength in grams per second (g/sec) of the garage in accordance with an

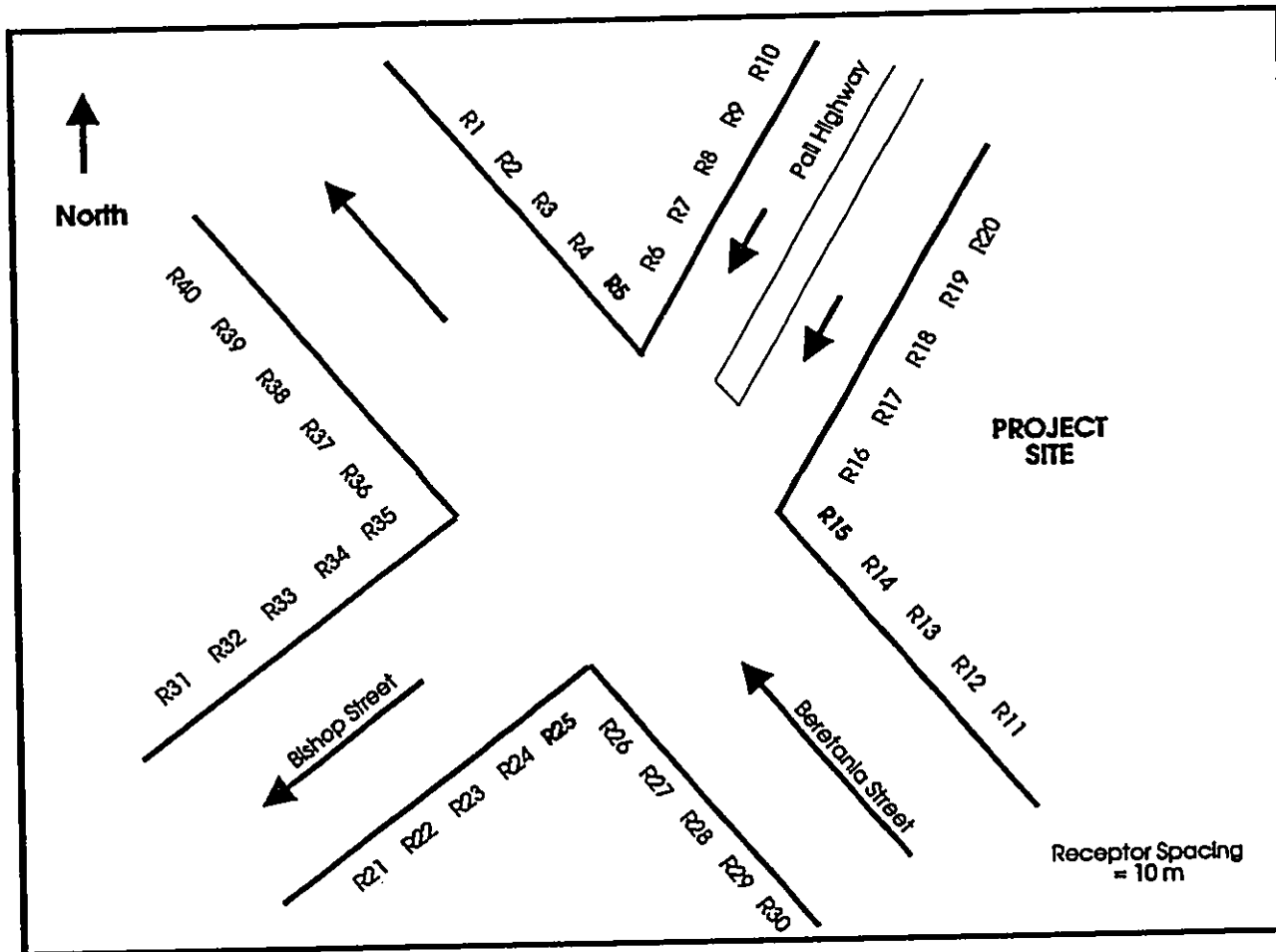
FIGURE 10
ESTIMATES OF MAXIMUM 1- AND 8-HOUR
CARBON MONOXIDE CONCENTRATIONS
Pali Highway at Vineyard Boulevard
Peak Traffic Hours
1998 - 2002



Estimated Maximum Concentrations
 (mg/m³)

<u>Period</u>	<u>Winds</u>	<u>1998</u>	<u>2002 w/o project</u>	<u>2002 w/project</u>	<u>Receptor</u>
A.M.	worst	16.4	16.3	16.5	R35
	typical	6.7	6.5	6.5	R15/R25
P.M.	worst	11.1	11.1	11.4	R24
	typical	3.3	3.2	3.3	R25
8-Hr	worst	7.7	7.7	7.8	R35
	typical	3.2	3.1	3.1	R15/R25

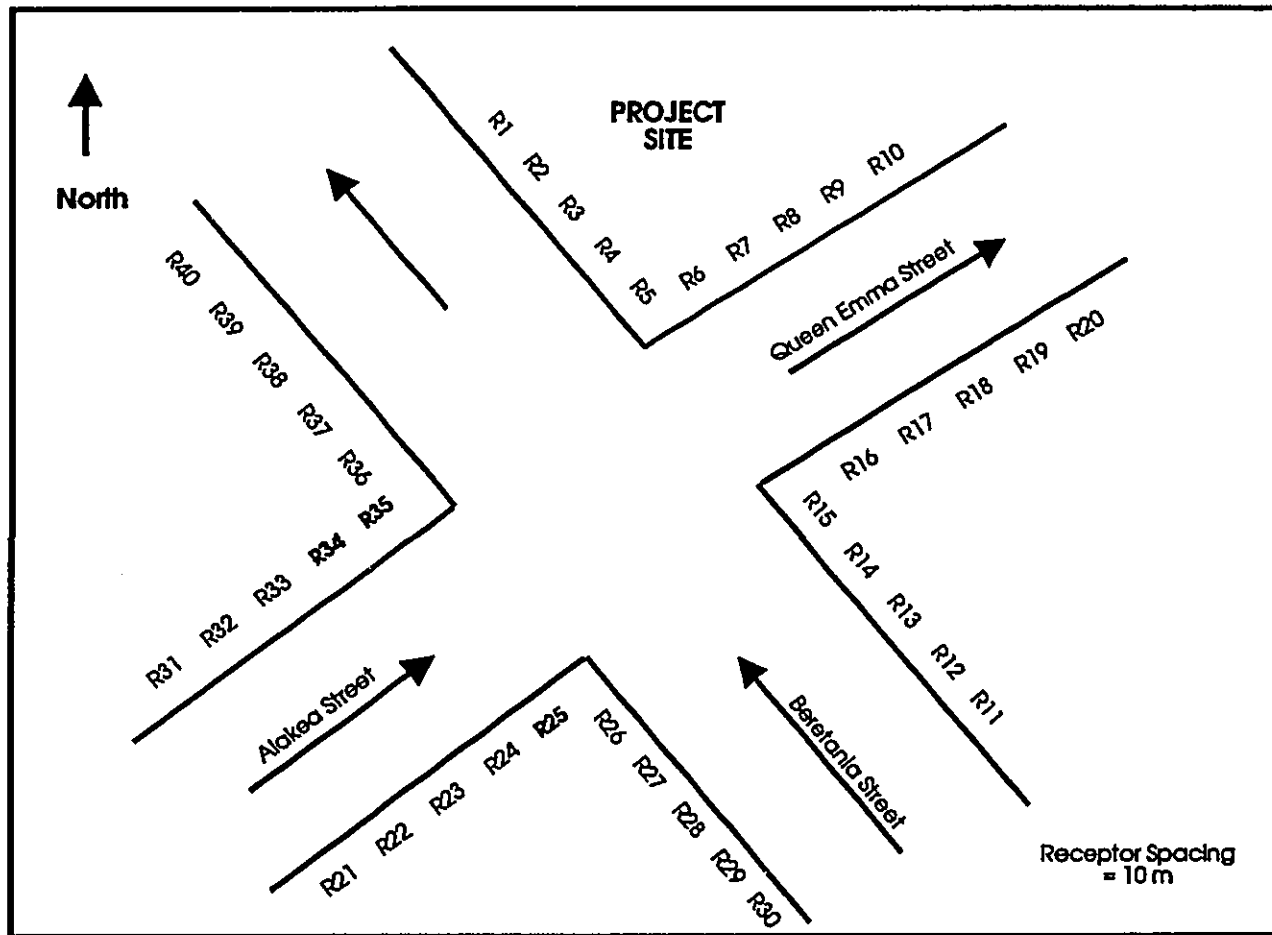
FIGURE 11
ESTIMATES OF MAXIMUM 1- AND 8-HOUR
CARBON MONOXIDE CONCENTRATIONS
Pali Highway at Beretania Street
1998 - 2002



Estimated Maximum Concentrations
 (mg/m³)

Period	Winds	1998	2002 w/o project	2002 w/project	Receptor
A.M.	worst	17.6	17.6	18.1	R5/R25
	typical	9.7	8.9	9.1	R25/R15
P.M.	worst	14.4	13.9	14	R15
	typical	4.3	4.4	4.9	R5/R15
8-Hr	worst	8.3	8.3	8.5	R5/R25
	typical	4.6	4.2	4.3	R25/R15

FIGURE 12
ESTIMATES OF MAXIMUM 1- AND 8-HOUR
CARBON MONOXIDE CONCENTRATIONS
Beretania Street at Queen Emma Street
Peak Traffic Hours
1998 - 2002



Estimated Maximum Concentrations
(mg/m³)

<u>Period</u>	<u>Winds</u>	<u>1998</u>	<u>2002 w/o project</u>	<u>2002 w/project</u>	<u>Receptor</u>
A.M.	worst	18.1	17.6	18.4	R35
	typical	4.9	5.9	7.5	R25
P.M.	worst	16.6	16	16.4	R34
	typical	5.6	5.5	5.4	R35
8-Hr	worst	8.5	8.3	8.6	R35
	typical	2.4	2.8	3.5	R25/R35

EPA²³ methodology. This was done for the a.m. and p.m. peak traffic hours and was based on the traffic consultant's entry/exit projections.

The next step was to determine the required or desired minimum air quality within the garage and the ventilation rate necessary to achieve that level of air quality. Such garage air quality is commonly based on CO levels and ventilation rates are determined or specified on that basis. That is the case in Hawaii where the DOH has promulgated regulations which govern garage ventilation²⁴.

The state rules specify a minimum of 1.5 cubic feet per minute (cfm) per square foot of area to be ventilated. In this instance, with three levels of parking, and assuming utilization of the entire site, that requirement would equate to approximately 760,000 cfm.

The rules also allow for an "engineered system" based on an assumed number of cars running at one time and a threshold limit value for CO. For residential garages, the rules state that the number of cars running is assumed to be 1.18% of the total parking spaces. In this instance, if one uses the Occupational Safety & Health Administration (OSHA) TLV of 35 parts per million (ppm), the calculated ventilation rate would be approximately 880,000 cfm.

Using the previously cited MOBILE-5B emissions model, we estimated an emission rate of 8.0 g/min per vehicle and used that value in conjunction with an assumption of 100% vehicle activity in the garage, i.e., 50% departing and 50% arriving, to estimate a worst-case total garage emission rate. This value was used to determine the ventilation rate necessary to comply with a TLV of 35 ppm. That computed rate was 270,000 cfm.

Based on the foregoing calculations, it would appear that the DOH rules provide a significant margin of safety in their ventilation requirements. This is probably attributable to the fact that they were promulgated in 1983, a time when CO emissions from motor vehicles were substantially greater than they are today. The motor vehicle emissions standards promulgated over the years by the EPA at the direction of Congress have had a marked effect throughout the U.S. in reducing CO emissions and ambient levels.

That 270,000 cfm with its CO content was then divided equally among seven proposed exhausts, five of which were located along the Pali Highway side of the project site and two of which were located along the Fort Street side of Kamali'i Park. These sites were selected because of their downwind orientation in terms of the prevailing northeasterly trade winds and desired avoidance of emissions blowing across the project site. The vents were sized to allow a nominal 4.1 m/sec discharge rate.

The short term version of the EPA guideline²⁰ model, ISC3²⁴, was used to model dispersion of the exhaust vents emissions during the peak traffic hours. The same meteorological conditions and receptor locations used in the CAL3QHC modeling were input to the ISC3 model in order to determine the contribution of the garage to the worst-case concentrations previously identified. Garage emission rates were also calculated based on the a.m. and p.m. entry/exit volumes projected by the traffic consultant¹⁴.

The results indicated minimal ($< 1.0 \text{ mg/m}^3$) garage contribution at all of the critical receptor locations near the three intersections studied. This is due to the ventilation diluted emission rates, distance from the vents to the critical receptors, and direction from vents to receptors which differed from the prevailing wind.

The results of the garage modeling can be considered conservative, i.e., overestimating, because the ventilation rate used was substantially less than that currently required by the DOH. A higher rate would further dilute the CO in the exhaust and result in lower ambient impacts.

7. OFFSITE STATIONARY SOURCE IMPACTS

7.1 Electrical Generation. The estimated 6.1 million kilowatt hours (kwhrs) of annual electrical demand by the project will necessitate the generation of electricity by power plants. Currently, most of Oahu's electrical energy is generated by Hawaiian Electric Company's oil-fired plants at Kahe Point and Waiiau. These units fire low sulfur (0.5%) fuel oil. The estimated emissions resulting from fuel burned to provide the power needed by the project are presented in Table 5.

7.2 Solid Waste Disposal. The refuse generated by the residents of the proposed apartments will require disposal. Historically, about 80% of Oahu's refuse was being landfilled with the remaining 20% being burned at the Waipahu Incinerator (now closed). With the opening of the City's resource recovery facility (HPOWER) at Campbell Industrial Park several years ago, most refuse is now being pre-processed and burned, leaving less mass to be landfilled. This facility was originally designed to handle most of Oahu's domestic refuse (1,800 T/day). Estimates of annual emissions attributable to the combustion of refuse from the proposed development are included in Table 5.

TABLE 5
ESTIMATES OF ANNUAL EMISSIONS
FROM OFFSITE SOURCES

Pollutant	Emissions (T/yr)	
	Electrical Generation	Solid Waste Disposal
Nitrogen oxides (NO _x)	33.1	5.5
Sulfur oxides (SO _x)	25.1	1.1
Particulate matter (PM)	2.52	0.5
Carbon monoxide (CO)	1.6	4.9
Volatile organic compounds (VOC)	0.3	0.3

8. DISCUSSION, CONCLUSIONS AND MITIGATION

8.1 Short-Term Impacts. Since, as noted above, the development area is considered semi-arid by Thornwaite's classification system, there is an increased potential for fugitive dust. It will be very important to employ adequate dust control measures during the construction period. Dust control could be accomplished through frequent watering of unpaved roads and areas of exposed soil. The EPA estimates that twice daily watering can reduce fugitive dust emissions by as much as 50%¹⁵. The soonest possible landscaping of completed areas will also help.

If construction vehicle activity is limited to offpeak hours, then its effects of lowering average travel speeds, reducing LOS, and increasing vehicle emissions, can be greatly diminished. Rerouting of Pali Highway traffic during construction of the underground garage will also have to be implemented in such a manner as to minimize excessive queuing and traffic delays during peak and off-peak hours. This will have the concomitant effect of minimizing vehicular emissions in the area.

8.2 Mobile Source Impacts.

While the worst-case screening modeling suggested the possibility of noncompliance with the State's carbon monoxide standards both now and in the future, additional modeling using typical Honolulu wind data demonstrated compliance. The actual long-term CO monitoring data of the DOH at its downtown monitoring site and the short-term CO sampling data collected as part of this study both support the latter modeling results.

The modeling results also indicated that there was very little difference between the "with project" and "without project" scenarios. This is due in part to the EPA's motor vehicles emissions control program which mandates emissions standards for new vehicles. The result over time is that older, higher emitting vehicles are eventually replaced by newer, lower emitting vehicles. Increases in traffic volume can thereby be offset by the reduced per-vehicle emission rates.

It should also be emphasized that the receptors in these analyses are all quite close to the streets, i.e., 10 meters, and that the CO concentrations drop off sharply with distance away from the traffic lanes. The concentrations under discussion and the potential for violations all apply to these close proximity locations. In this area, compliance is hardly an issue at most distances beyond 10 meters.

The proposed parking garage will be a stationary source of motor vehicle activity through its ventilation system exhausts, but the impacts on ambient levels of CO in the project area were found to be acceptable even with ventilation rates less than that specified by regulatory requirements.

8.3 Offsite Stationary Source Impacts. The proposed project will increase electrical demand which in turn will cause more fuel to be burned and more pollutants to be emitted into the air. These impacts can be mitigated by energy efficient design of the proposed dwelling units. The State Department of Business, Economic Development and Tourism has energy conservation design guidelines to assist in this effort. As for HECO's facilities which provide the power, each must continuously demonstrate compliance with all applicable ambient air quality standards and control regulations in order to retain its operating permit.

Emissions associated with the disposal of solid waste generated by the project are very small compared to the entire county. Nevertheless, they can be reduced by encouragement of use of recyclable products.

8.4 Conclusions. The following conclusions may be drawn from the foregoing analysis:

- While there will be short-term, construction related impacts on air quality, they can be adequately mitigated to prevent violations of existing standards or air pollution control rules.
- Increased motor vehicle activity generated by the project at major intersections serving the project area will not cause violations of existing federal air quality standards.
- That same motor vehicle activity will cause carbon monoxide levels to approach the stringent state air quality standards but with a very low probability of exceeding them.
- The ventilation system associated with the proposed underground parking garage will have a minimal contribution to ambient carbon monoxide levels in the project area.
- Impacts on offsite stationary sources of electrical power and solid waste disposal will not cause violations of existing air quality standards and can be mitigated by energy efficient design and recycling efforts.

REFERENCES

1. Clean Air Act, 42 U.S.C.A. §7409 (CAA §109), National primary and secondary ambient air quality standards.
2. Code of Federal Regulations, Title 40, Protection of Environment, Part 50, *National Primary and Secondary Ambient Air Quality Standards*.
3. State of Hawaii. Title 11, Administrative Rules, Chapter 59, *Ambient Air Quality Standards*, as amended, November 1993.
4. Library of Congress, Congressional Research Service. *A Legislative History of the Clean Air Amendments of 1970*, Volume 1, p. 411, January 1974.
5. U. S. Environmental Protection Agency. *National Ambient Air Quality Standards for Hydrocarbons: Final Rulemaking*, Federal Register, Volume 48, No. 3, p. 628, January 1983.
6. U. S. Environmental Protection Agency. Proposed Rulemaking, Federal Register, Volume 61, No. 241, pp. 65638, 65780, and 65716, 13 December 1996.
7. State of Hawaii. Title 11, Administrative Rules, Chapter 60.1, *Air Pollution Control*, November 1993.
8. Wilson Okamoto & Associates, Inc.. Existing traffic count data provided by Frances Yamada, 1 June 1998.
9. U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Climatic Data Center. *Local Climatological Data: Annual Summary with Comparative Data, Honolulu, Hawaii, 1995*
10. State of Hawaii, Department of Business, Economics and Tourism. *State of Hawaii Data Book - 1996*.
11. Thomwaite, C. W. Climates of North America According to a New Classification, *Geog. Rev.* 21: 633-655, 1931.
12. U.S. Air Force, Environmental Technical Applications Center Report No. 7461: *Stability Wind Roses, Hickam AFB, HI, 0000-2400 LST By Boundary Layer Section*, 4 September 1974.
13. U. S. Environmental Protection Agency. *Workbook of Atmospheric Dispersion Estimates, AP-26 (Sixth Edition)*, 1973.
14. Wilbur Smith Associates. Traffic study data for Block J Redevelopment Project provided by B. T. Brothers, 9 June 1998.

15. U.S. Environmental Protection Agency. *Compilation of Air Pollutant Emission Factors*, Fifth Edition, as updated on the EPA Technology Transfer Network (TTN), October 1996
16. Clean Air Act Amendments of 1990, P.L. 101-549, 15 November 1990.
17. U. S. Environmental Protection Agency. *MOBILE-5B (Mobile Source Emission Factor Model)*, 14 September 1996.
18. City & County of Honolulu, Department of Data Systems. *Age Distribution of Registered Vehicles in the City & County of Honolulu* (unpublished report), March 1992.
19. Seinfeld, John H. *Air Pollution: Physical and Chemical Fundamentals*, p. 69, McGraw-Hill Book Company, 1975
20. U.S. Environmental Protection Agency. *Guideline on Air Quality Models (Revised)*, 40 CFR 51, Appendix W, 26 June 1996.
21. U.S. Environmental Protection Agency. *User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections*, EPA-450/R-92-006, November 1992.
22. Morrow, J. W. *Air Quality Impact Analysis: Hawai'i Convention Center (Revised)*, 27 June 1995.
23. State of Hawaii. Title 11, Administrative Rules, Chapter 39, *Air Conditioning and Ventilation*, January 1983.
24. U.S. Environmental Protection Agency. *User's Guide for the Industrial Source Complex (ISC3) Dispersion Models*, EPA-454/B-95-003a, September 1995.

APPENDIX B

ACOUSTIC STUDY

Y. Ebisu & Associates

**ACOUSTIC STUDY FOR THE
BLOCK "J" REDEVELOPMENT PROJECT
HONOLULU, HAWAII**

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JUNE 1998

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CHAPTER I. SUMMARY

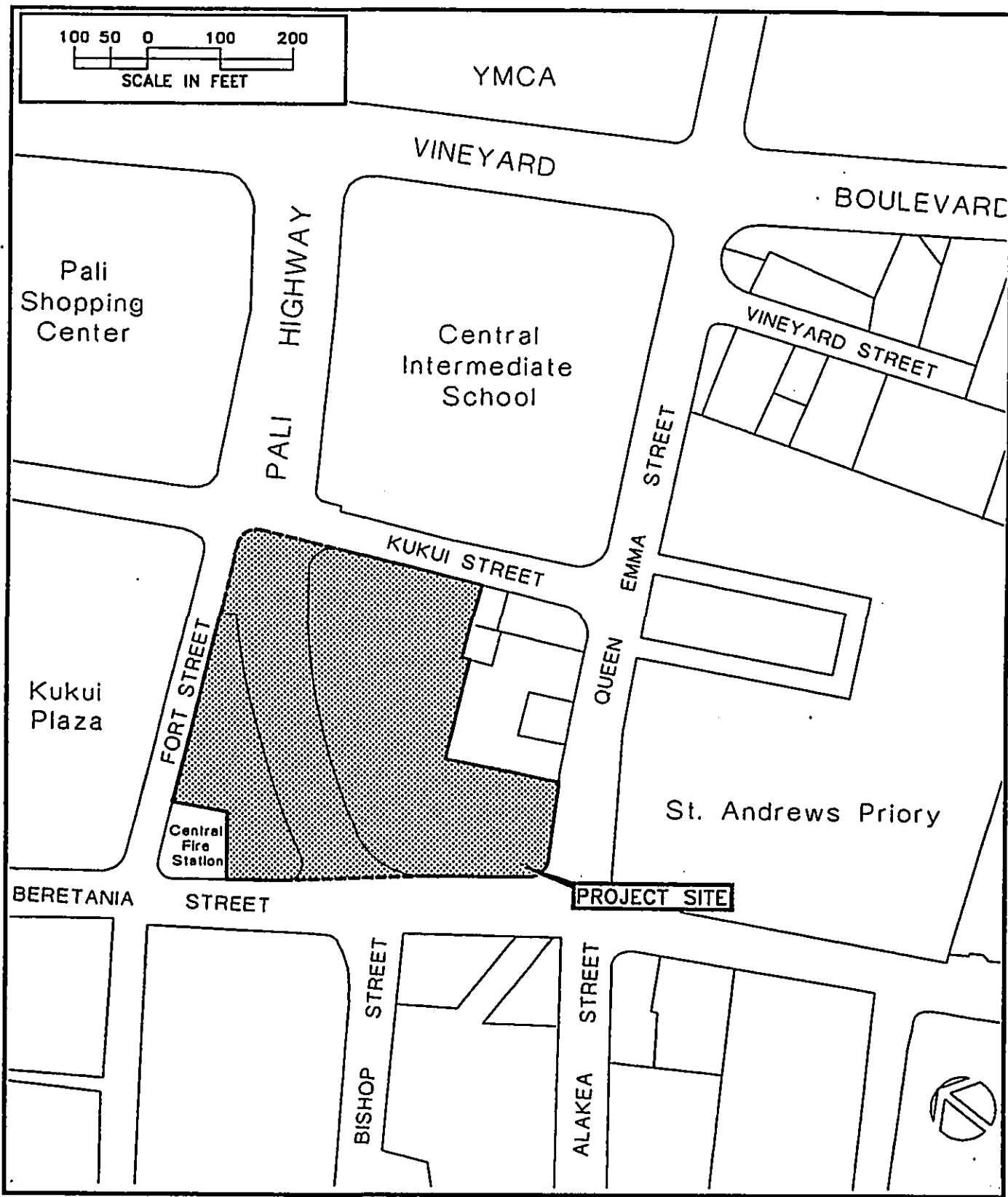
The existing and future traffic noise levels in the vicinity of the proposed Block J Redevelopment Project in Downtown Honolulu were evaluated for their potential impacts and their relationship to current FHA/HUD noise standards. The traffic noise level increases along the 5 roadways bordering the project site (see FIGURE 1) were calculated. Following project build-out by CY 2002, increases in traffic noise of 0.2 to 1.0 Ldn units are predicted to occur as a result of project plus non-project traffic.

Along Beretania Street, traffic noise levels are expected to increase by 0.2 to 0.3 Ldn, primarily as a result of non-project traffic. Along Queen Emma, South Kukui, and Fort Streets and along Pali Highway, traffic noise levels are expected to increase by approximately 0.2 to 0.3 Ldn by CY 2002 as a result of non-project traffic. Project traffic will add approximately 0.2 to 0.8 Ldn additional units of noise along Beretania, Queen Emma, South Kukui, and Fort Streets and Pali Highway in the immediate vicinity of the project. These levels of traffic noise increases resulting from project generated traffic are not considered to be significant. In addition, because of the business/commercial character of the project area, the predicted increases in traffic noise levels are not expected to generate adverse noise impacts.

The upper floor units on the south, east, and west faces of the Southeast Tower Building of the Block J Project will be exposed to traffic noise levels which exceed the 65 Ldn FHA/HUD noise standard. Because of this, impacts from traffic noise are possible at the proposed project dwelling units in the southeast tower building, and particularly those which face South Beretania Street. Mitigation of high traffic noise levels through the use of closure and air conditioning is one option for the individual dwelling units, although it may not be practical for units in the affordable rental unit category.

Unavoidable, but temporary, noise impacts will occur during construction of the proposed project, particularly during the excavation and potential sheet pile driving activities on the project site. Because construction activities are predicted to be audible within the project site and at adjoining properties, the quality of the acoustic environment may be degraded to unacceptable levels during periods of construction. Mitigation measures to reduce construction noise to inaudible levels will not be practical in all cases, but the use of quiet equipment is recommended as a standard mitigation measure.

Because of the presence of a historically significant building (the Central Fire



PROJECT SITE LOCATION AND SURROUNDING ROADWAYS

FIGURE 1

Station) adjacent to the project site and the potential for damage to this building from vibration during potential sheet pile driving operations, vibration monitoring is recommended during close-in pile driving operations where vibration levels are expected to exceed 0.2 inches/second. In addition, it is expected that the design and construction methods for the project buildings will be optimized to minimize risks of damage to adjacent structures from settling or heaving. A vibration limit of 2.0 inches/second should not be exceeded at any of the adjacent buildings, and modifications to the project's plans prior to design and construction are recommended if these limits are expected to be exceeded.

CHAPTER II. PURPOSE

The primary objective of this study was to describe the existing and future traffic noise environment in the environs of the proposed Block J Redevelopment Project in Downtown Honolulu on the island of Oahu. Traffic noise level increases and impacts associated with the proposed development were to be determined within the project site as well as along the public roadways expected to service the project traffic. A specific objective was to determine future traffic noise level increases associated with both project and non-project traffic, and the potential noise impacts associated with these increases. Assessments of possible future impacts from short term construction noise and vibration at the project site were also included as noise study objectives. Specifically, the potential risks of structural damage to adjacent buildings from sheet pile driving operations on the project site were included in the noise and vibration impact assessment. Recommendations for minimizing identified noise and vibration impacts were also to be provided as required.

CHAPTER III. NOISE DESCRIPTORS AND THEIR RELATIONSHIP TO LAND USE COMPATIBILITY

The noise descriptor currently used by federal agencies (such as FHA/HUD) to assess environmental noise is the Day-Night Average Sound Level (Ldn). This descriptor incorporates a 24-hour average of instantaneous A-Weighted Sound Levels as read on a standard Sound Level Meter. By definition, the minimum averaging period for the Ldn descriptor is 24 hours. Additionally, sound levels which occur during the nighttime hours of 10:00 PM to 7:00 AM are increased by 10 decibels (dB) prior to computing the 24-hour average by the Ldn descriptor. A more complete list of noise descriptors is provided in APPENDIX B to this report.

TABLE 1, derived from Reference 1, presents current federal noise standards and acceptability criteria for residential land uses. Land use compatibility guidelines for various levels of environmental noise as measured by the Ldn descriptor system are shown in FIGURE 2. As a general rule, noise levels of 55 Ldn or less occur in rural areas, or in areas which are removed from high volume roadways. In urbanized areas which are shielded from high volume streets, Ldn levels generally range from 55 to 65 Ldn, and are usually controlled by motor vehicle traffic noise. Residences which front major roadways are generally exposed to levels of 65 Ldn, and as high as 75 Ldn when the roadway is a high speed freeway. In the project area, traffic noise levels associated with Beretania Street are typically greater than 65 Ldn along the Right-of-Way due to the large volume of traffic on that major thoroughfare.

For purposes of determining noise acceptability for funding assistance from federal agencies (FHA/HUD and VA), an exterior noise level of 65 Ldn or lower is considered acceptable for residences. This standard is applied nationally (Reference 2), including Hawaii. Because of our open-living conditions, the predominant use of naturally ventilated dwellings, and the relatively low exterior-to-interior sound attenuation afforded by these naturally ventilated structures, an exterior noise level of 65 Ldn does not eliminate all risks of noise impacts. Because of these factors, and as recommended in Reference 3, a lower level of 55 Ldn is considered as the "Unconditionally Acceptable" (or "Near-Zero Risk") level of exterior noise. However, after considering the cost and feasibility of applying the lower level of 55 Ldn, government agencies such as FHA/HUD and VA have selected 65 Ldn as a more appropriate regulatory standard.

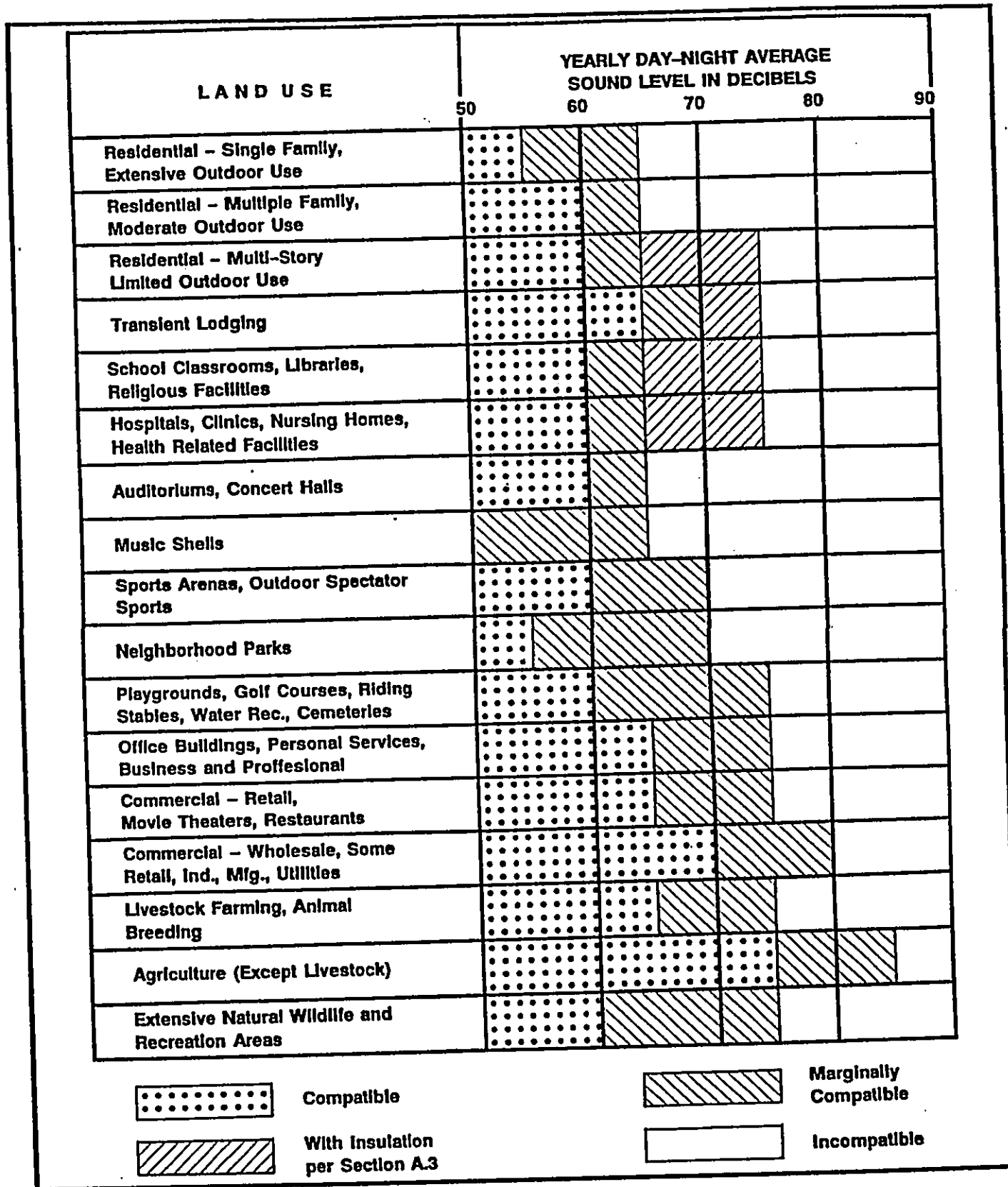
For commercial, industrial, and other non-noise sensitive land uses, exterior noise levels as high as 75 Ldn are generally considered acceptable. Exceptions to this

TABLE 1
EXTERIOR NOISE EXPOSURE CLASSIFICATION
(RESIDENTIAL LAND USE)

NOISE EXPOSURE CLASS	DAY-NIGHT SOUND LEVEL	EQUIVALENT SOUND LEVEL	FEDERAL (1) STANDARD
Minimal Exposure	Not Exceeding 55 Ldn	Not Exceeding 55 Leq	Unconditionally Acceptable
Moderate Exposure	Above 55 Ldn But Not Above 65 Ldn	Above 55 Leq But Not Above 65 Leq	Acceptable(2)
Significant Exposure	Above 65 Ldn But Not Above 75 Ldn	Above 65 Leq But Not Above 75 Leq	Normally Unacceptable
Severe Exposure	Above 75 Ldn	Above 75 Leq	Unacceptable

Notes: (1) Federal Housing Administration, Veterans Administration, Department of Defense, and Department of Transportation.

(2) FHWA uses the Leq instead of the Ldn descriptor. For planning purposes, both are equivalent if: (a) heavy trucks do not exceed 10 percent of total traffic flow in vehicles per 24 hours, and (b) traffic between 10:00 PM and 7:00 AM does not exceed 15 percent of average daily traffic flow in vehicles per 24 hours. The noise mitigation threshold used by FHWA for residences is 67 Leq.



LAND USE COMPATIBILITY WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVEL AT A SITE FOR BUILDINGS AS COMMONLY CONSTRUCTED
 (Source: American National Standards Institute S12.40-1990)

FIGURE 2

occur when naturally ventilated office and other commercial establishments are exposed to exterior levels which exceed 65 Ldn.

On the island of Oahu, the State Department of Health (DOH) regulates noise from construction activities, through the issuance of permits for allowing excessive noise during limited time periods. State DOH noise regulations are expressed in maximum allowable property line noise limits rather than Ldn (see Reference 4). Although they are not directly comparable to noise criteria expressed in Ldn, State DOH noise limits for residential, commercial, and industrial lands equate to approximately 55, 60, and 76 Ldn, respectively.

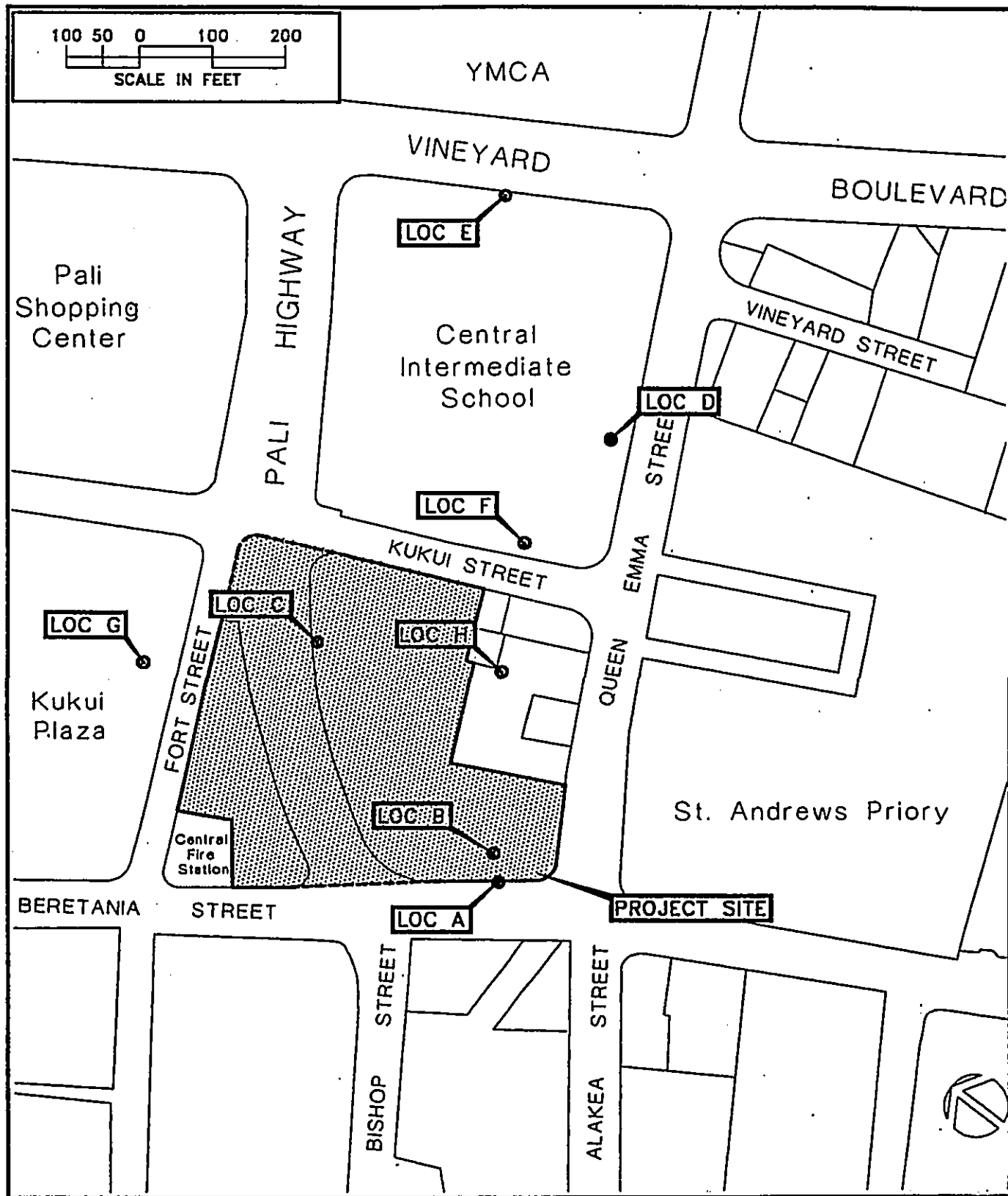
It should be noted that the noise compatibility guidelines and relationships to the Ldn noise descriptor may not be applicable to impulsive noise sources such as pile drivers. The use of penalty factors (such as adding 10 dB to measured sound levels or the use of C-Weighting filters) have been proposed. However, the relationships between levels of impulsive noise sources and land use compatibility have not been as firmly established as have the relationships for non-impulsive sources. The State DOH limits for impulsive sounds which exceed 120 impulses in any 20 minute period are 10 dB above the limits for non-impulsive sounds. If impulsive sounds do not exceed 120 impulses in any 20 minute time period, there are no regulatory limits on their sound levels under the State DOH regulations.

CHAPTER IV. GENERAL STUDY METHODOLOGY

Existing traffic noise levels were measured at eight locations in the project environs to provide a basis for developing the project's traffic noise contributions along the roadways which will service the proposed development. The locations of the measurement sites are shown in FIGURE 3. Noise measurements were performed during the month of June 1998. The results of the traffic noise measurements were compared with calculations of existing traffic noise levels to validate the computer model used. The traffic noise measurement results, and their comparisons with computer model predictions of existing traffic noise levels are summarized in TABLE 2. Additional noise measurements were obtained at various floors of the Kukui Plaza Building (Diamond Head Tower) at Location "G", and at various floors of the Queen Emma Building at Location "H". The purpose of these measurements was to evaluate the effects of receptor elevation on the traffic noise levels in the project environs.

Traffic noise calculations for the existing conditions as well as noise predictions for the Year 2002 were performed using the Federal Highway Administration (FHWA) Traffic Noise Model (Reference 5). Traffic data entered into the noise prediction model were: roadway and receiver locations; hourly traffic volumes, average vehicle speeds; estimates of traffic mix; and "Loose Soil" propagation loss factor. The traffic data for the project (References 6 and 7), Hawaii State Department of Transportation counts along South Beretania Street (Reference 8), and along Vineyard Boulevard at Pali Highway (Reference 9) were the primary sources of data inputs to the model. For existing and future traffic along the streets surrounding the project site, it was assumed that the average noise levels, or $Leq(h)$, during the peak traffic hour were approximately equal to the 24-hour Ldn along those roadways. For Vineyard Boulevard, it was assumed the average noise levels during the PM peak hour were 2.0 dB less than the 24-hour Ldn . These assumptions were based on computations of both the hourly Leq and the 24-hour Ldn of traffic noise along Vineyard Boulevard, Pali Highway, and South Beretania Street (see FIGURES 4, 5, and 6).

Traffic noise calculations for both the existing and future conditions in the project environs were developed for ground level and elevated receptors with and without the benefit of shielding from the proposed residential tower buildings. Traffic noise levels were also calculated for future conditions with and without the proposed mixed use project. The forecasted changes in traffic noise levels over existing levels were calculated with and without the project, and noise impact risks evaluated. The relative contributions of non-project and project traffic to the total noise levels were also calculated, and an evaluation of possible traffic noise impacts was made.



LOCATIONS OF NOISE MEASUREMENT SITES

FIGURE 3

TABLE 2

TRAFFIC NOISE MEASUREMENT RESULTS

	Time of Day <u>LOC/ (HRS)</u>	Ave. Speed <u>(MPH)</u>	--Hourly Traffic Volume--			Measured <u>Leq (dB)</u>	Predicted <u>Leq (dB)</u>
			<u>AUTO</u>	<u>M.TRUCK</u>	<u>H.TRUCK</u>		
A. 50 FT from the center-- line of S. Beretania St. (6/01/98)	1530 TO 1655	30	3,128	15	64	70.5	70.7
B. 90 FT from the center-- line of S. Beretania St. (6/01/98)	1657 TO 1730	30	3,128	15	64	65.9	65.8
C. 50 FT from the center-- line of Pali Hwy. (6/2/98)	0637 TO 0745	24	1,927	10	30	66.2	67.9
D. 61 FT from the center-- line of Queen Emma St. (6/03/98)	1550 TO 1650	25	1,660	6	12	62.5	62.6
E. 67 FT from the center-- line of Vineyard Blvd. (6/02/98)	1447 TO 1545	25	1,804	14	10	64.3	64.8
F. 40 FT from the center-- line of S. Kukui St. (6/03/98)	1440 TO 1540	22	964	6	18	63.4	63.4

TABLE 2 (CONTINUED)

TRAFFIC NOISE MEASUREMENT RESULTS

<u>LOCATION</u>	<u>Time of Day</u> <u>(HRS)</u>	<u>Ave. Speed</u> <u>(MPH)</u>	<u>--Hourly Traffic Volume--</u>			<u>Measured</u> <u>Leg (dB)</u>	<u>Predicted</u> <u>Leg (dB)</u>
			<u>AUTO</u>	<u>M.TRUCK</u>	<u>H.TRUCK</u>		
G. 10th Floor of Kukui Plaza-- Diamond Head Tower (6/04/98)	1530 TO 1700	N/A	N/A	N/A	N/A	63.4	63.7
H. 12th Floor of Queen Emma Building (6/08/98)	0954 TO 1204	N/A	N/A	N/A	N/A	64.5	64.0

FIGURE 4

HOURLY VARIATIONS OF TRAFFIC NOISE AT 100 FT
SETBACK DISTANCE FROM THE CENTERLINE OF
SOUTH BERETANIA STREET AT NUUANU STREAM BRIDGE
(NOVEMBER 24, 1997)

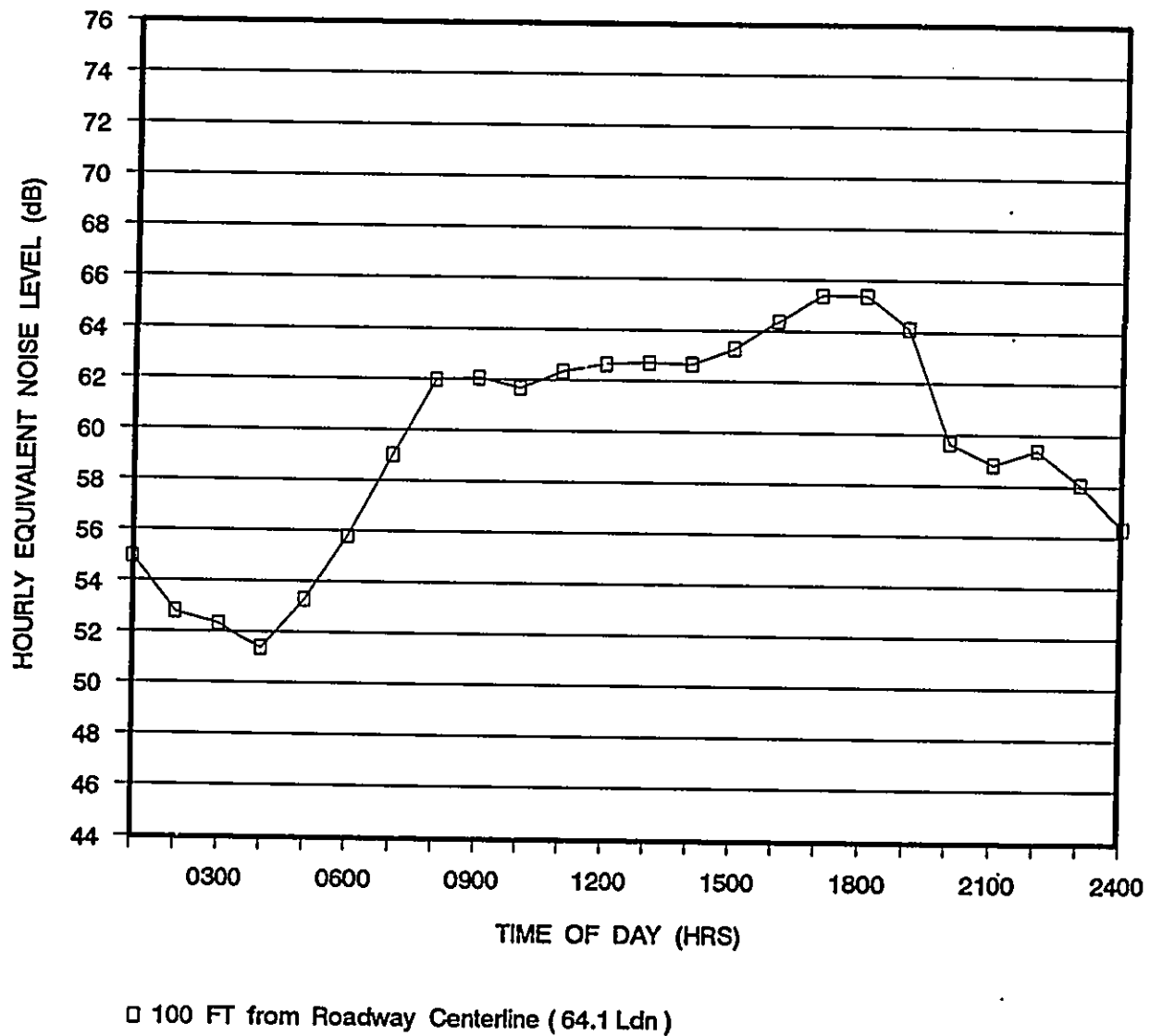


FIGURE 5

HOURLY VARIATIONS OF TRAFFIC NOISE AT 100 FT
SETBACK DISTANCE FROM THE CENTERLINE OF
VINEYARD BOULEVARD WEST OF PALI HIGHWAY
(MAY 15, 1996)

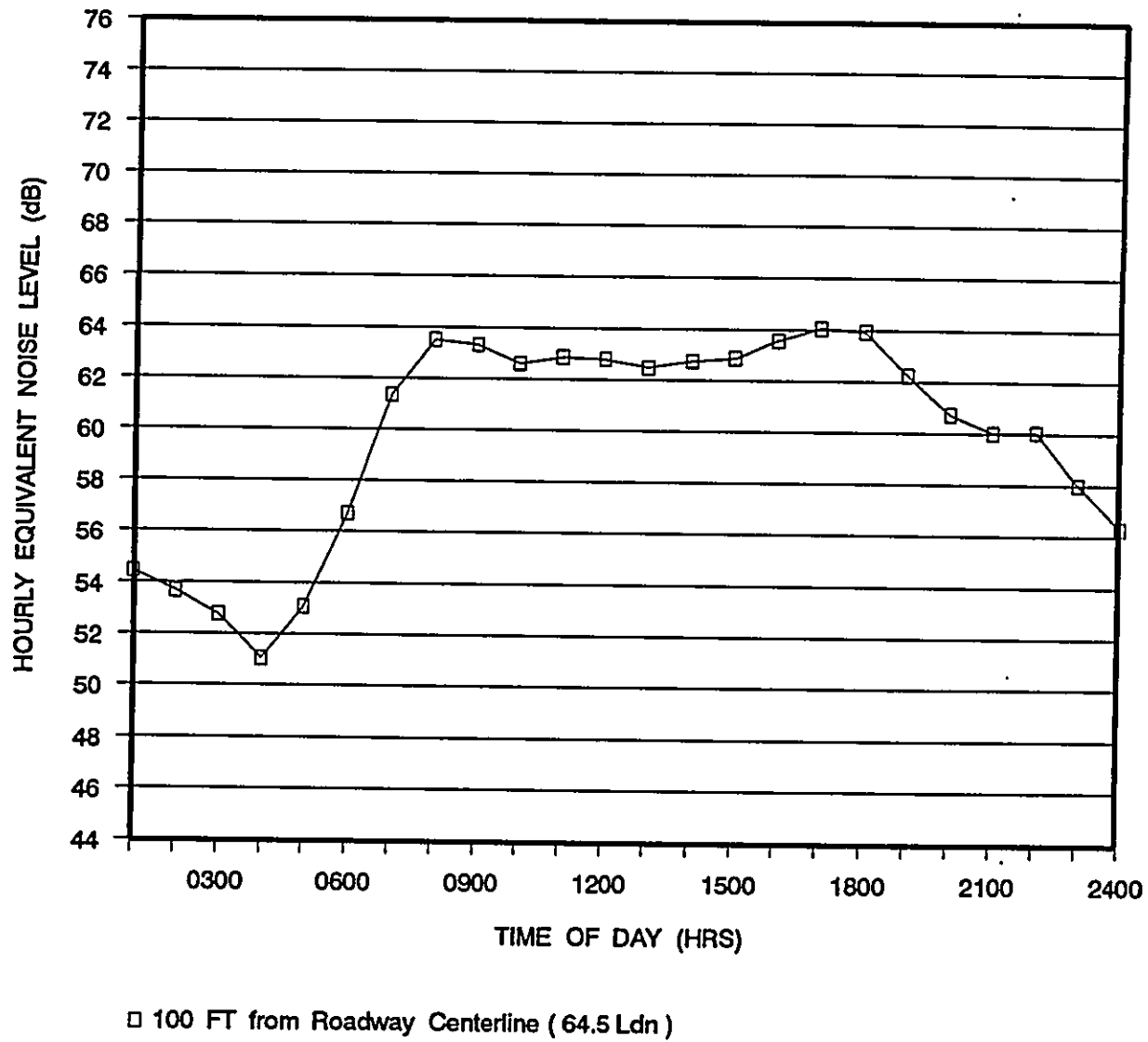
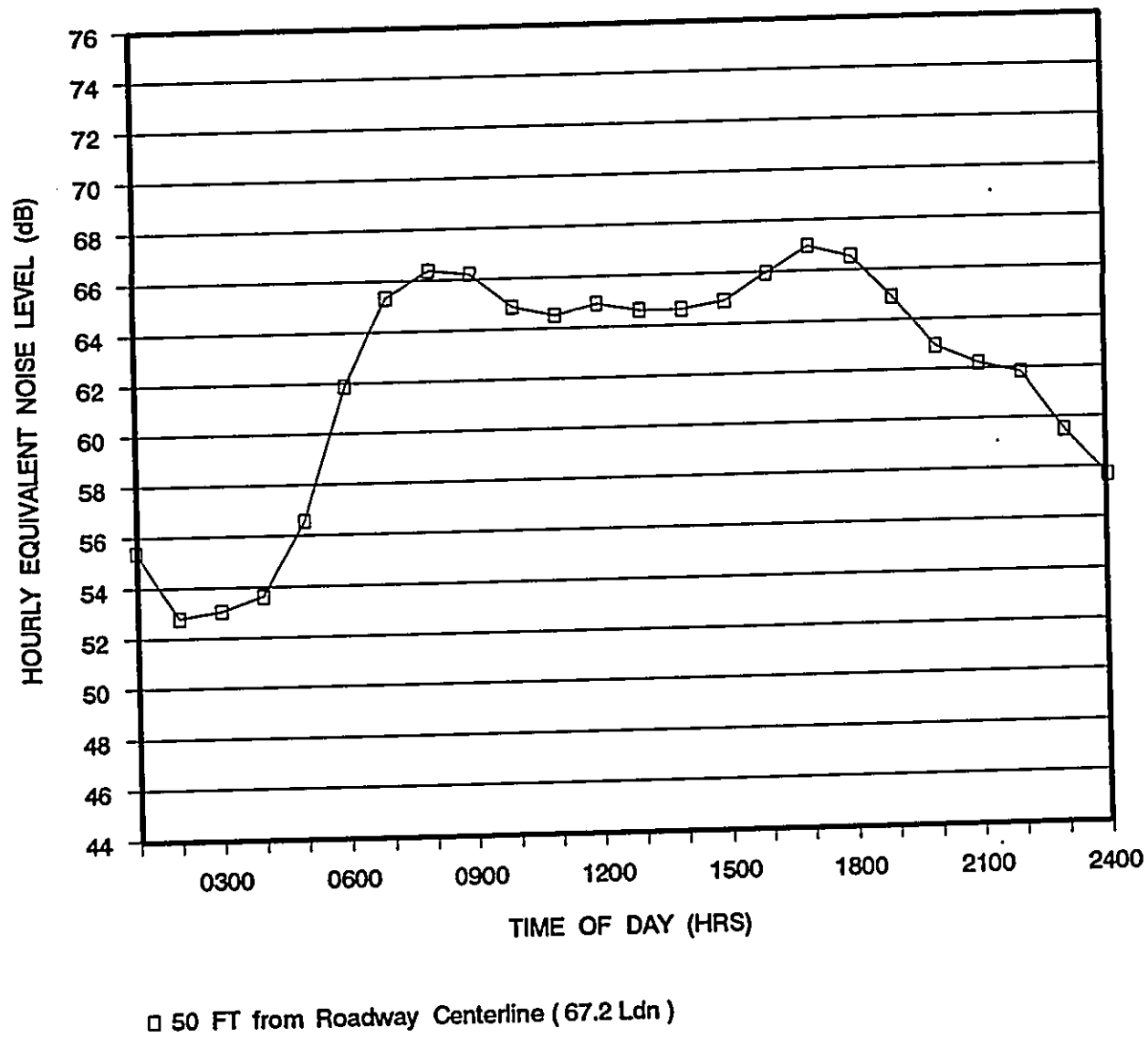


FIGURE 6

HOURLY VARIATIONS OF TRAFFIC NOISE AT 100 FT
SETBACK DISTANCE FROM THE CENTERLINE OF
PALI HIGHWAY SOUTH OF VINEYARD BOULEVARD
(MAY 15, 1996)



Calculations of average exterior and interior noise levels from construction activities were performed for typical naturally ventilated and air conditioned dwellings. Predicted noise levels were compared with existing background ambient noise levels, and the potential for noise impacts was assessed. Potential noise and vibration impacts from potential pile driving operations were also discussed, and mitigation measures recommended.

CHAPTER V. EXISTING ACOUSTICAL ENVIRONMENT

The existing background ambient noise levels within the project area are controlled by traffic along South Beretania Street, Pali Highway, Queen Emma Street, South Kukui Street, and local traffic within the existing parking lots. Daytime background ambient noise measurements were obtained at eight locations (Sites "A" thru "H") in the project environs. These locations are shown in FIGURE 3.

The existing traffic noise levels in the project environs along South Beretania and Queen Emma Streets are in the "Significant Exposure, Normally Unacceptable" category on the project site. Along Fort and South Kukui Streets and Pali Highway, existing traffic noise levels are in the "Moderate Exposure, Acceptable" category.

The results of the June 1998 traffic and background ambient noise measurements are summarized in TABLE 2, with measurement locations identified in FIGURE 3. Site "G" was located at the 10th Floor Fire Escape in the Diamond Head Tower of the Kukui Plaza Condominium. Site "H" was located at the 12th Floor Fire Escape in the Queen Emma Building. The remaining Sites "A" thru "F" were located at street level. As shown in TABLE 2, correlation between measured and predicted traffic noise levels was good. The Traffic Noise Model's "Loose Soil" propagation loss factor was used to obtain the good correlation.

TABLES 3 and 4 summarize the findings of traffic noise variations for different receptor elevations at the Kukui Plaza (32-story) and Queen Emma (12-story) Buildings. The results shown in the tables indicate that very small variations in existing traffic noise levels occur above the 2nd thru 4th floors of these two buildings.

Results of calculations of existing (CY 1998) traffic noise levels at the future tower building locations on the project site during the PM peak hour period are shown in FIGURE 7. TABLES 5A and 5B contain the traffic volume, speed, and mix assumptions which were used as inputs to the Traffic Noise Model. The results of the calculations are shown for ground level and elevated receptors without noise shielding effects from the two proposed tower buildings.

As indicated in FIGURE 7, the existing noise levels over the project site are relatively high near the South Beretania Street property line, and are dominated by traffic noise from South Beretania Street. At the site of the proposed Southeast Tower Building, existing traffic noise levels range from 61 to 67 Ldn at ground level receptors who are partially shielded from traffic noise by existing buildings and parked vehicles. For

TABLE 3
VARIATIONS IN MEASURED NOISE LEVELS WITH
SOUND LEVEL METER ELEVATIONS
(LOCATION "G"; KUKUI PLAZA)

<u>Time</u>	<u>* MEASURED SOUND LEVELS (dB) *</u>				<u>*** LEVELS RE. 10TH FLR. ***</u>		
	<u>10th Flr.</u>	<u>2nd Flr.</u>	<u>22nd Flr.</u>	<u>32nd Flr.</u>	<u>2nd Flr.</u>	<u>22nd Flr.</u>	<u>32nd Flr.</u>
0940 To 0947	62.7	N/A	63.2	N/A	N/A	0.5	N/A
0949 To 1004	63.1	N/A	N/A	63.5	N/A	N/A	0.4
1007 To 1022	62.5	61.6	N/A	N/A	-0.9	N/A	N/A
1026 To 1041	63.1	N/A	62.8	N/A	N/A	-0.3	N/A
1044 To 1059	63.4	N/A	N/A	63.4	N/A	N/A	0.0
1103 To 1118	62.7	62.4	N/A	N/A	-0.3	N/A	N/A
1120 To 1135	62.7	N/A	64.0	N/A	N/A	1.3	N/A

NOTES:

All sound levels are approximately 15 minutes average. Difference in sound levels shown are relative to the 10th floor level.

Example: Leq at 22nd floor (63.2) minus Leq at 10th floor(62.7) equals 0.5 dB.

TABLE 4

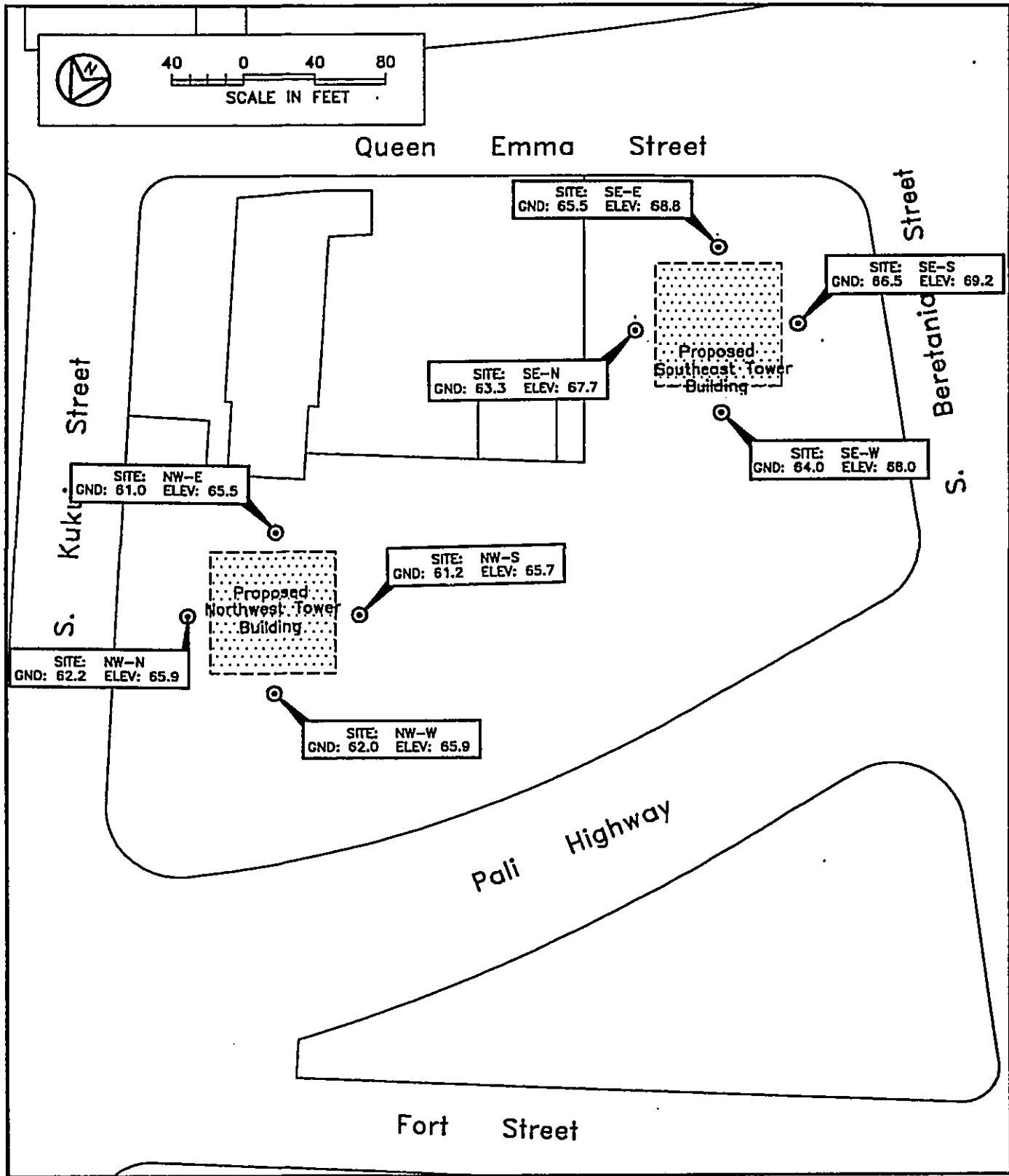
VARIATIONS IN MEASURED NOISE LEVELS WITH
SOUND LEVEL METER ELEVATIONS
(LOCATION "H"; QUEEN EMMA BUILDING)

TIME	* MEASURED SOUND LEVELS (dB) *				*** LEVELS RE. 12TH FLR. ***		
	12th Flr.	2nd Flr.	4th Flr.	8th Flr.	2nd Flr.	4th Flr.	8th Flr.
1002 To 1017	64.3	N/A	N/A	64.2	N/A	N/A	-0.1
1020 To 1035	64.8	N/A	62.5	N/A	N/A	-2.3	N/A
1047 To 1102	64.3	59.5	N/A	N/A	-4.8	N/A	N/A
1107 To 1122	64.6	N/A	N/A	64.0	N/A	N/A	-0.6
1124 To 1139	64.7	N/A	63.1	N/A	N/A	-1.6	N/A
1143 To 1158	64.4	62.4	N/A	N/A	-2.0	N/A	N/A

NOTES:

All sound levels are approximately 15 minutes average. Difference in sound levels shown are relative to the 12th floor level.

Example: Leq at 8th floor (64.2) minus Leq at 12th floor(64.3) equals -0.1 dB.



EXISTING (CY 1998) TRAFFIC NOISE LEVELS AT PROPOSED BLOCK "J" TOWER BUILDINGS

FIGURE 7

TABLE 5A

EXISTING (CY 1998) TRAFFIC VOLUMES AND NOISE LEVELS
ALONG ROADWAYS IN PROJECT AREA
(AM PEAK HOUR)

LOCATION	SPEED (MPH)	TOTAL VPH	**** VOLUMES (VPH) *****			50' Leg	100' Leg
			AUTOS	M TRUCKS	H TRUCKS		
S. Beretania St., East Segment	30	2,153	2,100	10	43	67.2	62.1
S. Beretania St., Southeast Segment	30	2,108	2,056	10	42	67.1	62.1
S. Beretania St., Southwest Segment	30	1,471	1,435	7	29	65.5	60.5
S. Beretania St., West Segment	30	1,986	1,937	9	40	66.8	61.8
S. Kukui St., North Segment	22	899	884	3	12	60.6	55.9
S. Kukui St., West Segment	25	503	491	3	9	59.4	54.6
Vineyard Blvd., East Segment	25	2,432	2,384	24	24	65.4	60.5
Vineyard Blvd., North Segment	25	2,149	2,107	21	21	64.9	59.9
Vineyard Blvd., West Segment	25	2,119	2,077	21	21	64.8	59.9
Nuuanu Ave., North Segment	25	1,411	1,383	14	14	63.0	58.1
Nuuanu Ave., West Segment	25	1,374	1,346	14	14	63.0	58.1
Nuuanu Ave., South Segment	25	1,009	989	10	10	61.6	56.7
Pali Hwy., North Segment	24	2,391	2,343	12	36	65.5	60.8
Pali Hwy., West Segment	24	1,967	1,927	10	30	64.7	60.0
Bishop St., South Segment	24	2,622	2,570	13	39	65.9	61.2
Fort St., West Segment	24	313	307	3	3	56.2	51.3
Queen Emma St., North Segment	25	1,294	1,280	5	9	62.1	57.0
Queen Emma St., East Segment	25	999	984	4	11	61.5	56.6
Alakea St., South Segment	25	936	921	4	11	61.3	56.4

TABLE 5B

EXISTING (CY 1998) TRAFFIC VOLUMES AND NOISE LEVELS
ALONG ROADWAYS IN PROJECT AREA
(PM PEAK HOUR)

<u>LOCATION</u>	<u>SPEED</u> <u>(MPH)</u>	<u>TOTAL</u> <u>VPH</u>	<u>AUTOS</u>	<u>M TRUCKS</u>	<u>H TRUCKS</u>	<u>50' Leg</u>	<u>100' Leg</u>
S. Beretania St., East Segment	30	3,171	3,093	15	63	68.8	63.8
S. Beretania St., Southeast Segment	30	3,207	3,128	15	64	68.9	63.9
S. Beretania St., Southwest Segment	30	2,800	2,731	13	56	68.3	63.3
S. Beretania St., West Segment	30	3,004	2,930	14	60	68.6	63.6
S. Kukui St., North Segment	22	1,550	1,525	5	20	62.9	58.2
S. Kukui St., West Segment	25	605	590	4	11	60.2	55.4
Vineyard Blvd., East Segment	25	2,868	2,811	29	29	66.2	61.2
Vineyard Blvd., North Segment	25	2,220	2,176	22	22	65.0	60.1
Vineyard Blvd., West Segment	25	2,206	2,162	22	22	65.0	60.1
Nuuanu Ave., North Segment	25	2,084	2,042	21	21	64.8	59.8
Nuuanu Ave., West Segment	25	1,980	1,940	20	20	64.5	59.6
Nuuanu Ave., South Segment	25	635	622	6	6	59.5	54.6
Pail Hwy., North Segment	24	2,428	2,379	12	36	65.6	60.8
Pail Hwy., West Segment	24	999	979	5	15	61.7	57.0
Bishop St., South Segment	24	1,485	1,455	7	22	63.4	58.7
Fort St., West Segment	24	112	110	1	1	51.6	46.7
Queen Emma St., North Segment	25	1,670	1,653	6	11	63.1	58.0
Queen Emma St., East Segment	25	2,717	2,675	11	31	65.9	61.0
Alakea St., South Segment	25	2,673	2,632	11	30	65.8	60.9

elevated receptors who are not shielded from traffic noise, existing traffic noise levels at the Southeast Tower location range from 68 to 69 Ldn. At the site of the proposed Northwest Tower Building, existing traffic noise levels for ground level receptors range between 61 to 62 Ldn, and between 65 and 66 Ldn for elevated receptors. Exterior noise levels which exceed 65 Ldn are considered to be "Normally Unacceptable" for residences by FHA/HUD and other federal agencies.

CHAPTER VI. FUTURE TRAFFIC NOISE ENVIRONMENT

Predictions of future traffic noise levels were made using the traffic volume assignments of Reference 7 for CY 2002 with and without the proposed project. The future projections of project plus non-project traffic noise levels on the roadways which would service the project are shown in TABLES 6A and 6B for the AM and PM peak hours of traffic, respectively.

The dominant traffic noise source in the project area will continue to be traffic noise from South Beretania Street, but the 0.4 dB increase in this noise source following project build-out is not expected to be significant. TABLE 7 summarizes the predicted setback distances to the 55, 65, and 70 Ldn traffic noise contour lines along the roadways servicing the project and attributable to both project plus non-project traffic by CY 2002. The setback distances in TABLE 7 do not include the beneficial effects of noise shielding from buildings, or the detrimental effects of additive contributions of noise from intersecting streets or reflections from building walls. As indicated in TABLE 7, relatively large setback distances to the 65 Ldn contour from the centerline of South Beretania are predicted to continue to exist in CY 2002.

FIGURE 8 shows the predicted future traffic noise levels at the locations of the proposed tower buildings on the project site following project build-out in CY 2002 for ground level and elevated (above the 4th floor) receptors. The beneficial effects of shielding from the proposed high-rise structure are included in the figures, as well as the additive noise contributions from the adjoining streets, are included in the sound level predictions shown in FIGURE 8. As indicated in the figure, the proposed elevated residential units in the Southeast Tower Building which face South Beretania Street (south direction) and Queen Emma Street (east direction) are expected to be exposed to traffic noise levels between 67 to 69 Ldn, and will probably be within the "Significant Exposure, Normally Unacceptable" noise exposure category. The units of the Southeast Tower which face South Kukui Street (north direction) should be in the "Moderate Exposure, Acceptable" noise exposure category, with noise levels less than 62 Ldn. Units of the Southeast Tower which face Pali Highway (west direction) are expected to be marginally above the 65 Ldn FHA/HUD noise standard for residences.

As shown in FIGURE 8, the elevated units in the proposed Northwest Tower Building which face South Kukui Street (north direction) Pali Highway (west direction), South Beretania Street (south direction), and South Kukui Street (east direction), should be at or below the 65 Ldn noise standard. The predicted noise levels along the north face of the Northwest Tower Building location are only marginally lower than 65

TABLE 6A

FUTURE (CY 2002) TRAFFIC VOLUMES AND NOISE LEVELS
ALONG ROADWAYS IN PROJECT AREA
(AM PEAK HOUR)

<u>LOCATION</u>	<u>SPEED</u> <u>(MPH)</u>	<u>TOTAL</u> <u>VPH</u>	<u>**** VOLUMES (VPH) *****</u>			<u>50' Leg</u>	<u>100' Leg</u>
			<u>AUTOS</u>	<u>M TRUCKS</u>	<u>H TRUCKS</u>		
S. Beretania St., East Segment	30	2,354	2,296	11	47	67.6	62.5
S. Beretania St., Southeast Segment	30	2,225	2,171	10	44	67.3	62.3
S. Beretania St., Southwest Segment	30	1,563	1,525	7	31	65.8	60.7
S. Beretania St., West Segment	30	2,132	2,079	10	43	67.1	62.1
S. Kukui St., North Segment	22	1,044	1,028	3	13	61.1	56.4
S. Kukui St., West Segment	25	561	548	3	10	59.8	55.0
Vineyard Blvd., East Segment	25	2,671	2,617	27	27	65.9	60.9
Vineyard Blvd., North Segment	25	2,290	2,244	23	23	65.2	60.2
Vineyard Blvd., West Segment	25	2,322	2,276	23	23	65.2	60.3
Nuuanu Ave., North Segment	25	1,539	1,509	15	15	63.4	58.5
Nuuanu Ave., West Segment	25	1,470	1,440	15	15	63.3	58.3
Nuuanu Ave., South Segment	25	1,123	1,101	11	11	62.1	57.1
Pali Hwy., North Segment	24	2,732	2,677	14	41	66.1	61.4
Pali Hwy., West Segment	24	2,233	2,189	11	33	65.2	60.4
Bishop St., South Segment	24	2,906	2,847	15	44	66.4	61.6
Fort St., West Segment	24	378	370	4	4	57.2	52.3
Queen Emma St., North Segment	25	1,491	1,476	5	10	62.6	57.6
Queen Emma St., East Segment	25	1,222	1,203	5	14	62.4	57.5
Alakea St., South Segment	25	1,182	1,164	5	13	62.2	57.3

TABLE 6B

FUTURE (CY 2002) TRAFFIC VOLUMES AND NOISE LEVELS
ALONG ROADWAYS IN PROJECT AREA
(PM PEAK HOUR)

LOCATION	SPEED (MPH)	TOTAL VPH	**** VOLUMES (VPH) *****			H TRUCKS	50' Leg	100' Leg
			AUTOS	M TRUCKS	H TRUCKS			
S. Beretania St., East Segment	30	3,406	3,322	16	68	69.1	64.1	
S. Beretania St., Southeast Segment	30	3,399	3,315	16	68	69.1	64.1	
S. Beretania St., Southwest Segment	30	2,975	2,902	14	59	68.5	63.5	
S. Beretania St., West Segment	30	3,247	3,167	15	65	68.9	63.9	
S. Kukui St., North Segment	22	1,843	1,813	6	24	63.6	58.9	
S. Kukui St., West Segment	25	658	642	4	12	60.6	55.8	
Vineyard Blvd., East Segment	25	3,192	3,128	32	32	66.6	61.7	
Vineyard Blvd., North Segment	25	2,524	2,474	25	25	65.6	60.6	
Vineyard Blvd., West Segment	25	2,657	2,603	27	27	65.9	60.9	
Nuuanu Ave., North Segment	25	2,250	2,206	22	22	65.1	60.1	
Nuuanu Ave., West Segment	25	2,125	2,083	21	21	64.8	59.9	
Nuuanu Ave., South Segment	25	675	661	7	7	59.9	55.0	
Pail Hwy., North Segment	24	2,933	2,874	15	44	66.4	61.7	
Pail Hwy., West Segment	24	1,208	1,184	6	18	62.5	57.8	
Bishop St., South Segment	24	1,738	1,703	9	26	64.1	59.4	
Fort St., West Segment	24	163	159	2	2	53.8	49.0	
Queen Emma St., North Segment	25	1,892	1,873	7	12	63.6	58.5	
Queen Emma St., East Segment	25	3,041	2,994	12	35	66.4	61.5	
Alakea St., South Segment	25	3,009	2,963	12	34	66.3	61.4	

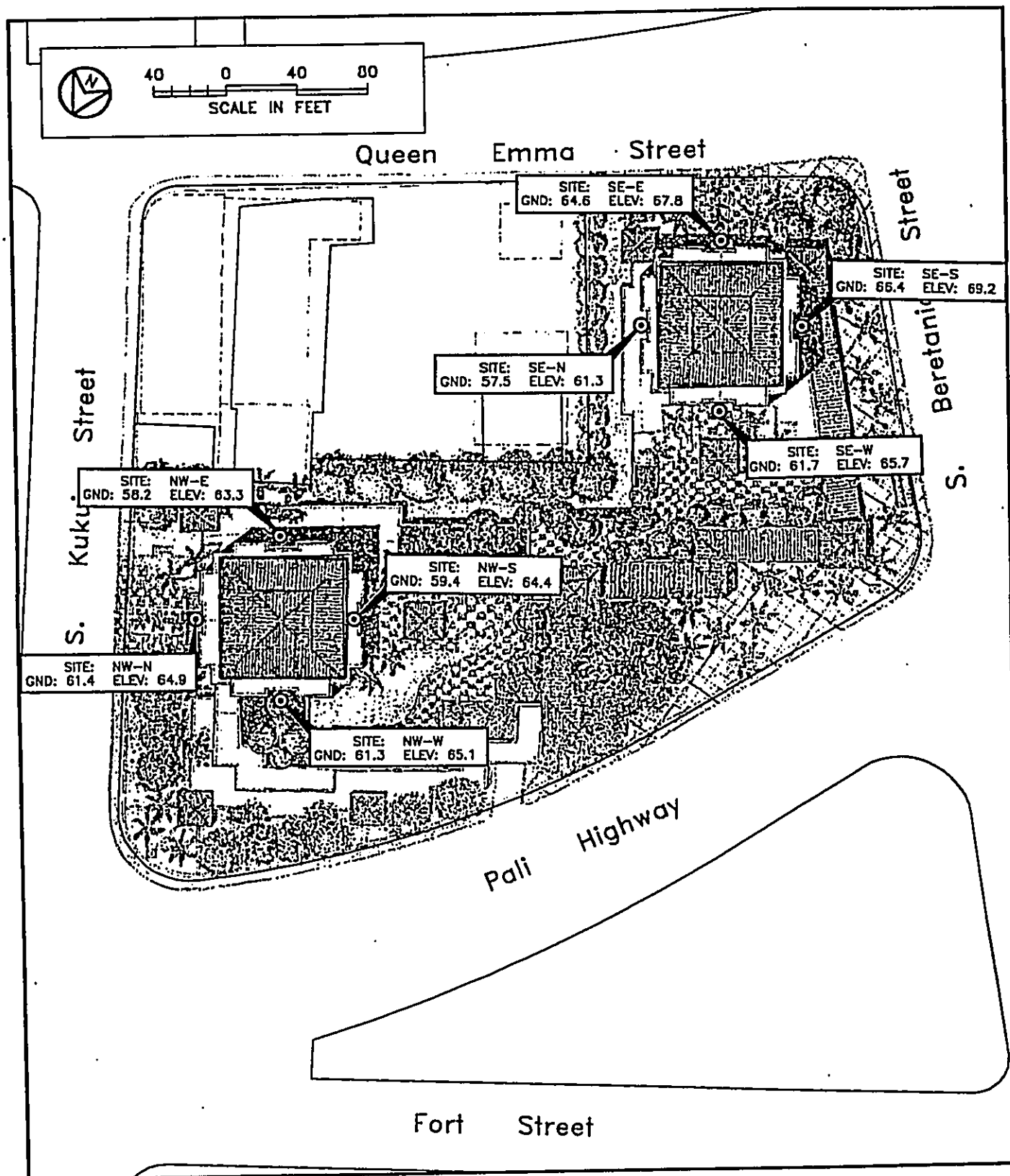
TABLE 7

EXISTING AND CY 2002 DISTANCES TO 55, 60, AND 70 LDN CONTOURS

STREET SECTION	55 Ldn SETBACK (FT)		65 Ldn SETBACK (FT)		70 Ldn SETBACK (FT)	
	EXISTING	CY 2002	EXISTING	CY 2002	EXISTING	CY 2002
S. Beretania St., East Segment	373	390	87	91	42	44
S. Beretania St., Southeast Segment	379	390	88	91	43	44
S. Beretania St., Southwest Segment	347	357	81	83	39	40
S. Beretania St., West Segment	362	379	84	88	41	43
S. Kukui St., North Segment	172	191	36	40	17	18
S. Kukui St., West Segment	110	117	24	26	11	12
Vineyard Blvd., East Segment	255	282	60	63	29	30
Vineyard Blvd., North Segment	222	234	50	55	24	26
Vineyard Blvd., West Segment	222	245	50	57	24	27
Nuuanu Ave., North Segment	208	218	49	51	23	24
Nuuanu Ave., West Segment	206	215	46	49	22	23
Nuuanu Ave., South Segment	134	141	30	33	14	16
Pali Hwy., North Segment	252	296	55	62	26	29
Pali Hwy., West Segment	227	237	48	52	22	24
Bishop St., South Segment	274	284	58	62	26	29
Fort St., West Segment	60	69	13	16	6	7
Queen Emma St., North Segment	158	170	38	41	19	20
Queen Emma St., East Segment	254	273	57	62	27	29
Alakea St., South Segment	250	269	56	61	27	29

Notes:

- (1) All setback distances are from the roadways' centerlines.
- (2) See TABLES 5A thru 6B for traffic volume, speed, and mix assumptions.
- (3) Setback distances are for ground level receptors.
- (4) "Loose Soil" conditions assumed along all roadways.



FUTURE (CY 2002) TRAFFIC NOISE LEVELS AT PROPOSED BLOCK "J" TOWER BUILDINGS

FIGURE 8

Ldn, and it is not possible to accurately determine if any of these units will be in the "Significant Exposure, Normally Unacceptable" noise exposure category.

From the traffic noise level prediction results shown in FIGURE 8, it can be concluded that, while most of the proposed residential units in the Southeast Tower Building will be in the "Significant Exposure, Normally Unacceptable" noise exposure category, all of the units in the Northwest Tower Building will be in the "Moderate Exposure, Acceptable" noise exposure category.

TABLES 8A and 8B present the results of calculations of the projected increases in traffic noise with and without the project. As indicated in TABLES 8A and 8B, traffic noise levels are predicted to increase by less than 2.2 dB during the AM or PM peak hours, with the largest increase expected along the section of Fort Street which is between South Kukui Street and South Beretania Street. The relatively large increase in traffic noise along Fort Street is attributable to the relatively low base levels of existing traffic noise, and the relatively large percentage increase in projected traffic along that street. Despite the 2.2 dB increase, traffic noise levels associated with Fort Street will remain very low (54 to 57 dB at 50 feet from the roadway's centerline). These predictions assume that average vehicle speeds and traffic mix will not change from current conditions.

As indicated in TABLES 8A and 8B, the increases in traffic noise attributable to project traffic along all roadways (except for Fort Street) are predicted to be less than 1.0 dB, which is considered to be minimal. This level of increase should not generate adverse noise impacts and will be difficult to measure. For these reasons, risks of adverse noise impacts resulting from project traffic along the roadways servicing the project are considered to be insignificant.

TABLE 8A

CALCULATIONS OF PROJECT AND NON-PROJECT
TRAFFIC NOISE CONTRIBUTIONS (CY 2002)
(AM PEAK HOUR)

<u>STREET SECTION</u>	<u>NOISE LEVEL INCREASE DUE TO:</u>	
	<u>NON-PROJECT TRAFFIC</u>	<u>PROJECT TRAFFIC</u>
S. Beretania St., East Segment	0.3	0.1
S. Beretania St., Southeast Segment	0.2	0.0
S. Beretania St., Southwest Segment	0.3	0.0
S. Beretania St., West Segment	0.3	0.0
S. Kukui St., North Segment	0.1	0.4
S. Kukui St., West Segment	0.3	0.1
Vineyard Blvd., East Segment	0.3	0.2
Vineyard Blvd., North Segment	0.3	0.0
Vineyard Blvd., West Segment	0.3	0.1
Nuuanu Ave., North Segment	0.3	0.1
Nuuanu Ave., West Segment	0.3	0.0
Nuuanu Ave., South Segment	0.5	0.0
Pali Hwy., North Segment	0.3	0.3
Pali Hwy., West Segment	0.2	0.3
Bishop St., South Segment	0.3	0.2
Fort St., West Segment	0.2	0.8
Queen Emma St., North Segment	0.2	0.3
Queen Emma St., East Segment	0.3	0.6
Alakea St., South Segment	0.2	0.7

TABLE 8B

CALCULATIONS OF PROJECT AND NON-PROJECT
TRAFFIC NOISE CONTRIBUTIONS (CY 2002)
(PM PEAK HOUR)

<u>STREET SECTION</u>	NOISE LEVEL INCREASE DUE TO:	
	<u>NON-PROJECT TRAFFIC</u>	<u>PROJECT TRAFFIC</u>
S. Beretania St., East Segment	0.3	0.0
S. Beretania St., Southeast Segment	0.3	-0.1
S. Beretania St., Southwest Segment	0.3	-0.1
S. Beretania St., West Segment	0.3	0.0
S. Kukui St., North Segment	0.2	0.5
S. Kukui St., West Segment	0.3	0.1
Vineyard Blvd., East Segment	0.2	0.2
Vineyard Blvd., North Segment	0.5	0.1
Vineyard Blvd., West Segment	0.6	0.3
Nuuanu Ave., North Segment	0.2	0.1
Nuuanu Ave., West Segment	0.3	0.0
Nuuanu Ave., South Segment	0.4	0.0
Pali Hwy., North Segment	0.3	0.5
Pali Hwy., West Segment	0.3	0.5
Bishop St., South Segment	0.4	0.3
Fort St., West Segment	0.2	2.0
Queen Emma St., North Segment	0.2	0.3
Queen Emma St., East Segment	0.3	0.2
Alakea St., South Segment	0.3	0.2

CHAPTER VII. DISCUSSION OF PROJECT RELATED NOISE AND VIBRATION IMPACTS AND POSSIBLE MITIGATION MEASURES

Traffic Noise. For the proposed residential units in the northwest tower building, traffic noise mitigation measures should not be required for the traffic noise projected thru CY 2002. Noise impacts from project related traffic along the surrounding roadways which are expected to service the project are not expected due to the very low levels of traffic noise associated with project traffic. At the Kukui Plaza Building, which is the closest residential structure to Fort Street, future traffic noise levels are expected to remain below 65 Ldn, and will continue to be controlled by distant traffic along Beretania Street and Pali Highway.

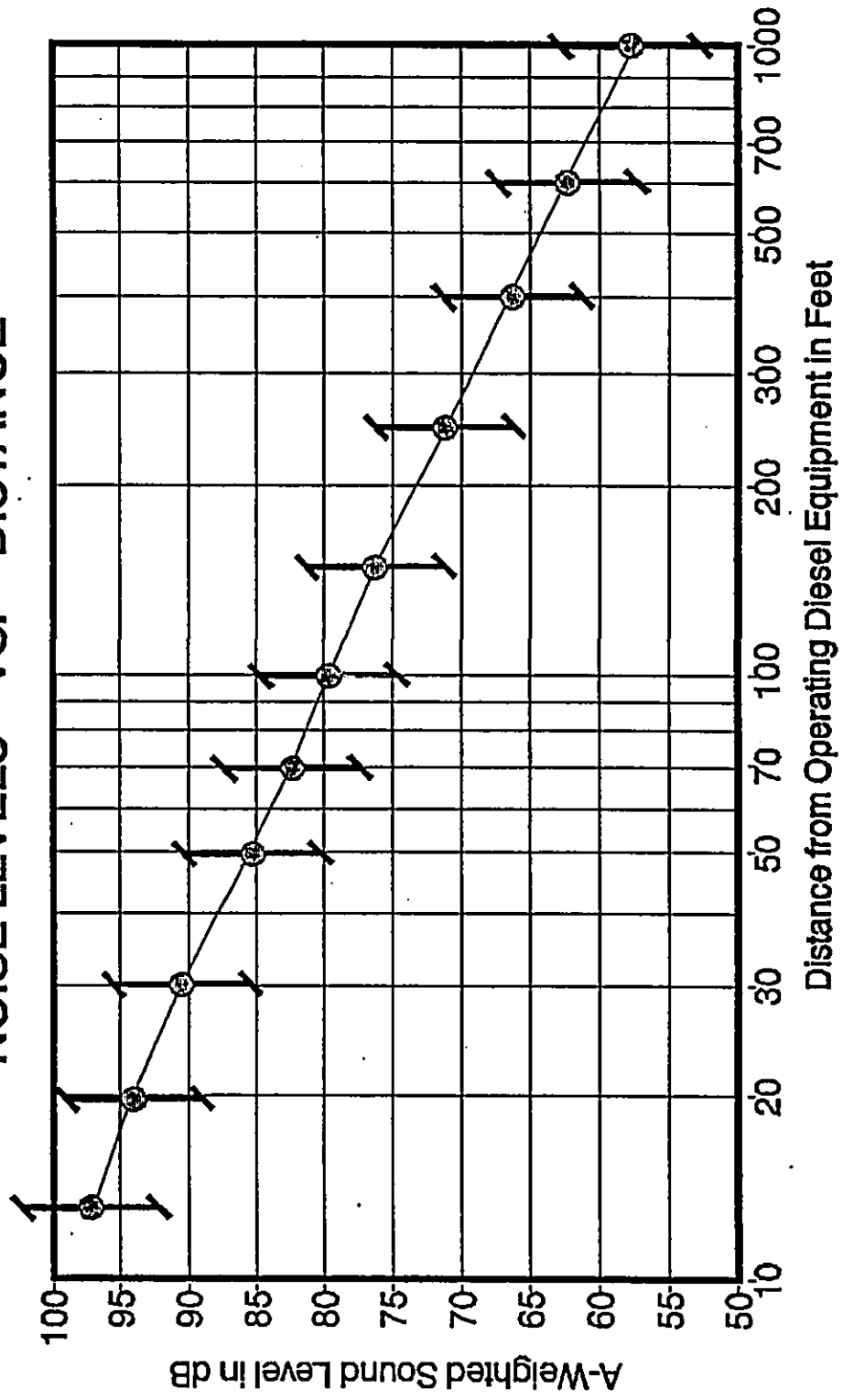
Impacts from traffic noise are possible at the proposed project dwelling units in the proposed Southeast Tower Building, and particularly at those units which face South Beretania Street. At the forecasted exterior noise levels of 65 to 70 Ldn, exterior-to-interior noise reductions of approximately 25 dB are required to achieve an interior noise level of 45 Ldn, which is the recommended level of interior noise which minimizes risks of adverse health and welfare effects. This level of exterior-to-interior noise reduction is difficult to obtain without total closure and air conditioning of the units. However, because the proposed units are intended to be in the affordable rental category, air conditioning may not be a realistic noise mitigation measure. If the 65 Ldn FHA/HUD standard must be met outside the living units, the only options are to relocate and reshape the footprint of the southeast tower building so as to buffer and shield the residential units from South Beretania Street traffic noise. If the use of total closure and air conditioning is the selected noise mitigation measure for some or all of the units exposed to exterior noise levels above 65 Ldn, it is suggested that glazing and exterior wall components with minimum STC 30 rating be used for the dwelling units.

General Construction Noise. Audible construction noise will probably be unavoidable during the entire project construction period. The total time period for construction is unknown, but it is anticipated that the actual work will be moving from one location on the project site to another during that period. Actual length of exposure to construction noise at any receptor location will probably be less than the total construction period for the entire project. TABLE 9 lists the range of noise levels of various types of construction equipment when measured at 50 FT distance from the equipment. Typical levels of exterior noise from construction activity (excluding pile driving activity) at various distances from the job site are shown in FIGURE 9. The impulsive noise levels of impact pile drivers are approximately 15 dB higher than the levels shown in FIGURE 9, while the intermittent noise levels of vibratory pile drivers

TABLE 9**RANGES OF A-WEIGHTED SOUND LEVELS OF
CONSTRUCTION EQUIPMENT AT 50 FEET DISTANCE**

<u>EQUIPMENT</u>	<u>SOUND LEVELS (dBA) MINIMUM / MAXIMUM</u>
Backhoes, Trencher	72 / 93
Compactors (rollers)	72 / 88
Compressors	68 / 87
Concrete Mixers	72 / 90
Front Loaders	72 / 96
Generators	70 / 82
Hoe Rams (Maximum Levels)	88 / 98
Jackhammers and Drills	75 / 98
Pavers	82 / 92
Pile Drivers (Maximum Levels)	89 / 105
Pneumatic / Hydraulic Hammers	85 / 98
Pumps	70 / 80
Saws	68 / 93
Scrapers, Graders	76 / 95
Steel Ball	74 / 85
Tractors	73 / 95
Trucks	70 / 95
Vibrators	70 / 81

ANTICIPATED RANGE OF CONSTRUCTION
NOISE LEVELS VS. DISTANCE



CONSTRUCTION NOISE LEVELS VS. DISTANCE

FIGURE 9

are at the upper end of the noise level ranges depicted in the figure.

FIGURE 9 is useful for predicting exterior noise levels at short distances (within 100 FT) from the work when visual line of sight exists between the construction equipment and the receptor. Direct line-of-sight distances from the construction equipment to existing residential and commercial buildings will range from 10 FT to 400 FT, with corresponding average noise levels of 105 to 63 dBA (plus or minus 5 dBA). For receptors along a cross-street, the construction noise level vs. distance curve of FIGURE 9 should be reduced by approximately 8 dBA when the work is occurring at the intersection with the cross street, and should be reduced by 15 dBA when work is occurring at least 100 FT from the intersection (and the visual line-of-sight is blocked by intervening buildings). Typical levels of construction noise inside naturally ventilated and air conditioned structures are approximately 10 and 20 dB less, respectively, than the levels shown in FIGURE 9.

The business offices within the neighboring Queen Emma Building northeast of the project site are predicted to experience the highest noise levels during construction activities due to their close proximity to the construction site. Adverse impacts from construction noise are not expected to be in the "public health and welfare" category due to the temporary nature of the work, the business/commercial character of the neighborhood, the prevalent use of air conditioning within the adjoining building, and due to the administrative controls available for regulation of construction noise. Instead, these impacts will probably be limited to the temporary degradation of the quality of the acoustic environment in the immediate vicinity of the project site.

Mitigation of construction noise to inaudible levels will not be practical in all cases due to the intensity of construction noise sources (80 to 90+ dB at 50 FT distance), and due to the exterior nature of the work (pile driving, grading and earth moving, trenching, concrete pouring, hammering, etc.). The use of properly muffled construction equipment should be required on the job site. At the Central Fire Station, use of air conditioning may be required for daytime sleeping areas and operations areas.

Peak airborne noise levels from pile driving may be as much as 15 dBA greater than noise levels shown in FIGURE 9 for non-impulsive (steady) construction noise sources. Although the pile driving can produce more intense noise levels, each pulse is of short individual duration (less than one second). Therefore, its impact on speech communication is not as severe as that of steady source of the same noise level.

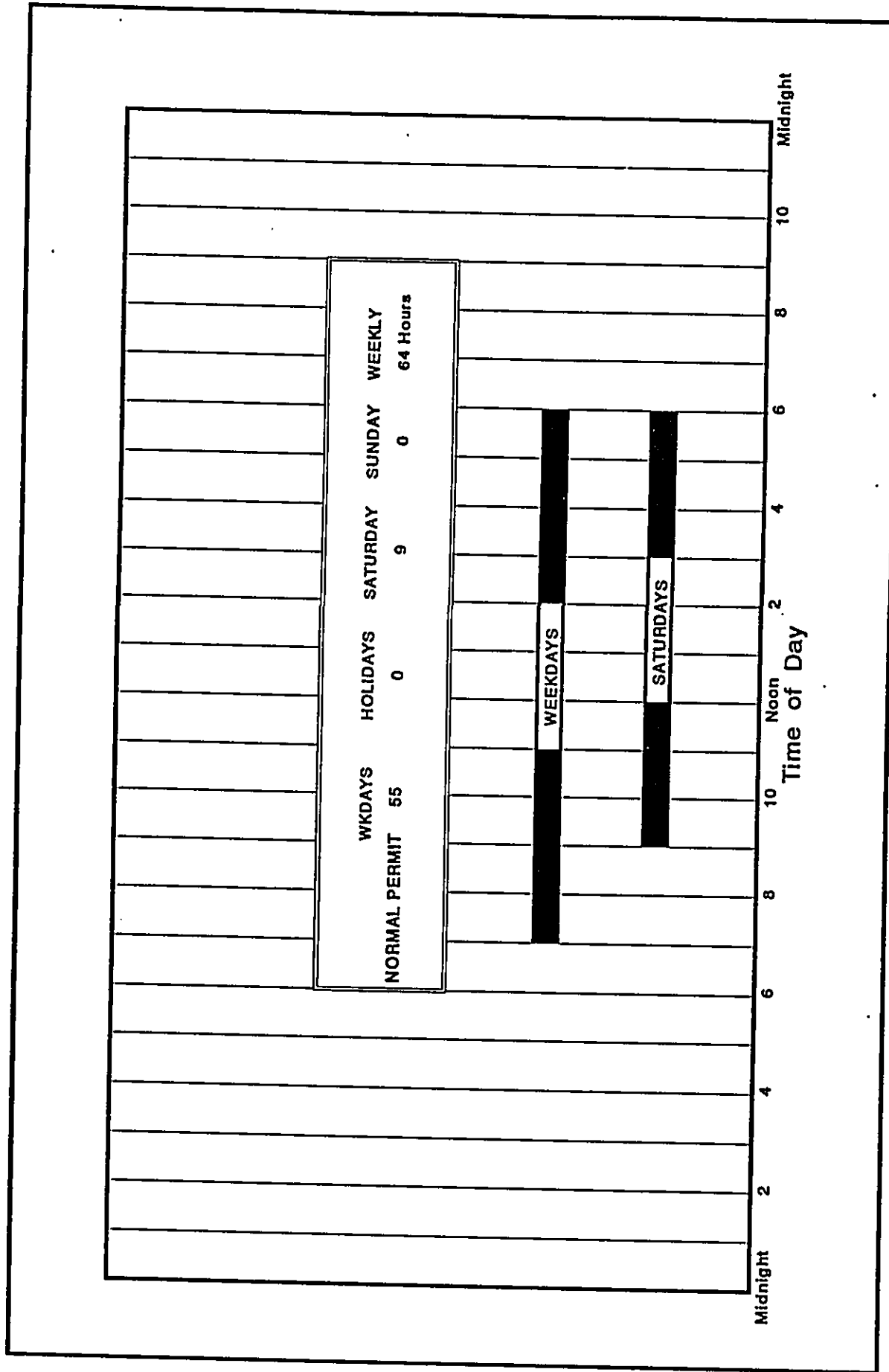
Severe noise impacts are not expected to occur inside air conditioned structures which are within 50 to 200 FT of the project construction sites. Inside naturally ventilated structures, interior noise levels (with windows or doors opened) are estimated to range between 63 to 75 dBA at 50 FT to 200 FT distances from the construction site. Closure of all doors and windows facing the construction site would generally reduce interior noise levels by an additional 5 to 10 dBA.

The incorporation of State Department of Health construction noise limits and curfew times, which are applicable on the island of Oahu (Reference 4), is another noise mitigation measure which is normally applied to construction activities. TABLE 10 depicts the normally permitted hours of construction. Noisy construction activities are not allowed on Sundays and holidays, during the early morning, and during the late evening and nighttime periods under the DOH permit procedures.

Vibration from Sheet Pile Driving. Pile driving will probably be necessary to implant sheet piles into the ground over the project site. Impact driven concrete piles are not planned to be used on the project site. Induced ground vibrations from the sheet pile driving operations have the potential to cause architectural and structural damage to structures. In addition, a historic building, (the Central Fire Station) is located on a parcel which is immediately adjacent to the project site.

Ground vibrations generated during pile driving operations are generally described in terms of peak particle (or ground) velocity in units of inches/second. The human being is very sensitive to ground vibrations, which are perceptible at relatively low particle velocities of 0.01 to 0.04 inches/second. Damage to structures, however, occur at even higher levels of vibration as indicated in TABLE 11. The most commonly used damage criteria for structures is the 2.0 inches/second limit derived from work by the U.S. Bureau of Mines. A more conservative limit of 0.2 inches/second is also used, and is suggested for planning purposes on this project because of the repetitive nature of pile driving operations which can increase risks of damage due to fatiguing, plus the historic nature and age of the adjacent buildings.

Based on measured vibration levels during pile driving operations under various soil conditions and at various distances, estimates of ground vibration levels vs. distance from the pile driver have been made for various soil conditions and for various energy ratings of the pile drivers. FIGURE 10, which was extracted from Reference 10, may be used to predict vibration levels for the soil conditions indicated. When coral layers must be penetrated, vibration levels can be expected to be higher than those shown in FIGURE 10, particularly if the adjacent structures



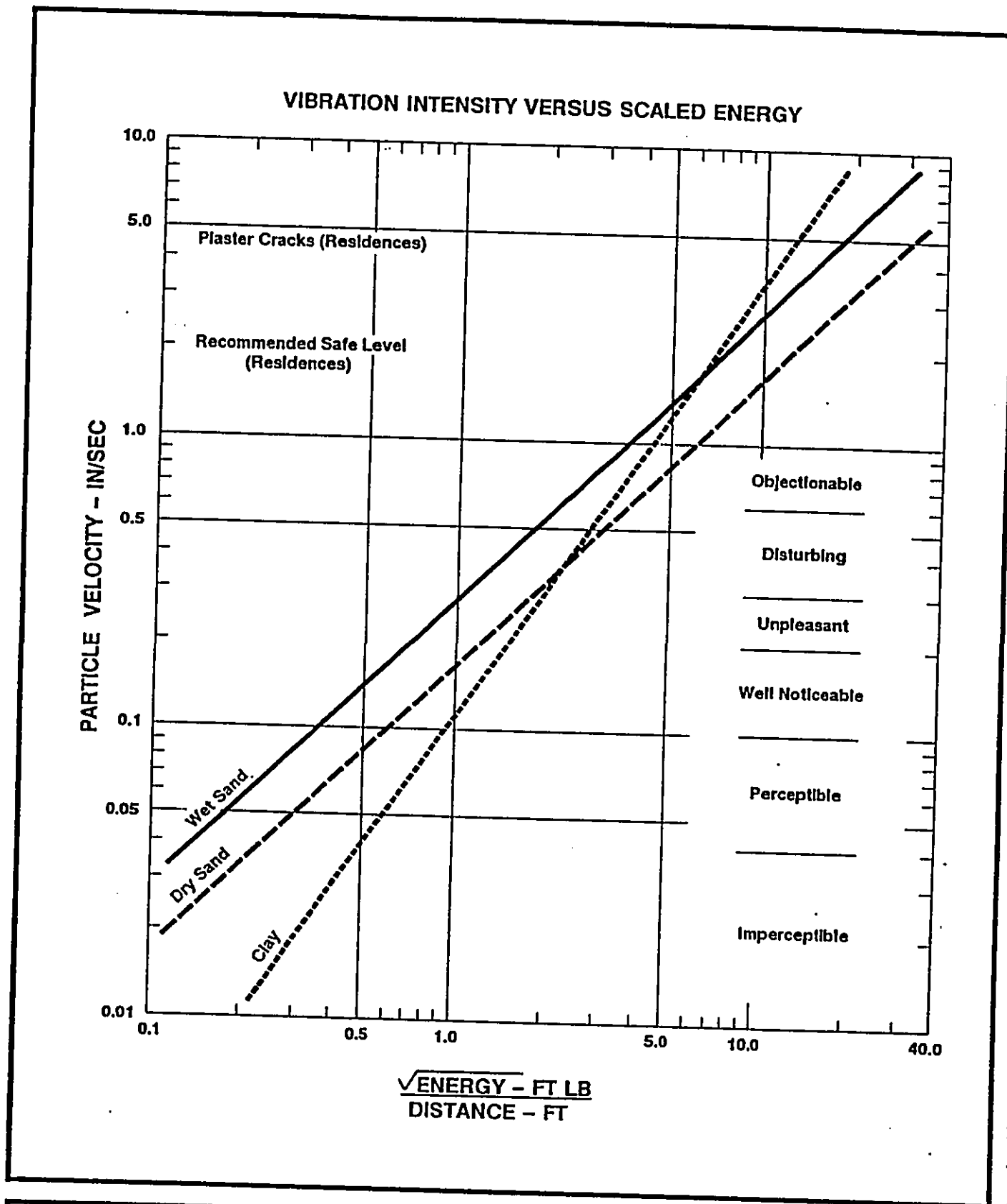
AVAILABLE WORK HOURS UNDER DOH PERMIT PROCEDURES FOR CONSTRUCTION NOISE

TABLE 10

TABLE 11
SUMMARY OF BUILDING DAMAGE CRITERIA

PEAK GROUND VELOCITY (mm/sec)	PEAK GROUND VELOCITY (In/sec)	COMMENT
193.04	7.6	Major damage to buildings (mean of data).
137.72	5.4	Minor damage to buildings (mean of data).
101.16	4.0	'Engineer structures' safe from damage.
50.8	2.0	Safe from damage limit (probability of damage <5%). No structural damage.
33.02	1.3	Threshold of risk of 'architectural' damage for houses.
25.4	1.0	No data showing damage to structures for vibration <1 in./sec.
15.24	0.6	No risk of 'architectural' damage to normal buildings.
10.16	0.4	Threshold of damage in older homes.
5.08	0.2	Statistically significant percentage of structures may experience minor damage (including earthquake, nuclear event, and blast data for old and new structures). No 'architectural' damage.
3.81	0.5 to 0.15	Upper limits for ruins and ancient monuments.
1.0	0.04	Vertical vibration clearly perceptible to humans.
0.32	0.01	Vertical vibration just perceptible to humans.

Source: 'State-of-the-Art Review: Prediction and Control of Groundborne Noise and Vibration from Rail Transit Trains'; U.S. Department of Transportation; December 1983.



MINIMUM VIBRATION INTENSITIES EXPECTED FROM PILE DRIVING

FIGURE 10

are supported by the common coral layer. From FIGURE 10, and for wet sand soil conditions, the 0.2 inches/second vibration damage criteria will be exceeded at a scaled energy distance factor of approximately 0.7. The scaled energy distance factor is equal to the square root of the energy (in foot-pounds) per blow of the hammer divided by the distance (in feet) between the pile tip and the monitoring location. For a 2,500 foot-pound small pile driver, a scaled energy distance of 0.7 equates to a required separation distance of 71 FT. Under clay soil conditions, and using the prediction procedures contained in FIGURE 10, a shorter separation distance of 47 FT is required to not exceed the 0.2 inches/second criteria when using a 2,500 foot-pound pile driver. It should be noted that 0.2 inches/second vibration levels were measured from a much larger 22,400 foot-pound pile driver at even shorter separation distances of approximately 30 FT in sandy, layered soil (Reference 11). The measurement data reported in Reference 11 are significantly lower than the vibration levels predicted by the methodology of Reference 10.

As indicated above, predictions of peak ground vibration levels vs. scaled energy distance factor from the driven pile are not precise, with initial uncertainty factor for a given location in the order of 10:1. For this reason, it is standard practice to employ seismograph monitoring of ground vibrations during pile driving operations with a 3-axis geophone or accelerometer. If sheet pile drivers of approximately 2,500 foot-pounds or smaller ratings are anticipated to be used on the job site, the initial vibration predictions indicate that there is some risk of exceeding the 0.2 inches/second vibration damage criteria at 47 to 71 FT separation distances, and monitoring during pile driving operations is warranted if sheet pile driving are planned at those distances from the Central Fire Station. For small pile driver operations, risks of damage to the church buildings across Queen Emma Street are considered to be very low. The Queen Emma Building is not considered to be at high risk during close in sheet pile driving operations due to the higher damage risk criteria of 2.0 inches/second which is applicable to this building. Pile driving operations using small pile drivers at very short distances (5 to 7 FT) are required before the 2.0 inches/second damage criteria may be exceeded.

In addition to vibration monitoring during sheet pile driving operations near historic buildings, the use of vibratory pile drivers should also be considered to minimize the high impulse sound levels associated with impact pile drivers. Vibratory pile drivers may be less annoying than impact pile drivers due to their lower peak levels of airborne noise.

The following preventative measures are recommended for implementation

during the planning and design phases of the project:

- o In addition to the normal planning and design concerns regarding potential damage due to settling and heaving during construction, consideration should also be given to risks of damage due to vibration from pile driving. A damage criteria of 0.2 inches/second should be used in conjunction with the vibration prediction method of Reference 10 to identify the potential damage risk distances to the driven piles.
- o If predicted vibration levels from pile driving exceed 0.2 inches/second at any historic building, and predicted levels cannot be reduced by sizing of the pile driver, test piles should be driven and their vibrations monitored and recorded prior to completion of the foundation design. The monitoring of the test piles should be designed to measure the expected peak, 3-axis vibration levels at the historic building. The results of the monitoring should be used to define the empirical distance from the driven pile to the 0.2 inches/second damage risk location, and to evaluate the risks of structural damage to the adjacent structure during actual construction.
- o If predicted vibration levels from pile driving exceed 2.0 inches/second at a historic building, the use of alternate types of piles or shoring should be considered for implementation during the design phase.

APPENDIX A. REFERENCES

- (1) "Guidelines for Considering Noise in Land Use Planning and Control;" Federal Interagency Committee on Urban Noise; June 1980.
- (2) "Environmental Criteria and Standards, Noise Abatement and Control, 24 CFR, Part 51, Subpart B;" U.S. Department of Housing and Urban Development; July 12, 1979.
- (3) "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety;" Environmental Protection Agency (EPA 550/9-74-004); March 1974.
- (4) "Title 11, Administrative Rules, Chapter 46, Community Noise Control;" Hawaii State Department of Health; September 23, 1996.
- (5) "FHWA Traffic Noise Model User's Guide;" FHWA-PD-96-009, DOT-VNTSC-FHWA-98-1, Federal Highway Administration; Washington, D.C.; January 1998.
- (6) Existing AM and PM Peak Hour Traffic Turning Movements for the Block "J" Redevelopment Project; Transmittal from Wilson Okamoto & Associates, Inc.; June 1, 1998.
- (7) Future (CY 2002) AM and PM Peak Hour Traffic Turning Movements With and Without the Block "J" Redevelopment Project; Transmittal from Wilbur Smith Associates; June 10, 1998.
- (8) November 24, 1997 24-Hour Traffic Counts; Station SL-33, Beretania Street at Nuuanu Stream Bridge; Hawaii State Department of Transportation.
- (9) May 15, 1996 24-Hour Traffic Counts; Station 431, Pali Highway and Vineyard Boulevard Intersection; Hawaii State Department of Transportation.
- (10) Wiss, John F., Janney, Elstner and Assoc.; "Damage of Pile Driving Vibration;" Highway Research Record, Number 155.
- (11) Gutowski, T.G.; Wittig, L.E.; and Dym, C.L.; "Some Aspects of the Ground Vibration Problem;" Noise Control Engineering; May-June 1978.

APPENDIX B

EXCERPTS FROM EPA'S ACOUSTIC TERMINOLOGY GUIDE

Descriptor Symbol Usage

The recommended symbols for the commonly used acoustic descriptors based on A-weighting are contained in Table I. As most acoustic criteria and standards used by EPA are derived from the A-weighted sound level, almost all descriptor symbol usage guidance is contained in Table I.

Since acoustic nomenclature includes weighting networks other than "A" and measurements other than pressure, an expansion of Table I was developed (Table II). The group adopted the ANSI descriptor-symbol scheme which is structured into three stages. The first stage indicates that the descriptor is a level (i.e., based upon the logarithm of a ratio), the second stage indicates the type of quantity (power, pressure, or sound exposure), and the third stage indicates the weighting network (A, B, C, D, E.....). If no weighting network is specified, "A" weighting is understood. Exceptions are the A-weighted sound level and the A-weighted peak sound level which require that the "A" be specified. For convenience in those situations in which an A-weighted descriptor is being compared to that of another weighting, the alternative column in Table II permits the inclusion of the "A". For example, a report on blast noise might wish to contrast the LCdn with the LAdn.

Although not included in the tables, it is also recommended that "Lpn" and "LepN" be used as symbols for perceived noise levels and effective perceived noise levels, respectively.

It is recommended that in their initial use within a report, such terms be written in full, rather than abbreviated. An example of preferred usage is as follows:

The A-weighted sound level (LA) was measured before and after the installation of acoustical treatment. The measured LA values were 85 and 75 dB respectively.

Descriptor Nomenclature

With regard to energy averaging over time, the term "average" should be discouraged in favor of the term "equivalent". Hence, Leq, is designated the "equivalent sound level". For Ld, Ln, and Ldn, "equivalent" need not be stated since the concept of day, night, or day-night averaging is by definition understood. Therefore, the designations are "day sound level", "night sound level", and "day-night sound level", respectively.

The peak sound level is the logarithmic ratio of peak sound pressure to a reference pressure and not the maximum root mean square pressure. While the latter is the maximum sound pressure level, it is often incorrectly labelled peak. In that sound level meters have "peak" settings, this distinction is most important.

"Background ambient" should be used in lieu of "background", "ambient", "residual", or "indigenous" to describe the level characteristics of the general background noise due to the contribution of many unidentifiable noise sources near and far.

With regard to units, it is recommended that the unit decibel (abbreviated dB) be used without modification. Hence, DBA, PNdB, and EPNdB are not to be used. Examples of this preferred usage are: the Perceived Noise Level (Lpn was found to be 75 dB. Lpn = 75 dB). This decision was based upon the recommendation of the National Bureau of Standards, and the policies of ANSI and the Acoustical Society of America, all of which disallow any modification of bel except for prefixes indicating its multiples or submultiples (e.g., deci).

Noise Impact

In discussing noise impact, it is recommended that "Level Weighted Population" (LWP) replace "Equivalent Noise Impact" (ENI). The term "Relative Change of Impact" (RCI) shall be used for comparing the relative differences in LWP between two alternatives.

Further, when appropriate, "Noise Impact Index" (NII) and "Population Weighed Loss of Hearing" (PHL) shall be used consistent with CHABA Working Group 69 Report Guidelines for Preparing Environmental Impact Statements (1977).

APPENDIX B (CONTINUED)

TABLE I
A-WEIGHTED RECOMMENDED DESCRIPTOR LIST

<u>TERM</u>	<u>SYMBOL</u>
1. A-Weighted Sound Level	L_A
2. A-Weighted Sound Power Level	L_{WA}
3. Maximum A-Weighted Sound Level	L_{max}
4. Peak A-Weighted Sound Level	L_{Apk}
5. Level Exceeded x% of the Time	L_x
6. Equivalent Sound Level	L_{eq}
7. Equivalent Sound Level over Time (T) (1)	$L_{eq(T)}$
8. Day Sound Level	L_d
9. Night Sound Level	L_n
10. Day-Night Sound Level	L_{dn}
11. Yearly Day-Night Sound Level	$L_{dn(Y)}$
12. Sound Exposure Level	L_{SE}

(1) Unless otherwise specified, time is in hours (e.g. the hourly equivalent level is $L_{eq(1)}$). Time may be specified in non-quantitative terms (e.g., could be specified a $L_{eq(WASH)}$ to mean the washing cycle noise for a washing machine).

SOURCE: EPA ACOUSTIC TERMINOLOGY GUIDE, BNA 8-14-78,

APPENDIX B (CONTINUED)

TABLE II
RECOMMENDED DESCRIPTOR LIST

<u>TERM</u>	<u>A-WEIGHTING</u>	<u>ALTERNATIVE⁽¹⁾ A-WEIGHTING</u>	<u>OTHER⁽²⁾ WEIGHTING</u>	<u>UNWEIGHTED</u>
1. Sound (Pressure) ⁽³⁾ Level	L_A	L_{pA}	L_B, L_{pB}	L_p
2. Sound Power Level	L_{WA}		L_{WB}	L_W
3. Max. Sound Level	L_{max}	L_{Amax}	L_{Bmax}	L_{pmax}
4. Peak Sound (Pressure) Level	L_{Apk}		L_{Bpk}	L_{pk}
5. Level Exceeded x% of the Time	L_x	L_{Ax}	L_{Bx}	L_{px}
6. Equivalent Sound Level	L_{eq}	L_{Aeq}	L_{Beq}	L_{peq}
7. Equivalent Sound Level ⁽⁴⁾ Over Time(T)	$L_{eq(T)}$	$L_{Aeq(T)}$	$L_{Beq(T)}$	$L_{peq(T)}$
8. Day Sound Level	L_d	L_{Ad}	L_{Bd}	L_{pd}
9. Night Sound Level	L_n	L_{An}	L_{Bn}	L_{pn}
10. Day-Night Sound Level	L_{dn}	L_{Adn}	L_{Bdn}	L_{pdn}
11. Yearly Day-Night Sound Level	$L_{dn(Y)}$	$L_{Adn(Y)}$	$L_{Bdn(Y)}$	$L_{pdn(Y)}$
12. Sound Exposure Level	L_S	L_{SA}	L_{SB}	L_{Sp}
13. Energy Average Value Over (Non-Time Domain) Set of Observations	$L_{eq(e)}$	$L_{Aeq(e)}$	$L_{Beq(e)}$	$L_{peq(e)}$
14. Level Exceeded x% of the Total Set of (Non-Time Domain) Observations	$L_{x(e)}$	$L_{Ax(e)}$	$L_{Bx(e)}$	$L_{px(e)}$
15. Average L_x Value	L_x	L_{Ax}	L_{Bx}	L_{px}

(1) "Alternative" symbols may be used to assure clarity or consistency.

(2) Only B-weighting shown. Applies also to C,D,E,.....weighting.

(3) The term "pressure" is used only for the unweighted level.

(4) Unless otherwise specified, time is in hours (e.g., the hourly equivalent level is $L_{eq(1)}$). Time may be specified in non-quantitative terms (e.g., could be specified as $L_{eq(WASH)}$ to mean the washing cycle noise for a washing machine.

APPENDIX C

TRAFFIC IMPACT STUDY

Wilbur Smith Associates

In Association with

Wilson Okamoto & Associates, Inc.

BLOCK J REDEVELOPMENT PROJECT
TRAFFIC IMPACT STUDY

Prepared for

CITY AND COUNTY OF HONOLULU
DEPARTMENT OF HOUSING AND COMMUNITY
DEVELOPMENT

Prepared by



In Association With

WILSON OKAMOTO & ASSOCIATES, INC.

June 1998

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Chapter 1

INTRODUCTION

The City and County of Honolulu Department of Housing and Community Development plans to lease the City property on the block bounded by Beretania Street, Fort Street, Kukui Street, and Queen Emma Street, located in Downtown Honolulu, for the development of a mixed use project (see Figure 1-1). This block is bisected by Pali Highway, which would remain open after completion of the development project.

The Block J Redevelopment Project would include three primary components:

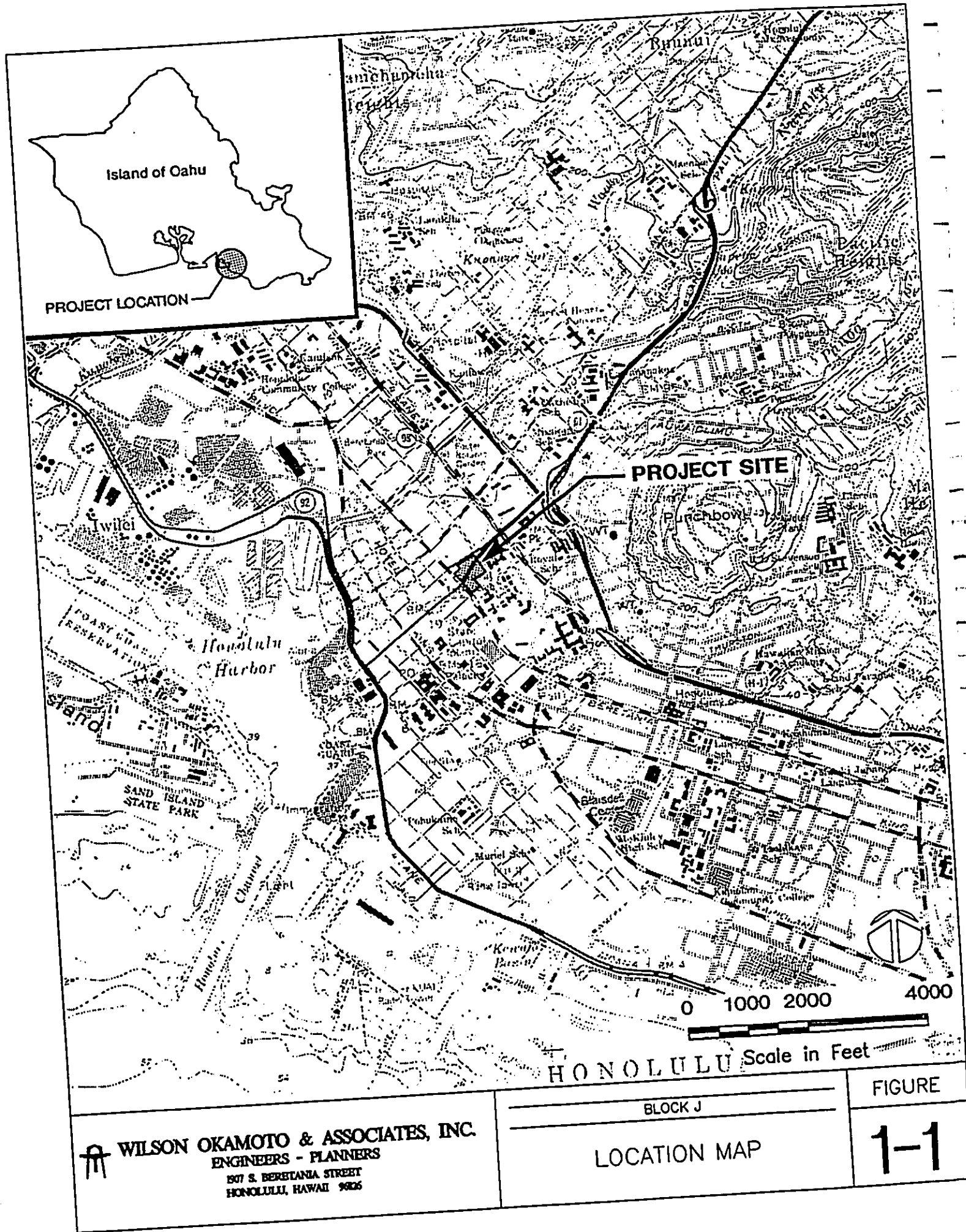
1. Two residential towers with affordable rental apartments for households earning at or below 60% of the median income. One of the towers is planned for senior households and the other for multi-family households.
2. A commercial development with approximately 100,000 square feet of retail space on the ground level and second level.
3. Approximately 1,896 parking stalls with most of the stalls located within three underground levels.


The site plan for the Project is depicted in Figure 1-2. The retail uses and two residential towers would be developed on the portion of the site presently used as City parking lots. The underground parking would occupy the area below the buildings and extend ewa to include the areas under Pali Highway and Kamalii Park. Access to the parking would be provided along Queen Emma Street, Kukui Street, Pali Highway, and Fort Street.

The purpose of this study is to assess the traffic impacts of the proposed Project. The assessment addresses the following:

- The number of additional vehicle trips that may be generated by the Project uses.
- The magnitude of the traffic increases on the roadways near the Project site.
- Location and use of Project ingress-egress driveways.
- Project impacts upon the traffic conditions at key intersections near the site.
- Identification of potential actions that may be appropriate to mitigate traffic impacts.

The Project is planned for completion late in the year 2001. The traffic forecasts and analyses reflect conditions in the Spring of 2002 with full occupancy of the Project. The assessment focuses on conditions during the weekday peak commute hours.




WILSON OKAMOTO & ASSOCIATES, INC.
 ENGINEERS - PLANNERS
 197 S. BERETANIA STREET
 HONOLULU, HAWAII 96826

BLOCK J
 LOCATION MAP

FIGURE
1-1

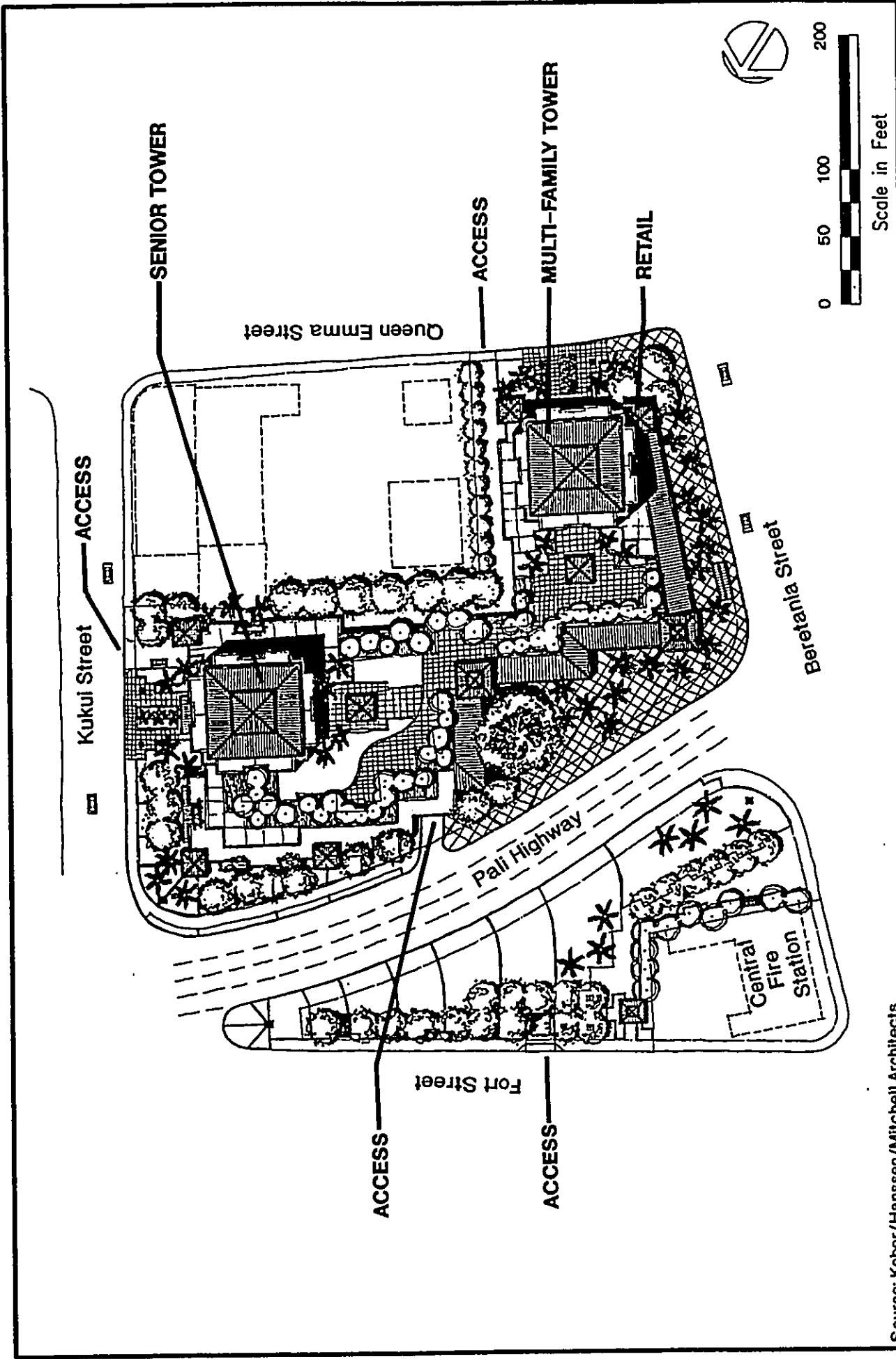


Fig. 1-2

SITE PLAN

**BLOCK J
REDEVELOPMENT
PROJECT**

Prepared by:
WILSON OKAMOTO &
ASSOCIATES, INC.

Prepared for:
CITY & COUNTY OF HONOLULU
DEPARTMENT OF HOUSING AND
COMMUNITY DEVELOPMENT

Source: Kober/Hanssen/Mitchell Architects

Chapter 2

EXISTING CONDITIONS

The portion of the Project site on the Diamond Head side of Pali Highway is currently occupied by two City parking lots: a public lot for short-term parking with 208 metered stalls, and a lot with about 75 stalls used for long-term parking by official vehicles and City employee vehicles. The northeast portion of this block is not included in the Project site and is occupied by several low-rise office buildings.

The portion of the Project site on the ewa side of Pali Highway is currently occupied by Kamalii Park. This park provides an open space area for passive use by Downtown Honolulu workers and residents. A fire station, which is not included within the Project site, is located adjacent to the Park on the corner of Fort and Beretania Streets.

The Downtown Honolulu Financial District is located makai of Beretania Street, with most blocks near the site occupied by high-rise office buildings and/or low-rise mixed-use buildings. The Kukui Plaza residential/commercial complex is located ewa of Fort Street across from Kamalii Park. The blocks on the Diamond Head and mauka sides of the site are occupied by the St. Andrew's Cathedral and Priory, and by Central Middle School, respectively.

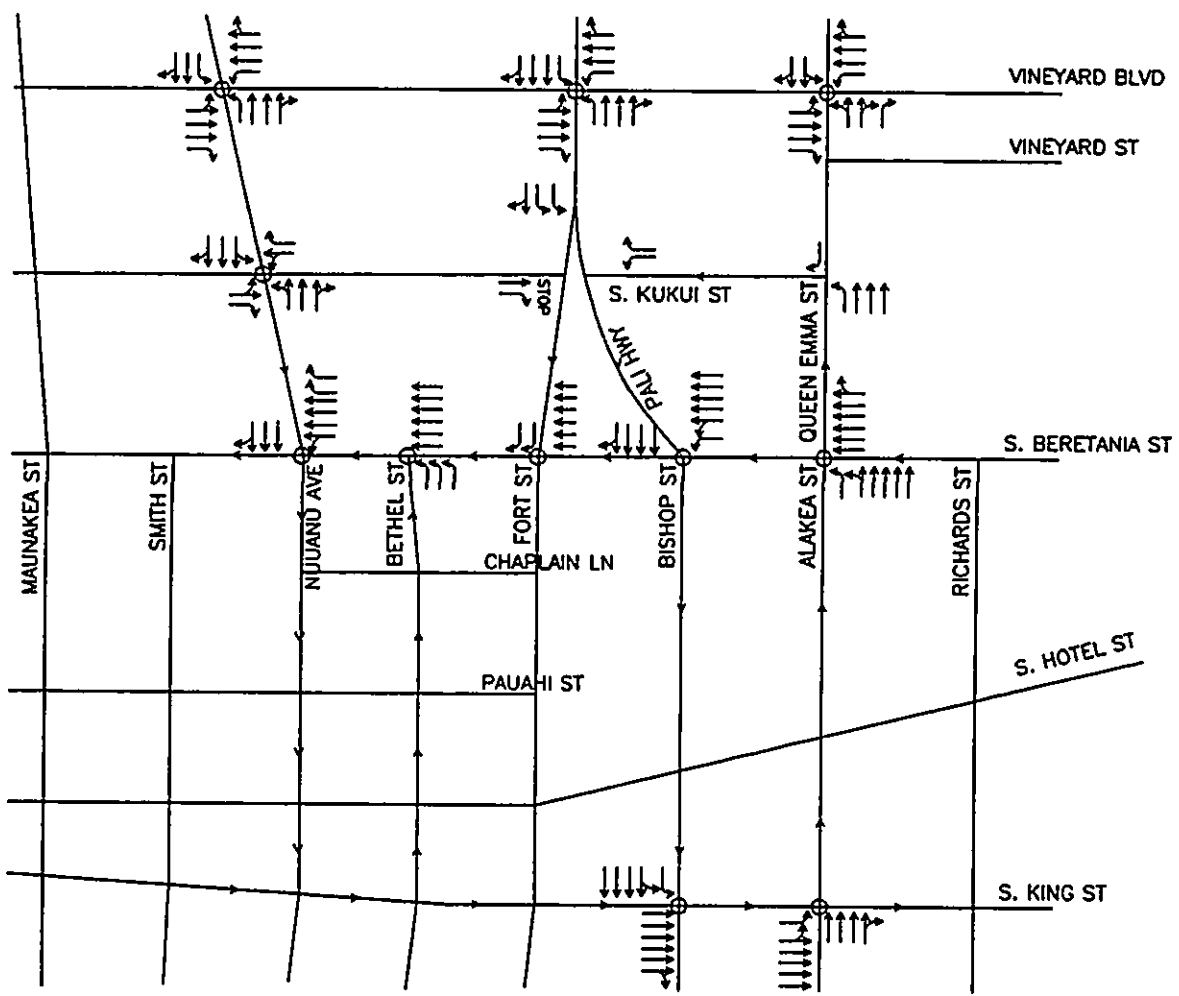
EXISTING ROADWAY SYSTEM

The roadway system in the vicinity of the Project site is depicted in Figure 2-1 with the numbers of lanes and type of traffic controls indicated at the key intersections.

Pali Highway - This major State highway connects the Windward communities of Oahu to the Downtown Honolulu area. Pali Highway also provides access from the Diamond Head-bound lanes of the H-1 Freeway to the Project area via an off-ramp located one block mauka of Vineyard Boulevard. Mauka of Kukui Street, Pali Highway is a two-way divided roadway with four to six through lanes. Between Kukui and Beretania Streets, Pali Highway is a one-way makai-bound roadway with two lanes located on either side of a landscaped median area. The segment of the highway adjacent to the Project site is under City jurisdiction. The roadway continues makai of Beretania Street as Bishop Street, also a City street.


Vineyard Boulevard - This major State highway parallels and serves as a major collector-distributor roadway for the H-1 Freeway through the Downtown Honolulu area. Vineyard Boulevard provides access to/from the Project site for the segment of the H-1 Freeway on the Diamond Head side of the Downtown area. Vineyard Boulevard is a median-divided roadway with three travel lanes in each direction and separate left-turn lanes at cross streets.

Beretania Street - Beretania Street provides five to six ewa-bound lanes through the Project area as part of a one-way street couplet with King Street.



LEGEND

- NUMBER AND TYPE OF TRAFFIC LANES
- TRAFFIC SIGNAL
- APPROACH WITH STOP SIGN
- ONE-WAY STREETS

 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 507 S. BERETANIA STREET HONOLULU, HAWAII 9686	BLOCK J	FIGURE
	EXISTING TRAFFIC LANES AND CONTROLS AT KEY INTERSECTIONS	2-1

Alakea Street/Queen Emma Street - This major street provides access from the Financial District mauka to Beretania Street, Pali Highway, and to the H-1 Freeway. The segment makai of Kukui Street serves mauka-bound direction travel as part of a one-way street couplet with Bishop Street/Pali Highway. Mauka of Kukui Street, Queen Emma Street is a two-way street. On-street parking is permitted along the segment of Queen Emma Street near the Project site, with three on-street stalls located along the Project site frontage.

Kukui Street - The one-way ewa-bound segment between Queen Emma Street and Pali Highway, located adjacent to the Project site, provides access to Pali Highway for traffic exiting from the Downtown and Civic Center areas. This one-way segment's intersections with both Queen Emma Street and Pali Highway have raised traffic islands to separate traffic movements and permit continuous flow without any traffic signal or STOP sign controls. Pedestrian crosswalks are located at these two intersections. On-street parking is permitted along both sides of this one-way segment, with three stalls located on the makai side adjacent to existing buildings outside the Project site and eight stalls located on the mauka side of the street.

Ewa of Pali Highway, Kukui Street is a two-lane, two-way collector street that provides access to the adjacent residential complexes. The raised traffic islands at the Pali Highway intersection do not permit ewa-bound traffic to cross Pali Highway or to turn mauka from the ewa section of Kukui Street.

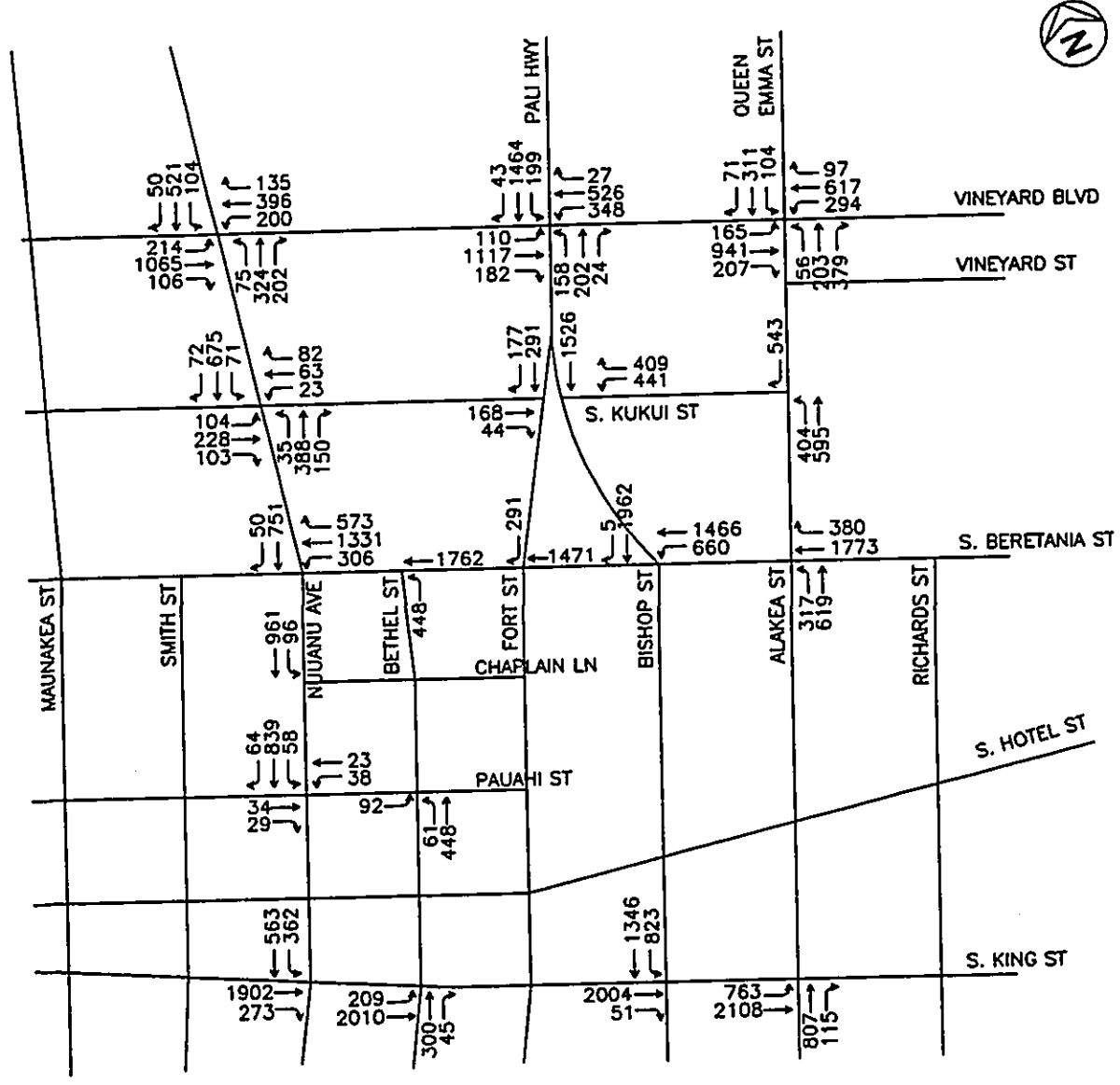
Fort Street - The one-block segment adjacent to Kamalii Park provides access to the Kukui Plaza porte cochere and functions as a right-turn lane for traffic turning from makai-bound Pali Highway onto Beretania Street. On-street parking is permitted along both sides of the street, with 12 stalls located adjacent to Kamalii Park and 9 stalls located along the ewa side of the street.


EXISTING TRAFFIC VOLUMES

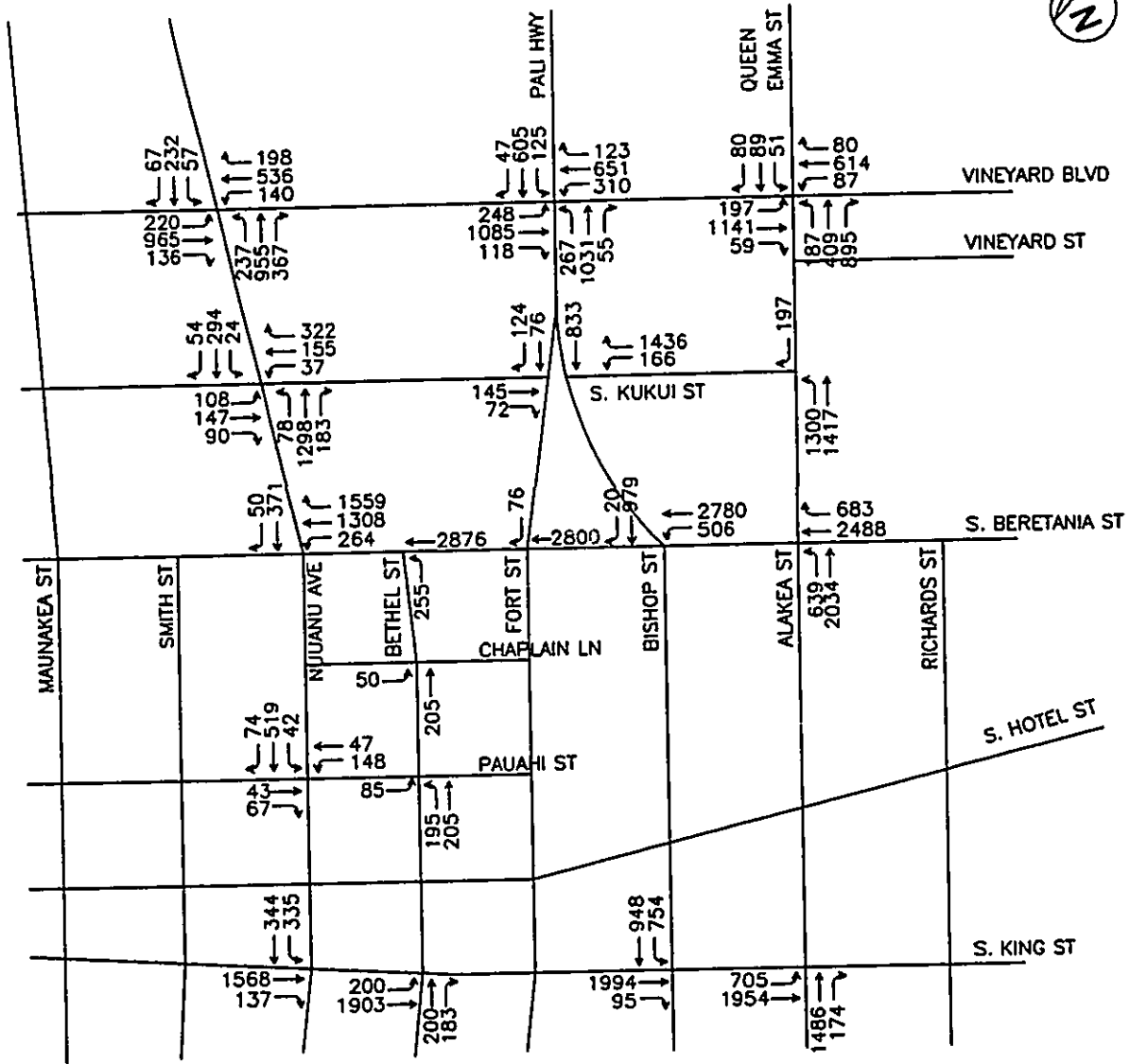
Special counts of traffic movements at the key intersections near the project site were made by Wilson Okamoto & Associates in mid-May, 1998. The counts were made during the weekday peak commute traffic hours. At most of the intersections, the peak one-hour volume of traffic during the morning generally occurred from 7:00 to 8:00 AM or 7:15 to 8:15 AM. During the afternoon, the peak one-hour traffic volumes typically occurred from 4:15 to 5:15 PM. The traffic volumes for the morning and afternoon peak hours are depicted in Figures 2-2 and 2-3, respectively.


In the morning peak hour, the highest traffic volumes in the study area occur at the intersection of Pali Highway with Vineyard Boulevard, with a total of approximately 4,400 vehicles entering the intersection. The second highest traffic volumes occur at the intersection of Pali Highway with Beretania Street, with 4,100 vehicles entering the intersection.

In the afternoon peak hour, the highest traffic volumes occur at the intersection of Beretania Street with Alakea Street, with a total of over 5,800 vehicles entering the intersection. The second highest volumes occur at the intersection of Pali Highway with Vineyard Boulevard, with a total of over 4,600 vehicles.



 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 1007 S. BERETANIA STREET HONOLULU, HAWAII 96813	BLOCK J	FIGURE
	EXISTING MORNING PEAK HOUR TRAFFIC	2-2



 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 107 S. BERETANIA STREET HONOLULU, HAWAII 96826	BLOCK J	FIGURE
	EXISTING AFTERNOON PEAK HOUR TRAFFIC	2-3

Traffic counts were made at the entrances and exits to the parking lots currently occupying the Project site. The numbers of vehicles entering and exiting the two lots during the peak traffic hours were:

Peak Hour	Enter	Exit	Total
Morning	176	29	205
Afternoon	94	179	273

EXISTING TRAFFIC CONDITIONS

Traffic conditions were analyzed for the key intersections for the weekday morning and afternoon peak traffic hours.

Methodology for Analyzing Levels of Service

The Transportation Research Board (TRB), a division of the National Science Foundation, has developed standardized methods for use in evaluating the effectiveness and quality of service for roadways and streets. Different methodologies are available for analyzing traffic signal-controlled intersections and other types of roadways.

The TRB evaluation methods use a concept known as level-of-service (LOS). This concept describes facility operations on a letter basis from A to F, which signify excellent to unacceptable conditions, respectively. The methods generally compare traffic volumes on a facility to the facility's theoretical capacity. Capacity is estimated based on the facility's physical characteristics (e.g. number and widths of lanes), traffic characteristics (e.g. types of vehicles), and type of traffic controls. The comparisons are frequently referred to as the volume-to-capacity ratio (V/C). The methodologies are described in the *1994 Highway Capacity Manual* (1994 HCM)¹.

Signal-Controlled Intersections--Traffic conditions at traffic signal-controlled intersections were evaluated using the Operations Analysis methodology described in the 1994 HCM. Using this method, the level-of-service is based on the average delay time per vehicle passing through the intersection. The delay time, calculated in seconds, is the result of the phasing and timing of the traffic signal as well as the intersection's physical layout and the composition of the traffic. Average delay time and level-of-service are estimated for the entire intersection, for each roadway approach, and for each traffic movement or lane group. A description of the characteristics and criteria associated with LOS A through LOS F is provided in Figure 2-4.

The methodology also calculates a ratio of actual or estimated peak hour traffic volumes to the theoretical capacity of the intersection. This ratio indicates the proportion of available capacity being used by traffic volumes and where there is unused capacity available for future traffic increases. This volume-to-capacity ratio (V/C) reflects the physical characteristics of the

¹ *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Third Edition. 1994.

The **OPERATIONS LEVEL METHODOLOGY**, which is described in the Transportation Research Board's Highway Capacity Manual, defines Level of Service (LOS) for signalized intersections in terms of delay. Technically, delay is the amount of time an average vehicle must wait at an intersection before being able to pass through the intersection. For signalized intersections, the relationship between LOS and delay is based on the average stopped delay per vehicle for a fifteen minute period.

LEVEL OF SERVICE 'A' - Delay 0.0 to 5.0 seconds

Describes operations with very low delay, i.e., less than 5 seconds per vehicle. This occurs when signal progression is extremely favorable. Most vehicles arrive during the green phase and are not required to stop at all.

Corresponding V/C ratios usually range from 0.00 to 0.60.

LEVEL OF SERVICE 'B' - Delay 5.1 to 15.0 seconds

Describes operations with delay in the range of 5 to 15 seconds per vehicle generally characterized by good signal progression and/or short cycle lengths. More vehicles are required to stop than for LOS 'A' causing higher levels of average delay.

Corresponding V/C ratios usually range from 0.61 to 0.70.

LEVEL OF SERVICE 'C' - Delay 15.1 to 25.0 seconds

Describes operations with delay in the range of 15 to 25 seconds per vehicle. Occasionally, vehicles may be required to wait more than one red signal phase. The number of vehicles stopping at this level is significant although many still pass through the intersection without stopping.

Corresponding V/C ratios usually range from 0.71 to 0.80.

LEVEL OF SERVICE 'D' - Delay 25.1 to 40.0 seconds

Describes operations with delay in the range of 25 to 40 seconds per vehicle. At LOS 'D', the influence of congestion becomes more noticeable. Many vehicles stop, and the proportion of vehicles not stopping declines. The number of vehicles failing to clear the signal during the first green phase is noticeable.

Corresponding V/C ratios usually range from 0.81 to 0.90.

LEVEL OF SERVICE 'E' - Delay 40.1 to 60.0 seconds

Describes operations with delay in the range of 40 to 60 seconds per vehicle. These high delay values generally indicate poor signal progression, long cycle lengths and high V/C ratios. Vehicles frequently fail to clear the intersection during the first green phase.

Corresponding V/C ratios usually range from 0.91 to 1.00.

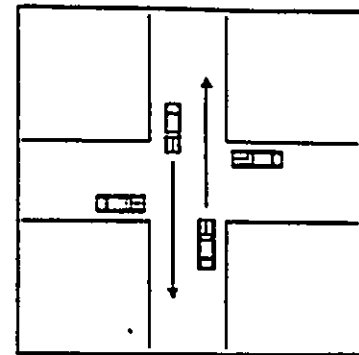
LEVEL OF SERVICE 'F' - Delay 60.1 seconds plus

Describes operations with delay in excess of 60 seconds per vehicle. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection.

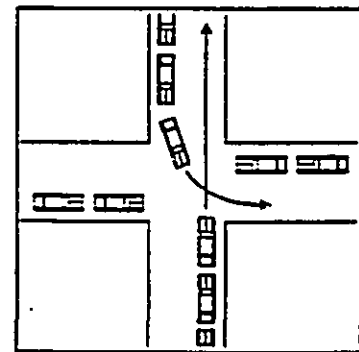
Corresponding V/C ratios of over 1.00 are usually associated.

SOURCE: Transportation Research Board, "Operations Level Methodology-Signalized Intersections", Highway Capacity Manual, Special Report 209, 1985.

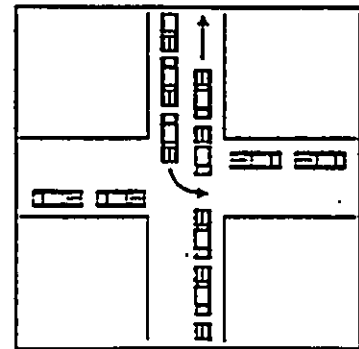
LOS-HCS-4-MINOR



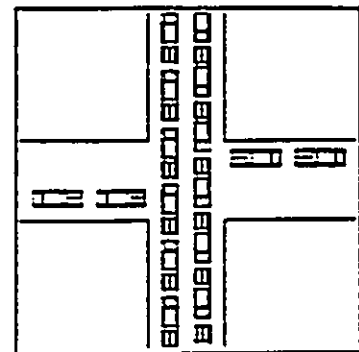
LOS 'A'




LOS 'C'



LOS 'D'



LOS 'F'

 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 1507 S. BERETANIA STREET HONOLULU, HAWAII 96816	BLOCK J	FIGURE
	LEVEL OF SERVICE DIAGRAM	2-4

intersection and the traffic characteristics, and is somewhat independent of the efficiency of the traffic signal phasing/timing.

Unsignalized Intersections—At intersections with STOP sign controls, the level of service was calculated using the 1994 HCM procedures for intersections with STOP or YIELD signs. In this methodology, the six levels of service, A through F, are used to describe traffic conditions for those movements that must yield to other movements:

- Left-turn out of the side street or driveway;
- Through movement from the side street,
- Right-turn out of the side street or driveway; and
- Left-turn into the side street.

Through vehicles on the major streets are not required to yield to other movements at two-way STOP controlled intersections.

The general indicator of intersection delay is determined by calculating the one-hour capacity for each key movement, based on the conflicting traffic volumes, and then comparing the number of vehicles making that maneuver to the calculated capacity. The unused or "reserve" capacity for the movement is then used to identify a delay time and a level-of-service for that movement. Unlike analysis at signalized intersections, an overall intersection level-of-service is not calculated, but a level-of-service is calculated for each lane group subject to the STOP or YIELD condition.

The level-of-service criteria for unsignalized intersections with STOP or YIELD controls is defined in Table 2-1.

Table 2-1	
LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS Block J Redevelopment Project Traffic Impact Study	
LOS	Average Stopped Delay (seconds/vehicle)
A	<5.0
B	5.1 - 10.0
C	10.1 - 20.0
D	20.1 - 30.0
E	30.1 - 45.0
F	>45
Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Chapter 10, 1994.	

Weekday Intersection Conditions

The overall traffic conditions at the key intersections during the weekday morning and afternoon peak hours are summarized in Table 2-2.

Adjustments were made at two intersections to provide a more realistic analyses of traffic conditions:

Pali Highway-Vineyard Boulevard - Pali Highway provides three through lanes at this intersection for mauka-bound traffic exiting the Downtown area. However, very little through traffic uses the shared through/right-turn curb lane since the third through lane ends several hundred feet mauka of the intersection and traffic must merge into the adjacent through lane. Spot counts indicate few through vehicles use the curb lane in the morning peak hour and about 7.5% of the through traffic uses the curb lane in the afternoon peak hour. The analyses were adjusted to reflect these usage levels.

Alakea Street-Beretania Street - The mauka-bound through traffic in the shared left-turn/through lane on the Alakea Street approach to this intersection is directed into a lane that ends approximately 100 feet mauka of the intersection. Field observations indicate that few through vehicles use this lane, so this intersection was analyzed with the shared mauka-bound lane as a left-turn-only lane.

In the morning peak hour, most of the intersections operate at very acceptable traffic conditions. The key constraint to traffic flow in the area is the intersection of Pali Highway and Vineyard Boulevard, with peak hour volumes approximating 98.2% of the estimated intersection capacity and average delays reflective of Level of Service (LOS) E conditions. The critical movements that experience the most delay are the makai-bound traffic on Pali Highway and the vehicles turning left from ewa-bound Vineyard Boulevard onto makai-bound Pali Highway.

In the afternoon peak hour, the Pali Highway-Vineyard Boulevard and Beretania Street-Alakea Street intersections have the highest proportion of the intersection capacity used by existing traffic volumes, with traffic approximating 89% of the intersection capacity. At the Pali Highway intersection, the longest delays occur for the through and left-turn traffic on mauka-bound Pali Highway, and the vehicles turning left from ewa-bound Vineyard Boulevard onto makai-bound Pali Highway. At the Alakea Street intersection, the longest delays occur for the traffic turning right from Beretania Street and the through traffic on Alakea Street.

Although the total entering traffic at the Vineyard Boulevard intersections with Queen Emma Street and with Nuuanu Avenue utilize only about 79% of the intersection capacity, several movements at each intersection experience long delays. Long delays occur for the left-turn traffic from both approaches of Nuuanu Avenue and Queen Emma Street since no separate protected signal phase is provided for these movements. On Queen Emma Street, the mauka-bound through and right-turn traffic also experience long delays. At both intersections, the Vineyard Boulevard through traffic is allocated a major portion of the signal green time and these movements operate at very good conditions (LOS B or C).

Table 2-2

**EXISTING TRAFFIC CONDITIONS AT KEY INTERSECTIONS
Block J Redevelopment Project Traffic Impact Study**

Intersection	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Vineyard Blvd. & Queen Emma St.	0.711	28.5	D	0.793	**	**
Vineyard Blvd. & Pali Hwy.	0.982	47.8	E	0.893	41.9	E
Vineyard Blvd. & Nuuanu Ave.	0.794	31.0	D	0.788	**	**
Kukui St. & Nuuanu Ave.	0.671	9.8	B	0.726	10.9	B
Kukui St. & Pali Hwy.	*	13.0	C	*	6.3	B
Beretania St. & Alakea St./Queen Emma St.	0.424	11.0	B	0.891	15.7	C
Beretania St. & Pali Hwy./Bishop St.	0.696	14.9	B	0.640	12.3	B
Beretania St. & Fort St.	0.311	9.9	B	0.379	7.9	B
Beretania St. & Bethel St.	0.326	10.2	B	0.417	8.2	B
Beretania St. & Nuuanu Ave.	0.443	9.3	B	0.398	11.6	C
King St. & Bishop St.	0.592	18.9	C	0.484	17.7	C
King St. & Alakea St.	0.579	10.9	B	0.667	14.2	B

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.

ADPV = Average delay per vehicle, in seconds.

LOS = Level of service.

* V/C is not calculated for intersections with STOP sign controls.

** Delay not calculated since unreliable where traffic substantially exceeds capacity for one or more traffic movements.

Wilbur Smith Associates; June 9, 1998.

PUBLIC TRANSPORTATION

TheBus provides fixed-route public transit service along each of the streets adjacent to the Project site. Queen Emma Street and Pali Highway are used by suburban trunk routes serving Windward Oahu, and by many of the express bus routes serving Windward Oahu and East Honolulu. The mauka-bound buses along the Windward routes also use the one-way segment of Kukui Street to travel from Queen Emma Street to Pali Highway.

Beretania Street is used for ewa-bound travel by several of the urban trunk routes (11, 19 and 20), Leeward suburban trunk routes, and many of the Leeward express routes.

A major bus stop is located at Beretania Street curb adjacent to the Project site. A bus stop is also located along the ewa-side curb of Pali Highway mauka of the Beretania Street intersection.

TheHandi-Van provides public transportation service to persons with disabilities who are unable to use the regular TheBus fixed-route service. TheHandi-Van vehicles are equipped with wheelchair lifts. The service is available seven days a week, with service starting at 5:00 AM (weekdays) or 6:00 AM (weekends and holidays) and extending to midnight. Reservations for service must be made 24 hours to two weeks in advance of the trip. The vehicles will pick-up passengers at appropriate pre-arranged locations along public streets, private roadways, or off-street passenger loading areas, such as porte cocheres for residential buildings

Chapter 3

2002 CONDITIONS WITHOUT PROJECT

The Block J Redevelopment Project is planned for completion in late 2001, with full occupancy anticipated in early 2002. Forecast traffic volumes and conditions without the Project are presented for the Spring of Year 2002 as a baseline from which to identify the incremental effects of the Project.

ROADWAY IMPROVEMENTS

No significant modifications are expected for the roadways and key intersections near the Project site by year 2002.

Two roadway modifications may be made to roadways at the periphery of the study area by 2002:

- Punchbowl Street - The section of Punchbowl Street adjacent to Queens Medical Center may be widened to five lanes in conjunction with improvements at the medical center facility. The City is also studying the potential conversion of the segment of Punchbowl Street between Beretania and King Streets to two-way traffic operation. These modifications may improve traffic conditions along Punchbowl Street and encourage the diversion of some traffic now using Alakea/Queen Emma Street to use Punchbowl Street.
- North King Street - The City is planning to reduce the number of traffic lanes from the present four to three in the Chinatown segment between River and Smith Streets. This modification should not affect traffic flow within the study area.

TRAFFIC GROWTH WITHOUT THE PROJECT

Traffic increases near the Project site over the next four years are expected to primarily result from increased occupancy levels at recent developments in or near Downtown Honolulu, or increases in traffic traveling through the Downtown area. There are also several redevelopment projects planned outside of the study area that may affect traffic growth, such as the redevelopment of the Downtown Post Office site on Richards Street and the expansion of facilities at the Queens Medical Center. An area-wide traffic growth factor was used to reflect the traffic increases from both the increased levels of Downtown activity and the two projects outside the study area.

The Regional Transportation Plan Study¹ forecasts an average increase in traffic in the vicinity of Downtown Honolulu of between 0.8% to 0.9% per year from 1990 to 2020. Historic traffic count data for the State Department of Transportation (DOT) count station at the intersection of

¹ *Oahu Regional Transportation Plan*, prepared for the Oahu Metropolitan Planning Organization by Kaku Associates, 1995.

Pali Highway and Vineyard Boulevard indicates no increase to increases as high as 2% per year for the different legs of the intersection and different comparison years. Other historic count information in the study area indicates declines to as much as 2% per year between 1990 and 1998.

For this study, an average increase of 1.5% per year was used to forecast 2002 peak hour traffic volumes without the Project, or about double the anticipated long-term growth rate. The resultant 6.2% increase should represent a high or conservative forecast for most of the study intersections during this period.

The growth factor was applied to all traffic movements at the key intersections near the Project site. The resultant traffic volumes for the weekday morning and afternoon commute peak hours are depicted in Figures 3-1 and 3-2, respectively.

TRAFFIC CONDITIONS AT KEY INTERSECTIONS

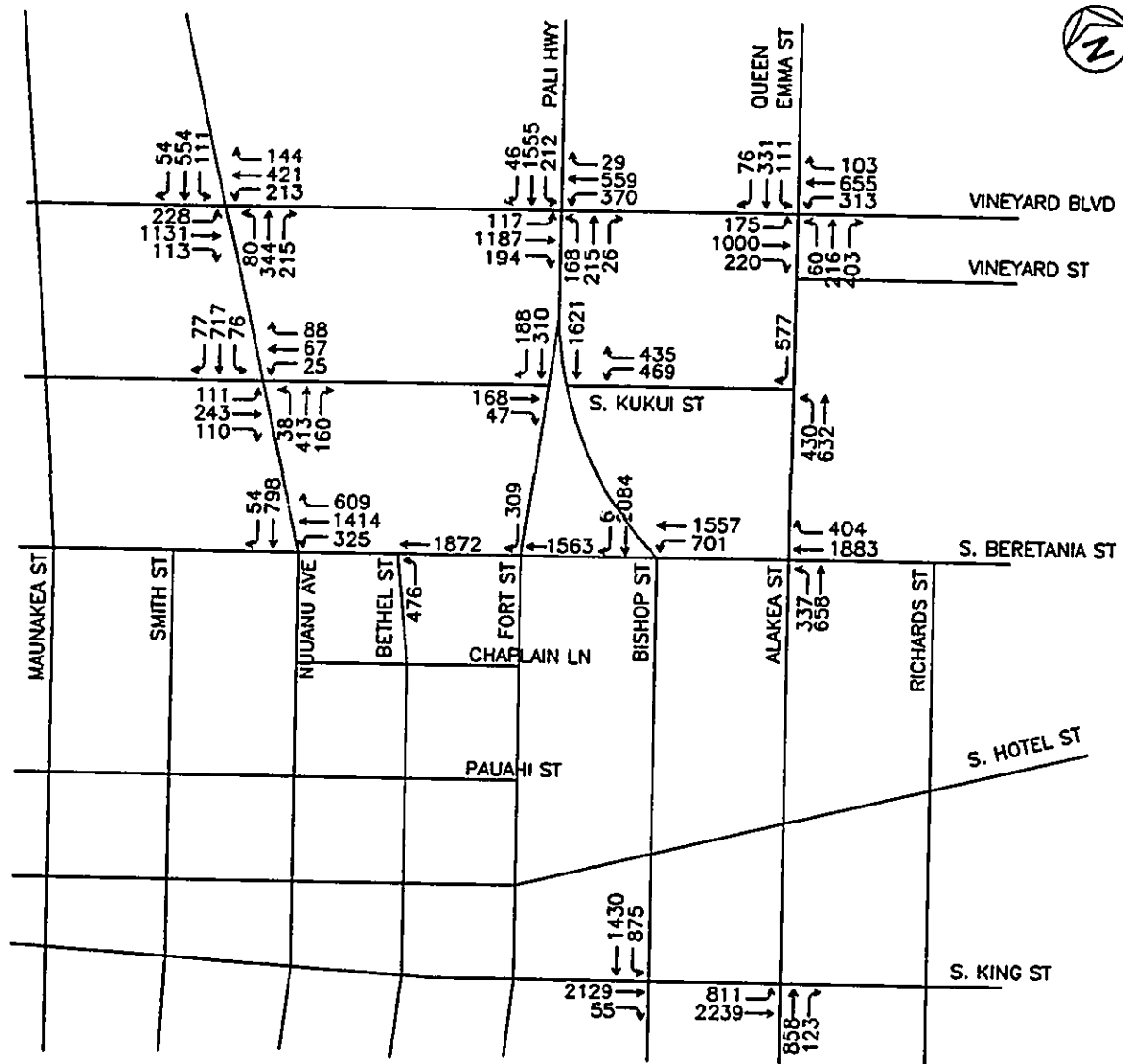
The overall traffic conditions for each of the key intersections near the Project site are summarized in Table 3-1. Significant changes in conditions include:

Morning Peak Hour

- At the Pali Highway-Vineyard Boulevard intersection, the increased traffic would exceed the intersection capacity by 4.4% and average delays would approach LOS F.
- At the intersection of Nuuanu Avenue with Vineyard Boulevard, the additional traffic would greatly worsen the left-turn movement from both Nuuanu Avenue approaches with LOS F conditions. The projected traffic would increase the proportion of capacity use to 93.2%.

Afternoon Peak Hour

- At the Pali Highway-Vineyard Boulevard intersection, the increased traffic would approximate 95% of the intersection capacity.
- At the Vineyard Boulevard intersection with Queen Emma Street, the mauka-bound traffic would exceed capacity for this approach by 8% with present signal phasing and timing.
- At the intersection of Beretania Street with Alakea/Queen Emma Streets, the increased traffic would approximate 94.8% of the intersection capacity.



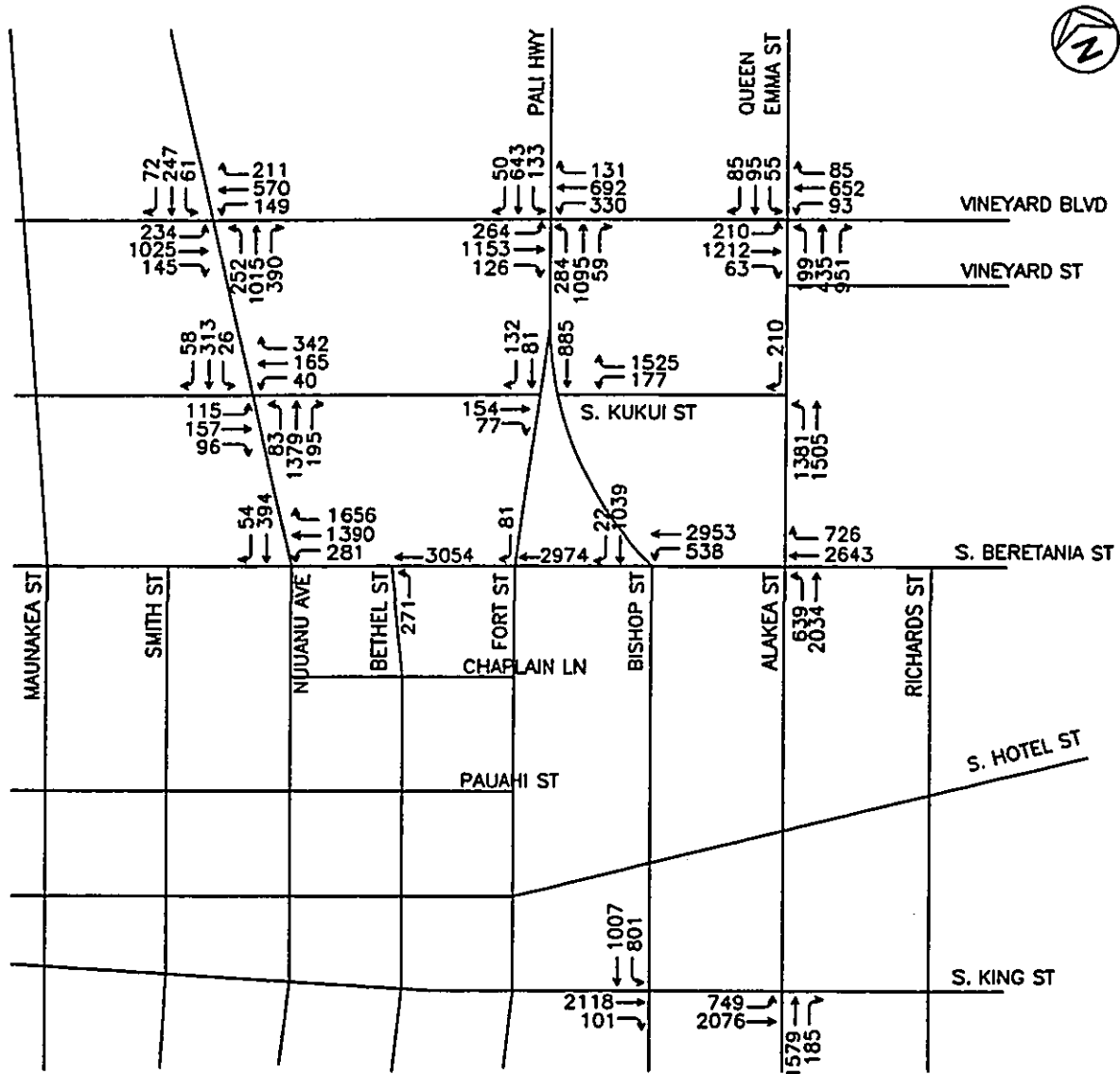
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 ENGINEERS - PLANNERS
 1907 S. BERETANIA STREET
 HONOLULU, HAWAII 96826

BLOCK J

2002 MORNING PEAK HOUR
 TRAFFIC WITHOUT PROJECT

FIGURE

3-1




 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 197 S. BERETANIA STREET HONOLULU, HAWAII 96826	BLOCK J	FIGURE
	2002 AFTERNOON PEAK HOUR TRAFFIC WITHOUT PROJECT	3-2

Table 3-1

2002 TRAFFIC CONDITIONS AT KEY INTERSECTIONS
WITHOUT PROJECT
Block J Redevelopment Project Traffic Impact Study

Intersection	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Vineyard Blvd. & Queen Emma St.	0.764	31.3	D	0.852	**	**
Vineyard Blvd. & Pali Hwy.	1.044	58.6	E	0.950	46.6	E
Vineyard Blvd. & Nuuanu Ave.	0.932	**	**	0.866	**	**
Kukui St. & Nuuanu Ave.	0.726	11.8	B	0.781	13.9	B
Kukui St. & Pali Hwy.	*	15.4	C	*	6.7	B
Beretania St. & Alakea St./Queen Emma St.	0.453	11.3	B	0.948	19.7	C
Beretania St. & Pali Hwy./Bishop St.	0.735	15.6	C	0.672	12.8	B
Beretania St. & Fort St.	0.331	10.0	B	0.403	8.1	B
Beretania St. & Bethel St.	0.347	10.3	B	0.443	8.5	B
Beretania St. & Nuuanu Ave.	0.471	9.4	B	0.423	16.1	C
King St. & Bishop St.	0.629	21.4	C	0.514	18.7	C
King St. & Alakea St.	0.615	11.3	B	0.717	15.1	C

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.

ADPV = Average delay per vehicle, in seconds.

LOS = Level of service.

* V/C is not calculated for intersections with STOP sign controls.

** Delay not calculated since unreliable where traffic substantially exceeds capacity for one or more traffic movements.

Wilbur Smith Associates; June 17, 1998.

Chapter 4

2002 CONDITIONS WITH PROJECT

The Block J Redevelopment Project is planned for completion in late 2001 and full occupancy in early 2002. The traffic assessment reflects conditions in Spring of 2002 with full occupancy of the Project.

PROJECT DESCRIPTION

The residential and retail elements of the Project will be developed on the site of the present City public and employee parking lots, as depicted in Figure 1-2. The parking for the Project will be provided in an underground parking structure that will extend from the retail/residential structure to include the areas under the adjacent section of Pali Highway and Kamalii Park.

Project Components

The Project will include residential rental units, a commercial retail complex, and parking for use both by the residents, employees, and visitors of the Project uses and by the public.

Residential Use - Two apartment towers will be developed with one- and two-bedroom apartments for rental at affordable rates. Plans are for one tower with 475 units to be developed for seniors and the second tower with 438 units to be available to singles and families.

Commercial Retail Complex - The Project Developer would prefer to develop the two levels of retail area as an entertainment complex. This would consist of a theater complex, restaurants, and a bookstore. However, other uses are also being considered, such as shops and services oriented to the residents and workers in the area.

For the purpose of the traffic study, the retail component is assumed to have retail stores, restaurants, and service establishments more typical of a community shopping center. The community shopping center would generate a higher number of trips during the peak commute hours as compared to the entertainment use and thus represent more of a "worse case" for impact on overall area traffic conditions during the peak traffic periods.

Parking - Approximately 1,876 parking stalls would be provided in the underground parking structure and 20 stalls at ground level. The use of the parking is based on the following allocation:

Senior Residents	119 Stalls
Multi-family Residents	438
Residential Unit Guests	91
Retail	167
Replacement for City Meter Stalls	208
Additional Stalls Available to Public	873

If a greater number of stalls are reserved for the Senior Tower residents, or for other site uses, the number of stalls available for general public use would be reduced by that amount.

Roadway Modifications

After construction of the parking structure beneath Pali Highway, the portion of the highway makai of the Kukui Street intersection would be rebuilt as a four-lane roadway without the median area. The pedestrian and landscape areas adjacent to this roadway section would be widened by the corresponding width of the median.

Project Driveway Access

The site plan envisions the construction of a two-way driveway off of Queen Emma Street and Kukui Street between the Project building and the existing buildings on the northeast corner of the block. The driveway would include the present Emma Lane and connect to both Queen Emma Street and Kukui Street. Preliminary plans are for access to the Project parking garage to be located along this Main Driveway as well as directly from Pali Highway and from Fort Street.

- **Main Entry/Exit Driveway** - This driveway would permit entry and exit by all parkers, to include residents, monthly parkers, visitors, and public parkers. The parking attendant booths would be located at this driveway to permit exit by public pay/validation parkers. Vehicles would be able to enter and exit this driveway from either Queen Emma Street or Kukui Street.
- **Pali Highway** - An entrance would be located along this roadway to permit entry by all parkers. An exit driveway may also be provided for direct exit onto Pali Highway. The exit, if provided, would be used by only resident and monthly parkers.
- **Fort Street** - An entrance and/or exit may be located along this street. If provided, the entrance would be usable by all parkers. The exit would be used by only resident and monthly parkers.

The traffic assessment is based on the provision of an entry and exit driveway at each of these potential driveway locations.

VEHICLE TRIP GENERATION

Assumptions Used in Trip Generation

Several factors involved in the traffic forecasts, such as the specific type of uses in the commercial/retail complex, had not been finalized at the time of the traffic assessment. The assumptions concerning these uses and other factors in the estimation of Project trip generation are discussed in the following paragraphs.

Residential Towers - The numbers of vehicle trips to/from the Project were based on average trip generation rates as compiled by the Institute of Transportation Engineers (ITE).¹ The ITE trip rates for a high-rise apartment building was used for the multi-family tower and the rates for attached elderly housing were used for the senior tower.

Retail Complex - For the purpose of the traffic assessment, the ITE trip rates for a community shopping center were used for the commercial retail area. This trip rate reflects a mix of retail stores, restaurants, and service establishments. The shopping center rate would result in a higher estimate of trips during the peak commute hours than entertainment uses.

The numbers of vehicle trips entering or exiting a commercial development include both new vehicle trips and additional stops by vehicles that would be traveling through the area whether or not the project is developed. These additional stops, referred to as pass-by trips, occur primarily for retail and service uses, but would also apply to entertainment uses. The ITE Trip Generation manual provides a methodology and equation for estimating the proportion of the generated vehicle ends that are pass-by trips. For a 100,000 square-foot retail complex, approximately 40% of the Project trips would typically be pass-by trips. For the Project retail uses, the traffic forecasts reflect this pass-by rate, with one-half of the pass-bys assumed to be vehicle trips and one-half assumed to be made by walk-ins by persons residing or working near the Project. The pass-by factor was applied only to the afternoon peak hour.

Public Parking - The number of vehicles entering/exiting the public parking would depend upon the number of stalls available to the public and the types of uses served by the stalls. The traffic estimate reflects:

- A total of 1,081 stalls are assumed to be available for public use during the morning. In the afternoon, the traffic generation rate assumed for the retail use would generate a higher peak parking use of about 100 stalls more than the 167 stalls identified for the retail use. Thus, 100 fewer stalls (981 stalls) would be available for other public parkers in the afternoon peak period.
- The public stalls would be primarily used by persons working or visiting office and commercial uses near the Project. The stalls would be available for use by a mix of monthly lease parkers and short-term visitor parkers.
- At the time of peak use on a typical day, approximately 90% of the public stalls are assumed to be occupied by parkers.
- For parking facilities serving office and retail uses, the peak direction, peak hour entering or exiting volume is generally between 45% and 60% of the peak number of occupied stalls. For this assessment, the trip generation is based on 55% of the peak number of occupied stalls arriving in the morning peak hour and 55% leaving in the afternoon peak hour. This proportion is similar to that for the present public lot on the Project site. The rate of vehicles exiting in the morning and entering in the afternoon peak hour was based on the directional split for parking facilities serving office uses.

¹ *Trip Generation, Sixth Edition*, Institute of Transportation Engineers, 1997.

Estimated Additional Vehicle Trips

The trip generation rates and the resultant numbers of additional vehicle trips entering or exiting the Project during the morning and afternoon commute peak hours are presented in Table 4-1. The numbers indicated for the retail complex in the afternoon peak hour are only those additional trips on the adjacent streets. There would also be an additional number (66 vehicles), equivalent to 33% of the afternoon peak hour additional trips to/from the retail complex, that would be an added stop by vehicles passing by the site.

Table 4-1							
PROJECT VEHICLE TRIP GENERATION							
Block J Redevelopment Project Traffic Impact Study							
Project Component	Quantity	Morning Peak Hour			Afternoon Peak Hour		
		To Project	From Project	Total	To Project	From Project	Total
Trip Generation Rates							
Family Apartments	Units	0.075	0.225	0.30	0.214	0.136	0.35
Senior Housing	Units	0.03	0.03	0.06	0.058	0.052	0.11
Shopping	TSF	0.972	0.648	1.62	1.97	1.97	3.94
Public Parking	Stall	0.495	0.068	0.563	0.101	0.495	0.596
Numbers of Vehicle Trips							
Family Apartments	438 Units	33	99	132	94	60	154
Senior Housing	475 Units	15	15	30	28	25	53
Shopping	100 TSF	97	65	162	197	197	394
Public Parking: AM	1,081 Stalls	<u>535</u>	<u>74</u>	<u>609</u>			
PM	981 Stalls				<u>100</u>	<u>486</u>	<u>586</u>
Total		680	253	933	419	768	1,187
Less Trips To/From Existing Parking Lots		-176	-29	-205	-94	-179	-273
NET INCREASE AT THE SITE		504	224	728	325	589	914
TSF = Thousands of square feet of floor area Stalls = Includes the replacement City stalls and additional public stalls not used by the Project. Wilbur Smith Associates; June 15, 1998							

An estimated 933 vehicles would enter or exit the Project during the morning peak hour, or a net increase of 728 vehicles over the number presently entering/exiting the two parking lots on the site. The residential and retail uses contribute about 45% of the increase, with the public parking facility attracting the majority of trips.

In the afternoon peak hour, an estimated 419 vehicles would enter the Project and 768 vehicles would exit the Project, not including the 66 pass-by vehicles. After adjustment for the existing parking lots, the Project would add an additional 914 vehicle trips on the adjacent streets.

PEAK HOUR TRAFFIC VOLUMES

The directional distribution and routing of the Project trips was based on the present traffic patterns in the Downtown Honolulu area. The 728 and 914 Project trips in the morning and afternoon peak hours, respectively, were assumed to represent a net increase in traffic on the area street system. Some of the public parkers may actually represent a relocation of existing trips as parkers are displaced from vacant lots in the Downtown area that are temporarily used as parking while awaiting development. The existing traffic entering/exiting the site and the pass-by vehicles were added to the volumes at the Project driveways.

The resultant traffic volumes at the key intersections and the Project driveways are depicted in Figures 4-1 and 4-2 for the morning and afternoon peak hours, respectively.

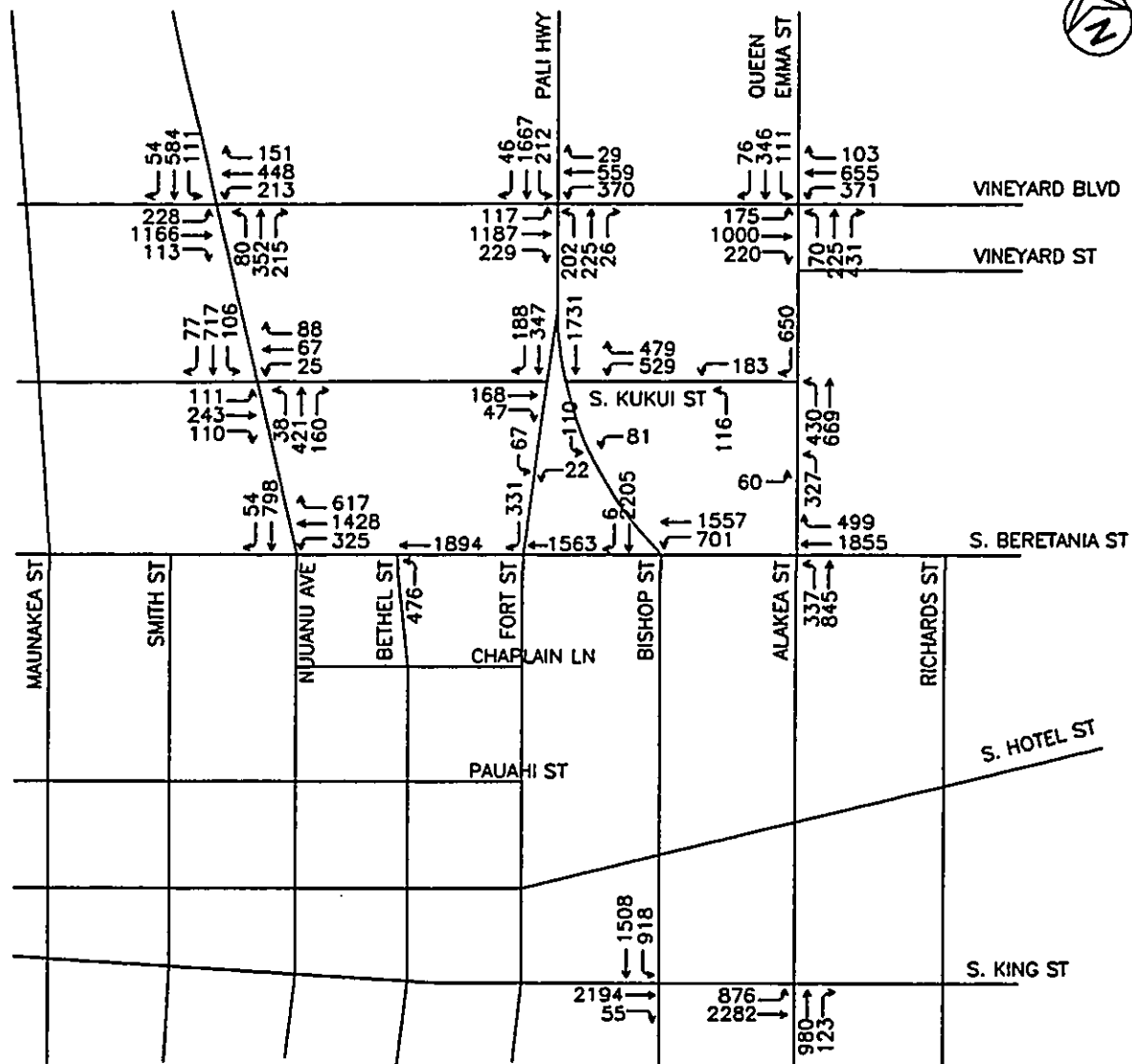
The estimated increases in traffic volumes and the percentage increase as a result of the Project are listed in Table 4-2 for key segments of the area roadways. In both the morning and afternoon peak hours, the largest volume increase would occur on the segment of Pali Highway between Vineyard Boulevard and the Project site. This segment also represents the highest percentage increase in the afternoon peak hour for the listed segments.


The Alakea Street-Bishop Street one-way couplet also accommodates a large portion of the Project traffic. The second largest volume increase and largest proportional increase would occur on Alakea Street in the morning peak hour, and both streets would accommodate a large volume of Project traffic during the afternoon peak hour.

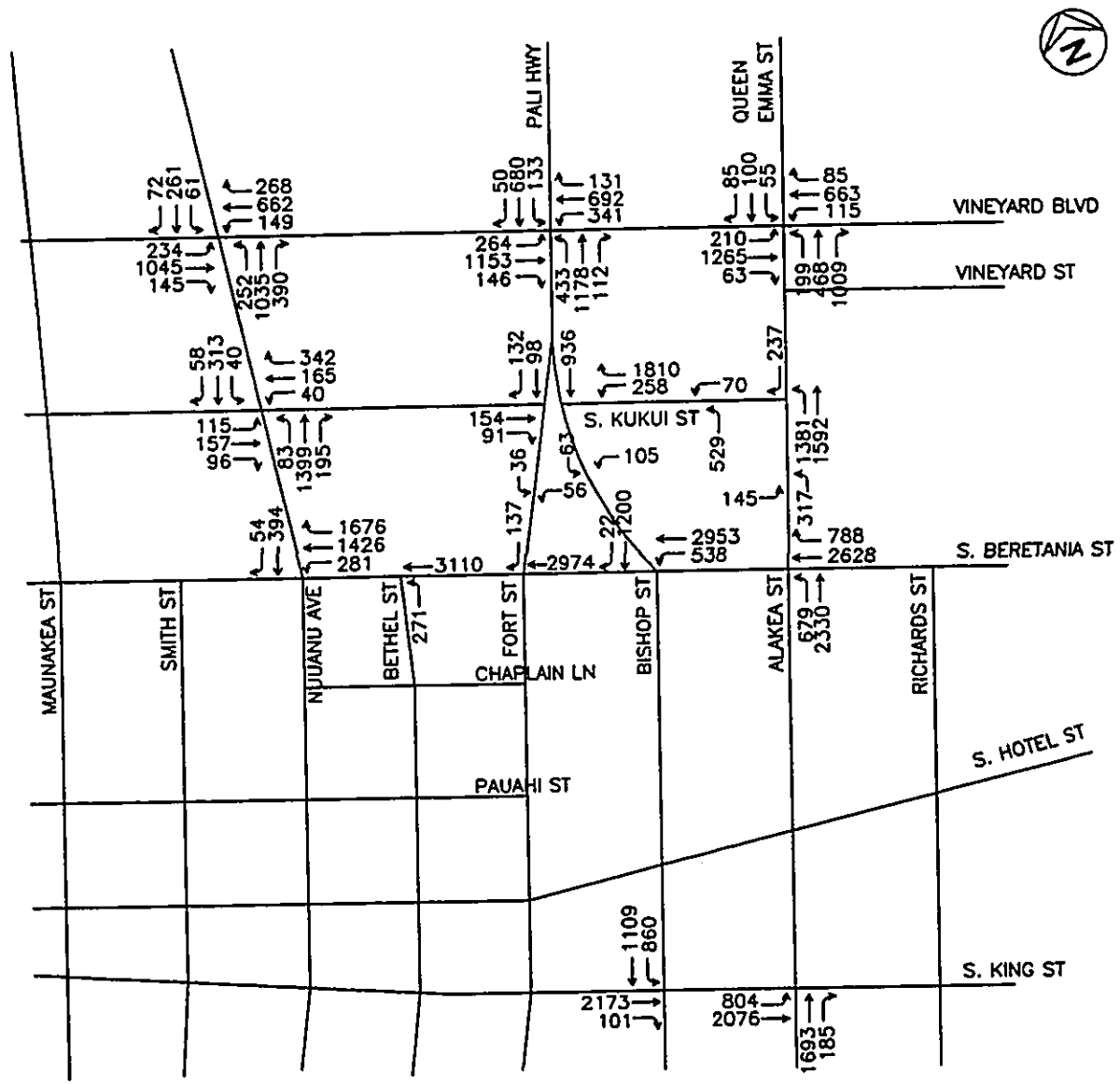
TRAFFIC CONDITIONS AT KEY INTERSECTIONS

Traffic conditions for the morning and afternoon peak hours with the Project are summarized for the key intersections in Table 4-3. The table presents the overall conditions for each intersection.

Most of the intersections are projected to operate at acceptable conditions with the Project. The impacts at those intersections with problem conditions are discussed in the following paragraphs. Potential mitigation actions are discussed where appropriate.



 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 807 S. BERETANIA STREET HONOLULU, HAWAII 96826	BLOCK J	FIGURE
	2002 MORNING PEAK HOUR TRAFFIC WITH PROJECT	4-1




 WILSON OKAMOTO & ASSOCIATES, INC. ENGINEERS - PLANNERS 1907 S. BERETANIA STREET HONOLULU, HAWAII 96826	BLOCK J	FIGURE
	2002 AFTERNOON PEAK HOUR TRAFFIC WITH PROJECT	4-2

Table 4-2
TRAFFIC INCREASES ON KEY ROADWAY SEGMENTS
WITH BLOCK J REDEVELOPMENT PROJECT
Block J Redevelopment Project Traffic Impact Study

Location	Morning Peak Hour			Afternoon Peak Hour		
	Without Project	Project Increase	Percent Increase	Without Project	Project Increase	Percent Increase
Pali Hwy. Mauka of Vineyard Blvd.	2,174	122	5.6	2,316	120	5.2
Pali Hwy. Makai of Vineyard Blvd.	2,528	191	7.6	2,537	353	13.9
Bishop St. Makai of Beretania St.	2,785	121	4.3	1,577	161	10.2
Alakea St. Makai of Beretania St.	995	187	18.8	2,840	169	6.0
Queen Emma St. Mauka of Kukui St.	1,209	110	9.1	1,715	114	6.6
Vineyard Blvd. Diamond-Head of Queen Emma St.	2,585	86	3.3	3,048	140	4.6
Vineyard Blvd. Ewa of Pali Hwy.	2,271	69	3.0	2,569	169	6.6
Beretania St. Diamond-Head of Queen Emma St.	2,287	67	2.9	3,369	47	1.4
Beretania St. Ewa of Fort St.	1,872	22	1.2	3,054	56	1.8
Kukui St. Ewa of Pali Hwy.	403	30	7.4	363	14	3.9

Wilbur Smith Associates; June 12, 1998

Table 4-3

**2002 TRAFFIC CONDITIONS AT KEY INTERSECTIONS
WITH PROJECT
Block J Redevelopment Project Traffic Impact Study**

Intersection	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Vineyard Blvd. & Queen Emma St.	0.815	33.8	D	0.864	**	**
Vineyard Blvd. & Pali Hwy.	1.103	**	F	0.994	54.5	E
Vineyard Blvd. & Nuuanu Ave.	1.021	**	F	0.892	**	**
Kukui St. & Nuuanu Ave.	0.780	19.9	C	0.787	14.7	B
Kukui St. & Pali Hwy.	*	18.4	C	*	7.0	B
Beretania St. & Alakea St./Queen Emma St.	0.572	11.9	B	0.995	19.4	C
Beretania St. & Pali Hwy./Bishop St.	0.759	16.1	C	0.702	13.1	B
Beretania St. & Fort St.	0.341	10.0	B	0.428	8.2	B
Beretania St. & Bethel St.	0.349	10.4	B	0.449	8.6	B
Beretania St. & Nuuanu Ave.	0.473	9.5	B	0.430	17.4	C
King St. & Bishop St.	0.657	22.2	C	0.546	20.4	C
King St. & Alakea St.	0.646	12.0	B	0.730	17.0	C

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.

ADPV = Average delay per vehicle, in seconds.

LOS = Level of service.

* V/C is not calculated for intersections with STOP sign controls.

** Delay not calculated since unreliable where traffic substantially exceeds capacity for one or more traffic movements.

Wilbur Smith Associates; June 17, 1998.

Vineyard Boulevard-Queen Emma Street

The overall intersection would operate at acceptable levels with the forecast morning peak hour traffic volumes. However, the increased traffic turning left from onto makai-bound Queen Emma Street would increase the volume-to-capacity ratio for this movement from 1.058 without the Project to 1.208 with the Project, based on the existing allocation of traffic signal green time. This additional turning traffic could be accommodated by the allocation of additional green signal time to the eastbound approach, or the construction of a second (double) left-turn lane for this approach.

During the afternoon peak hour, the additional Project traffic would worsen the congestion and delays experienced by the mauka-bound traffic on Queen Emma Street. Based on the present signal timing, the mauka-bound traffic volume with the Project would approximate 117% of capacity allocated to this approach versus 108% without the Project. The mauka-bound traffic on Queen Emma Street would experience delays reflective of LOS F conditions, either with or without the Project. For the overall intersection, the proportion of the capacity used by the 2002 traffic in the afternoon peak hour would be at an acceptable level with or without the Project (86.4% with the Project versus 85.2% without the Project). The conditions for the mauka-bound traffic could be improved by the allocation of more signal green time to this approach during the afternoon peak hour.

Vineyard Boulevard-Pali Highway

The Project traffic would worsen the congested conditions at this intersection during the morning and afternoon peak hours. During the morning, the forecast traffic entering the intersection would approximate 110% of capacity with the Project versus 104% without the Project. The average delay would worsen from the borderline LOS E/F conditions without the Project to LOS F with the Project. The Project traffic would affect most of the critical conflicting traffic movements at the intersection, with all operating at LOS F both without and with the Project. The volume-to-capacity ratio for each movement in the afternoon peak hour would be affected as follows:

Critical Movement	Without Project	With Project
Eastbound Through	1.039	1.070
Westbound Left Turn	1.065	1.065
Northbound Left Turn	1.033	1.245
Southbound Through	1.037	1.110

In the afternoon peak hour, the increased traffic volumes would approximate the intersection capacity. However, the average vehicle delay for the intersection would remain at LOS E with the Project. The Project would primarily affect the northbound traffic flow on Pali Highway. The left-turn movement from northbound Pali Highway would increase from 99.2% of capacity

without the Project to 110.2% with the Project. The northbound through movement would increase from 91.4% to 98.3% of capacity.

Conditions could be improved at this intersection by the provision of second (double) left-turn lanes on either or both the mauka-bound Pali Highway and ewa-bound Vineyard Boulevard approaches. The conditions with these lanes and the Project traffic are summarized in the following table.

Modification	Morning Peak Hour			Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Add Left-Turn Lane to Mauka-bound Approach	1.033	57.3	E	0.989	45.5	E
Add Left-Turn Lane to Ewa-bound Approach	0.983	45.2	E	0.922	45.5	E
Add Left-Turn Lane to Both Approaches	0.913	39.3	D	0.916	41.6	E
V/C = Ratio of the traffic volume to the theoretical capacity of the intersection. ADPV = Average delay per vehicle, in seconds. LOS = Level of service.						

The additional left-turn lane on Pali Highway would not fully offset the Project impacts during the morning peak hour, but would offset the impacts in the afternoon period. The additional left-turn lane on Vineyard Boulevard would offset the Project impacts during both peak hours. The provision of both additional left-turn lanes would improve traffic conditions to 1998 levels for the afternoon peak hour and to better than existing conditions for the morning peak hour.

The additional left-turn lane on Pali Highway could be provided by restriping the present roadway with 10-foot wide turn lanes and 11-foot wide through lanes. The additional left-turn lane on Vineyard Boulevard could be provided by restriping the present lanes to 11-foot widths and reducing the median width. The Vineyard Boulevard lane could extend only to the column supporting the pedestrian bridge, which is located midway between the Pali Highway and Queen Emma Street intersections. This stacking distance would be sufficient to accommodate an additional 7 to 8 vehicles during each signal phase.

Vineyard Boulevard-Nuuanu Avenue

Conditions would worsen for the left-turn movements from both Nuuanu Avenue approaches, which are not provided a protected left-turn phase. In the morning peak hour, the conditions for the left turns would result in critical conflicting traffic movements approximating 102% of the intersection capacity.

Conditions for the left-turn movements could be improved by the provision of a protected left-turn phase for the Nuuanu Avenue approaches. With a left-turn phase, the forecast traffic would approximate 73.6% of intersection capacity, and overall intersection conditions would improve to LOS D. The State DOT is currently planning to modify the traffic signal to provide this protected left-turn phase.

Beretania Street-Alakea/Queen Emma Streets

The traffic conditions presented for this intersection in Table 4-3 reflect the Project traffic mauka-bound on Queen Emma Street using the shared left-turn/through lane to travel through this intersection. The forecast traffic in the afternoon peak hour would approximate 99.5% of the intersection capacity with the Project, versus 94.8% without the Project. The overall average delay for vehicles passing through the intersection decreases slightly with the Project, since most of the Project traffic is added to the mauka-bound shared left-turn/through lane, which has an average delay less than that for the overall intersection.

The mauka-bound Project traffic in the shared left-turn/through lane would cross the intersection into the lane that presently ends near Emma Lane, which is the planned Project driveway access to/from Queen Emma Street. This short section of mauka-bound lane should be maintained from Beretania Street to the Project driveway to permit the Project traffic to use the shared lane, which is less heavily used than the through lanes during the afternoon peak period. This may require the removal of the three parking stalls along the curb between Beretania Street and the Project driveway, and the prohibition of parking along this segment by any vehicles.

The key movement affected by Project traffic in the afternoon peak hour would be the right-turn movement from Beretania Street onto Queen Emma Street. The increased traffic would approximate 105.4% of the capacity for this movement, versus 91.0% without the Project. The delay for the right-turn traffic would worsen to LOS E versus LOS C.

Both overall intersection conditions and the right-turn movement could be improved in the afternoon peak period by permitting the right-turn traffic on ewa-bound Beretania Street to turn from both the existing right-turn lane and from the adjacent through lane, which would be striped as a shared through/right-turn lane. This would improve the afternoon conditions to 86% of capacity. However, this change could worsen conditions during the morning peak period since most of the Project traffic would likely use the shared lane. The Project traffic turning right from this shared lane would have to yield to any pedestrians using the Queen Emma Street crosswalk and would block any through traffic using the shared lane. This modification could be tried on a temporary trial basis after the Project is occupied to determine if the pedestrian conflict disrupts morning traffic flow along Beretania Street.

Kukui Street Connection to Mauka-bound Pali Highway

In the afternoon peak period, the mauka-bound traffic stopped on Pali Highway at the Vineyard Boulevard traffic signal often stacks back onto Kukui Street. This currently blocks access to the left-turn lane at the Pali Highway intersection with Vineyard Boulevard and reduces the efficiency of the left-turn lane operation. The vehicle queue would also block egress from the Project driveway onto Kukui Street.

These problems could be reduced by the reconstruction of the traffic islands at the Kukui Street intersection with Pali Highway to provide two lanes for the right-turn movement from the ewa-bound one-way section of Kukui Street onto mauka-bound Pali Highway. The segment of Kukui Street between the Project driveway and Pali Highway would be restriped to provide two right-turn lanes and one left-turn lane. This would require the removal of four to five of the on-street parking stalls along the mauka curb, or the restriction of the use of these spaces during the afternoon peak traffic period. The pedestrian crosswalks on the Kukui Street approach would have to be relocated and installation of traffic signal controls could be needed at the relocated crosswalks.

POTENTIAL IMPACTS TO ON-STREET PARKING

The Project driveways and the traffic mitigation actions discussed in the preceding section could result in the removal or restriction to use of the on-street parking stalls at several locations near the Project site. These include the following:

- **Queen Emma Street between Beretania Street and the Project Driveway**
Extension of the sidewalk/pedestrian area adjacent to the Project, combined with the retention of the existing mauka-bound lane that ends at Emma Lane/Project driveway, could require the removal of the three existing parking stalls and the prohibition of any parking or stopping along this curb frontage.
- **Kukui Street between Queen Emma Street and Pali Highway**
Removal or restriction of parking during the afternoon peak traffic period may be needed along this street segment to improve traffic conditions for mauka-bound traffic flow along Kukui Street and Pali Highway, and to facilitate egress from the Project driveway onto Kukui Street. Four or more on-street stalls along the mauka curb between the Project driveway and Pali Highway could be removed or restricted from use during the afternoon peak period.
- **Fort Street between Kukui Street and Beretania Street**
The Project driveway connection to Fort Street would require the removal of four or five on-street parking stalls along the curb adjacent to Kamalii Park.

PUBLIC TRANSPORTATION

TheBus Service

The Project would increase the number of public transit trips made to or from the Downtown Honolulu area on TheBus fixed bus routes that serve the Project area. However, the Project size and uses should not require an increase in transit services in the area.

The Project would not require the permanent relocation of existing bus stops, although the bus stops adjacent to the Project site may be temporarily relocated during construction.

The Project should improve conditions at the existing Beretania Street bus stop located adjacent to the Project site. The Project would close the present driveway entrance from Beretania Street to the existing parking lots, which is located between the bus stop and the Pali Highway intersection crosswalks. The closure of this driveway would:

- Increase the curb length of the bus stop by about 25 feet, thus providing a longer curb length for stopped buses and reduce traffic blockage by buses of the Alakea Street intersection and crosswalks.
- Increase the sidewalk area available for passengers waiting for buses and waiting on the northeast corner of the intersection to cross either Beretania Street or Pali Highway.
- Remove the vehicle conflict with pedestrians using the mauka-side sidewalk of Beretania Street between the bus stop and the corner.

The length of the Beretania Street bus stop would also be increased by the expansion of the pedestrian-landscape area to use the present parking stalls and channelization area in Queen Emma Street at the intersection with Beretania Street. This curb extension into Queen Emma Street, combined with the driveway closure, would increase the bus stop to a length sufficient to accommodate either four or five buses, versus three buses at present.

TheHandi-Van Service

With a residential tower reserved for senior citizens, the Project would likely have some effect on TheHandi-Van operations. The senior citizen tower, with a planned 475 units, would provide a central residence location for a large population of existing and/or potential TheHandi-Van users who otherwise would likely reside at scattered locations across Oahu. This relocation to a central residential tower could affect TheHandi-Van in several ways:

- The Project may increase the number of person trips made on TheHandi-Van by some residents whose relocation to the Project separates them from family and/or friends that had been providing for a portion or all of their transportation needs.

- The Project's senior citizen tower may allow more efficient service by the TheHandi-Van operation since the concentration of a large number of potential service users in a single residential building should permit more frequent grouping of person trips for service by a single vehicle trip.
- The Project's location in the Downtown Honolulu area, centrally located to many of the health care facilities, social service providers, and shopping and recreational attractions, may result in shorter TheHandi-Van trips to serve those users who previously resided in less centrally located areas of Honolulu.

Chapter 5

SUMMARY OF FINDINGS

The Block J Redevelopment Project is planned to include: two apartment towers for rentals at affordable rates, one for senior citizens and one for singles and families; a retail complex on the ground and second levels; and an underground garage with up to 1,898 parking stalls. The specific uses in the retail complex had not been identified at the time of the traffic study, although entertainment uses are favored by the developer. For the traffic study, the trip rates for a shopping center were used for the retail uses, which would generate more trips during the peak traffic hours and thus provide a more conservative assessment of the potential traffic impacts. The parking facility would serve Project uses as well as provide public parking for persons working or visiting other Downtown activities near the site. As many as 1,081 stalls may be available for public parking.

The Project is planned for completion in the Fall of 2001. Full occupancy is assumed by the Spring of 2002, which is used for the future assessment of traffic conditions.

EXISTING CONDITIONS

The Project site is presently used for metered public parking (208 stalls) and parking for City official and employee vehicles (about 75 stalls). At present, 205 and 273 vehicles enter or exit the site during the morning and afternoon peak traffic hours, respectively.

Traffic conditions were analyzed for a dozen intersections near the Project site. Most of these intersections operate at acceptable conditions during the peak traffic hours. The intersections that experience problem conditions include:

- Queen Emma Street-Vineyard Boulevard during the afternoon peak hour
- Pali Highway-Vineyard Boulevard during the both peak hours
- Nuuanu Avenue-Vineyard Boulevard during the both peak hours
- Beretania Street-Alakea Street during the afternoon peak hour.

2002 CONDITIONS WITHOUT THE PROJECT

General growth in economic activity in the Downtown area and development outside the study area are expected to increase traffic at the study intersections by about 6.2% by the Spring of 2002. This traffic increase would worsen conditions at the existing problem intersections.

2002 CONDITIONS WITH THE PROJECT

The Project could generate as many as 933 and 1,187 vehicle trips to or from the site in the morning and afternoon peak hours, respectively. This would represent an increase of 728 and 914

vehicle trips above the number of trips to/from the existing parking lots on the site during the morning and afternoon peak hours, respectively.

Vehicles using the public parking stalls included within the site, but who are actually visiting or working at an off-site location, would be the major source of traffic entering and exiting the Project during the peak traffic hours. If this Project were not developed, many of these vehicles may travel to the Downtown area and use alternative parking sites, and thus would not represent a traffic increase on the area streets as a result of the Project. However, for this traffic assessment, the vehicles using the public parking stalls are considered as a net increase on the study area streets and a contributor to the Project impacts.

Traffic Impacts and Potential Mitigation

The Project traffic would worsen conditions at the existing problem intersections near the site:

- **Vineyard Boulevard-Queen Emma Street**
During the morning peak hour, the Project traffic would worsen delays for the left-turn movement from ewa-bound Vineyard Boulevard. Conditions could be improved for this movement by the allocation of more signal green time for this movement or the construction of a second (double) left-turn lane.

The Project traffic would increase delays for mauka-bound traffic on Queen Emma Street during the afternoon peak hour. Allocation of additional green time to this approach could reduce delay for the mauka-bound traffic while maintaining overall acceptable conditions at the intersection. Alternatively, more of the Koko Head-bound Project traffic could use Pali Highway to travel Diamond Head and turn onto Vineyard Boulevard without affecting conditions at the Pali Highway intersection.

- **Vineyard Boulevard-Pali Highway**
In the morning peak hour, the year 2002 traffic would approximate 110% of intersection capacity with the Project traffic versus 104% without the Project. In the afternoon peak hour, the Project traffic would increase the use of intersection capacity to 99.4% from 95% without the Project. The traffic conditions could be improved by provision of second (double) left-turn lanes on the mauka-bound Pali Highway and/or ewa-bound Vineyard Boulevard approaches. Provision of both additional turn lanes would improve future conditions to or better than existing conditions.
- **Vineyard Boulevard-Nuuanu Avenue**
The Project traffic would worsen conditions for the left-turn movements from the Nuuanu Avenue approaches, particularly during the morning peak hour. These left-turn movements do not have protected left-turn phases. Conditions for the left-turn movements could be improved by modifying the signal phasing to provide a protected

left-turn phase, particularly in the morning peak hour. The State DOT is currently planning to modify the traffic signal to provide this protected left-turn phase.

- **Beretania Street-Alakea Street**
The Project would worsen conditions at this intersection during the afternoon peak hour, with the forecast traffic approximating 99.5% of the intersection capacity with the Project, versus 94.8% without the Project. The short section of mauka-bound lane that extends from Beretania Street to Emma Lane (the future Project driveway) should be maintained to permit the mauka-bound Project traffic on Alakea Street to use the shared left-turn/through lane, which directs through traffic into this short lane segment mauka of the intersection. The shared lane is less heavily used than the through lanes during the afternoon peak period, and Project traffic use of this lane should have less impact on overall intersection conditions. The Project would also worsen conditions for the right turn movement from ewa-bound Beretania Street.
- **Kukui Street Connection to Mauka-bound Pali Highway**
The traffic islands at the Kukui Street intersection with Pali Highway should be reconstructed to provide two lanes for the right-turn movement from the ewa-bound one-way section of Kukui Street onto mauka-bound Pali Highway. The segment of Kukui Street between the Project driveway and Pali Highway would be restriped to provide two right-turn lanes and one left-turn lane. This would require some restriction or removal of the on-street parking on the mauka curb.

Potential Impact to On-Street Parking

The Project may require the removal or restriction of on-street parking at several locations adjacent to the Project site:

- **Queen Emma Street between Beretania Street and the Project Driveway**
The three existing stalls along the ewa side curb may be removed, and parking and stopping prohibited along this curb.
- **Kukui Street between Queen Emma Street and Pali Highway**
Four or more on-street stalls along the mauka curb between the Project driveway and Pali Highway could be either removed or restricted from use during the afternoon peak period to provide two right-turn lanes from Kukui Street onto Pali Highway.
- **Fort Street between Kukui Street and Beretania Street**
The Project driveway connection to Fort Street would require the removal of four or five on-street parking stalls along the curb adjacent to Kamalii Park.

Public Transportation

The Project would increase the number of public transit trips made to or from the Downtown Honolulu area on TheBus and TheHandi-Van. However, the Project size and uses should not require an increase in transit services for either system.

The Project should improve conditions at the existing Beretania Street bus stop located adjacent to the Project site. The Project would close the present driveway entrance from Beretania Street to the existing parking lots, which is located between the bus stop and the Pali Highway intersection crosswalks. The closure of this driveway would increase the length of the curb available for loading and unloading passengers, increase the area available for passengers waiting at the bus stop, and remove the vehicle crossing of the sidewalk between the bus stop and the Beretania Street-Pali Highway crosswalks.

APPENDIX D

ARCHAEOLOGICAL ASSESSMENT

Cultural Surveys Hawaii

**ARCHAEOLOGICAL ASSESSMENT
OF AN APPROXIMATELY 4.1-ACRE PROJECT SITE
IN DOWNTOWN HONOLULU,
ISLAND OF O'AHU
(TMK 2-1-09:18 & 27)**

by

**Hallett H. Hammatt, Ph.D.
and
Rodney Chiogioji, B.A.**

Prepared for

WILSON OKAMOTO AND ASSOCIATES, INC.

**Cultural Surveys Hawaii
June 1998**

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I. INTRODUCTION

A. Project Description

At the request of Wilson Okamoto and Associates, Inc., Cultural Surveys Hawaii has conducted an archaeological assessment of an approximately 4.1-acre (approximately 178,285-square foot) project site - TMK 2-1-09:18 & 27 - in downtown Honolulu, island of O'ahu (Figure 1). The project site - currently owned by the City and County of Honolulu - comprises two parcels bounded by Beretania, Queen Emma, Kukui and Fort Streets, and includes an approximate 44,870 square foot portion of the Pali Highway which bisects the two parcels. The parcel on the east side of the Pali Highway is presently a municipal parking lot; the parcel on the west side of the highway is Kamali'i Park. The project site is proposed for future development.

B. Scope of Work

The scope of work for this assessment included:

- 1) Historic background research for the project site, focused on previous land use and previously-recorded archaeological and historical sites. This research includes a review of historic maps, archival documents, land documents, and other historical resources. The emphasis is on identifying potential sensitive areas which could impact the design of future development.
2. Fieldwork consisted of an inspection and assessment of identified historic and archaeological sites and potential site areas. Present conditions of sites are documented with descriptions and photographs.
- 2) Preparation of a report to document the results of the archaeological and historical research, and fieldwork. The report assesses potential impacts of future development to possible subsurface archaeological resources and provides alternatives for mitigation, if appropriate.

C. Work Accomplished

Field inspection of the project site was accomplished on June 4, 1998.

Background research included: a review of previous archaeological studies on file at the State Historic Preservation Division of the Department of Land and Natural Resources; review of documents at Hamilton Library of the University of Hawai'i, the Hawai'i State Archives, the Mission Houses Museum Library, the Hawai'i Public Library, and the Archives of the Bishop Museum; study of historic photographs at the Hawai'i State Archives and the Archives of the Bishop Museum; and study of historic maps at the Survey Office of the Department of Land and Natural Resources.

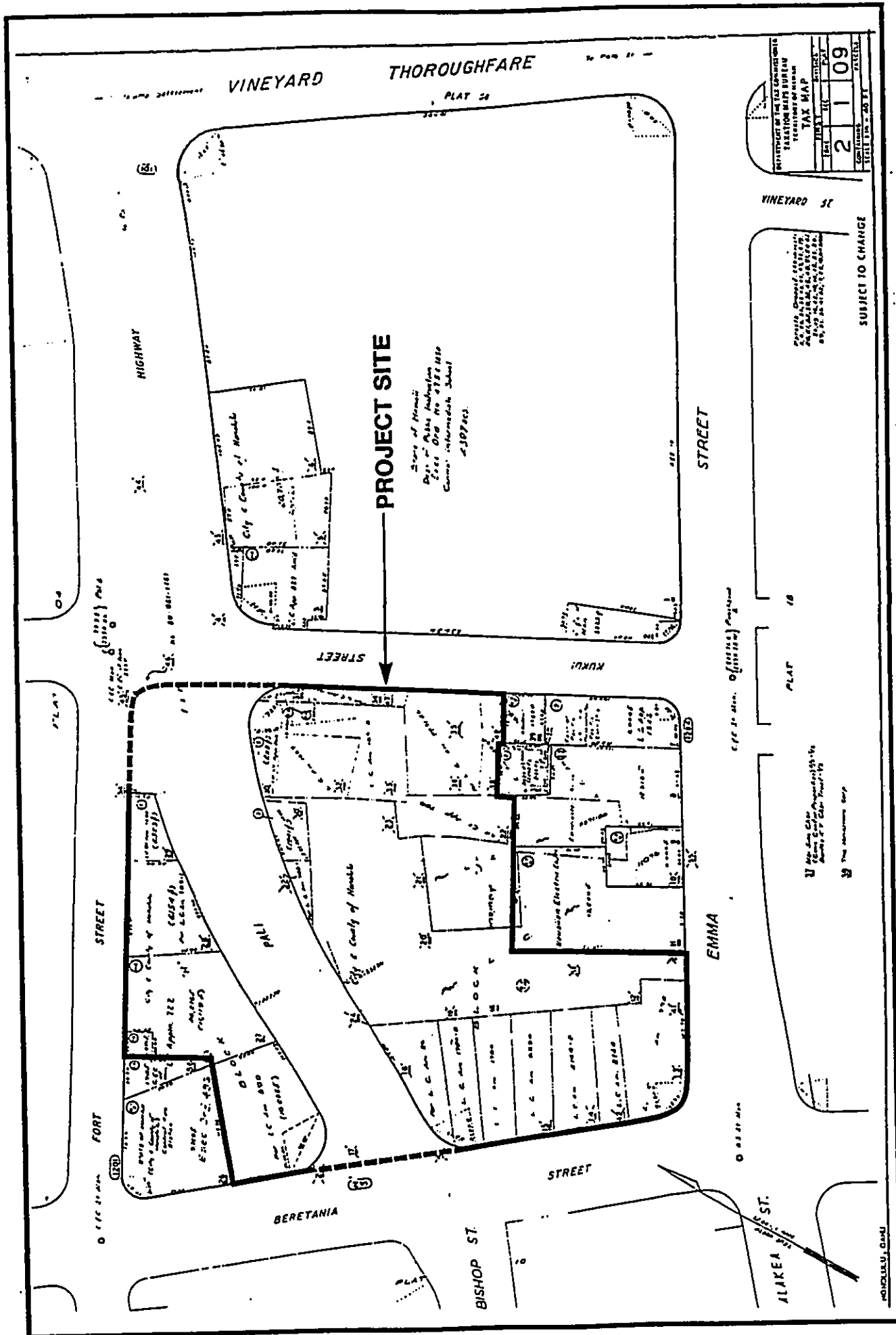


Figure 1 Tax map showing project site

II. CULTURAL AND HISTORICAL DOCUMENTATION

This section begins with a review of the available documentary evidence for the general character of the present project site as it had evolved in the years before western contact in the later 18th century. The development of the portion of Honolulu including the project site during the 19th century and into the early 20th century was recorded in increasingly abundant documentation - including government records, private accounts, newspapers, maps and photographs. Finally, during subsequent decades of the 20th century, abundant documentation allows a more precise focus on the project site and its environs.

A. Pre-Contact to 1800

The area that today includes downtown Honolulu was known to the Hawaiians as Kou, a center of population and activity, like Waikīkī, its neighbor to the southeast. In Waikīkī, a system of irrigated taro *lo'i* (the design of which was traditionally ascribed to the 15th-century chief Kalamakua), fed by streams descending from Makiki, Mānoa, and Pālolo valleys, blanketed the plain, and networks of fish ponds dotted the shoreline. Similarly, Kou possessed shoreward fishponds and irrigated fields fed by streams descending from Nu'uanu and Pauoa valleys.

Waikīkī had an additional distinction: it was the residence of the *ali'i* and a center of political power on O'ahu island. Kamehameha himself resided in Waikīkī at Pua'ali'ilī'i (an area encompassing the site of the Royal Hawaiian Hotel) after he had consolidated control of the islands (except Kaua'i).

B. 1800 to 1850

With the arrival of - and commencement of trade with - foreigners in the Hawaiian Islands during the reign of Kamehameha, a shift in traditional patterns occurred. Exemplifying this shift during the reign of Kamehameha was the change of his residence, in 1809, from Waikīkī to the coast at Kou (Honolulu) in response to the latter's focus - based on the safe anchorage provided by its deep water harbor - as the center of foreign trade on O'ahu.

The development of Honolulu during the 19th century is, inevitably, a rapid substitution of the traditional patterns that had once shaped the land by new responses to the pressures of a burgeoning western presence. A visitor to Honolulu in 1819 described:

The port of Onorourou, generally frequented today by all the European vessels that come to the Islands, is without doubt the most favorable location with respect to shelter, commerce, and resources necessary for the supply of ships...

The town of Onorourou is located on a large, flat plain. It is on the shores of a bay of the same name. The houses, similar to the most part to those of Owhyhi [Hawai'i] and of Mowi [Maui], are however interspersed with a certain number of houses built of stone that belong for the most part to Europeans or to Anglo-Americans. (de Freycinet 1978:40-42)

Reverend Hiram Bingham, arriving in Honolulu in 1820, described a still predominantly native Hawaiian environment - still a "village" - on the brink of western-induced transformations:

We can anchor in the roadstead abreast of Honolulu village, on the south side of the island, about 17 miles from the eastern extremity...Passing through the

irregular village of some thousands of inhabitants, whose grass thatched habitations were mostly small and mean, while some were more spacious, we walked about a mile northwardly to the opening of the valley of Pauoa, then turning southeasterly, ascending to the top of Punchbowl Hill, an extinguished crater, whose base bounds the northeast part of the village or town...Below us, on the south and west, spread the plain of Honolulu, having its fishponds and salt making pools along the seashore, the village and fort between us and the harbor, and the valley stretching a few miles north into the interior, which presented its scattered habitations and numerous beds of *kalo* (*arum esculentum*) in its various stages of growth, with its large green leaves, beautifully embossed on the silvery water, in which it flourishes. (Bingham 1981:92-93)

Into the 1820s, Honolulu remained more notable for its native culture than for any western-created urban structure imposed upon that culture.

Another visitor to Honolulu in the 1820s, Jacobus Boelen, hints at the possible pre-contact character of the Honolulu lands that include the present project site:

It would be difficult to say much about Honoruru. On its southern side is the harbor or the basin of that name (which as a result of variations in pronunciation [sic] is also written as Honolulu, and on some maps, Honoonoono). The landlocked side in the northwest consists mostly of *tarro* fields. More to the north there are some sugar plantations and a sugar mill, worked by a team of mules. From the north toward the east, where the beach forms the bight of Whytete [Waikiki], the soil around the village is less fertile, or at least not greatly cultivated. (Boelen 1988:62)

Boelen's description suggests that the present project site was located within that portion of Honolulu consisting "mostly of *tarro* fields".

Perhaps the 1830s marked a shift in the character of the Honolulu area as perceived by its inhabitants. By the third decade of the century, western commercial and missionary interests had supplanted the native Hawaiian impulses that had once shaped the environment. Ideals that were consciously western and urban impelled Honolulu's growth. Such ideals found expression in events like the formal naming of streets which commenced in September 1836. It was then that the *Sandwich Island Gazette* began soliciting suggestions for street names from its readers. Among those accepted were: King Street, Beretania Street, and Garden Lane.

By the 1840s, western commercial and missionary interests had taken hold and impelled the growth of Honolulu. Gorman D. Gilman, who arrived in Honolulu in 1841, described the limits of the town of Honolulu during the early 1840s:

The boundaries of the old town may be said to have been, on the makai side, the waters of the harbor; on the mauka side, Beretania street; on the Waikiki side [i.e., the area just beyond Punchbowl Street], the barren and dusty plain, and on the Ewa side, the Nuuanu Stream. (Gilman 1903:97)

A map of 1847 shows the grid of Honolulu streets at mid-19th century, with "Alanui Beritania" defining the *mauka* edge of the town, and trails or roads leading to Nu'uau and

Pauoa valleys, and Pūowaina (Punchbowl Crater)(Figure 2). Among the buildings located near Beretania Street by the mid-19th century was The Cathedral of Our Lady of Peace which had been constructed on Fort Street in 1843; the land was given to the Catholic Church by Kamehameha III. Situated along Beretania Street, within the present project site itself, the wood frame residence of Jules Dudoit, the French Consul to the Hawaiian Kingdom, had been constructed in 1845. As the *Mahele* records discussed below indicate, Dudoit's may not have been the only western-type house within the project site by the mid-19th century.

***Mahele* and Land Commission Award Documentation**

The Organic Acts of 1845 and 1846 initiated the process of the *Mahele* - the division of Hawaiian lands - which introduced private property into Hawaiian society. In 1848, the crown and the *ali'i* (royalty) received their land titles. *Kuleana* awards for individual parcels within the *ahupua'a* were subsequently granted in 1850. These awards were presented to tenants - native Hawaiians, naturalized foreigners, non-Hawaiians born in the islands, or long-term resident foreigners - who could prove occupancy on the parcels before 1845 (Apple 1978:45). Information from *Mahele* records for awards within the present project site was summarized by Myra Tomonari-Tuggle in an earlier study of the project site:

In the *mauka* portion of the project site were taro and potato patches, pasture land, and *mahina* or farm lots. There were at least 21 taro patches... Leleiiohoku, husband of the princess Ruth Ke'eliokalani, claimed a farm lot for his personal use near the middle of the present block (LCA 9971:26). In testimony for J. Dudoit's claim to LCA 26, it was noted that Gideon La'anui, a high ranking chief in the court of Kamehameha III, had an enclosed potato patch on the parcel. There were nine houses scattered throughout the *mauka* farm area.

It was only along Beretania Street, considered the inland limit of Honolulu town, that there was a semblance of growing urbanism. In six of the seven Land Commission Award parcels along Beretania Street [within the present project site], there were fourteen houses occupied by Hawaiians. Whether these houses were of wood frame or grass construction is unknown...(Tomonari-Tuggle 1983:5)

(Locations of Land Commission Award parcels are indicated on the current tax map; see Figure 1 above.)

Representative of the Land Commission Awards (LCAs) along Beretania Street within the present project site was LCA 590 to Kauliokamoa at the *mauka*-Diamond Head corner of Beretania and Fort streets. *Mahele* documents identify the parcel as a house site and note: "Kauliokamoa [has been] living there [since 1825]...It has been enclosed with a fence...Six houses are there...2 for Kauliokamoa himself...Claimant got it from his parents-in-law who took it up when it was lying desolate...It is just mauka of Pulua's place (Brewer) on the NW of J. Dudoit's place."

Apparently, at mid-century, within the *makai* portion of the project site, urban Honolulu had established a foothold, while the *mauka* portion continued to accommodate Hawaiian agricultural practices.

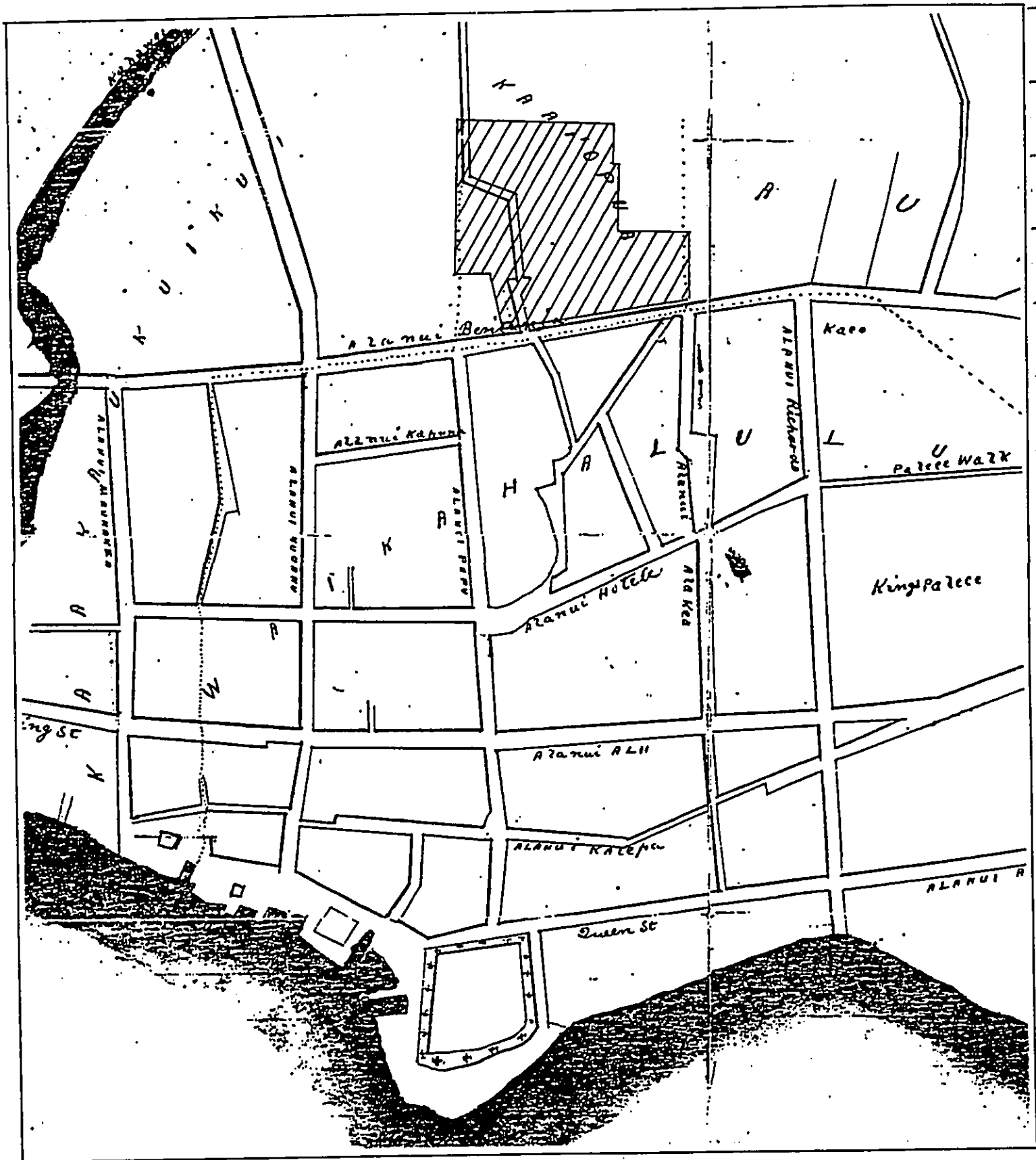


Figure 2 Portion of 1847 map of Honolulu by T. Metcalf showing approximate location of project site (hatched)(Hawai'i State Archives)

C. 1850s to 1900

During the second half of the 19th century, as Honolulu Town continued to expand, the *mauka* side of Beretania Street, in the vicinity of the present project site, became a focus of building activity. Else Waldron, in an account (published in 1967) of her family in 19th century Honolulu, noted:

In 1858 Kamehameha IV divided his garden (area now fronting on Alakea and Beretania Streets) into lots to be purchased by different individuals. He set aside a portion, Emma Place and Lane, which was a gift to the Anglican Church in Hawaii. The first lot to be bought was the Robertson lot in 1858, costing \$400.00. In February, 1859, the Robertson house was moved to Emma Square from the lower part of town...

Emma Place or Square was in very neglected condition in 1858 and remains so for some time after homes were built in its neighborhood. Mr. J. Montgomery, a lawyer who came to occupy one of the lots, was the first person to become interested in the square and to make it a park. (Waldron 1967:8)

Waldron also records the origins of the present Emma Street:

What is now Emma Street, was first a lane leading from an opening on Beretania Street, up through the King's Garden to the Royal School, built on Emma Street in its present position in 1851. Taro patches extended to the west of the King's Garden [i.e. in the direction of the present project site]. The lane was first widened and extended by Kamehameha IV and was not yet completed as Emma Street until about 1867. (*Ibid.*:8)

Also in 1867, the cornerstone for St. Andrew's Cathedral, at Beretania and Emma streets, was laid during ceremonies attended by King Kamehameha V and Queen Emma (though actual construction of the cathedral would not begin until the 1880s). On May 30, 1867, St. Andrew's Priory School for Girls - founded by Queen Emma and Mother Priscilla Lydia Sellon - was dedicated.

The newly-constructed residences and church-related buildings on the *mauka* side of Beretania Street rapidly displaced the taro *lo'i*, potato patches, pasture land and farm lots noted on the present project site by Waldron and the mid-century *Mahele* records. By the late 1860s, according to the first City Directory of Honolulu, there were at least three residences located within the present project site; these included the residence of J.G. Dickson on Beretania Street (the former house of J. Dudoit) and the residences of Mrs. M. Kalua and W. Humphreys, 2nd clerk of the Supreme Court, on Emma Street (Greer 1966:46,57). Adjacent to the present project site, at the corner of Fort and Beretania streets on the site of the present Central Fire Station, was the grocery store of T. Mossman. This store was only one of the commercial enterprises that were opening along Beretania Street in the second half of the 19th century: "...west of Nuuanu [Street]...[Beretania] was lined, especially on the south side, with small shops, eating huts, Hawaiian homes, and *hulahula* houses" (*Ibid.*:4).

An 1875 photograph of Honolulu Town shows the present project site located just outside the heaviest concentration of buildings *makai* of Beretania Street (Figure 3). However, the roofs of several western-style buildings are visible among the trees in and around the present project site, and other buildings can be seen covering the landscape into Nu'uuanu Valley.

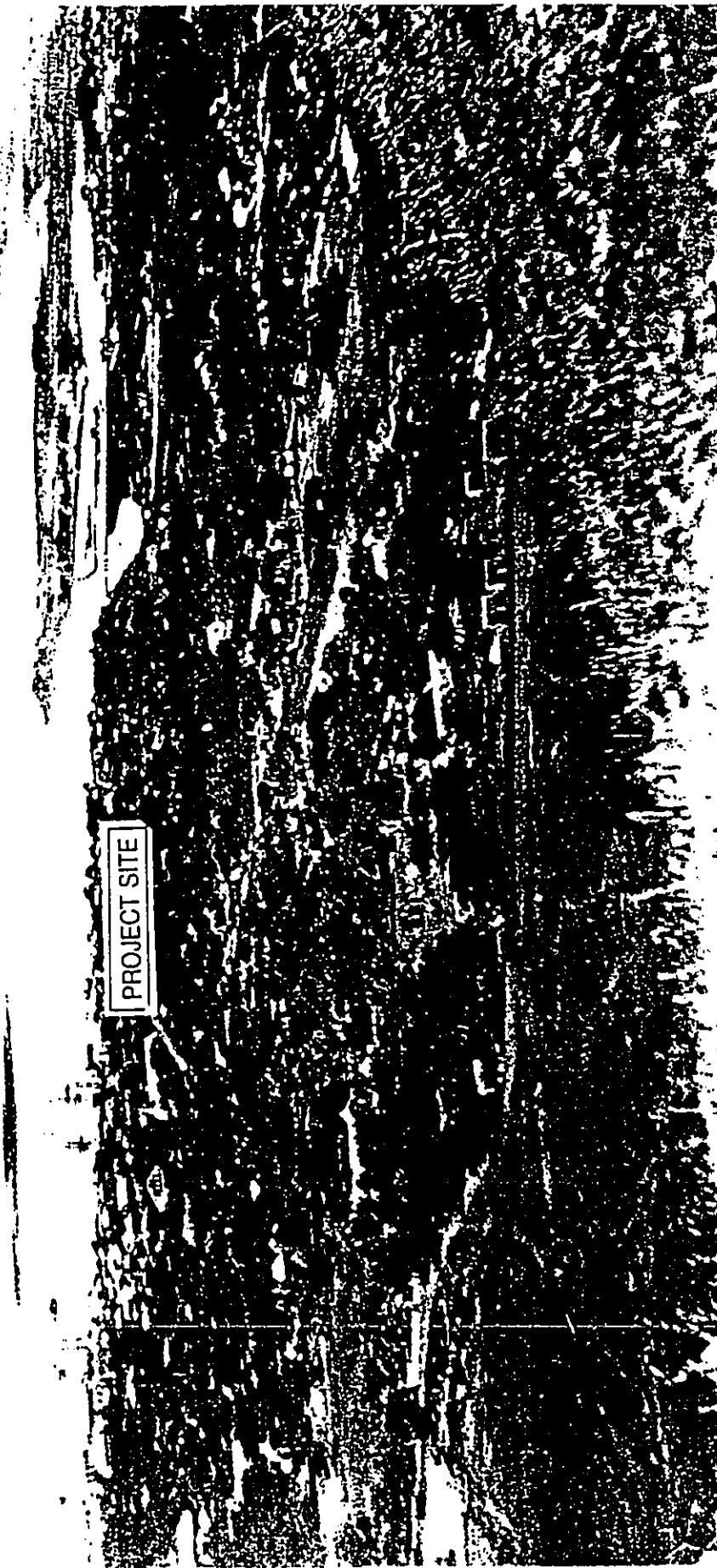


Figure 3 Honolulu Town in 1875 with approximate location of present project site indicated (Bishop Museum Archives)

By the 1870s, a sizeable population of Chinese immigrants had settled in Honolulu, especially concentrated in the blocks between Nuuanu and Maunakea streets. A 1878 census recorded 1,299 Chinese in Honolulu where the total population numbered 14,114.

In 1875 the YMCA in Honolulu engaged a Chinese colporteur, Sit Moon, to come from San Francisco to work among the Chinese in the Islands. In 1878 the Hawaiian Board of Missions...undertook work among the Chinese and the next year helped some Chinese Christians establish the Fort Street Chinese Church in Honolulu. (Glick 1980:98)

The Fort Street Chinese Church and an adjacent "Chinese YMCA" were opened in 1881 within the present project site (Figure 4). The land had been purchased from the Mossman family (owners of the store at the corner of Beretania and Fort streets) for \$4500. The Chinese YMCA "organized classes for instruction in English and Chinese" (*Ibid.*:174).

In the early 1880s, Princess Ruth Ke'elikōlani built a new home just *mauka* of the project site. After Princess Ruth's death in 1883, her home became the Central Grammar School (the present Central Intermediate School). An historic photograph, likely taken from a balcony or the roof of Princess Ruth's house, shows the present project site, appearing much the same as in the photograph of 1875, occupied by wood frame houses set among mango, monkeypod and other trees (Figure 5).

In 1897 a new Central Fire Station and headquarters building was constructed at the corner of Fort and Beretania streets (adjacent to the present project site). The building cost \$34,742.50 and was "built of 'native' or Punahou Stone taken from what was known as the 'Swanzy Quarry' in the vicinity of what is now Judd Hillside" (Smith 1978).

The opening of the Central Grammar School and the building of a new fire station, both adjacent to the present project site, and the earlier establishment of the Fort Street Chinese Church and YMCA within the project site, suggest that near the end of the 19th century the project site was fully subsumed within urban Honolulu Town. An 1897 map of Honolulu indicates that, indeed, the project site was then enclosed by the grid of streets - generally along the same alignments as today - which now extends well *mauka* into Nu'uauu and Pauoa valleys (Figure 6).

D. 1900s to Present

Maps and photographs indicate that by the first decades of the 20th century, the present project site was no longer the enclave of wood frame residences, set among shade and fruit trees on the fringe of "downtown" Honolulu, shown in the 1875 photograph (see Figure 3 above). A fire insurance map of 1914 exhibits the array of residential, commercial, and religious structures that covered the project site (Figure 7). Major buildings identified on the map include the Central Fire Station and, just *mauka*, a furniture repair shop and mattress factory, and the Fort St. Chinese Church and Kindergarten (within the site of the present Kamali'i Park). Facilities of the Chinese YMCA (apparently in the route of the present Pali Highway) included a library, rooms, and a school. Businesses within the present project site include: a restaurant and Chinese laundry on Fort Street, and, at the corner of Beretania and Emma streets, a carpenter's shop, a tent and awning factory, a Chinese laundry and a bicycle repair shop. In 1914, Kukui Street had not yet crossed to Emma Street. The warren of dwellings and tenements filling most of the present project site was accessed by alleys identified as Emma Place and Corkscrew Lane.

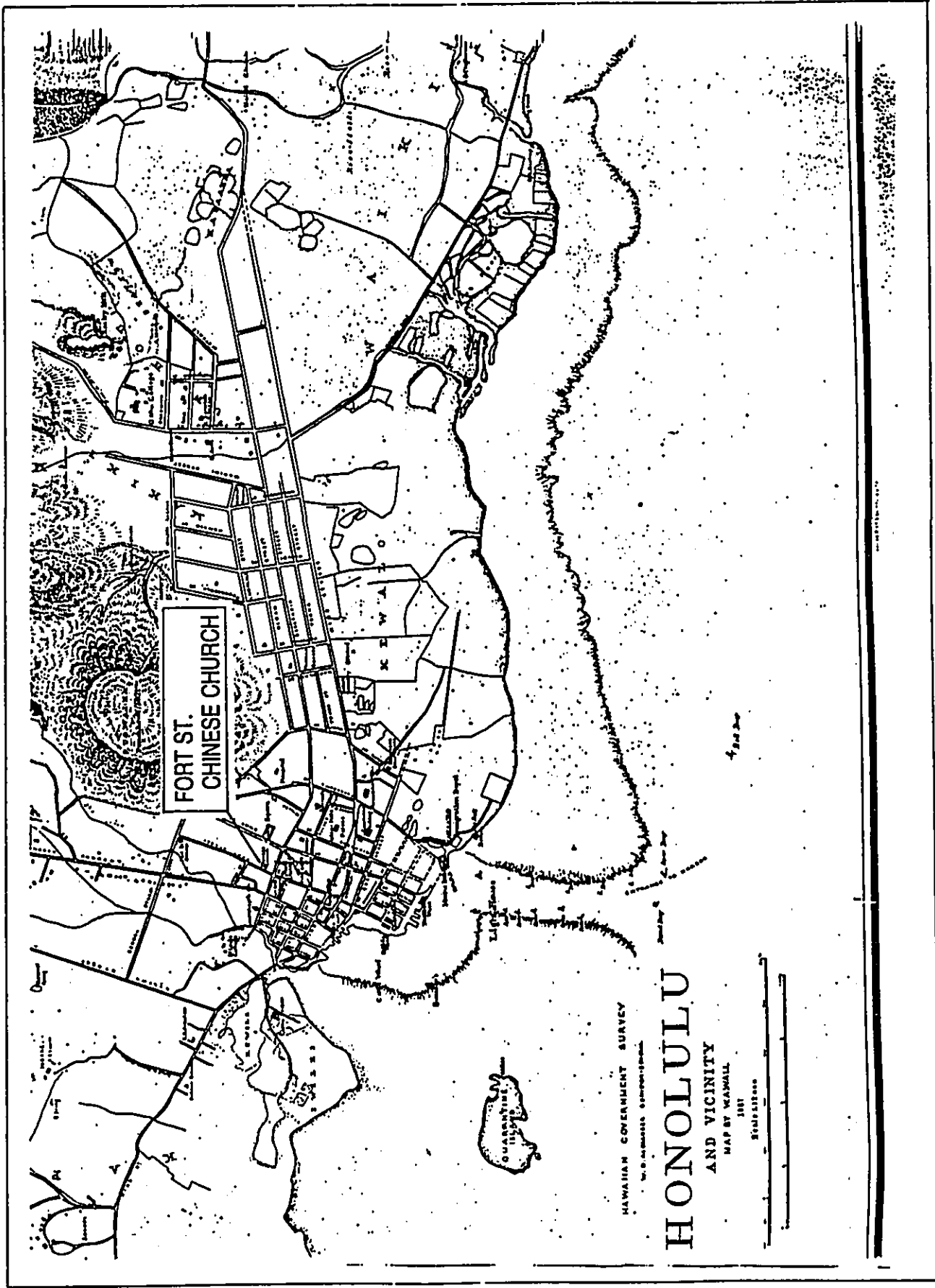


Figure 4 1887 map of Honolulu by W.A. Wall identifying "Chinese Church" on Fort Street within present project site (Bishop Museum Archives)

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Figure 5 Photograph, ca. 1880s, of present project site (in foreground below Our Lady of Peace Cathedral on right) likely taken from house of Princess Ruth Ke'elikōlani (Bishop Museum Archives)

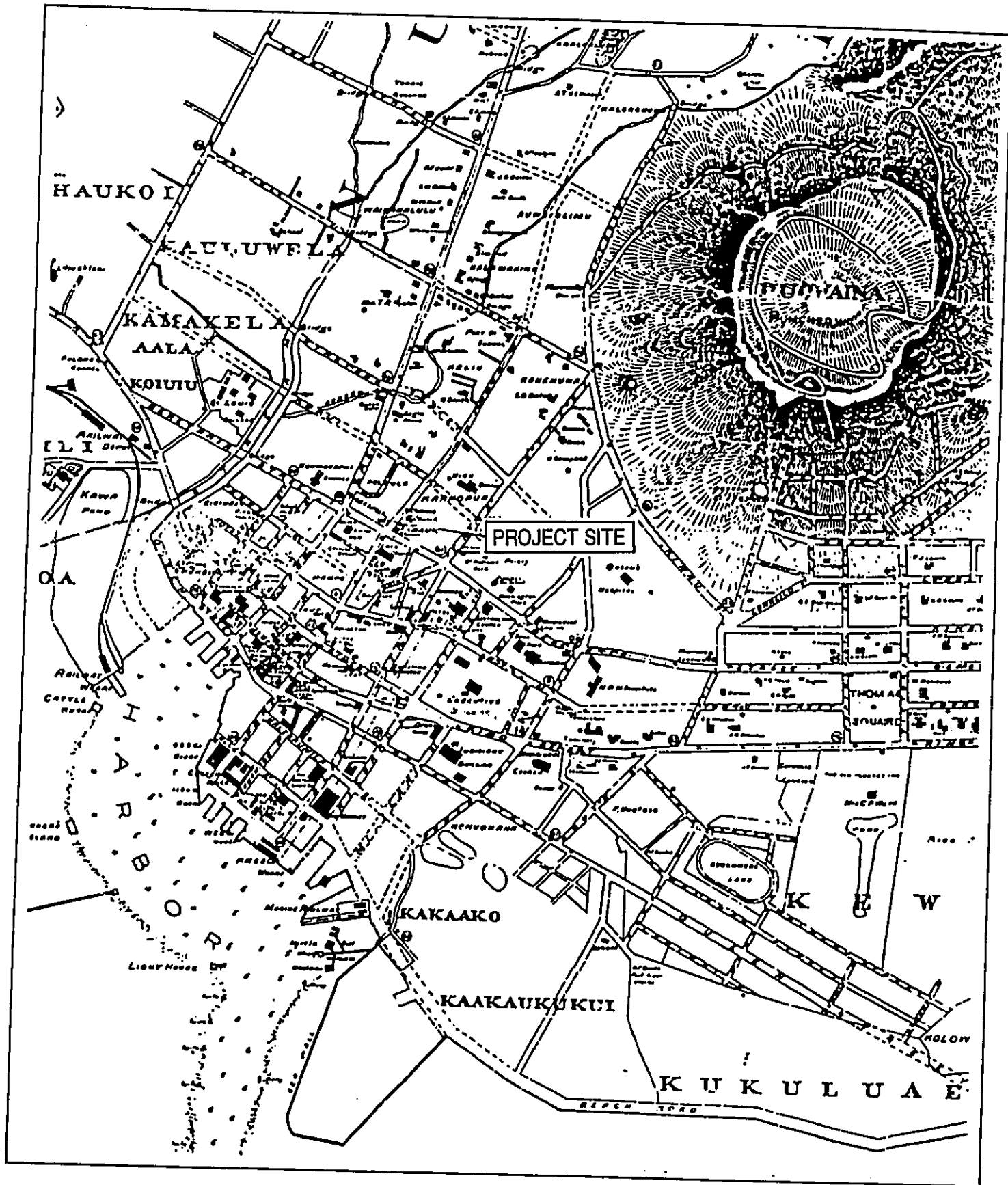


Figure 6 1897 map of Honolulu by M.D. Monsarrat showing location of present project site

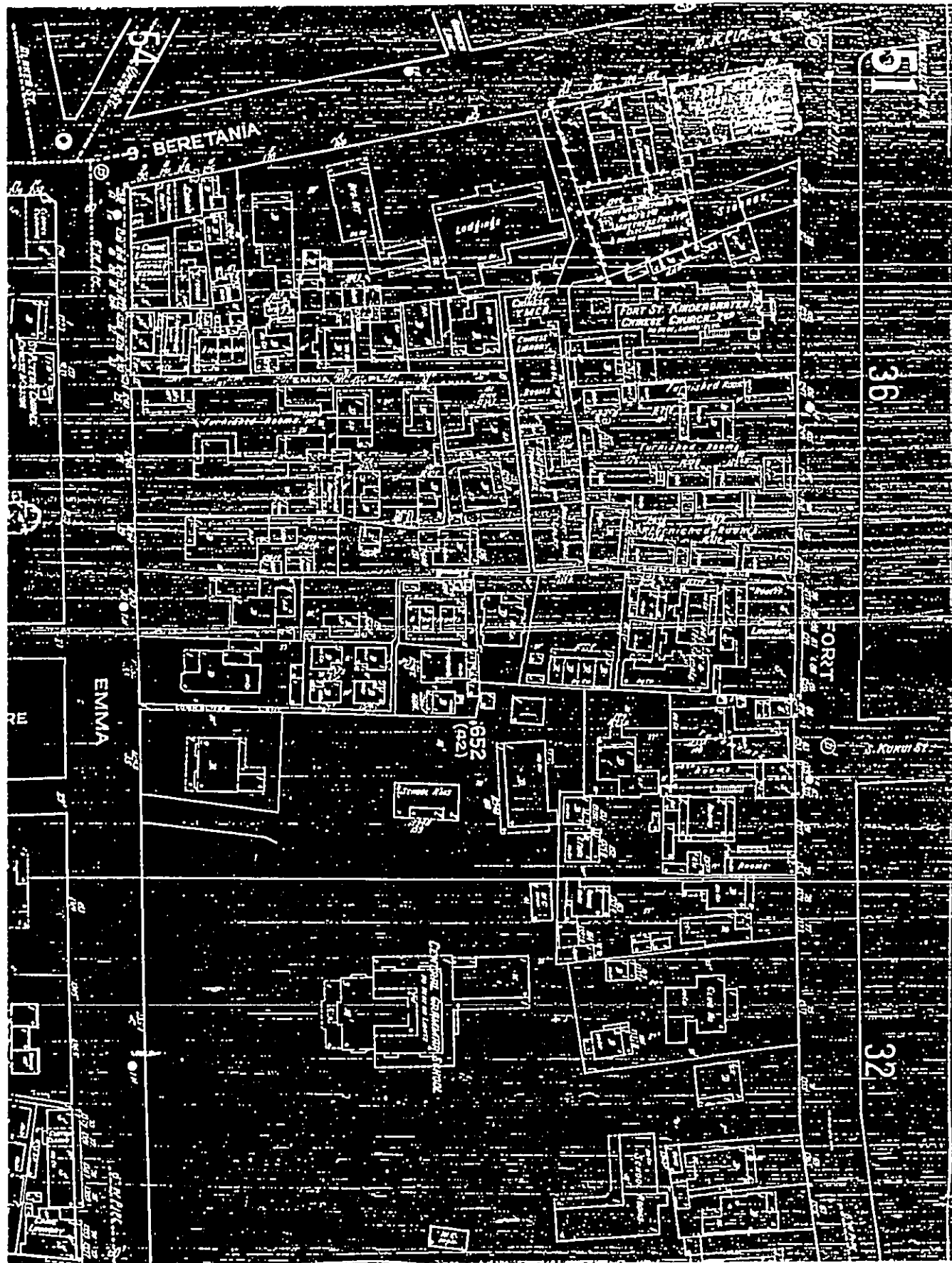


Figure 7 1914 Sanborn Fire Insurance map showing present project site (Hawaii State Archives)

During the 1920s, the buildings on the present project site continued to represent a mix of commercial, residential and religious functions. A fire insurance map of 1927 indicates a few notable additions to the project site (Figure 8). On Fort Street (within the present Kamali'i Park) the States Theatre stands where "furnished rooms" appeared on the 1914 map. An alleyway extending into the present project site from Beretania Street, which had been unnamed in the 1914 map, is identified as "Akia Lane". New doctor's offices appear on Fort and Emma streets. Perhaps most indicative of changing times is the appearance of automobile-related shops on Beretania Street. The jumbled character of the present project site was typical of many areas of Honolulu in the 1920s and 1930s:

Mainland visitors to Honolulu were still struck by the exotic appearance of even the city's most populated sections...[There] were still densely packed areas threaded by narrow, twisted lanes, especially in the Vineyard, Kukui, Kapalama, and Iwilei areas adjoining downtown. Elsewhere, particularly where the city planning commission had authorized local business development, the old type of two-story structure, with shops below and living quarters above, lined major streets. Equipped with permanent awnings of wood or corrugated sheeting, projecting over the sidewalks, these buildings, most often painted a shade of green, gave the city a sort of tropical look. Johnson 1991:326)

By the mid-1930s, the original Central Fire Station had become obsolete and the City and County of Honolulu authorized construction of a new station:

Construction...began on August 7 [1934] by E.E. Black, Ltd., and was formally occupied by No.1 and No.2 Engine Companies on May 2, 1935 at 11:12a.m. The total cost of construction amounted to \$79,830.12...It is a two-story reinforced concrete structure...The front doors and panel were built by the California Artistic Metal and Wire Company of San Francisco...The material used is an aluminum alloy known to the trade as 43S or 95% aluminum and 5% silicum.

Additional office space was provided by the erection of a one-story hollow-tile building in the rear of this station which became the clerk's office on June 13, 1949...(Smith 1978)

By 1940 Kukui Street had been lengthened to Emma Street. Two photographs from the 1940s show the present project site from the corner of Kukui and Fort streets (Figures 9 & 10). Evident along the Fort Street side of the project site are the "old type of two-story structure, with shops below and living quarters above" extending to the Central Fire Station, while one- and two-story wood frame tenements stood along Kukui Street.

A 1951 Sanborn Fire Insurance map indicates significant changes within the block defined by Beretania, Emma, Fort and Kukui Streets since the 1920s (Figure 11). The States Theater had been converted to a warehouse. The Fort Street Chinese Church property had been sold in the late 1920s and the church was replaced by an "auto shelter" and taxi stands. A Hawaiian Electric Company sub-station had been installed in 1931 (within the excluded portion of the present project site on the east side of the block). Two aerial photographs of Honolulu taken in the early 1950s show the project site in the context of the overall downtown Honolulu landscape at mid-century, and on the brink of a decade of major

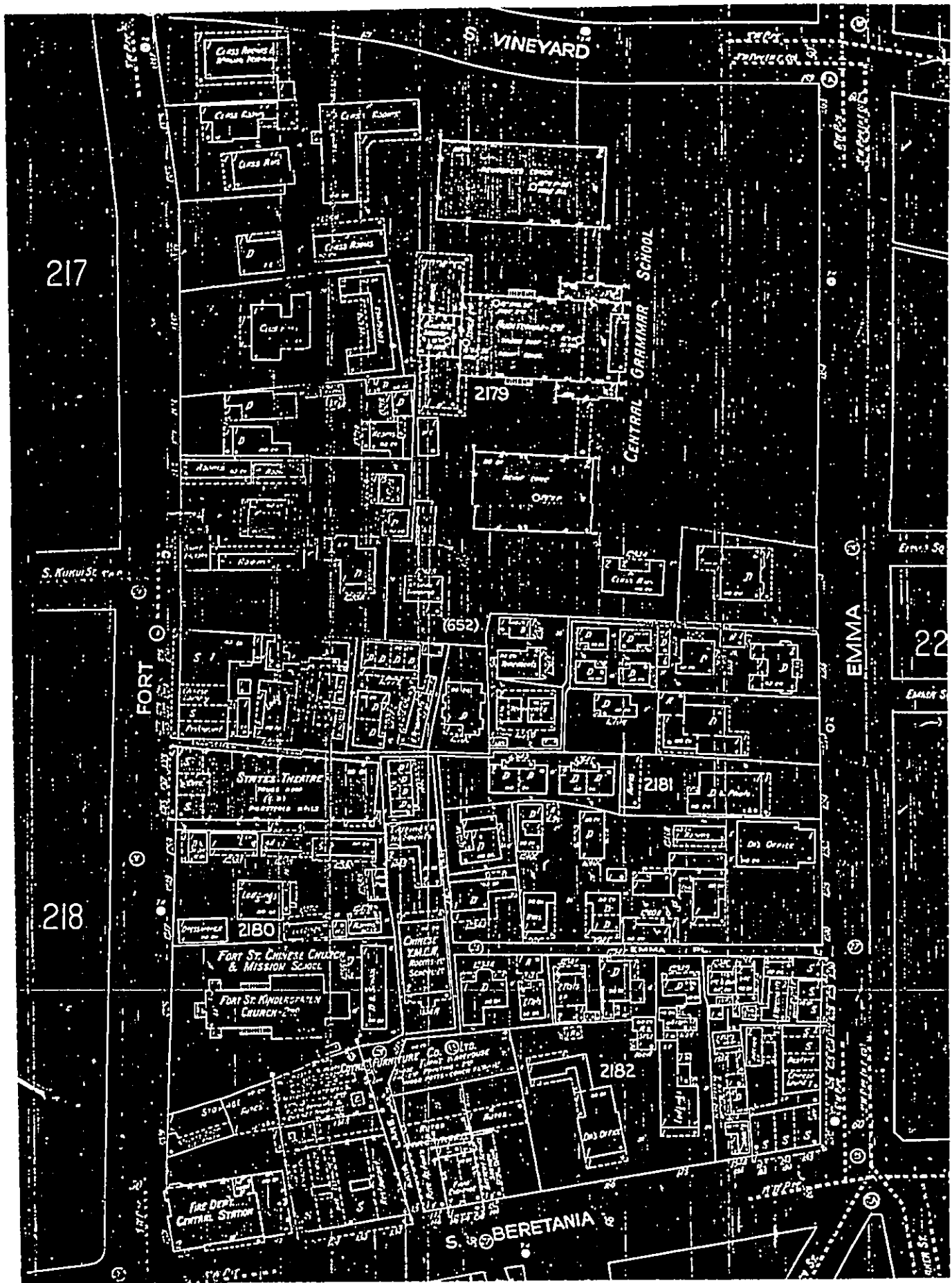


Figure 8 1927 Sanborn Fire Insurance map showing present project site (Hawaii State Archives)



Figure 9 1940 photograph taken from roof of old Nu'uanu YMCA showing Emma St. and Fort St. corner of present project site (courtesy Mr. Ted Chernin)



Figure 10 1940s photograph of Emma St. and Fort St. corner of present project site (Bishop Museum Archives)



Figure 11 1951 Sanborn Fire Insurance map showing present project site (Hawai'i State Archives)

transformations impelled by a planned urban renewal program directed by the Honolulu Redevelopment Agency, which had been created in 1949 (Figures 12&13).

In late 1955, the City and County razed the buildings in most of the [project site] and constructed a metered parking lot, at the time the largest in the country. In a newspaper article preceding the demolition, it was noted that 24 structures were to be removed, among them the Chinese YMCA and the Hee Fat house, the last remnants of Victorian age architecture in the block. (Tomonari-Tuggle 1983:12)

Following the mid-1950s demolition of buildings and construction of the metered parking lot within the present project site, the site was further altered in 1959 when the Pali Highway corridor was cut through to Bishop Street. Contemporary photographs show the extensive ground disturbance within the project site necessitated by construction of the corridor (Figures 14-16). The photographs indicate that a few buildings remained on the present project site up to the late 1950s. These buildings were subsequently demolished when, in 1962, a county employee parking lot was opened at the corner of Beretania and Emma streets, and, later, when Kamali'i Park was created between the Pali Highway corridor and Fort Street.

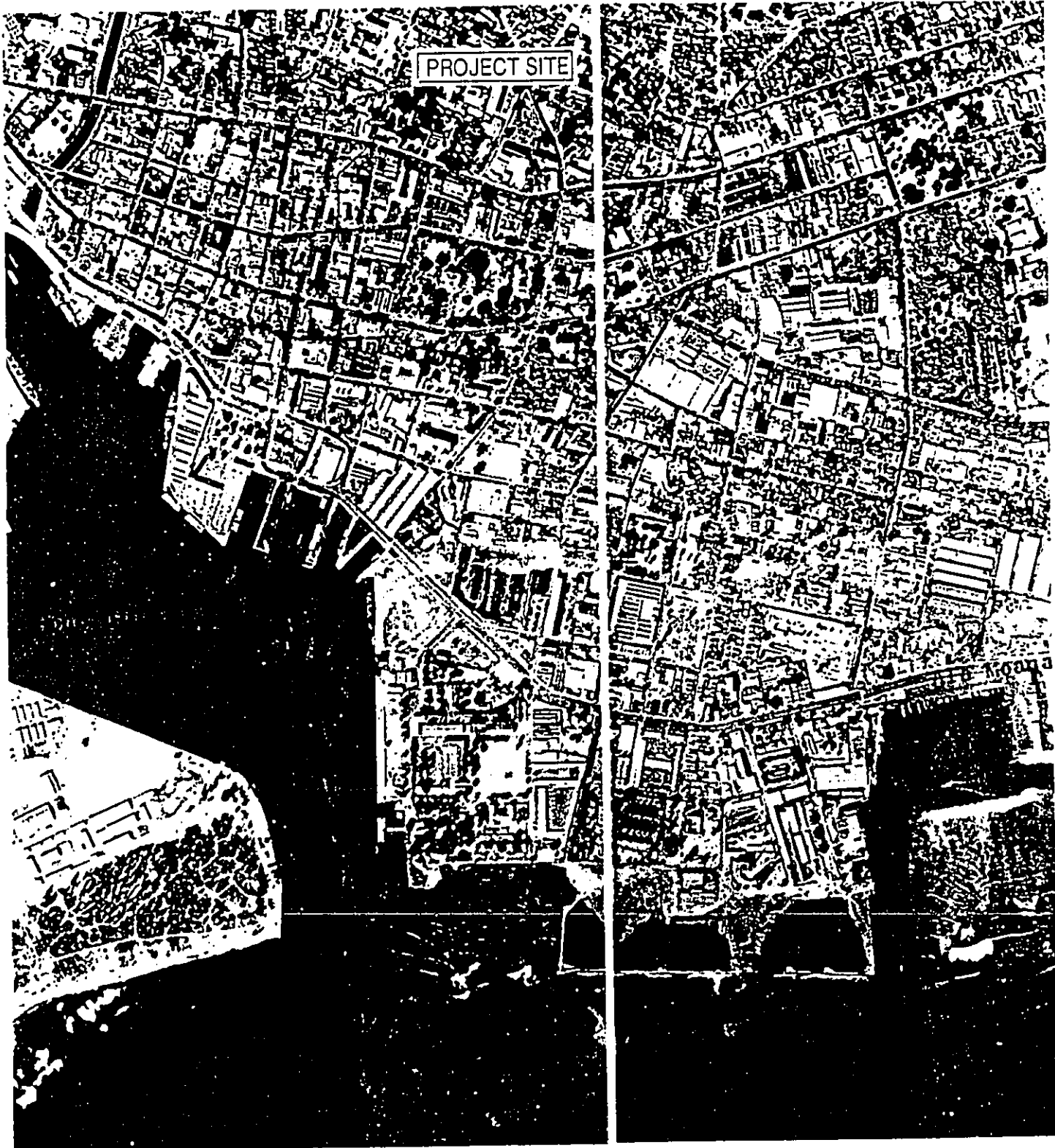


Figure 12 Portion of 1952 aerial photograph of Honolulu with present project site indicated (Bishop Museum Archives)

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Figure 13 Aerial photograph of Honolulu, *ca.* early 1950s, with block bordered by Emma, Beretania, Fort and Kukui streets indicated (Hawai'i State Archives)



Figure 14 Photograph (Aug. 30, 1959) taken from Kukui St., showing excavation for Pali Highway corridor through present project site (Bishop Museum Archives)



Figure 15 Photograph (August 30, 1959) showing excavation at corner of Kukui St. (on right) and Fort St. (in background) within present project site (Bishop Museum Archives)

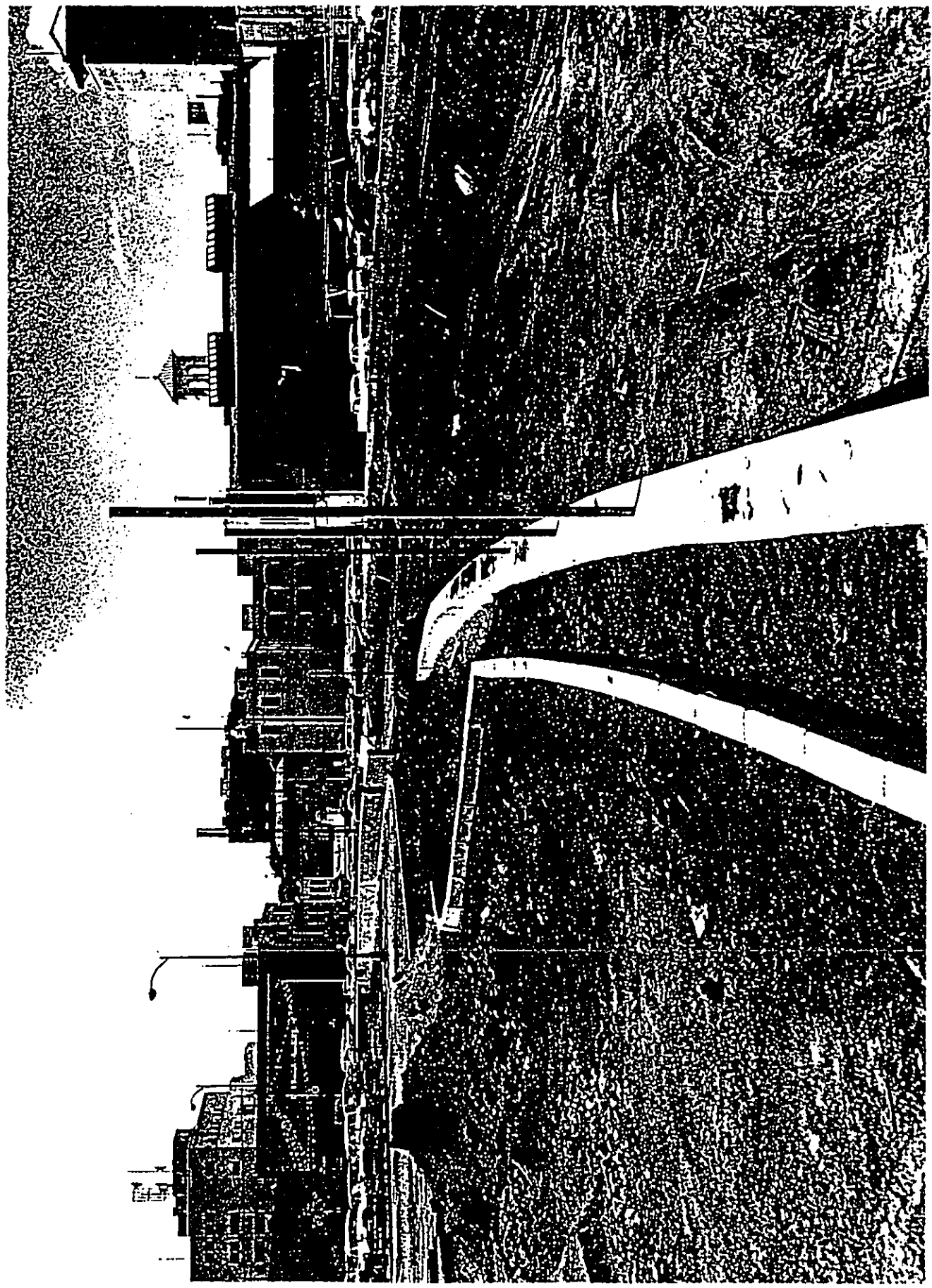


Figure 16 Photograph (October 1959) showing construction of Pali Highway through the municipal parking lot on present project site (Bishop Museum Archives)

III. PREVIOUS ARCHAEOLOGICAL AND HISTORICAL RESEARCH

No archaeological sites have been previously recorded within the project site. According to information provided by staff of the State Historic Preservation Division, no human burial finds have been recorded within or in the near vicinity of the project site until the present (personal communication, 6/9/98).

There have been no previous inventory-level archaeological studies within the present project site or in areas adjacent to the site. However, in 1983, an archaeological assessment was conducted of the municipal parking lot portion of the site (Tomonari-Tuggle 1983). As part of that investigation, ten soil borings were examined for cultural material and profile descriptions were made. A fairly uniform gravelly silty clay containing concrete, bottle glass, and metal fragments extended to a depth of two to three feet. This layer could constitute a demolition layer containing material from former structures on the site or it could have been a transported fill carried to the site from another location which happened to contain historic-era materials. Below this layer, at a depth of three to five feet, was a naturally-deposited volcanic cinder layer which is almost certainly the Late Pleistocene Black Tantalus and Sugar Loaf Ash deposit identified by Sterns in a core taken from the grounds of Iolani Palace (Sterns 1939). This deposit predates the arrival of the first Hawaiians and is of geologic interest only. (It should be noted that at Queen Street and King Street, adjacent to Punchbowl Street, historic burials were intrusive into this ash deposit, but no cultural material has ever been found to be contemporaneous with the ash.)

No historic-era sites have been previously recorded within the project site. However, immediately adjacent to the site, the Central Fire Station at the corner of Fort and Beretania Streets has been entered on the Hawai'i State Register of Historic Places (July 19, 1980) and the National Register of Historic Places (December 2, 1980). The station is entered under Site 50-80-14-1346, a thematic group comprising seven historic fire stations.

IV. FIELD INSPECTION RESULTS

The project site was inspected on June 4, 1998.

No evidence of surface archaeological sites remains. All buildings shown on the fire insurance maps of 1914, 1927 and 1951, and in historic photographs, have been demolished. The county employee parking lot, the municipal parking lot, the Pali Highway corridor, and Kamali'i Park - all constructed since the 1950s - are the only extant features within the project site (Figures 17-19).

The only remaining historic-era structure immediately adjacent to the project site is the Central Fire Station building - constructed in 1934-35 - which has been entered on the Hawai'i State and National Registers of Historic Places (Figure 20). The building continues to function as a fire station and the exterior appears little altered since the 1930s.



Figure 17 County employee parking lot at corner of Beretania and Emma streets with Hawaiian Electric Co. sub-station buildings in foreground; view to southwest



Figure 18 Municipal parking lot, Pali Highway corridor, and Kamali'i Park portion of project site; view west



Figure 19 Kamali'i Park and Pali Highway corridor; view to southeast

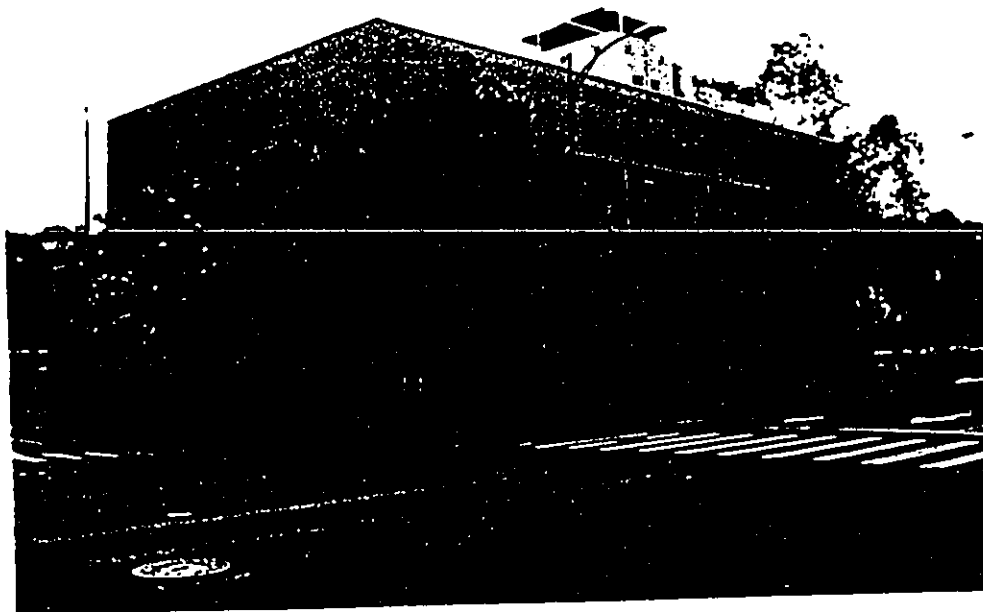


Figure 20 Central Fire Station building adjacent to project site at corner of Fort and Beretania streets; view to east

V. SUMMARY AND RECOMMENDATIONS

A. Summary

Background research suggests that, by the mid-19th century, the present project site accommodated both Hawaiian agricultural practices in the *mauka* portion and Hawaiian and western house sites along its perimeter at Beretania Street. Throughout the remainder of the 19th century and into the 20th century, the project site was increasingly used for western commercial, residential and religious purposes. By the 1920s, the project site formed an integral part of urban Honolulu, with tenements interspersed among commercial uses. Most of the area was levelled for construction of a municipal parking lot in the mid-1950s. Finally, construction of the Pali Highway corridor and Kamali'i Park caused the removal of all remaining historic surface structures.

No archaeological or historic sites are currently extant on the surface of the project site. However, adjacent to the project site is the Central Fire Station which has been placed on the Hawai'i State and National Registers of Historic Places.

B. Recommendations

The following recommendations are presented to address archaeological and historical concerns:

- 1) Subsurface investigations at other Honolulu City and County parking lots have indicated that very little ground disturbance had occurred during the construction of these parking lots. For this reason, there is potential for subsurface archaeological and historical remains within the parking lot portion - and likely the Kamali'i Park portion - of the present project site.
- 2) Subsurface testing of the parking lot and park areas is recommended. This testing should be done with backhoe and should be sufficient to adequately sample the project site, to determine the extent and nature of archaeological and historical deposits and features. Testing could be conducted after closing of the parking lot but before construction activities commence.

This testing program will be in coordination with the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources.

A report on the testing results would be prepared and submitted to the SHPD for review and approval.

- 3) If significant findings are encountered, it may be necessary to prepare a mitigation plan detailing measures to address the effects of construction on subsurface archaeological and historic remains. This plan could include data recovery and/or construction monitoring. The plan should be submitted to the SHPD for review and approval.

If no findings are encountered during testing, then further mitigation measures may not be necessary.

- 4) Design and construction activities should be done in cognizance of the historic status of the adjacent Central Fire Station.

VI. REFERENCES

- Apple, Russell A.
1978 *Pahukanilua: Homestead of John Young, Kawaihae, Kohala, Island of Hawai'i.* National Park Service, Hawaii State Office: Honolulu.
- Bingham, Hiram
1981 *A Residence of Twenty-One Years in the Sandwich Islands.* Charles E. Tuttle Company: Rutland, Vermont.
- Boelen, Jacobus
1988 *A Merchant's Perspective: Captain Jacobus Boelen's Narrative of his Visit to Hawai'i in 1828.* Hawaiian Historical Society: Honolulu.
- Bowser, George
1880 "An Itinerary of the Hawaiian Islands," in George Bowser (ed.), *The Hawaiian Kingdom Statistical and Commercial Directory and Tourists' Guide, 1880-1881,* Honolulu.
- de Freycinet, Louis C. de S.
1978 *Hawaii in 1819: A Narrative Account.* Pacific Anthropological Records, No. 26, B.P. Bishop Museum: Honolulu.
- Gilman, Gorman D.
1903 "Streets of Honolulu in the Early Forties," in Thomas G. Thrum (ed.), *Hawaiian Almanac and Annual for 1904,* Honolulu.
- Glick, Clarence E.
1980 *Sojourners and Settlers: Chinese Migrants in Hawaii.* Hawaii Chinese History Center: Honolulu.
- Johnson, Donald D.
1991 *The City and County of Honolulu: A Government Chronicle.* University of Hawai'i Press: Honolulu.
- Smith, H.A.
1978 *History of the Honolulu Fire Department.* Honolulu.
- Sterns, H.T.
1939 "Geologic Map and Guide to Oahu, Hawaii, Territory of Hawaii", Division of Hydrography, Bulletin 2. Honolulu.
- Tomonari-Tuggle, Myra
1983 "Block J, Downtown Honolulu: An Assessment or Archaeological Potential." Report prepared for Home Properties, Inc.
- Waldron, Else
1967 *Honolulu 100 Years Ago.* Honolulu.

APPENDIX E

SOCIO-ECONOMIC IMPACT ASSESSMENT

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Beyond Information. Intelligence.

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**SOCIO-ECONOMIC IMPACT ASSESSMENT OF
THE BLOCK J REDEVELOPMENT PROJECT,
HONOLULU, HAWAII**

June 1998

Revised September 1998

Prepared for:

Wilson Okamoto & Associates, Inc.

Block J Associates, LLC

City and County of Honolulu

SMS affiliations:

Allan Barker Associates

Customer Insight Company

International Survey
Research

Simmons Market
Research Bureau, Inc.

Strategic Mapping, Inc.

EXECUTIVE SUMMARY

The Block J Redevelopment Project will include some 913 residential units in two towers, 100,000 square feet of retail space, and underground parking. The number of parking stalls could total about 1,900 stalls. Above ground, the project will occupy land now used for parking lots. The excavated area will extend under Pali Highway and Kamali'i Park (bounded by Pali Highway, Beretania Street, and Fort Street). (In the project's Environmental Impact Statement [EIS] Preparation Notice, two alternative sizes for the parking structure were mentioned. Subsequently, the alternative described here was chosen.)

Context

The project is located in the center of Honolulu. The project site is now covered by parking lots. Other buildings on the same block house commercial offices, medical offices and vocational schools. The project site is surrounded by quite varied land uses: Honolulu's financial district, a set of historic structures in the Capitol District, and a redevelopment area with several multi-story residential buildings. Pali Highway and Beretania Street, next to the project site, are major arteries.

While several major commercial buildings were built in Downtown Honolulu in the 1990s, little new residential development has occurred recently in the urban center. In the past decade, the great majority of new housing has been built in the Central O'ahu and 'Ewa Development Plan areas. Most of that suburban housing has been priced to sell to families earning the median income or higher. As a result, little new housing has been available for families earning 60% of the median income or less.

In the Primary Study Area (Census Tracts 40, 41, and 42), population growth stalled during the 1980s, and has changed little since 1990. The median age in all three Census Tracts is much higher than the island median. Family incomes vary, with Downtown residents (in CT 40) earning slightly more, on average, than the island median, but residents of the other tracts earning less. Similarly, no families living in the Downtown tract were below the poverty line in 1990, but 6.7% of the families in the other two tracts were, as compared to 5.4% of island families. Nearly three-quarters of the study area residential units were rented as of 1990.

Community Concerns

Residents and other stakeholders in the primary study area expressed concern about impacts on traffic (during construction and afterwards) and the compatibility of the project, as an income-limited residential development, with neighboring land

uses. Construction noise and the loss of parking during construction were of especial concern to same-block landowners.

Many welcomed the new retail area and additional parking, but concern was also expressed that retail vacancy rates could be high if project commercial tenants do not attract a mix of local residents and commuters.

Economic and Demographic Impacts

Based on the estimated construction cost (\$110 million), the project will likely involve nearly 800 person-years of construction work over three years, and an additional 1,200 person-years of indirect and induced construction-related jobs. Once the project is built, about 275 full-time jobs could be located in the project. (The number of jobs could vary, depending on the commercial uses in the project.) Only a few of those jobs would, strictly speaking, be made possible by the project, and would count as project impacts.

The project will house approximately 1,250 residents. This population amounts an increase of about 15% in the primary study area population. Residents will likely be O'ahu residents. The project will not attract new residents or visitors to the island.

The 438 new multi-family units in the project amount to about one year's new demand for the 50% to 80% of median income segment, and one-sixth of a minimum estimate of pent-up demand for housing for this group. As such, it responds to recognized demand, but does not greatly change the imbalance of demand over supply for housing in this income group. The 475 senior units constitute a 40% increase in the elderly housing supply expected to be built in the next few years.

The project would provide the City and County of Honolulu with an initial payment, lease rents, and property taxes on the retail area, according to a draft development agreement under consideration by the City and the developer. The City and County would also acquire the parking structure after 30 years and the rest of the project after 65 years. The initial payment is proposed to be \$8 million. Inasmuch as the agreement is currently being negotiated, and the total revenue stream for the City and County would depend on cash flows over many years, SMS did not estimate the overall cost/revenue balance for the City and County.

The net impact of project construction on the State of Hawai'i is estimated as \$6.3 million.

Social Impacts

The project's major social impacts include construction-period impacts, affecting commuters, businesses in the same block, and nearby residents, provision of new housing, improving the quality of life for residents, and conflicts among residents. Once construction is finished, social impacts on facilities, businesses, and residents in the study area appear to be small.

Mitigations

Potentially adverse social impacts include:

- **Construction Impacts on Traffic and on Businesses in Existing Block J Buildings:** To lessen impacts, construction is being planned so as to keep Pali Highway open for commuters. The development process is being pushed forward as quickly as possible, shortening the time in which units in the same block will be hard to rent due to nearby construction.
- **Increased Use of Open Space between Queen Emma Street and St. Andrew's Priory:** Project residents are likely to use the small public park land across Queen Emma Street from the project. One result is that St. Andrew's Priory may seem more a part of its urban surroundings. Although the school and its students could be perceived as potentially affected by the presence of more people, the project is far more likely to provide observers in the park area, who may dissuade intruders from the school property, than actual intruders. No actual increase in danger to the school can be ascribed to the project.
- **Conflicts among Residents:** Senior citizens are apt to seek peace, quiet and security in their home; residents of the multi-family tower may be far more active and noisy than the elderly residents. To minimize potential conflicts between elders and young families, care will be needed in design and landscaping. It will be helpful to design the open space above the retail area so that separate areas can be enjoyed for active, noisy play and for quieter pursuits.

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1.0 INTRODUCTION

1.1 THE PROJECT

Block J Associates proposes to build a twin-tower development on City and County of Honolulu land at the Block J site. The above-ground area to be developed is now covered with parking. It is bounded by Pali Highway, Beretania Street, Queen Emma Street, a Hawaiian Electric substation, existing buildings on the block, and Kukui Street. During construction, work will go on under Pali Highway, since underground parking is planned to extend under that roadway. The parking area would extend under Kamalii Park (bounded by Pali Highway, Fort Street, and the Central Fire Station). (An alternative size for the parking structure was mentioned in the EIS Preparation Notice. It is no longer being considered.) The park and highway would return to their current configuration after construction.

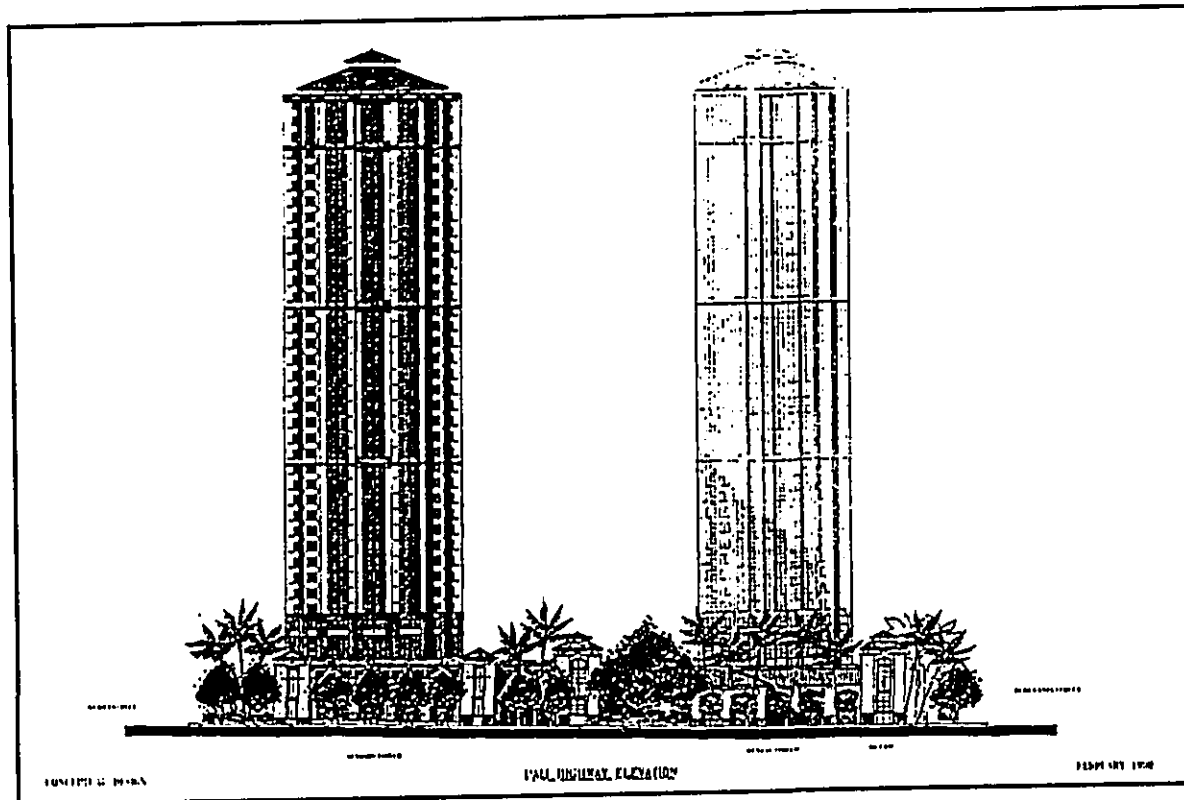
Exhibit 1-A shows the project's outline as seen from the west (across Pali Highway).

One tower would contain about 475 one- and two-bedroom rentals for senior citizen households. The other tower would contain apartments of similar size, for families of all ages. In both, rentals would be at levels affordable for families making 60% of the county median household income. The towers would be some 350 feet high, within the central Honolulu height limits. (Part of the property, along Queen Emma Street is in the Capitol District, with lower height limits. The towers are set back from that district.)

At ground level, about 25,000 square feet would be open space. Some 100,000 square feet of retail space would be located in two stories under the towers. An additional 32,000 square feet of open space would be available for tenants on the roof of the retail area. Below ground, three stories of parking would include about 1,900 stalls .

The City and County of Honolulu has selected the project as advancing its redevelopment objectives, including economic stimulation, providing affordable rentals for families and senior citizens, and reducing dependence on automobiles (by locating housing near Downtown jobs), and providing more public parking than is now available on-site.

Exhibit 1-A: PROJECT ELEVATION PLAN



SOURCE: Wilson Okamoto & Associates, Inc., 1998.

1.2 PURPOSE AND SCOPE OF THIS REPORT

This report is intended as an appendix to the Environmental Impact Statement being prepared by Wilson Okamoto and Associates, Inc. The aims of a socio-economic impact assessment are to provide information to decision-makers so that they can assess the proposed development in relation to the social and economic context, and to provide answers to specific questions identified in the Hawai'i Environmental Impact Statement law (HRS Section 343).

This report includes five sections:

1. This introduction;
2. The second section discusses current conditions and emerging trends that provide the context for development of the project area and for assessing the project's impacts;
3. The third section identifies economic and demographic impacts;

4. The next section draws on interviews and minutes of community groups to identify citizen concerns related to the project; and
5. The fifth section provides an independent consultant's assessment of likely social impacts, and points out mitigation measures for adverse impacts.

2: SOCIAL AND ECONOMIC CONTEXT

The project is intended to respond to housing needs of Honolulu's low-moderate income households, now and in the coming decades. It is located near the center of Honolulu, near other multifamily buildings, the financial center, and some of the city's most historic buildings.

This chapter describes the island and local contexts in which the project may have impacts. Changes over recent decades are noted in order to place the new project in relation to a history of development. Projections of future growth are also discussed, to assess whether the project's role in the city and the immediate area is likely to continue or change.

2.1 STUDY AREAS

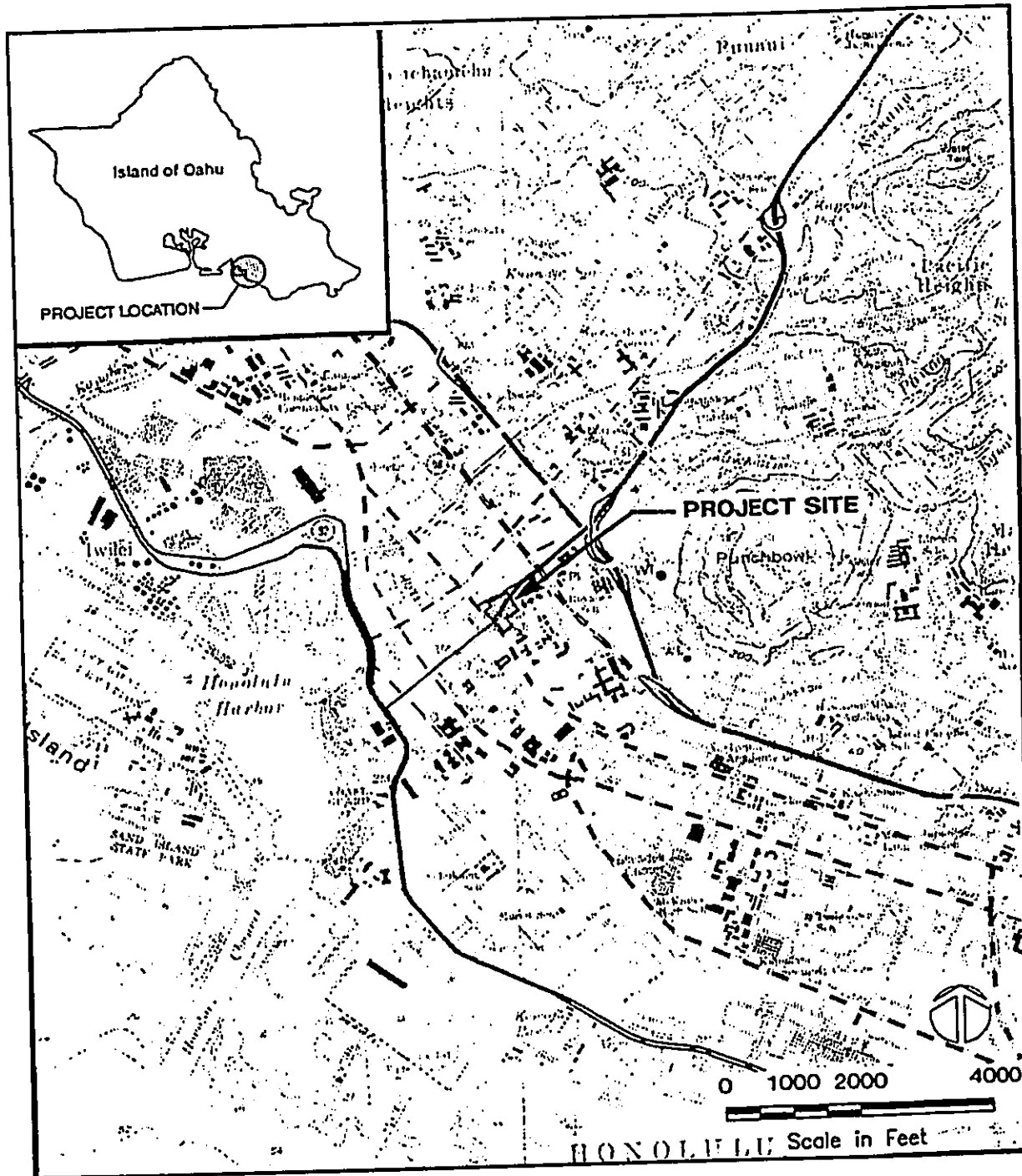
The project is located near major roadways, near the center of Honolulu's urban zone (as shown in Exhibit 2-A).

The immediate area of the project site and its surroundings can be usefully defined in terms of US Census Tracts (CTs):

- CT 42: This tract, bounded by Nu'uaniu Avenue, 'Iolani Avenue, Queen Emma Street and South Beretania Street, includes the project site and nearby apartment buildings.
- CT 40: This tract is the Central Business District of Honolulu. It is bounded by Nu'uaniu Avenue, South Beretania Street, Richards Street, and the harbor front.
- CT 41: This tract is bounded by Queen Emma Street, 'Iolani Avenue, Ward Avenue, South King Street, Alapai Street, then South Beretania. It includes various uses to the east of the project – notably, the St. Andrew's Cathedral complex and outlying State office buildings (although the bulk of the State offices are in the Capitol District, south of Beretania Street).

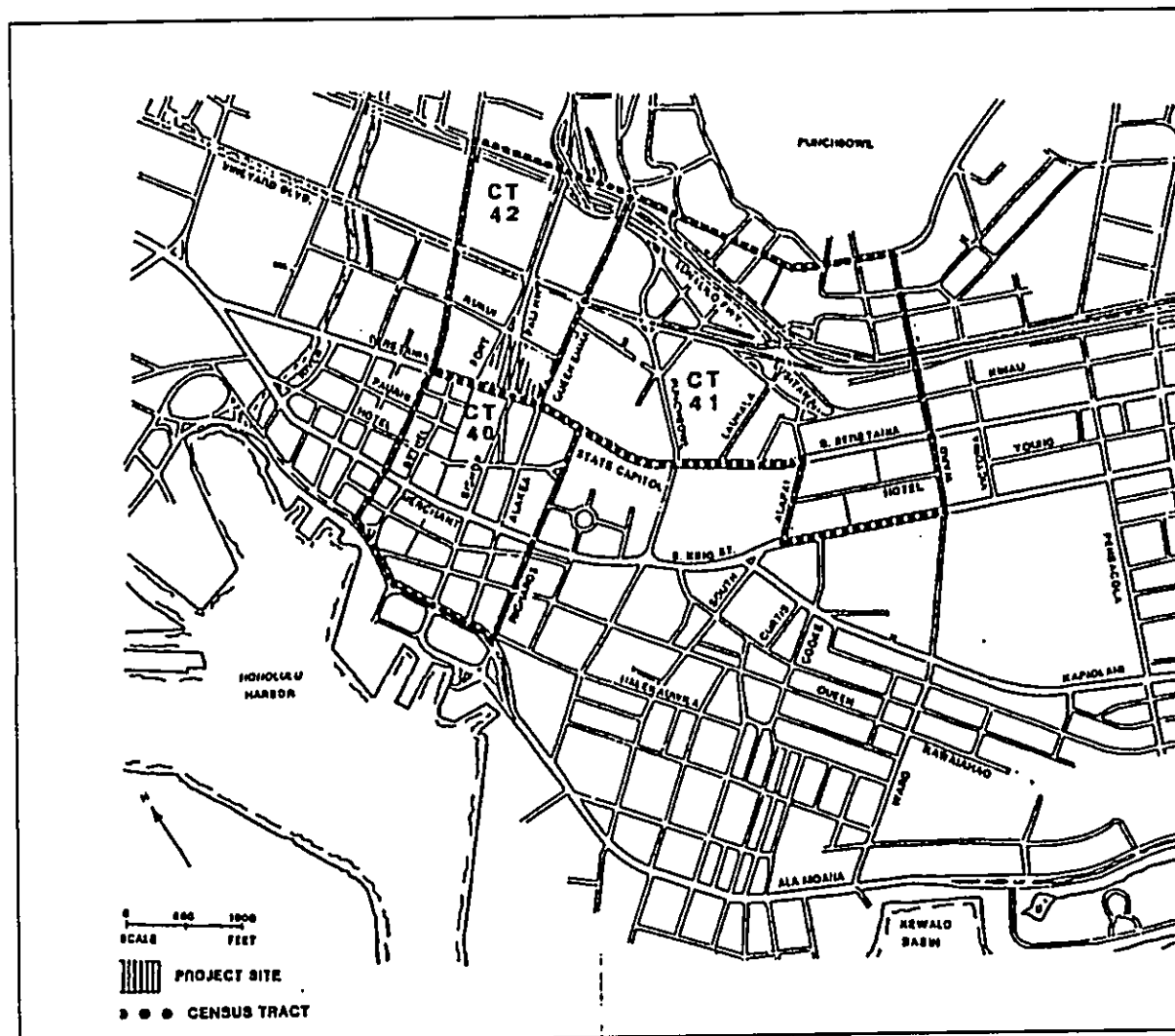
These three tracts encompass a Primary Study Area that can be described over time using US Census data. (See Exhibit 2-B and Appendix A.) The Secondary Study Area is the area over which project impacts may plausibly be experienced. The island of O'ahu is taken here as the Secondary Study Area, the broader context for the project. When specific impacts are identified that will likely be felt beyond the Primary Study Area, but may not affect the whole island equally, the extent of likely impact will be noted carefully.

Exhibit 2-A: LOCATION MAP



SOURCE: Wilson Okamoto & Associates, Inc. 1998

Exhibit 2-B: PRIMARY STUDY AREA



SOURCE: Adapted from Community Resources, Inc. 1989.

2.2 HISTORY AND CURRENT CONDITIONS

2.2.1 Block J

The project site is near the heart of urban Honolulu. The area mauka (inland) from the commercial center was densely settled during the first half of the century. Urban renewal led to redevelopment, notably the building of Kukui Plaza, next to the project site. The block bounded by Pali Highway, Beretania Street, Queen

Emma Street, and Kukui Street was designated for commercial uses, and it now has a mix of offices and parking on-site.

The project site itself is now occupied by parking lots. One is for City and County workers. The larger lot, with some 208 stalls, is metered. The stalls are reportedly much used by people visiting the Honolulu District Courts and visitors to the buildings on the block.

Buildings on Block J were erected during the period of urban redevelopment of the area in the early 1960s. Three are low, while the Queen Emma building has ten stories plus a basement with space rented out. Of the low buildings, both the Civic Center building and the Mirikitani Building have Kukui Street addresses but face the parking lots.

Tenants in the Block J buildings include State offices, many of which will be moving to Kapolei within a year, various commercial and medical offices, and technical schools. An alarm company with many Downtown clients is located in the Queen Emma building.

2.2.2 Primary Study Area – Overview

The project site is at the intersection of areas where different land uses have extended along major roadways:

- The Honolulu financial district is centered south of King Street, but has extended along Bishop Street to Beretania Street, south of the project site.
- Along Beretania Street are located a series of historic buildings, including the State Capitol, Washington Place (once home of Queen Lili'uokalani and now the Governor's Mansion), St. Andrew's Cathedral (Episcopal) and the Cathedral of Our Lady of Peace (Roman Catholic).
- Older areas north and west of central Honolulu were densely settled during the first half of the century, and then became targeted for urban redevelopment. The Kukui and Queen Emma redevelopment areas now include multi-story apartment complexes.

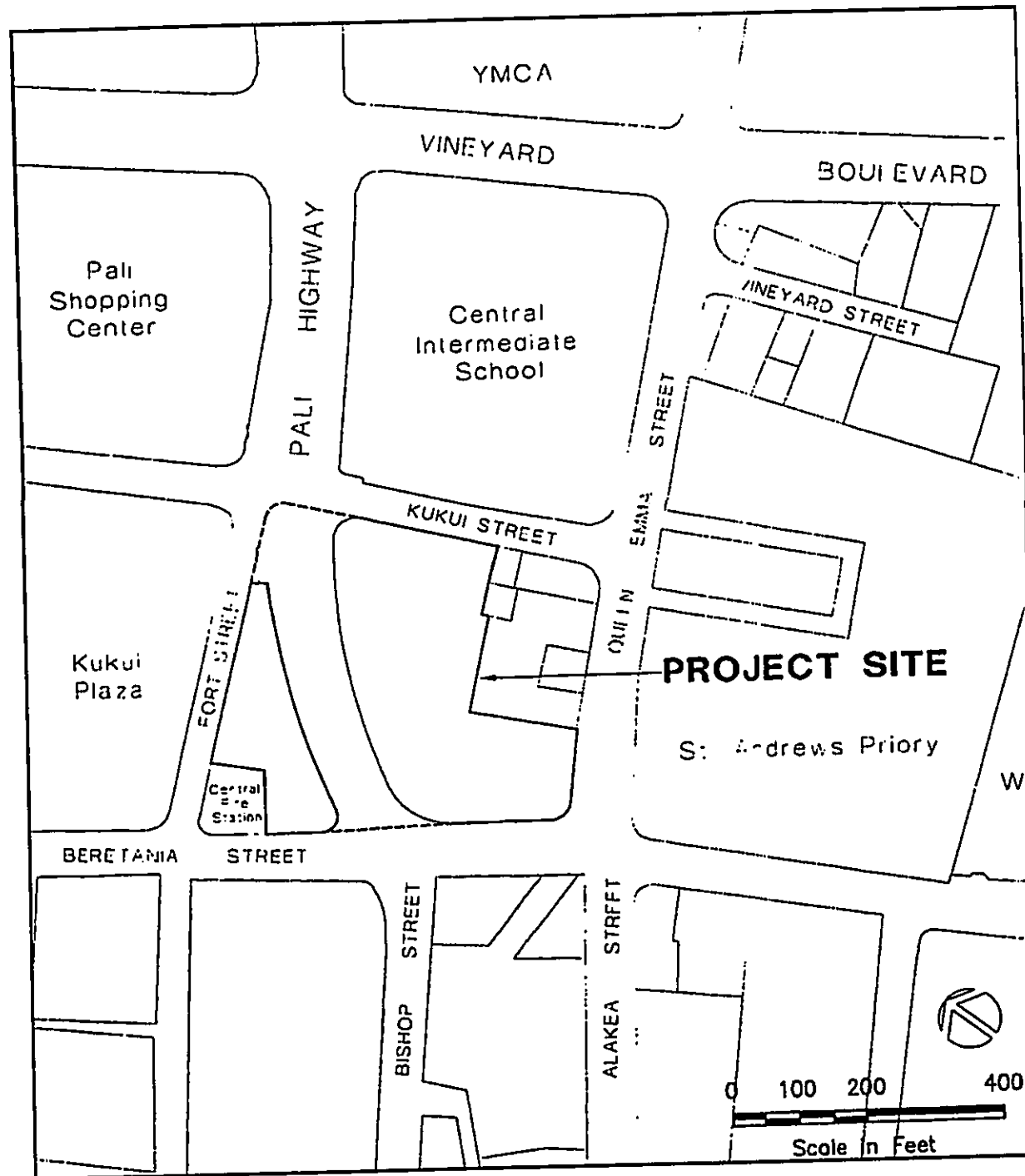
Because the project site faces the historic St. Andrew's Cathedral, a small portion of the project site along Queen Emma Street is included in the Hawai'i Capitol Special District.

Additional public facilities in the vicinity include Central Middle School – once the site of the first Honolulu public high school – immediately north of the project site,

and Queen's Medical Center, located on Punchbowl Street within a half-mile of the project site.

Exhibit 2-C shows the Beretania Street and Bishop Street corridors.

Exhibit 2-C: IMMEDIATE SURROUNDINGS OF PROJECT SITE



SOURCE: Wilson Okamoto & Associates, Inc., 1998.

The Primary Study Area has also been shaped by major transportation routes. Pali Highway leads directly from Downtown Honolulu to the Nu'uanu and Windward O'ahu residential areas. The H-1 Freeway, Honolulu's most used highway, runs near the northern edge of the study area. Vineyard Boulevard has become a major roadway in part as it carries commuter traffic to and from the highway.

Residential land uses in the primary study area include high-rise apartments around the project site and in Downtown Honolulu, and a mix of older, low-rise buildings at the northern edge of the study area.

2.2.3 City and County of Honolulu – Overview

The center of government, finance and industry in Hawai'i, O'ahu is home to three-quarters of the State population and workforce. The major urban zone stretches along a single corridor, from Hawai'i Kai in the east to Waipahu in the west, bounded by the ocean and the Ko'olau mountains.

Land for urban development has been limited in supply and expensive, with the result that housing prices have long been among the highest in the United States. A housing crisis was long recognized but has not been fully resolved even now, when housing prices have fallen and then stabilized over a period of recession. (LaCroix , 1992 provides evidence of the duration of the housing crisis; the collaborative work of SMS Research and The Prudential Locations, Inc. [1997, updating an earlier study] provides a detailed study of inventory and demand charts current and likely future conditions.)

Hawai'i's economy, once based on agriculture for exports, has been driven since 1960 by tourism and military spending. With growth in these sectors came extensive construction and continuing expansion of the financial sector.

Hawai'i's tourism, and hence the economy as a whole, grew extremely quickly during the 1980s. Since the early 1990s, income from tourism failed to grow significantly. At the same time, military spending declined as well. Since that time, the state workforce has shrunk. Much of the decline occurred in residential construction. The value of private residential construction in both 1996 and 1997 was less than half the value of construction in 1991, at the peak of the last business cycle (Bank of Hawai'i, 1998).

The bulk of residential construction on O'ahu has been located away from the urban core since the 1970s. Older suburbs, such as Hawai'i Kai, continue to be built out, while new residential areas such as Mililani Mauka, the Villages of

Kapolei, and Royal Kunia have been developed. In the 'Ewa Development Plan area, new development has involved cooperation between public- and private-sector interests.

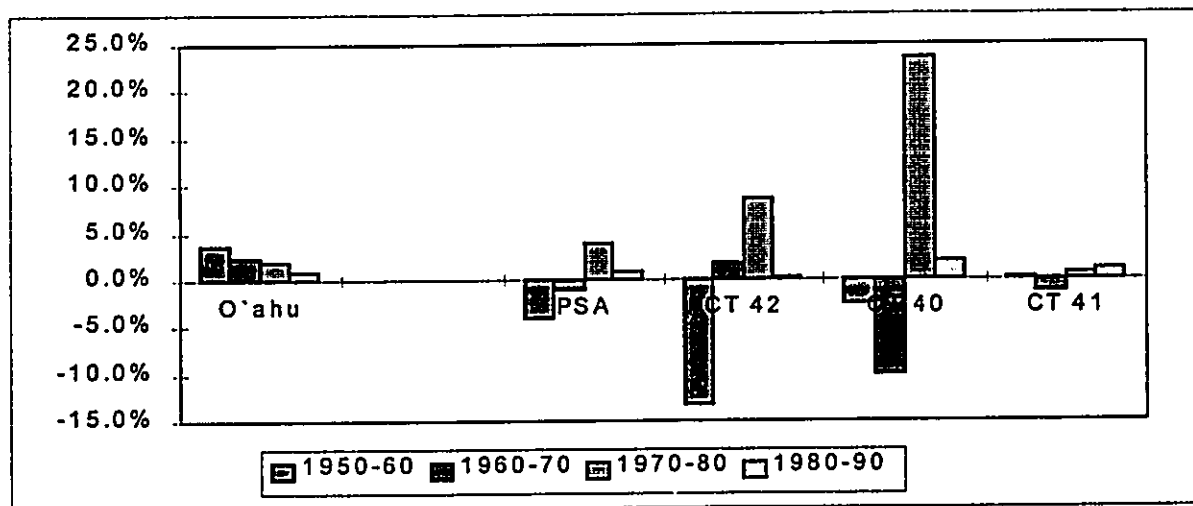
Suburban growth has responded to the strong interest in home ownership among middle-income families. It offers much less to families with low or moderate incomes, or to senior citizens.

2.2.4 Demographic Trends and Characteristics

O'ahu has experienced population growth consistently from World War II to the early 1990s. The rate of growth has slowed over the decades (as shown in Exhibit 2-D and Appendix A, Exhibit A-1). Smaller areas have grown less consistently. The Primary Study Area (PSA) lost population during the period of urban clearance. New construction in the 1970s brought a sharp increase in the PSA population, although it never returned to the level of 1950, before urban renewal.

Since 1990, population growth has stalled at the State and County levels. There has been no major new construction in the PSA. (To the west, new multi-family buildings include a condominium, Honolulu Park Place, and City projects in the Chinatown area.)

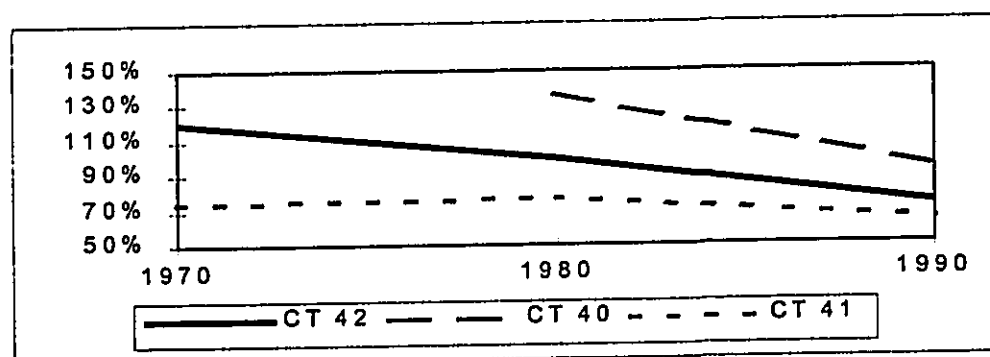
Exhibit 2-D: POPULATION GROWTH RATES, PRIMARY STUDY AREA AND COUNTY



The PSA population, like that of the City and County as a whole, is ethnically mixed, with no single group forming a majority. (See Appendix A, Exhibit A-2 for details.) Slightly less than half were Hawai'i-born in 1990.

Over recent decades, O'ahu's population has been aging, with the median age climbing to 32.2 years as of 1990. PSA median ages are much higher, with the highest being 44.6 years in CT 42, including the project site. Income levels in the three different census tracts of the PSA have been quite different from each other in the past. The Downtown population was relatively affluent, while residents of CT 41 (east and north of the project site) had, on average, incomes well below the island norm. In all three census tracts, the trend has been for incomes to grow less quickly than for the island as a whole. When median incomes are viewed as percentages of the island median, then, they have fallen, and fallen below the island level in most of the PSA. (See Exhibit 2-E for the trend. As of 1989, the median income in CT 40 [Downtown] was 103% of the island median; in CT 42 it was 89%.)

Exhibit 2-E: PRIMARY STUDY AREA MEDIAN FAMILY INCOMES, AS SHARE OF COUNTY MEDIAN



SOURCES: US Census, 1972, 1981b, 1991b.

2.2.5 Housing Conditions

Over the past few decades, average household sizes have been declining, both in Hawai'i and elsewhere. However, Hawai'i households are large, compared to ones in other states. (Only Utah households were larger on average in 1990 [Morgan Quitno, 1993].) Households in the Primary Study Area do not follow this trend: they tend to be much smaller than the state and island average (as shown in Appendix A, Exhibit A-3). PSA households changed little in size from 1970 through 1990.

As of 1990, the PSA included 4,483 residential units, of which 4% were vacant. Three-quarters (73%) of the occupied units were rental units. Over recent decades, the physical condition of housing in the PSA had improved – only 1% lacked kitchen or bathroom plumbing inside the unit, as compared to 11.2% in 1970. Crowding of people in housing changed less, with 9% of units in 1990 having “very crowded” conditions (with more than 1.5 persons per room). This level of crowding was only slightly higher than the island average.

Rents in much of the PSA were slightly higher than the island average in 1990. Rental payments amounted to about a fifth of household incomes – slightly more than the island average.

2.2.6 The Housing Market

Studies of housing supply demand conducted in 1992 and 1997 by SMS Research and Locations, Inc. show both the extent of housing demand and changes in demand. (Locations, Inc. and SMS Research & Marketing Services, Inc., 1992; SMS Research & Marketing Services, Inc. and The Prudential Locations, Inc., 1997).

Between 1992 and 1997, the O’ahu housing inventory increased by nearly 24,000 units (to 309,473). Among housing types, condominiums increased by 13.8%, while single family housing increased only by 5.7% and apartments only by 7.9%. New construction of single-family housing and condominiums (including townhouses) for families making moderate incomes has resulted in a significant increase in home ownership (as shown in Exhibit 2-F). New units have been relatively large. The share of O’ahu housing that had two bedrooms or less declined by nearly 15% between 1992 and 1997.

Among homeowners, the share who must devote more than 30% of gross income to housing costs rose to nearly 40% on O’ahu by 1997. In part, this reflects a depressed economy. In part, it is due to the expansion of home ownership opportunities.

For renters, average housing prices rose only by 7.4% between the two surveys. The average rental, however, was near the level affordable for families making 80% of the median income.

**Exhibit 2-F: SELECTED HOUSING DEMAND INDICATORS,
O'AHU, 1992 AND 1997**

	1992	1997	Change
Housing Units			
Condominium	81,293	92,503	13.8%
Apartment	40,535	43,732	7.9%
TOTAL	285,487	309,473	8.4%
Tenancy			
Own	47.6%	53.8%	13.0%
Rent	52.4%	46.2%	-11.8%
Size			
Studio and 1 bedroom	19.5%	18.8%	-3.6%
2 bedrooms	32.4%	28.8%	-11.1%
3 or more bedrooms	48.1%	52.4%	8.9%
Average Monthly Rent			
All units	\$864	\$928	7.4%
2 bedrooms		\$923	
% with Shelter to Income Ratio of 30% or More			
Own	23.0%	39.2%	70.4%
Rent	44.6%	41.4%	-7.2%
Expect to Move			
Will buy	87,027	102,101	17.3%
Will rent	78,839	66,155	-16.1%
Can afford (Renters)			
Less than \$200	1.1%	0.2%	-81.8%
\$200 to \$499	1.9%	1.4%	-26.3%
\$500 to \$799	17.5%	9.0%	-48.6%
\$800 to \$1,099	27.6%	19.6%	-29.0%
\$1,100 to \$1,399	12.3%	14.6%	18.7%
\$1,400 or more	39.6%	55.2%	39.4%

NOTES: All data based on surveys of O'ahu residents conducted by SMS Research. From SMS Research & Marketing Services, Inc. and The Prudential Locations, Inc., 1997.

The number of households expecting to move to rental units – demand for rental housing – has decreased since 1992. The number of those who expect to move to a home they own increased from 1992 to 1997. A further factor affecting demand is that a quarter of those who expect to move – 28.6% of O'ahu household heads who expect to own homes, and 26.7% of those who expect to

rent – mention out-of-State locations as where they will probably move. For many, Hawai'i is simply no longer a viable place to live, often because of housing costs.

In the 1997 survey, 10.6% of those who expected to rent said they could afford \$799 or less for housing. An additional 19.6% could afford up to \$1,099, as shown in Exhibit 2-F.

2.3 FORCES FOR CHANGE

2.3.1 Island-level Trends

Hawai'i's economy has stagnated since the early 1990s. The result has been slower population growth, much less demand for new housing, and lower housing prices. Long-term trends have not, however, disappeared:

- The population is aging, both in the sense that senior citizens are surviving longer and in the sense that the average age of the population is increasing.
- The number of one- and two-person households is still increasing, so the average household size -- 3.02 on O'ahu in 1990 -- is getting smaller. This trend is nationwide, and is projected to continue at least through 2020.
- Population growth is likely to continue over the long term, if at much slower rates than in the 1970s and 1980s.
- O'ahu's transportation system, based on a single major highway (H-1) and feeder routes, is congested and will continue to be so. Steps being taken to manage the problem do not go far towards solving it. Moreover, new urban development in 'Ewa and Central O'ahu has involved more residential areas than commercial or industrial ones, so many new Leeward O'ahu residents must still commute to the Primary Urban Center for work.

Currently, little new housing development is occurring outside of the Honolulu area. Over the long term, plans call for additional housing in the Primary Urban Center (Honolulu to Pearl City), in 'Ewa and in Central O'ahu.

2.3.2 Primary Study Area

As a central urban area that has already seen considerable redevelopment, the Primary Study area will likely change little in the next few decades. Block J is the single area of its size remaining in the Kukui Redevelopment Area which could be

the site of major development. No residential development is planned within the study area. Other projects now under way or planned consist of:

- A commercial complex inside the old post office building (on King Street, at Richards Street), bringing new shops and restaurants to the Downtown area.
- Renovations at Queens Medical Center, planned to begin in late 1998, intended to expand outpatient services. Work will include building a new parking lot on Miller Street, and adding a lane to Punchbowl Street (personal communication, Don Clegg, Analytical Planning Consultants, June 1998).
- Construction of a new elementary school at the site of the (now closed) Pohukaina School is under discussion. Such a school would serve Kaka'ako residents and lower demand for Royal School.

After the construction of several new office buildings in the early 1990s in Downtown Honolulu and the Kapi'olani-King corridor, demand for office space is much lower than at the beginning of the decade. Currently, no plans for new office development have been announced.

3: ECONOMIC AND DEMOGRAPHIC IMPACTS

3.1 INTRODUCTION

This chapter discusses estimates of population, employment, and cash flows associated with construction and operations of the project. Except for construction employment, these impacts are modest because (a) the project is for residential housing and (b) it would be built and operated as an affordable housing project, largely exempt from General Excise Tax and Real Property Tax. Major findings include:

- The direct construction workforce amounts to 785 person-years (over a three-year period), earning \$35.7 million (1997 dollars);
- While many commercial operations could locate in the project, few of those jobs would be newly created and would count as an impact of the project;
- The City and County would receive an initial payment of \$8 million, followed by lease rents on the project and property taxes on the retail area. The total revenue stream will depend on the development agreement, which is still being negotiated.
- The State of Hawai'i would gain about \$6.3 million from taxes associated with project construction. (The project is assumed in this report to be granted tax-exempt status with regard to the General Excise Tax – so State revenues associated with construction derive mainly from workforce and indirect and induced spending.)

An impact occurs when and where a new development amounts to a change for persons and institutions in a surrounding area. Some of the calculations shown here count as impacts only at a local level, while others involve changes for a wider area. For example, the project will house about 1,250 persons. On the most immediate level, all the residents are new to the project site. The number of project residents who move into the Primary Study Area will be smaller than the total, since some probably moved from nearby buildings. The change in the total residential population of the Primary Study Area, however, will likely be about equal to the residential population of the project. That is because demand is strong enough that few housing units in the area would remain vacant if residents move to the Block J project. By contrast, at the island level, few or no residents of the project are likely to be new to O'ahu -- and there is no reason to expect that the project itself will attract any new residents to the island. In other words, there is no population impact at the island level.

3.2 EMPLOYMENT AND INCOMES

The project involves short-term jobs related to construction and long-term jobs associated with continuing operations. For both construction and operations, employment impacts are of three types:

- Direct jobs are immediately created by construction of a project or, subsequently, by project operations. Direct jobs are not necessarily on-site: on-site construction supports jobs in offices and base yards elsewhere.
- Indirect jobs are created as businesses directly involved in a project purchase goods and services in the local economy.
- Induced jobs are created as workers spend their incomes for goods and services.

Indirect and induced employment in Hawaii can be estimated using multipliers from a model of input-output relations in the state economy. The model was developed by State researchers for analyzing the economy as a whole. (The Input-Output model currently in general use draws on relationships within the economy in 1992. SMS uses a customized ImplanPro software version of the model incorporating the transaction table developed by Hawai'i State Department of Business, Economic Development and Tourism researchers.)

3.2.1 Construction

The project will involve approximately 32 months of construction, and a total construction cost estimated at \$110 million. As shown in Exhibit 3-A, the total construction jobcount comes to 785 person-years, for an average annual direct jobcount of 260 full-time jobs over three years.

Total direct, indirect, and induced employment associated with construction comes to some 2,000 person-years of employment over time.

Direct construction wages are estimated at \$35.7 million (1997 dollars) over the course of construction, and the total wages associated with construction would amount to nearly \$70 million. (Construction wages are estimated from average industry wages on O'ahu; indirect and induced wages are estimated on the basis of average reported wages for the entire workforce statewide.)

Exhibit 3-A: CONSTRUCTION JOBS AND INCOME

	1999	2000	2001	Total
Construction spending	\$ 41.3	\$ 41.3	\$ 27.5	\$ 110.0
Employment (in person-years)				
Direct employment	294	294	196	785
Indirect and induced employment	456	456	304	1,215
Total employment	750	750	500	2,001
Incomes (in million 1997\$s)				
Direct	\$ 13.4	\$ 13.4	\$ 8.9	\$ 35.7
Indirect and induced	\$ 12.6	\$ 12.6	\$ 8.4	\$ 33.5
Total	\$ 26.0	\$ 26.0	\$ 17.3	\$ 69.2

NOTES: Direct employment estimated from average employment per million dollars in construction (measured from tax base), 1996. Indirect and induced employment estimated with Type II multiplier for multi-family construction (2.548) in 1992 State Input-Output Model. Incomes estimated from average Honolulu construction wages and wages, all sectors of Hawaii employment, 1996, adjusted to 1997 dollars according to changes in Consumer Price Index.

SOURCES: DBEDT, 1997a, 1997b; DLIR, 1997; Bank of Hawaii, 1998a,

3.2.2 Operations

The retail area will house most of the permanent jobs in the project, as shown in Exhibit 3-B. However, these jobs will not be created as a result of the project. Most will simply be moved to the site from other locations. Some could be new activities in Downtown Honolulu, or expansions that are made possible with the new space created in the project.

A wide range of potential new or expanded uses has been mentioned, e.g.:

- A movie theater has been mentioned as one possible use;
- A major bookstore, such as Borders, could be located in the project, in easy reach of Downtown Honolulu and the H-1 freeway; and/or
- Hawai'i Pacific University could expand operations, and use some of the project retail space for classrooms.

None of these uses is more than speculative at this point. Accordingly, they cannot be counted as project impacts. Exhibit 3-B estimates jobs based on a mix

of uses. Changes in the mix could result in some changes in the number of jobs, and greater changes in the overall social impacts of the retail area (discussed in the next chapter). One possibility is that entertainment uses could occupy much of the retail area, bringing many evening customers. Alternatively, small offices could be the major use, and the retail area would see little activity outside of working hours.

Personal and health care jobs will be associated with senior housing. Mostly these will consist of part-time jobs. (Exhibit 3-B counts full-time equivalents.) These jobs are associated with the persons who receive care, not the project per se, so they do not count as new jobs in the island economy.

Operations jobs that, strictly speaking, count as new impacts are those jobs needed to manage and maintain the building, including the parking area. An estimated 19 jobs will be created when the project reaches a high, stable level of occupancy, a year or so after opening.

Exhibit 3-B: DIRECT OPERATIONS JOBS

<i>Operational Jobs by Role in Project</i>		
Parking		10
Building management and maintenance		9
Resident services, senior housing		14
Retail area		243
Retail	17	
Restaurants, fast food	63	
Commercial offices	152	
Amusement	12	
Total		276

NOTES: Jobcount developed by SMS. Actual jobcount may vary depending on occupancy and the operations that occupy space in the project. Assumed occupancy: 90% for retail, food; 80% for commercial offices. Estimates based on Urban Land Institute and planning estimates of jobs per square foot.

These 19 new jobs in the project would support another ten jobs in the economy in general. Incomes associated with the new direct jobs would total about \$480 thousand annually, while wages for the associated indirect and induced jobs would come to about \$275 thousand (1997 dollars).

3.2.3 Impacts on the Labor Force

Annual construction jobs will average about 1% of construction work in Hawai'i in terms of jobcount and construction put in place. (The 1997 construction workforce was estimated as 23,450 jobs.) It will contribute to the trend of continuing construction growth, but not be a major impact on the industry.

The new operations jobs associated with the project would amount to less than 0.01% of the total O'ahu jobcount, and would have no appreciable impact on the labor market.

3.3 POPULATION AND HOUSING

3.3.1 On-Site Population

The residential units in the project are expected to house approximately 1,250 persons after a brief start-up (as shown in Exhibit 3-C). With a senior tower and a second tower occupied by small families, relatively few children would be present in the project.

The project's population amounts to 14.8% of the Primary Study Area's 1990 population. Adding the project to the available housing stock will increase the Primary Study Area resident population by at least 10% over current levels, since there has been no major new housing built in the area since 1990.

Notably, the project will have no population impact at the island level – no one is expected to come to O'ahu, as a resident or visitor, in order to live in the project.

The daily on-site population will include residents, persons working in the project, and visitors to the retail area. The retail-related customer numbers could be fairly small or could amount to several times the workforce, depending on the mix of activities in the complex. Small shops and offices would see relatively little visitor traffic; restaurants and amusements would likely attract more people.

The total population on-site at a peak time could conceivably total as many as 2,000 persons, including most residents, some workers, and customers. However, many workers and customers for the retail area would come during the day, when many residents are out.

Exhibit 3-C: OCCUPANCY AND RESIDENT POPULATION

	Average number of persons per household	
	Units	
Multi-family		
1 bedroom	292	1.76 (1)
2 bedroom	146	1.76 (1)
Senior		
1 bedroom	402	1.1 (2)
2 bedroom	73	1.76 (1)
	2002	2003 and later
<i>Absorption</i>		
Average occupancy (2)		
Multi-family	85%	95%
Senior	70%	90%
Population		
Multi-family	655	732
Senior	399	514
Total	1,055	1,246
Young children (age 0-4) (3)	25	27
School-age population (3)	46	51

NOTES: (1) Average persons per household, rental units, Primary Study Area, 1990.
(2) Assumed by SMS, based on discussions with housing operators.
(3) Based on age distribution, Primary Study Area, 1990, applied to population of project multi-family units. ("School age" taken to be 5 to 17.)

3.3.2 Impacts on Housing Demand and Supply

As discussed earlier, O'ahu has both measurable housing demand and a slow housing market. After a period of concerted development of single-family housing in 'Ewa and Central O'ahu in the early 1990s, developers are increasingly turning to affordable multi-family buildings, especially facilities for senior citizens, as a relatively certain component of the housing market.

New housing demand on O'ahu in the 50% to 80% of median income range is estimated as about 500 units per year (SMS Research & Marketing Services, Inc. and The Prudential Locations, Inc., 1997). The overall gap between supply and demand as of 1997 is estimated at 18,566 units. The share of pent-up demand in the 50% to 80% of median income range is likely to be at least 2,900 units. (Since income groups with less than median income usually have less choice of housing

than groups with higher incomes, the group's share of new demand provides a minimal estimate of its total demand.)

The 438 units in the project's multi-family tower nearly equal new demand generated by the 50% to 80% of median income range in one year, and about one-sixth of the minimal pent-up demand from this income group. The project will contribute to meeting demand, but is not expected to reduce greatly the continuing imbalance between supply and demand for low-moderate income housing.

As discussed earlier, evidence of demand for senior housing is less clearcut than overall demand for housing by income group. The 1997 *Housing Policy Study Update* provided evidence of demand in general. Current demand for units at Kulana Hale – at 78% occupancy, soon after opening (from Kulana Hale Rental Report, per L. Yamafuji, June 1998) – reinforces the probability that demand for senior rental housing is far greater than existing supply.

The 475 units in the senior tower represent a major new contribution to the senior housing stock. The City estimated in late 1997 that some 1,215 units in buildings for seniors would be erected on O'ahu from 1998 through 2000. With the project – not included in that list – the projected new supply increases by 40%.

The mix of one- and two-bedroom apartments in the senior tower is likely to make the project highly attractive to its market. At Kulana Hale, which opened recently, one-bedroom units filled quickly, while studios were rented more slowly. The proposed King Street Apartments will also offer some 91 one-bedroom units for rent to seniors in central Honolulu, but not two-bedroom units. A third new building, Royal Kinau, will also offer one- and two-bedroom units for seniors. It appears likely that demand for units larger than studios is strong enough to support all three, but detailed demand studies remain to be done.

3.3.3 Availability of Employment Near Housing

Many employment opportunities for residents of Block J exist in the Primary Study Area (PSA) and the surrounding area. Jobs far outnumber resident population in the central city, even when areas with many multifamily buildings are included. (For this analysis, a "central Honolulu" area including Chinatown, the financial downtown, and the government downtown zones is examined.)

Recent jobcount data for small areas exists in the 1995 *O'ahu Regional Transportation Plan*, prepared for the O'ahu Metropolitan Planning Organization (Kaku Associates, 1995). The population and jobcount data presented in the report are based on the 1990 U.S. Census and are broken down into 284 Transportation Analysis Zones (TAZ). Job data include the estimated number of

jobs, by industry, for each TAZ within the City and County of Honolulu. TAZ 1 through 22 and 86 through 88 correspond fairly closely to the area of interest (CTs 39, 40, 41, 42, 51, 52). Boundaries for this area include School, Iolani, and Prospect Streets on the north; Ward Avenue, King and South Streets on the east; Nuuanu Stream on the west; and Honolulu Harbor on the south.

In 1990, the resident population of this area was approximately 13,500. Some 6,600 households were in the area. A total of 7,300 civilian workers lived in central Honolulu, where there were approximately 78,200 jobs. Central Honolulu had approximately 2% of the resident population and 19% of the jobcount for the City and County of Honolulu. The greatest number of jobs were in Services; Finance, Insurance and Real Estate; Government; and Retail. Exhibit 3-D shows the distribution of jobs within selected industry classifications, with jobcounts updated to estimated 1996 levels.

Exhibit 3-D: POPULATION AND JOBCOUNTS, CENTRAL HONOLULU, 1996

	City & Country of		Estimated % in Study Area
	Honolulu	Study Area (1)	
Resident Population	837,994	13,456	1.6%
Civilian Jobcount (1996)	402,986	80,595	20.0%
Agriculture	4,324	401	9.3%
Government	85,341	10,677	12.5%
TCU (2)	33,067	10,290	31.1%
Industrial	30,705	3,857	12.6%
FIRE (3)	29,806	14,725	49.4%
Service	118,151	28,598	24.2%
Retail	83,512	9,307	11.1%
Construction	18,080	2,740	15.2%

NOTES: Jobcounts based on 1990 Census, more recent County data, and projections of job growth used for transportation planning.

(1) Based on Transportation Analysis Zone Data

(2) Transportation, Communications, Utilities

(3) Finance, Insurance, Real Estate

SOURCES: OMPO, 1995; DBEDT, 1996

Rentals at the project would be at levels affordable for families making 60% of the county median family income as estimated by the US Department of Housing and Urban Development. In 1990, the median family income for O'ahu was estimated as \$41,200. As of 1996, the HUD median had reached \$55,900. Average wages grew during that period, but not, in many cases, as quickly as the HUD median income.

To estimate the number of households with incomes amounting to 60% of the HUD median in the central Honolulu area which could be supported by nearby jobs, the following calculations were made:

1. The number of jobs paying 60% of the HUD median or less was calculated, using the DLIR data on average incomes by industry for Honolulu County, by assuming that wages in each industry were distributed in a standard ("bell curve") distribution, and that the low end of the curve – 5% of the sample – was defined by the minimum wage.
2. All jobs paying 50% to 60% of the HUD median were counted as capable of supporting a household (14,800 jobs or households).
3. Since most Hawaii households have more than one source of income, multiple-income households with total incomes amounting to 60% of median were roughly estimated by counting the jobs in the area paying from 0 to 50% of the HUD median, and treating these as contributing to incomes of households making 60% of the HUD median. Two or three of these incomes could help to support a household, so the total number of jobs in this range was divided by three to estimate the number of households supported (37,400 jobs, 12,500 households).

Approximately 27,300 households making 60% of the HUD median could then be supported by jobs in central Honolulu. (Of course, this number would be even greater if households with one job in central Honolulu and another job elsewhere were counted.) This figure is more than four times the number of households – at all income levels – in the central Honolulu area, and nearly four times the number of future households if the 913 proposed Block J households are included along with existing ones.

It is not know how many of those living within the central Honolulu area also work there. US Census data for 1990 show that of those employed and living in the area, approximately 3% work at home. Of the remaining employed population who did not work at home, approximately 15% took less than ten minutes to get to work, and approximately 25% walked to work. From this data, it is estimated that between 15% and 25% of those employed in the area also work there.

3.4 FISCAL IMPACTS

3.4.1 City and County of Honolulu

According to the draft development agreement being considered by the City and County, Honolulu would gain revenues of several types from the project:

- An initial payment of \$8 million from the developer;

- Lease rents over a period of 65 years; and
- Real property taxes on some of the non-residential space.

In addition, the City and County would acquire the parking area after 30 years, and would own the remainder of the project after 65 years.

The only clear cost to the City and County would be the loss of on-site parking revenues. (These consist of hourly stall rentals during construction. After construction, the City and County would derive lease revenues from the parking income.)

3.4.2 State of Hawai'i

The State incurs no costs due to the project. Its new revenues would derive from construction spending. These are estimated in Exhibit 3-E. Very little new revenues associated with new operations in the project, that could not exist elsewhere, would be generated.

Exhibit 3-E: REVENUES FOR THE STATE OF HAWAII

	1999	2000	2001
<i>(in \$1,000,000s)</i>			
Cash Flows			
Construction spending	\$ 41.3	\$ 41.3	\$ 27.5
Construction-related wages	\$ 26.0	\$ 26.0	\$ 17.3
Excise Taxes			
Construction spending (1)	\$ -	\$ -	\$ -
Construction-related wages (2)	\$ 0.8	\$ 0.8	\$ 0.5
Income Taxes			
Corporate (3)	\$ 0.1	\$ 0.1	\$ 0.1
Personal (4)	\$ 1.5	\$ 1.5	\$ 1.0
TOTAL	\$ 2.4	\$ 2.4	\$ 1.6
CUMULATIVE	\$ 2.4	\$ 4.7	\$ 6.3

NOTES: All dollar figures are 1997 dollars. Costs and revenues are for the entire construction period.

- (1) No direct tax on construction spending, when project gains 201 (e) status.
- (2) Calculated at 4% of workforce income spent on taxable items. Taxable share estimated from 1992-93 US Bureau of Labor Statistics study.
- (3) Calculated as 0.25% of construction spending, from 1989-90 data on business receipts and corporate income tax collections.
- (4) Calculated as 5.7% of workforce income, based on 1992 data on individual tax liability and gross income.

SOURCES: DBEDT, 1997; Hawaii State Department of Taxation, 1991.

4: COMMUNITY CONCERNS

4.1 APPROACH

SMS Research conducted interviews with some 29 key informants and reviewed Neighborhood Board minutes and earlier Environmental Impact Statements from the area for this project. Key informants included area residents, stakeholders concerned with nearby properties, operators of businesses in the block, and educational administrators. Interviewees were asked to discuss their own operations or activities, and any concerns they or people they knew might have about the project.

Interviewees are listed in Exhibit 4-A.

Many of those interviewed had been involved with the city's Pacific Nations Center proposal ten years ago. Hence, discussions often involved comparisons between the present project and the earlier, larger proposal.

4.2 CONCERNS INDEPENDENT OF THE PROJECT

Ten years ago, many Downtown residents and landlords hoped for an urban renaissance, based on affluent condominium owners and a mix of entertainment. That hope was based on success of projects such as Honolulu Park Place and the renovation of Hawai'i Theater. It seemed quite likely that the blocks below Beretania Street would fill with new office towers, and new condominiums would fill much of the space to the north of Beretania Street. Since then, the market for upscale condominiums has shrunk, and new entertainment venues have been located at Aloha Tower and sites outside the Downtown area. The Downtown Improvement Association, once a persistent voice for Downtown renewal, has dissolved after the retirement of its executive director.

Exhibit 4-A: LIST OF INTERVIEWEES

Name	Affiliations
Adams, Captain Eric	Honolulu Fire Department, Central Station
Adams, Thomas K.	Vice President and Principal Broker Hawaiian Asset Management and Investment Corp. (owners of Queen Emma Building)
Bean, Steve	Headmaster, St. Andrew's Priory
Ching, Clement	Representative of owners, building in Block J
Courtney, Father Peter	Rector, St. Andrew's Cathedral
Eichor, Susan K.	General Manager, Infrastructure Provisioning GTE Hawaiian Tel
Erickson, Sally	Director, Safe Haven, Mental Help Hawaii
Furukawa, Darrin	Kukui Plaza resident
Furukawa, Jay	Section Manager, Access Design & Construction GTE Hawaiian Tel
Hochberg, L. Jim	Senior Vice President, Hawaii Pacific University
Hong, Richard	President, Board of Directors, Century Square
Kakaio, Milton	President, Alert Alarm (Queen Emma Bldg. tenant)
Larsen, Gary	Paradise Management Corporation Director, Commercial Properties (Kukui Plaza)
Lau, Major Henry	District 1, Honolulu Police Department
Lee, Mervyn W., Esq.	representing Civic Center Properties occupant, Civic Center building
Matusow, Lynne	Chair, then Vice Chair, Downtown Neighborhood Board
Mirikitani, Marion	Owner and occupant, Mirikitani Building
Mollring, Dolores	Member, Downtown Neighborhood Board Member, Kukui Plaza - Downtown - Chinatown Citizens Patrol Chair, Safe Haven Advisory Committee Resident, Kukui Plaza
Moroney, Sean P., Ph.D.	Principal, Electronics School (Queen Emma Bldg.)
Peicich, Dick	General Manager, Century Square

(Continued)

Exhibit 4-A, Cont.

Name	Affiliations
Rothstein, Andrew	Downtown resident
Sanborn, Alan	Planning Branch, Public Works Division, Department of Accounting and General Services
Soeda, Vince	Project Engineer, Transmission Engineer GTE Hawaiian Tel
Sproul, George	Section Manager, Building Services GTE Hawaiian Tel
Tom, Penny	Principal, Central Middle School
Vlachos, Barbara	Senior Warden, St. Peter's Episcopal Church
Walsh, Mike	Vice President and Treasurer, Queen Emma Foundation
White, Burton	Vice Chair, then Chair, Downtown Neighborhood Board
Jon Yoshimura	Member, Honolulu City Council

NOTE: Affiliations are listed to indicate the range of community groups and networks which the interview process tried to reach. Interviewees were asked about opinions in the community, not to speak on behalf of organizations. No claim is made that the groups and organizations mentioned above take any position with regard to the project.

While the hope for a vibrant Downtown remains, additional concerns have arisen during the 1990s. Residents speak of Beretania Street and nearby side streets as unsafe or unsavory at night. They mention the presence of prostitutes and mentally ill persons more than any threat of assault or robbery.

Traffic appears a more general concern now for Downtown stakeholders than it was ten years ago. At that time, much discussion was devoted to the route for a future light-rail system, to alleviate congestion to and from Downtown Honolulu. Funding for construction of such a system was not approved. Downtown stakeholders now speak of traffic congestion as bad, likely to get worse, and nearly impossible to control.

4.3 CONCERNS WITH REGARD TO THE PROJECT

Nearly all issues mentioned by stakeholders as of concern in connection with the project are listed in Exhibit 4-B. Typically, interviewees mentioned one or two issues as critical, and went on to discuss additional concerns.

Exhibit 4-B: ISSUES AND CONCERNS MENTIONED BY STAKEHOLDERS

STAKEHOLDERS	CONCERNS	
	Construction Period	Operations Period
<i>Same Block</i>	Loss of tenants already and during construction Loss of parking Vibration (pile driving) Noise, dust Traffic, access	Restricted access to buildings that face parking lot Loss of open space, views Want easy access to parking Affordable rental use not appropriate in business center, in Block J Expect project maintenance problems
<i>Adjacent Blocks</i>	Traffic congestion Vibration (pile driving) Noise, dust Interference with operations Loss of parking -- and more illegal parking nearby	New opportunities: parking, restaurants, other uses Loss of view, open space Intruders, vandalism, crime Greater use of park space Possible problems with students Loss of demand for parking New construction improves area
<i>Neighborhood Residents, Business, Wider Community</i>	Traffic congestion Noise	New parking, retail welcome Affordable rental population thought not compatible with nearby residents Seniors likely not to welcome much retail activity, children Design may be obtrusive Competition with area retail for tenants Uncertain that project is needed Some opposed to City role in affordable rentals Increased traffic congestion Elementary schools full already Want more open space

NOTE: This table summarizes complex concerns. See text for more detail.

Three themes were most mentioned as the major issues associated with the project:

- Construction period irritants (above all traffic disruption and noise);
- Concerns about additional, low-income residents in the Downtown area; and
- New retail amenities for the Downtown area.

These and other issues are discussed further in this section. The next chapter provides assessment, from the perspective of an outside observer, of the likelihood and force of the anticipated impacts. In this section, comments serve to clarify the applicability of concerns to the project under study.

4.3.1 Stakeholder Groups' Perspectives on the Project

Different stakeholder groups had only slightly different perspectives on the proposed project. Stakeholders with interests in the same block as the project had very specific concerns about traffic impacts and the effects of surrounding the existing buildings with a new project. Stakeholders associated with a few facilities adjoining the project site or a block away had similar concerns about construction, but less strongly-expressed concerns about the impacts of the project itself, once it is built. Others in the neighborhood viewed the project as enhancing or detracting from the neighborhood as a whole.

Interviewees were not asked whether they supported or opposed the project. Nonetheless, a few of the stakeholders in the same block stated their opposition to the project. Many of the remaining interviewees treated the project as inevitable, making comments such as "you can't stop progress," and some voiced support for the proposed development.

4.3.2 Concerns about Anticipated Construction-Period Changes

Owners of buildings in Block J believe that the first impact of the project is already being felt. They are losing tenants or having to renegotiate rents with tenants who threaten to move, and they see the project as making it hard to rent out spaces in the same block.

Comment: The office market is already soft in the area, and State agencies are moving to Kapolei, independent of the project. On the one hand, this means that many vacancies are likely to occur independent of the project.

On the other hand, the additional impact of anticipated construction clearly makes a difficult situation worse for nearby building owners.

When construction begins, the 208 metered parking spaces on-site will be withdrawn. Several nearby businesses expect this loss to lower their customer volume and to make parking difficult for employees who use the existing lot.

Comment: After construction, hourly parking at municipal rates will be available in the project.

Construction activities are expected to cause considerable inconvenience and irritation. For the immediate area (including adjoining blocks), noise and dust are expected to be problems. Concern has been expressed that vibration from pile driving could affect older structures, notably St. Andrew's Cathedral. Construction activity could also make it temporarily difficult to conduct activities in nearby buildings, including classes, use of electronic equipment, and transmitters that now send signals across the airspace above the project site.

Comment: The extent of pile driving will be negligible, as described in the project Environmental Impact Statement. Both noise and vibration will, as a result, have a shorter duration than many fear. Noise and dust controls set by the State Department of Health and the City and County Building Department will be followed.

Traffic is a concern for all except a few residents. The anticipated impact on the immediate area is increased congestion at peak hours. For Downtown workers and the wider community, constriction or closure of Pali Highway is of great concern.

Comment: Construction is being planned to allow at least two lanes of Pali Highway to remain open during peak periods throughout the construction period.

4.3.3 Concerns about Anticipated Changes after Construction

Reactions to the project as a new element in the Downtown area were mixed. Many hoped that the project would bring new commercial amenities, such as a movie theater and new restaurants. Some saw a new building as welcome, and a clear improvement over existing conditions on the project site. Concern was expressed that the building design be attractive, and building materials be of high quality.

Several viewed the project in relation to Honolulu's depressed economy. Believing retail and office vacancies in Downtown Honolulu, to be high, they were concerned that (a) the project retail area would have a high vacancy rate, and/or (b) it would attract tenants away from nearby buildings, increasing problems there.

Comment: Downtown office and retail vacancy rates are much higher than in the early 1990s but appear (based on calls to managers of residential buildings with retail space, June 1997) to be in the 15% to 20% range. This is comparable to normal rates elsewhere in the country.

A few stakeholders were concerned that the retail area would attract young people, thereby irritating older residents of the project. Again, concern was expressed that some Central Middle School students would cross through the project site to and from school; project security and school administrators would need to find ways to minimize any intrusions.

Some interviewees doubted whether there was need for a development of the size of the project, or that the project was appropriately located. The concept of a mixed-use building, adding both consumers and retail to the area, was welcome to some but questioned by others. Two questions were raised about the project's residents: whether a low-moderate income population would support the shops and attractions in the complex and fit with the area, and whether seniors in the project would find noise from other uses irritating.

Several raised concerns about the project as an affordable rental building located next to Honolulu's financial district. Some thought the multi-family unit residents would likely work in industrial areas, and hence commute away from Downtown – defeating one aim of the project. Again, some of these interviewees felt that a residential project was inappropriate for the site, as residential and/or as a City-sponsored project, rather than a purely private-sector initiative.

A few thought of the project population as a very low income group, and expected the project to attract gangs, crime, and drug use. A few commented that the site might now at times be used for criminal purposes, so the project, with appropriate security, would be an improvement. Many interviewees wondered whether the project would attract homeless persons – but most of these went on to consider how security at the project would likely be able to deal with any problem associated with this group.

Comment: The income requirement for affordable rentals – 60% of the HUD estimate of the median household income – comes to about \$30,000 per year. That is about 110% of the average annual wage in Hawai'i (DLIR, 1997). Families in the multi-family units will have one or two wage-earners. Many could be Downtown professional, technical and clerical personnel.

Most interviewees expected traffic impacts of the project as likely to add to existing problems, even after construction ends. A few thought that provision of ample parking in the project could lessen congestion slightly in the Downtown financial district to the south.

As noted earlier, some stakeholders in the same block as the project had distinctive concerns. Two buildings now face the parking lot. Owners are concerned that they will lose convenient access to their property, views and open space. They anticipate new costs for sanitation services and repairs if their buildings are hard to reach.

Comment: Along the side in question, the planned building will be set back 45 feet from the property line. Landscaping and a road access to parking will separate the existing buildings from the new structure.

Stakeholders in the same block and nearby expressed concern that the hourly parking be located near access and exit points within the garage. Some felt that their customers and visitors would be willing to park in the garage, but would be inconvenienced if they had to cross two or three levels of parking and hundreds of feet distance to reach a destination in the existing buildings.

Interviewees felt that Kukui Plaza residents would regret the loss of an unobstructed view to the east. Noise and traffic associated with the project were also potentially of concern to neighbors across the street.

The new project population was viewed by several stakeholders as adding to demand for very limited public facilities – parks and elementary schools.

4.3.4 Additional Potential Effects of the Project

The line between social impacts and other ones can be thin, since changes in physical conditions of many kinds can affect social life. As a rule, impacts that could affect persons' everyday life are discussed in this report. SMS also encountered concerns that are most appropriately discussed in the Environmental Impact Statement in terms of engineering issues:

- GTE Hawaiian Tel has antennae on the roof of their office building, south of the project site. These point to sites on Tantalus, to the north. During construction and afterwards, the antennae may need to be relocated to allow a straight line-of-sight path between the antenna and the mountain receiver sites.

- St. Andrew's Cathedral (east of the project site) and Our Lady of Peace Cathedral (south of the project site, across Beretania Street) are both historic buildings. In the past, stakeholders have been very concerned about the effect of vibration on these.
- According to interviewees, the trade winds can blow very strongly at the top of Bishop Street (near the Century Square Building). Some sought assurance that the project would not make the gusts felt there even stronger.

5: SOCIAL IMPACTS

This chapter provides an independent consultant's analysis of likely impacts of the project on lifestyle, family and work life, and community organization. It draws on community concerns, discussed in the last chapter, and on expert information cited herein, but goes beyond those concerns in order to specify potential social impacts. Mitigation measures for potential adverse impacts are discussed at the end of the chapter.

Social impacts are shaped by planning and design decisions that are taken over months or years. Interactions between developers and the community, followed by dealings of operators, residents, or other tenants of a project with the surrounding community will also affect the extent of impacts. Outside forces and events play a further role in shaping social impacts.

Potential adverse social impacts and problems of compatibility of a project with its neighbors can often be addressed and reduced or avoided if recognized early. Mitigation measures often depend on community perceptions and priorities. Their efficacy can depend on local perceptions that a measure has been generally accepted as meeting community needs. Hence it is inappropriate for an outside consultant to prescribe cures for social problems: in many cases, mitigation measures are to be suggested for review by concerned parties, so that those parties can devise the response that best meets their needs.

5.1 OVERVIEW

This chapter deals first with impacts on public facilities and services, then with other social impacts, during construction and afterwards. Major social impacts consist of:

- Possible delays, inconvenience and irritants associated with construction;
- Providing new housing for the low-moderate income group, leading to potential improvement in quality of life for residents in new housing; and
- Potential conflicts among project residents.

These and other impacts are discussed below.

5.2 PUBLIC FACILITIES AND SERVICES

Selected public facilities and services of key importance to community life are discussed here. Other public facilities, which must be addressed first as engineering issues (e.g., utilities), are discussed in the Environmental Impact Statement for the project.

5.2.1 Police Protection

Existing Conditions.

The project site is located in the Honolulu Police Department's Division 1. It is patrolled by officers stationed in the Downtown-Chinatown substation (at Nu'uano and Hotel Streets). Typically, one police officer is assigned to the beat including the project site per eight-hour watch. Officers patrol in three-wheel vehicles and automobiles. According to police officials called by SMS, the site poses no particular public safety problem at present (personal communication, Major Henry Lau, HPD).

Future Without Project.

If the current use continued, no additional need for police protection will arise.

Future With Project.

As a residential area, the project will demand greater police activity than the project site does now. Typically, police responses in residential areas deal with thefts or domestic disturbances. Again, the commercial area and underground parking add to the density of activity on the site, and hence potential demand for police services.

On the other hand, the project will house O'ahu residents, not attract new residents. Building security personnel may provide a greater degree of safety for residents than they would have in older buildings.

In light of the mix of uses in the building – residential, retail and parking – building security will be a concern to be addressed by the project's operator. Even with effective building security on-site, demands for police service will be greater than for the site at present.

5.2.2 Fire Protection

Existing Conditions.

Central Fire Station, located next to the project site, serves as the primary station for the area. The station includes the office of the Battalion Chief for one of five O'ahu battalions, as well as an engine company. (Seven firefighters are assigned to the engine company per eight-hour shift.) The Kaka'ako Fire Station is the secondary station serving the area, with an engine company and a snorkel company.

Central Fire Station serves a district extending from the waterfront, to Richards Street, up to the slopes of Punchbowl and as far west as Akepa Lane, beyond Liliha Street. Because it is located on a one-way street, the engine sometimes must travel against traffic, along Beretania Street (fronting the project site) to Queen Emma Street to respond to emergency calls.

In May 1998, the station responded to 60 calls, of which 41 were for medical assistance (personal communication, Captain Eric Adams, Central Fire Station, June 1998).

Future Without Project.

Electrical and plumbing renovations are planned for Central Fire Station in the coming fiscal year.

Future With Project.

As a new building meeting current codes, the project should house residents in conditions equal to or better than those of their previous homes, in terms of fire safety.

No impact on Fire Department operations is anticipated so long as the Central Fire Station truck can continue to travel against traffic on Beretania Street while responding to emergencies. Therefore, it will be important, during construction, to minimize intrusions into the right curb lane of Beretania Street. When the project is built, it will not extend into Beretania Street. No vehicular entrance on Beretania Street is planned within the proposed project.

5.2.3 Medical Services

Existing Conditions.

Downtown Honolulu is served by Queen's Hospital, within a half-mile of the project site. Outside the Primary Study Area, Straub Hospital and the Kaiser Permanente Honolulu Medical Center are located a few blocks east, while St. Francis and Kuakini Hospitals are in the Liliha area to the west. These hospitals offer a full range of emergency and acute-care services. Physicians' offices are concentrated near Queen's Medical Center.

Emergency medical transport is provided to the vicinity of the project site by a City ambulance located at Queen's Medical Center.

Future Without Project.

Queen's Medical Center plans extensive changes within its campus (personal communication, Don Clegg, Analytical Planning Consultants, June 1998). Key elements of the plan include:

- Relocating emergency and outpatient services along Miller Street;
- Building a 606-car garage on Miller Street;
- Developing an additional lane on Punchbowl Street. When the Queen's Medical Center project is completed, there should be two lanes in each direction on Punchbowl Street between Vineyard Avenue and Beretania Street, with a central lane for left turns.

The hospital will eventually be able to increase outpatient services appreciably, and bring the number of acute-care beds to its currently approved level -- 560 beds.

Future With Project.

The project will not add any demands for medical services, and will locate residents easily within reach of medical facilities. No impact on medical services is anticipated.

The Queen's Medical Center renovations and Block J project construction should both be ongoing in 1999 and 2000. Little or no impact of either one on the other is expected. Nearly all the Queen's Medical Center work will occur on its own

campus. The proposed changes to Punchbowl Street will widen that roadway, as opposed to constricting it.

5.2.4 Education

Existing Conditions.

The project is located in Honolulu District, in the McKinley High School service area. Central Middle School is in the block adjoining Block J. Royal School, on Queen Emma Street mauka of Vineyard Boulevard, is the nearest elementary school.

St. Andrew's Priory, a private school for girls, is located off Queen Emma Street, about 400 feet from the edge of the project site. It has about 500 students in its K to 12 program.

Hawai'i Pacific University is located in Downtown Honolulu. Its administrative offices are on Fort Street Mall, across Beretania Street from Central Fire Station and the project site. Some commercial space in Kukui Plaza is used by the University, although most of Hawai'i Pacific University's Downtown space is located on Fort Street and Bishop Street south of Beretania Street.

Over recent years, Honolulu schools saw lower enrollments and, on the whole, little crowding, at least as compared with other O'ahu districts. Recently, however, growth of multi-family housing in Chinatown has brought increased enrollments at Royal School and McKinley High School. Currently, the Department of Education reports Royal School with some 37 students over capacity, and McKinley High School as having 10 students more than capacity. Central Middle School is well under capacity (Personal communication, S. Beppu, Facilities and Support Services Branch, Department of Education, June 1996).

Future Without Project.

No new projects are planned that might bring additional residents into the Downtown area in the next few years. The long-term trend toward declining enrollments would then likely continue without the project.

The Department of Education is reviewing alternative ways to increase elementary classroom space in central Honolulu. One alternative under discussion is to open a new Pohukaina School in Kaka'ako,

Future With Project.

Based on the Primary Study Area's population in 1990, SMS estimated the school-age population as 51 persons (for the multi-family tower only). The Department of Education anticipates the project's public school population to be slightly larger:

Elementary school:	34 students
Middle school:	10 students
High school:	12 students

The impact of the project is a matter of additional enrollments. Where schools are already at capacity, principals must consider alternative uses of space, to free up classroom space, or restrict the number of Geographic Exemptions. The District and Department may consider changes in school boundaries and/or use of portable classrooms. The new enrollments associated with the project amount to more than one elementary school classroom, and less than half a classroom at the higher grade levels.

The Department of Education is requesting a "fair share" contribution of \$1,125 per housing unit that could shelter schoolchildren. If the senior tower was for seniors only, and children could not live there, then the request would apply only to the multi-family tower (\$492,750). Otherwise, the request would apply to all units in the project (\$1,027,125).

Portable classrooms cost approximately \$120,000 to build and install. The "fair share" request amounts to the facility cost of about four to eight classrooms. However, the number of project resident students in schools currently at capacity amounts at most to two classroom populations.

Moreover, future facility usage, as estimated above, is certain to be greater than facility impacts. Since the project's residents will already be O'ahu residents, the project will not add a single student to the Department of Education population. Instead, some students will already be living within the immediate area, while others will be moving from other schools' service areas. Many of those will be moving from schools at or above capacity. If these students attend Royal School, also over capacity, the result is not a new impact so much as the movement of an existing problem – more students than older schools can serve – from one school to another. No new demand for DOE facilities would be created.

Based on the number of students expected in the project and on a review of the actual impacts associated with the project, the DOE's estimate of a "fair share" contribution is not proportionate to likely future impacts.

5.2.5 Early Childhood Education and Care

Existing Conditions.

Early childhood education and care (ECEC) facilities are available at St. Peter's Church, on Queen Emma Street north of the project site, and at the City and County of Honolulu Child Care center, at Punchbowl and Beretania Streets.

In the late 1980s and early 1990s, considerable attention was given to the supply and quality of ECEC services in Hawai'i. In part, this was due to problems of supply and cost; in part, it followed on recognition that early childhood learning can be crucial to intellectual and social development. The City and County of Honolulu opened its center next to the municipal office tower. The State of Hawai'i's Open Doors program provided financial support for center-based care for four-year-olds. In recent years, center-based enrollments have declined. This trend seems largely due to declines in both family and government funds available to support ECEC services.

Future Without Project.

The project site would generate no ECEC demand if its current use continued.

Future With Project.

As shown in Exhibit 3-C, approximately 27 young children would live in the project. Based on historical trends, it is possible that 12% of these – three children – would be enrolled in center-based care (projected from O'ahu data in the Simmons/SMS Hawai'i Study of Media and Markets, 1991-1997). About the same share of the young children living in the Block J project could depend on care by non-relatives. Such care could be available in the building or nearby; it is often provided by neighbors willing to care for an additional child as well as their own.

The number of children living in the project needing services is too small to affect ECEC demand, both within the Primary Study Area and islandwide.

5.2.6 Recreation

Existing Conditions.

Small parks are located near the project site: Kamali'i Park, across Pali Highway from the site, and the half-acre open space within the roadway loop that runs from Queen Emma Street to and from St. Andrew's Priory. Additional open space is

found on the grounds of 'Iolani Palace, about three blocks to the southeast, and in Foster Botanical Garden, about three blocks to the northwest. (While these are special-use facilities, some urban residents use them as recreational space.) Residential developments such as Kukui Plaza have open areas and recreation facilities available to tenants several floors above the street.

Kamamalu Playground, two blocks mauka of the project, on Vineyard Street and Queen Emma Street, has a basketball court, bathrooms, and grassy open space. It is the only nearby space set aside for active recreation. (Other City parks outside the Primary Study area include A'ala Park and regional parks such as Ala Moana and Kapi'olani Parks.)

Future Without Project.

Downtown resident leaders have stressed a need for additional recreation space independent of the Block J project. Future use of the open space at the Smith/Beretania site, now used for parking, is under study. One proposal is to convert it to a park for nearby residents.

Future with Project.

The project will provide about 32,000 square feet of open space above the retail area and some 25,000 square feet of landscaped open space at street level, replacing some 103,000 square feet of parking lot.

The project will house some 1,250 persons, including about 80 children. Currently, Kukui Plaza residents make little use of Kamali'i Park. Its landscaping invites little use. Project residents, separated from that park by Pali Highway, are not likely to make much use of the space. The park area between Queen Emma Street and St. Andrew's Priory, however, is closer to the project and more open in appearance than Kamali'i Park. Project residents are far more likely to use this park, along with students from the Priory and the preschool at St. Peter's.

Kamamalu Playground has open space for active play only two blocks away. However, it does not have the play equipment used by young children. Central Intermediate School and Royal School activities have priority in using this park, so project residents may find the park heavily used during school and A+ hours.

5.3 OTHER SOCIAL IMPACTS

Social impacts are discussed here by phase. The analysis deals first with factors likely to affect the immediate area strongly, and then with ones felt by people at some distance from the project site.

Analysis of the project in relation to the surrounding area brings out the following social impacts as potentially significant:

- Loss of parking and related inconvenience during construction for users of existing Block J buildings;
- Traffic congestion, during and after construction;
- Increases in housing supply, leading to improved housing conditions;
- New population in a small area with limited open space and public facilities. Impacts are expected to be most noticeable at the small park between Queen Emma Street and St. Andrew's Priory.

5.3.1 Construction Period

During construction, tenants and owners of the existing buildings on Block J will experience inconvenience and delays due to noise, dust, movement of construction equipment, and the loss of nearby parking spaces. Contractors will be held to standards set by State and City and County rules, but considerable irritation will likely be felt in response to construction-period activity.

The claim that construction (including the loss of parking stalls) will add to the difficulty in filling nearby buildings with tenants is plausible. However, unless the City and County has guaranteed spaces to nearby landowners, the impact of construction is a short-term loss of an amenity, not withdrawal of facilities to which landowners and tenants have specific rights.

Two buildings that face the project site will have views and access limited during construction, as barriers will likely extend along the project boundary. After construction, they will have less open area in front of them than at present. However, there will be a 45-foot space between the project site boundary and the actual wall of the project building in front of those existing buildings. Consequently, while vehicular access to those buildings may be restricted both during and after construction, views and a sense of open space will be in part restored after construction.

Traffic impacts will be felt in the immediate area in the form of congestion and extended peak hours. (See the traffic analysis conducted for the Draft

Environmental Impact Statement for quantified estimates of impacts.) Traffic congestion will affect the larger community perhaps more strongly, since commuters to and from Windward O'ahu will be most affected by slowdowns on Pali Highway due to project construction.

5.3.2 Operations Period

Expanded Housing Supply.

As discussed earlier, the project provides new housing in response to both general need for additional housing on O'ahu and demand for housing in the income segment targeted. Consequences of additional housing for the 60% of median segment are:

- Less crowding;
- The ability, for adults of all ages, to form new households; and
- Lower pressure on rental supply, and hence lower likelihood that rents will rise.

As a rule, an expanded, new housing supply available at controlled rates can help to ease family tensions.

However, the project's impact relative to demand is small in the case of the multi-family units. As for the senior units, other new projects lack the two-bedroom units. Consequently, the chance that these units will help families avoid situations of crowding and family stress seems good.

Increased Density.

The new Downtown resident population in the project will support local merchants. Some residents will become parishioners of nearby churches. For many local institutions, population growth downtown is desirable.

Increased population may pose a problem in relation to locally limited resources. Currently, the project site is a relatively open area. It provides convenient parking for nearby offices and public facilities. With development, the sense of open space will diminish and the population using some facilities will increase.

In the blocks near the project site, open space is largely incorporated in built-up areas, and little is open to the public at large. Project residents will use the recreational facilities of their building, but may also use adjacent areas that seem

welcoming. Increased use of the small park between Queen Emma Street and St. Andrew's Priory seems likely, as noted earlier. Social consequences include:

- The park will be less available to Priory students and classes for use than it is now; and
- The Priory will seem less an isolated campus, set apart from Downtown. Consequently, concern that intruders may enter the Priory campus will likely increase, motivating additional security.

Two sorts of intruders have been mentioned as of particular concern in relation to nearby facilities: homeless persons (especially ones who are drunk or mentally aberrant) and young people. The project will add few young people and no homeless persons to the area, so it will not increase very much the risk of intrusion (as distinct from a sense of vulnerability to intrusion).

Responses to Homeless Persons in the Neighborhood.

The impact of the project on the homeless population will be small. Local residents, landowners and tenants are concerned that this group has increased in numbers and visibility. They are not only found on Fort Street Mall or near areas where they are often fed (Cathedral of Our Lady of Peace; Safe Haven), but also throughout the part of the Primary Study Area between Beretania Street and Vineyard Avenue. SMS expects that a major reason for their presence throughout the area is that very few bathrooms are available to the public in Downtown Honolulu. (Portable toilets are sometimes placed at Fort Street Mall near King Street, but it has been City policy not to make public bathrooms available in the financial district.) Kamamalu Playground has the most convenient fixed bathroom facilities for many homeless persons in the Downtown area.

The project site is not a destination for homeless persons, although it is on a route between Kamamalu Park and more central locations. Construction and the long-term presence of the project will not increase the number of homeless persons, either on-site or nearby. It may narrow their choice of paths across the Primary Study Area, with the result that the number of homeless persons walking along Queen Emma Street could increase.

Just as residents of nearby condominiums are concerned to avoid offensive street activities, so residents and tenants of the project will seek assurance that mentally ill homeless persons and illegal activities are not welcome in and around the building. Street-level tree plantings, while welcome as part of the daytime view, will likely be viewed as a problem if they could shade street activity from public view. Again, the choice of plant materials and lighting systems along the boundary between the project and existing buildings on the block will likely need to be made with security as a major concern.

A potential impact of the project could be to create sheltered, if hardly comfortable, spaces for homeless persons to sleep, either along the edges of the project away from the street or, if project landscaping screens narrow areas in front of the Civic Center and Mirikitani Buildings, in front of those buildings. However, none of the buildings are likely to have arcades or other areas protected from rain, so they will not become established sleeping areas comparable to 828 Fort Street.

Interactions of Residents with Other Residents, Tenants, and Neighbors.

Some stakeholders express concern that building residents will be rowdy, noisy, or prone to crime. Potential problems of compatibility among groups in the project or nearby can be foreseen, but these do not amount to a risk to public safety. Instead, problems of minimizing friction between different groups are likely to arise unless attention is paid in design and operation of the facility:

- Residents of the senior and multi-family towers will need to work out with the operator rules to minimize friction between young and old. Shared use of the open space above the retail area may need to be planned with some care, so that both seniors and younger residents are encouraged to use the area, but active play need not impinge on those engaged in less strenuous or noisy activities.
- In the event that the retail area attracts theaters and entertainment, a similar problem of controlling noise near the senior tower will arise. (This is not to say that seniors will not be among the noise-makers, only that many residents of a senior tower will value highly control over noise and activity in their building.)

A different noise problem could arise for residents of the southern tower of the project. They will be located within five hundred feet of the bells of two churches. Also, street noise (including ambulance and fire truck sirens) on both Beretania Street and Pali Highway will be audible from that tower.

SMS finds no basis in the project for the concern that crime could increase in the surrounding neighborhood. Residents are no more likely to engage in criminal activity than are residents of Kukui Plaza. (While Kukui Plaza units are owned by individuals, many units are in fact rented. A typical one-bedroom unit rents for about \$800 – slightly more than the rates proposed for the project. Project residents will have to show evidence of income to qualify, and will be under the general oversight of a manager representing the operator from whom they rented their units. Consequently, the project population will be more closely screened than are Kukui Plaza renters.)

For neighbors at Kukui Plaza, the project will intrude in an open Diamond Head view. (However, the two-tower design of the project will preserve some of the long-distance view for neighboring buildings.)

5.4 MITIGATION MEASURES

Potentially adverse impacts noted in this report can be mitigated, as follows:

- **Construction Impacts.** Construction will be subject to regulatory controls on noise and dust. Construction plans are being developed to allow Pali Highway traffic to move through the construction period, reducing the traffic congestion that will likely arise.

Development plans call for construction to begin as soon as possible and to last less than three years. While owners of units in Block J buildings may view this as a four-year period of reduced occupancy, the fact remains that the development process is being advanced as quickly as possible.

- **Impact on St. Andrew's Priory and Adjacent Park Space.** The major potential impact mentioned above is a change in the perception that the Priory is isolated. However, new users of the park space between the Priory and Queen Emma Street are likely to consist mainly of seniors and young parents with small children. Neither constitute a danger to the Priory and its students. New users will instead be observers who, by their presence, may lessen the chance that people will approach the school area and intrude on students or commit offenses. In short, the actual impact of the project will help to mitigate the perceived impact.
- **Potential Conflicts among Project Residents.** Planning will be needed to create separate recreation spaces for active play and for quieter activities. It may be appropriate to demarcate parts of the rooftop open space both architecturally and with landscaping. Building regulations will be needed to minimize conflicts over use of shared spaces.

**APPENDIX:
CENSUS DATA, 1970 - 1990**

Exhibit A-1: POPULATION TRENDS, CITY AND COUNTY OF HONOLULU AND STUDY AREA

	April 1950	April 1960	April 1970	April 1980	April 1990	Average Annual Rate of Growth			
						1950-60	1960-70	1970-80	1980-90
City and County of Honolulu	353,020	500,409	630,528	762,565	836,231	3.6%	2.3%	1.9%	0.9%
Total Study Area	9,068	5,942	5,359	7,777	8,405	-4.1%	-1.0%	3.8%	0.8%
Census Tract 42	4,093	991	1,162	2,637	2,672	-13.2%	1.6%	8.5%	0.1%
Census Tract 40	376	288	100	820	891	-2.6%	-10.0%	23.4%	1.9%
Census Tract 41	4,599	4,663	4,097	4,320	4,742	0.1%	-1.3%	0.5%	0.9%

SOURCES: U.S. Bureau of the Census, 1972, 1981a, 1981b; Hawaii State Department of Planning and Economic Development, 1973, and Hawaii State Department of Business and Economic Development, 1987.

Exhibit A-2: TOTAL POPULATION AND DEMOGRAPHIC BREAKDOWNS - CITY AND COUNTY OF HONOLULU AND STUDY AREA, 1970, 1980 AND 1990

	CITY AND COUNTY OF HONOLULU			STUDY AREA (COMBINED TRACTS 42, 40, and 41)			CENSUS TRACT 42 (Project Site)			CENSUS TRACT 40 (Downtown)			CENSUS TRACT 41 (Downtown Hospital)		
	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
	TOTAL POPULATION	630,528	762,565	836,231	5,359	7,777	8,405	1,162	2,637	2,672	100	820	991	4,097	4,320
Ethnicity	41.2%	33.1%	32.0%	N/A	39.6%	37.0%	N/A	43.2%	36.0%	N/A	63.0%	63.0%	N/A	32.9%	31.0%
Caucasian	26.8%	24.9%	23.0%	N/A	22.2%	22.0%	N/A	23.0%	25.0%	N/A	12.8%	12.0%	N/A	23.3%	22.0%
Japanese	10.4%	12.8%	14.0%	N/A	6.8%	7.0%	N/A	4.6%	5.0%	N/A	7.2%	5.0%	N/A	8.0%	9.0%
Filipino	8.5%	10.5%	11.0%	N/A	7.4%	8.0%	N/A	4.3%	7.0%	N/A	3.7%	4.0%	N/A	10.0%	11.0%
Hawaiian	13.2%	18.7%	20.0%	N/A	24.1%	26.0%	N/A	24.6%	27.0%	N/A	13.3%	16.0%	N/A	25.8%	27.0%
Other	9.3%	7.9%	7.0%	7.1%	5.2%	4.0%	5.6%	4.3%	3.0%	0.0%	2.3%	2.0%	7.6%	6.3%	5.0%
Age	26.2%	20.2%	17.0%	12.3%	8.3%	7.0%	7.2%	6.9%	5.0%	1.0%	4.9%	3.0%	14.0%	9.8%	9.0%
Less than 5 yr.	59.5%	64.6%	65.0%	70.0%	74.7%	71.0%	75.0%	74.3%	68.0%	76.0%	81.0%	83.0%	68.4%	73.8%	70.0%
5 to 17 yr.	5.0%	7.3%	11.0%	10.7%	11.8%	18.0%	12.2%	14.6%	23.0%	23.0%	11.8%	12.0%	9.9%	10.1%	17.0%
18 to 64 yr.	24.6	28.1	32.2	N/A	N/A	N/A	N/A	39.2	44.6	N/A	42.6	41.4	N/A	30.6	36.9
65 or more yr.	56.1%	55.1%	54.0%	N/A	48.6%	47.0%	N/A	45.1%	56.6%	N/A	46.0%	35.0%	N/A	51.3%	66.9%
Median age (yrs.)	NC	30.1%	30.0%	N/A	33.7%	32.0%	N/A	40.3%	22.7%	N/A	44.0%	43.2%	N/A	27.7%	12.6%
Place of Birth*	NC	14.8%	16.0%	N/A	17.7%	21.0%	N/A	14.6%	20.7%	N/A	12.8%	21.8%	N/A	20.5%	20.5%
Hawaii	42.5%	48.2%	50.0%	32.0%	25.6%	44.0%	27.6%	23.5%	56.0%	23.0%	31.9%	27.0%	33.7%	25.7%	42.0%
Other U.S.**	23.9%	25.5%	26.0%	N/A	52.5%	32.0%	N/A	58.8%	24.0%	N/A	31.2%	38.0%	N/A	52.7%	35.0%
Foreign	1.2%	1.3%	1.0%	N/A	1.8%	3.0%	N/A	2.1%	2.0%	N/A	3.4%	1.0%	N/A	1.3%	3.0%
Residence 5 Yrs. Before* (people aged 5 or more)	20.9%	18.4%	17.0%	N/A	12.3%	14.0%	N/A	10.6%	12.0%	N/A	33.5%	23.0%	N/A	9.1%	14.0%
Same house	11.5%	6.6%	5.0%	7.6%	7.8%	7.0%	8.8%	5.0%	7.0%	17.5%	0.0%	10.0%	6.8%	11.1%	7.0%
Same county	20.8%	14.4%	59.4%	25.0%	13.3%	59.2%	6.7%	13.0%	56.8%	39.8%	4.3%	51.9%	31.6%	15.5%	62.6%
Other county	37.5%	35.5%	14.2%	27.8%	32.1%	11.8%	34.8%	27.6%	11.1%	9.3%	39.5%	4.7%	25.9%	33.8%	14.1%
Other state	12.9%	18.3%	14.1%	16.8%	21.3%	12.8%	26.4%	20.7%	12.6%	9.3%	19.8%	15.6%	11.4%	22.1%	12.1%
Other country	15.5%	21.7%	12.3%	18.9%	26.2%	16.2%	24.2%	32.7%	19.5%	21.3%	31.5%	27.8%	16.7%	20.1%	11.2%
Education* (people aged 25 or more)															
Less than H.S.															
H.S. graduate only															
Some post H.S.															
College, 4+ yr.															

NOTES: * Figures based on 15 percent sample; numbers hence represent estimates.
 ** Includes persons born in U.S. territories, or born abroad or at sea to U.S. parents.
 NC: 1970 categories not comparable to 1980 ones.
 N/A: Not Available.

Sources: U.S. Bureau of the Census, 1972, 1981a, 1981b; Hawaii State Department of Planning and Economic Development, 1973.

Exhibit A-3: HOUSING STOCK AND CHARACTERISTICS - CITY AND COUNTY OF HONOLULU AND STUDY AREA, 1970, 1980 AND 1990

	CITY AND COUNTY OF HONOLULU		STUDY AREA (Combined Tracts 42, 40, and 41)		CENSUS TRACT 42 (Project Site)		CENSUS TRACT 40 (Downtown)		CENSUS TRACT 41 (Queen's Hospital)					
	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980				
TOTAL YEAR-ROUND HOUSING UNITS	174,107	250,866	281,683	4,570	4,483	642	1,590	1,547	53	608	699	1,903	2,372	2,237
Vacant (total)	5.4%	8.2%	6.0%	6.7%	4.0%	1.9%	4.2%	3.0%	1.9%	18.1%	10.0%	5.7%	5.6%	4.0%
Vacant for rent	2.5%	3.6%	2.0%	3.5%	1.0%	0.3%	1.8%	1.0%	0.0%	9.4%	3.0%	4.1%	3.2%	1.0%
TOTAL YEAR-ROUND OCCUPIED UNITS	164,763	228,856	265,304	4,252	4,284	630	1,524	1,508	52	498	626	1,795	2,240	2,150
TENURE														
Owner-occupied	45.0%	49.5%	52.0%	26.7%	27.0%	0.5%	31.1%	28.0%	0.0%	35.1%	28.0%	12.1%	21.7%	26.0%
Renter-occupied	55.0%	50.5%	48.0%	73.3%	73.0%	99.5%	68.9%	72.0%	100.0%	64.9%	72.0%	87.9%	78.3%	74.0%
SELECTED CONDITIONS														
Lacking some or all plumbing	3.5%	1.5%	1.0%	6.6%	1.0%	2.7%	4.6%	0.0%	82.7%	30.9%	0.0%	12.1%	2.5%	1.0%
1.51 or more persons/room	6.9%	7.4%	8.0%	7.8%	9.0%	1.3%	5.0%	7.0%	11.5%	3.8%	4.0%	12.3%	10.6%	13.0%
PERSONS PER HOUSEHOLD	3.60	3.15	3.02	1.82	1.82	1.81	1.73	1.72	1.19	1.57	1.57	2.27	1.93	1.95
MEDIAN CASH RENT* (renter-occ'd)	\$130	\$279	\$615	N/A	N/A	\$189	\$347	\$700	\$58	\$250	\$889	\$101	\$271	\$561
As % of median family income	13.0%	14.2%	14.8%	N/A	N/A	15.5%	17.7%	23.0%	N/A	9.4%	22.7%	13.6%	18.1%	21.0%

NOTES: * For 1980, median values are for non-condominium housing units.
 ** Figures based on 15 percent sample; numbers hence represent estimates.

*N/A: Not Available.

Sources: U.S. Bureau of the Census, 1972, 1981a, 1981b; Hawaii State Department of Planning and Economic Development, 1973.

REFERENCES

Bank of Hawai'i.

Business Trends. July 1997 - March 1998. Honolulu, HI, 1998a.

Construction in Hawai'i, 1998. Honolulu, HI, 1998b.

City and County of Honolulu.

Department and Agency Reports of the City and County of Honolulu for Fiscal Year July 1, 1996 - June 30, 1997. Honolulu, HI, 1998.

Community Resources, Inc.

Social Impact Assessment for the Proposed Pacific Nations Center, Honolulu, Hawai'i. In Parsons Hawai'i, *Draft Environmental Impact Statement, Pacific Nations Center*. Prepared for City and County of Honolulu Department of Housing and Community Development. Honolulu, HI, 1989.

Hawai'i State Department of Business, Economic Development and Tourism

The State of Hawai'i Data Book, 1996. Honolulu, HI, 1997a..

The 1992 Hawai'i State Input-Output Study (Preliminary Report). Honolulu, HI, 1997b.

Hawai'i State Department of Labor and Industrial Relations

1996 Employment and Payrolls in Hawai'i. Honolulu, HI, 1997.

Hawai'i State Department of Planning and Economic Development

Community Profiles for Hawai'i. Honolulu, HI, 1973.

Hawai'i State Department of Taxation

Hawai'i Income Patterns, Corporations - 1989. Honolulu, HI, 1991.

LaCroix, S.J.

"Cost of Housing." In R. Roth, ed. *The Price of Paradise*. Honolulu, HI, 1992.

Locations, Inc. and SMS Research & Marketing Services, Inc.

Hawai'i Housing Policy Study. Honolulu, HI, 1992.

Morgan Quitno Corporation

State Rankings, 1993: A Statistical View of the 50 United States. Lawrence, KS, 1993.

SMS Research & Marketing Services, Inc. and The Prudential Locations, Inc.
Hawai'i Housing Policy Study Update 1997. Honolulu, HI, 1997.

US Department of Commerce, Bureau of the Census
1970 Census of Population and Housing. Census Tracts: Honolulu, Hawai'i Standard Metropolitan Statistical Area. Washington, DC, 1972.

Census of Population and Housing, 1980: Summary Tape File 1-A, Hawai'i. Washington, DC, 1981a.

Census of Population and Housing, 1980: Summary Tape File 3-A, Hawai'i. Washington, DC, 1981b.

Census of Population and Housing, 1990: Summary Tape File 1-A, Pacific Division, Vol. I. CD90-1A-9-1. Washington, DC, 1991a.

Census of Population and Housing, 1990: Summary Tape File 3-A, Alaska, Hawai'i, Oregon. CD90-3A-02. Washington, DC, 1991b.