August 3, 2007

The Honorable Laurence K. Lau, Acting Director
Office of Environmental Quality Control
Department of Health
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Lau:

Subject: Chapter 343, HRS, Final Environmental Assessment (FEA)
Finding of No Significant Impact (FONSI)
Project: 260 Beach Walk Retail Development
Applicant: First Round Pacific, LLC
Agent: Group 70 International, Inc.
Location: 270 and 286 Beach Walk, 321 Saratoga Road - Waikiki
Request: Waikiki Special District Permit (Major)
Proposal: New Retail Development
Tax Map Keys: 2-6-3: 26, 27, 48, 49 and 58

The Department of Planning and Permitting has reviewed the comments received during the 30-day public comment period, which began on May 8, 2007. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish notice of availability for this project in the next available OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form and four (4) copies of the FEA. If you have any questions, please contact Sharon Nishiura of our Urban Design Branch at 768-8031.

Very truly yours,

Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:pl
Encl.

Doc. 557192
280 Beach Walk Retail Development

Applicant:
First Round Pacific, LLC
Agent: Cory, LLC
4901 Kalani‘ana‘ole Highway
Honolulu, Hawai‘i 96821

Prepared by:
Group 70 International, Inc.
Architecture • Planning & Environmental Services • Interior Design • Assets Management
Honolulu, Hawai‘i

August 2007
280 Beach Walk Retail Development
TMK 2-6-003:026,027,048,049,058
Waikīkī, Oʻahu, Hawaiʻi

Final Environmental Assessment

This environmental document is prepared in accordance with the requirements of Chapter 343, HRS and Hawaiʻi Administrative Rules, Title 11, Department of Health.

Applicant:
First Round Pacific, LLC
Agent: Cory, LLC
4901 Kalaniʻanaʻole Highway
Honolulu, Hawaiʻi 96821

Approving Agency:
City and County of Honolulu
Department of Planning and Permitting
650 King Street
Honolulu, Hawaiʻi 96813

Prepared by:
Group 70 International, Inc.
Architecture • Planning & Environmental Services • Interior Design • Assets Management
Honolulu, Hawaiʻi

August 2007
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To facilitate the readers’ ability to distinguish the revision made from the Draft EA to the Final EA, substantive changes and additions are highlighted. Text that has been deleted is indicated by a strikethrough. New, revised and deleted sections, figures and appendices are noted.

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SECTION 1.0
Introduction
1.0 INTRODUCTION

1.1 PROJECT INFORMATION SUMMARY

Type of Application: Environmental Assessment (EA)

Applicant/Land Owner: First Round Pacific, LLC
Agent: Beall Corporation
4901 Kalani’ana’ole Highway
Honolulu, Hawai’i 96821
Contact: Cory A. Beall
Telephone: (808) 542-9846

Accepting Authority: City and County of Honolulu
Department of Planning and Permitting,
Urban Design Branch
650 South King Street
Honolulu, Hawai’i 96813
Telephone: (808) 527-5369

Name of Action: 280 Beach Walk Retail Development

Agent: Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawai’i 96813
Contact: Kāwika McKeague
Telephone: (808) 523-5866

Project Location: Waikīkī, O‘ahu, Hawai‘i (Figures 1-1 and 1-2)

Tax Map Key:
TMK (1) 2-6-003: 026 (Vacant Lot) (Figure 1-3)
TMK (1) 2-6-003: 027 (Vacant Lot)
TMK (1) 2-6-003: 048 (Existing Parking Structure)
TMK (1) 2-6-003: 049 (Parking/Loading Access Easement)
TMK (1) 2-6-003: 058 (Utility Easement)

Land Area:
TMK (1) 2-6-003: 026/027 21,394 square feet (SF)
TMK (1) 2-6-003:026 13,664 SF
TMK (1) 2-6-003:027 7,730 SF
TMK (1) 2-6-003: 048 6,272 SF
TMK (1) 2-6-003: 049 4,888 SF
TMK (1) 2-6-003: 058 2,710 SF
TOTAL Land Area 35,264 SF (0.81 acres)

State Land Use District: Urban District (U)

County Zoning:
TMK (1) 2-6-003:026 Resort Commercial Precinct (RCP)
TMK (1) 2-6-003:027 Resort Mixed Use Precinct (RMUP)
1.2 OVERVIEW OF PROPOSED PROJECT

First Round Pacific, LLC is proposing a retail development which will be known as 280 Beach Walk. The project is situated on approximately 0.81 acres on the island of O‘ahu, in the moku (district) of Kona, within the ahupua‘a of Waikīkī (Figure 1-1). The project site area is an approximately 35,256 square foot (SF) property located near the north end of the elongated block bounded by Kālia Road to the south, Kalākaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west (Figure 1-2). The project area is presently a largely empty lot that includes a two-level parking garage, a permanent access easement and, until recent demolition, low-rise buildings, including the Hula Hut Restaurant.

Envisioned as a subtle yet important piece to the ongoing revitalization effort within the Waikīkī corridor, the proposed project will contribute to an emerging trend of redevelopment that defines a key gateway experience to the State’s largest investment in the tourism industry. The design of the new building depicts a series of two-story storefronts; each of the project’s retail units oriented directly to Kalākaua Avenue. Storefront units with direct access from the street will coexist with a second floor restaurant and outdoor dining experience designed to reflect the diversity that makes Waikīkī special and unique. The building design and appurtenant landscaping will comply with the requirements of the Waikīkī Special District Design Guidelines in a manner that creates strong visual ties to the activity along Kalākaua Avenue and the Beach Walk corridor.

The project area includes the following Tax Key Map (TMK) parcels: TMK 2-6-003: 026, 027, 048, 049 (which is owned by RGM Trust) and 058 (Figure 1-3). While all the parcels are defined within a Joint Development Agreement (JDA), parcels 026 and 027 are the primary properties subject to major redevelopment and are thus the primary focus of this environmental review. However, other planned improvements including those to the existing parking facility and access on parcels 048 and 049 have been fully considered in the environmental study. Based upon preliminary review of historical photographs, maps, and land use records, the proposed development site had been used for a mixture of commercial, residential, and hospitality properties since prior to 1914. Most recently, the parcels of the JDA were occupied by a residential apartment-hotel building on parcel 027 and the Hula Hut restaurant on parcel 026. In 2000, the residential building on parcel 027 was demolished. Similarly, the restaurant building located on parcel 026 was demolished in 2004. Both parcels have remained vacant since that time. Currently, parcels 026 and 027 are gravel-covered vacant lots, used for parking and surrounded by a chain link fence (Figure 1-4).

The project area proposed for development consists of a 34,199 SF retail building on parcels 026 and 027. The proposed development includes a series of two-story storefronts, accentuated with a
glazed-tile roof form that captures the street-oriented building expressions and traditions reminiscent of Honolulu’s earliest places of commerce. The proposed height of the building’s roof ridge is 50 feet, a dimension that closely references the existing conditions of the adjacent Burberry and Hawaiiana Hotel buildings (Figure 1-5). An existing two-level parking structure occupies Parcel 048. Portions of the parking structure, its entrance and exit, are located on Parcel 049, which is not owned by First Round, LLC. Access via a perpetual access easement is secured through a Conditional Use Permit (Conditional Use Permits 2000/CUP-84) between the two landowners. The easement will continue to be utilized as a means for parking access as well as for access to a new loading dock for the proposed development. A portion of the northeast corner of the parking structure will be demolished and an existing ramp to the lower level of the structure will be relocated in order to allow vehicle access to the new loading area for 280 Beach Walk. Parcel 058 is a utility easement. Additional minor site and surface improvements will occur in support of the parking, loading, and circulation requirements.

The surrounding area is heavily developed with commercial properties including extensive street-front retail, residential condominium high-rise structures, hotels, and public parking areas. Specifically, the proposed development is located between the Burberry Store and the Hawaiiana Hotel. The Beach Walk Triangle Park and the ANA Office building are located directly across Beach Walk to the east of the project site. Within one block of the site area are newer developments such as the Outrigger Waikīkī Beach Walk, Trump Tower, the Royal Hawaiian Shopping Center, and retailer’s such as Tiffany’s, Coach, Chanel, and Tod’s.

1.3 HRS, CHAPTER 343 ENVIRONMENTAL REVIEW PROCESS AND COUNTY REVIEW PROCESS

In accordance with the requirements of Chapter 343, Hawai‘i Revised Statutes, a Draft EA is being prepared as the proposed project is located within the City and County of Honolulu Waikīkī Special District. Upon completion, the Draft EA will be submitted to the State Office of Environmental Quality and Control (OEQC). A notice of the Draft EA will then be published in the Environmental Notice, which will also commence a 30-day public review period. The Draft EA will be presented in eight sections and will include the following content: a detailed summary and project description; a description of the environmental setting; a section that identifies potential impacts and prescribed mitigative measures on identified natural, cultural, and socioeconomic resources as well as project demands on existing infrastructure; a description and analysis of alternatives; a discussion of the project’s relationship to State and County land use designations and regulations; the anticipated determination and reasons for its believed outcome; a list of necessary permits and approvals; an updated list of agencies, organizations, and individuals that participated in the pre-consultation phase of the Draft EA and that received copies of the Draft EA; and a list of references cited or used in developing the Draft EA. After the 30-day review period of the Draft EA has been completed, public comment received will be considered and addressed, as appropriate. A Final EA will then be prepared, highlighting key areas of the document that were revised, updated, or modified based upon information received during the public comment period.

Upon acceptance of the Final EA, a Finding of No Significant Impact (FONSI) is anticipated. A Special District Permit (Major) application would then be filed with the City and County of Honolulu, Department of Planning and Permitting, Urban Design Branch for review and approval, as per the requirements of the Revised Ordinances of Honolulu, Chapter 21 (Land Use Ordinance), Article 9 (Special District Regulations). Construction would begin immediately after the issuance of the Special District Permit (Major) and other ministerial permits.
Figure 1-1  280 Beach Walk Project Location Map
Figure 1-2  Aerial Map of Waikīkī Area with outlined Project Boundary for 280 Beach Walk
Figure 1-3  Tax Map Key and Special Management Area for 280 Beach Walk
Figure 1-4   Existing Site Conditions of 280 Beach Walk, Parcel 026 and 027

Figure 1-5   Concept Rendering of Proposed 280 Beach Walk Retail Development
1.4 **AGENCIES AND PUBLIC CONTACTED DURING THE PRE-CONSULTATION AND DRAFT EA REVIEW PERIODS**

A Pre-consultation Memo and Participant Letter were sent in January 2007 to initiate the environmental review process. Copies of these documents along with the comment and response letters received and issued are included as Appendix A.

A list of agencies and other parties that were presented notice of the proposed development or were contacted for input and comment regarding the proposed project during the pre-consultation period of the Draft EA is provided below. A listing of those agencies, organizations, and individuals that will be provided an opportunity to review the Draft EA is provided in Section 7.0 of this document.

**State Agencies**
Department of Business, Economic Development & Tourism, Office of Planning  
Department of Land and Natural Resources (DLNR), Director’s Office  
DLNR, Office of Conservation and Coastal Lands  
DLNR, State Historic Preservation Division  
Office of Environmental Quality Control  
Office of Hawaiian Affairs

**City and County of Honolulu**
Department of Planning & Permitting  
Department of Design & Construction  
Department of Environmental Services

**Elected Officials**
State Senator Gordon Trimble  
State House Representative Tom Brower  
State House Representative Scott Y. Nishimoto  
Council District Representative Charles Djou

**Citizen Groups, Individuals & Consulted Parties**
Waikiki Neighborhood Board Association No. 9, Robert Finley (Chair)  
Waikiki Improvement Association, Patricia Tam (Chair)  
RGM Trust  
Ronald Petty  
Jay Shidler  
Saratoga Partners, LLC  
Dyer Beach Walk Holdings, LLC  
Sorensen Family  
Florence T. Cooper  
Nomura Financial, LTD  
Nancy Walker  
Saratoga Apt-Hotel, Inc.  
Marie Lee Trust  
Urasenke International, Inc.
1.5 NECESSARY PERMITS AND APPROVALS

Project development and implementation is scheduled to begin immediately following approvals of necessary permits and approvals, and available funding. A summary of possible required approvals is provided below:

- Issuance of FONSI for the HRS 343 Final EA
- Application and Acceptance of City and County of Honolulu Special District Permit (Major) application
- Ministerial Permits including grading and building permits, sewer and water connection permits, sidewalk permits, and possible subdivision approval to transfer right-of-way to proposed on-site easement

All permits and approvals, including ministerial permits, will be obtained prior to construction.
SECTION 2.0
Description of Proposed Project
2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 PURPOSE AND NEED OF PROPOSED ACTION

Located in the heart of Waikiki, the proposed retail development of 280 Beach Walk will bring a sense of enhanced vitality to the heart of Hawai’i’s main economic market. In the immediate proximity of the Fort DeRussy Reservation, the prominent retail storefronts of 2100 Kalakaua Avenue, Outrigger’s Waikiki Beach Walk, and the new Trump Tower, the proposed 280 Beach Walk will contribute to an emerging trend of redevelopment that defines a key gateway experience for Honolulu’s most active pedestrian district. The proposed development is specific to enhancing the physical character and ambiance of the immediate vicinity but will also be an integral but small extension of the overall urban revitalization effort along the main street front of Kalakaua Avenue into the heart of Waikiki.

Currently, the gateway into Waikiki introduces visitors and residents to a mix of urban and open-space landscaped experiences that begin to blend one into the other in a manner that is reflective of the rich heritage and cultural diversity of Hawai’i yet contemporary in the urban form and design. It is anticipated that the specific experience of the 280 Beach Walk project from Kalakaua will be enriched by its frontal relationship to a small public open space that places the project site in a unique position off of the street. From this point of view, 280 Beach Walk will be perceived both as a special destination within the district, as well as an important visual connection to the area’s revitalized ocean-side developments.

Inspired by Waikiki’s special sense of place, the design of 280 Beach Walk will transform approximately 0.81 acres (35,256 SF); including 21,394 SF of currently vacant yet previously developed land into a modest but foremost destination of signature shops and dining. The project design will emphasize this district’s sensibility to pedestrian scale through a carefully crafted architecture that celebrates a strong connection between its use, context, and climate.

2.2 PROJECT AREA DESCRIPTION AND CURRENT LAND USES OF THE SURROUNDING AREA

The project site for the proposed 280 Beach Walk Retail Development consists of five properties totaling 0.81 acres, which are defined by a Joint Development Agreement (JDA).

Tax Map Key (TMK) parcels 1-2-6-03: 026 and 1-2-6-03: 027 are both unimproved and consist of vacant land covered with gravel. A residential apartment-building and restaurant formerly occupied the two parcels but were demolished in 2000 and 2004, respectively. Approximately 21,394 SF, the two parcels currently appear to be one lot and are surrounded by a chain link fence.

The development property also consists of TMK parcel 1-2-6-03:058 (2,710 SF), which serves as a utilities easement, and TMK parcel 1-2-6-03: 048 (6,272 SF), a 2-story parking structure with a basement level. The property owners have obtained a perpetual access easement from the owner of TMK parcel 1-2-6-03:049 (4,880 SF) to allow access to the parking structure on parcel 048 as well as to the loading dock of the proposed new development.

The project area (Figure 1-1) is bordered to the east by Beach Walk beyond which is the Wyland Plaza, a multi-tenant commercial high rise. The tenants of the Wyland Plaza include the Wyland Gallery, Planet Hollywood, Marie’s Health Food, and a parking garage. To the west, the project
area is bordered by Saratoga Road, beyond which is the U.S. Post Office building. A tennis court is situated northwest of the project area and public parking lot is located southwest of the project area beyond Saratoga. To the immediate north of the project area is the Burberry Plaza, which fronts Kalākaua Avenue. The Hawaiian Hotel is located just south of the project area.

2.3 PROPOSED PROJECT DESIGN OF RETAIL BUILDING

The focused area for redevelopment is to occur on approximately 21,394 SF that comprise parcels 026 and 027. This portion of the 280 Beach Walk project will entail the development of retail and dining fronting the vibrant pedestrian experience of Waikīkī’s Kalākaua Avenue. Pedestrians will be greeted by a building expression composed of a series of two-story storefronts each accentuated by a dramatic glazed-tile roof form in a way that recalls the street-oriented building traditions of Hawai’i’s earliest places of commerce. Under the City and County of Honolulu Land Use Ordinance (LUO), the allowable building area for the project area is 68,329 SF, the proposed development would include approximately 34,199 SF of restaurant, retail, egress, and support space (Table 2-1).

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<tr>
<th>280 Beach Walk Project Components</th>
<th>1ST Floor (SF)</th>
<th>2ND Floor (SF)</th>
<th>TOTAL (SF)</th>
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<td>2,550</td>
<td>13,095</td>
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<td>5,050</td>
<td>12,385</td>
<td>17,435</td>
</tr>
<tr>
<td>LĀNAI</td>
<td></td>
<td>1,714</td>
<td>1,714</td>
</tr>
<tr>
<td>EGRESS</td>
<td>571</td>
<td></td>
<td>571</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>1,384</td>
<td></td>
<td>1,384</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17,550</td>
<td>16,649</td>
<td>34,199</td>
</tr>
</tbody>
</table>

Table 2-1 Proposed Space Program for 280 Beach Walk Retail Development

The ground floor retail space will entail the construction of six units utilizing a total of approximately 10,545 SF. The retail bays will vary in size from 1,100 to 5,200 SF. An additional 2,550 SF of retail space would be provided on the second floor, yielding a total of 13,095 SF for the project. Approximately 5,050 SF of ground floor space will be utilized as part of the entry and retail program for the proposed second floor restaurant. The dining area of the restaurant itself will entail the use of 12,385 SF on the second floor with an additional 1,714 SF reserved for an outdoor lānaī dining area. An additional 1,955 SF will be used for egress and back of house support (Figures 2-1 to 2-9).

A focus of the design is to orient each of the project’s six retail units to directly address Kalākaua Avenue. Overall, the effect of the storefront offsets will be to blend with the curvilinear geometry of Beach Walk as it creates a rhythm of repetition consistent with the buildings of the surrounding area. Planned variation in the width of the storefronts will further emphasize a new development which is naturally connected to the diversity of retail and restaurant programs that characterize Waikīkī’s streetscape. Additionally, the material, proportion, and use of the proposed storefronts are designed to be appropriate to the pedestrian-level experience. The experiences of strolling through the project’s beautifully appointed landscape design or dining on the second floor dining lānaī with strong visual ties to the activity of Kalākaua will tie 280 Beach Walk to the distinctive sense of place qualities in Waikīkī.
The architectural character of 280 Beach Walk is intended to articulate thoughtful attention to hierarchy, detail, material, and color in a manner that allows the project to derive its identity from project site’s location, shape, and surrounding context. Although the project is located in an area of Waikiki that allows for building heights up to 300 feet, the new two-story building would have a height of approximately 46 feet at the highest ridge line.

Experienced from the street, the large pitched roof forms of clay-tile will articulate a highly textured and carefully crafted expression that is consistent with the hand-built construction methods of Hawaiian architecture. These roof forms are supported by a legible framework of column and beam components that describe the structural principles of a shed-roof typology that has long been a tradition in the built-form of the Pacific Rim. The resulting spatial quality of the architectural design underlines this development as a potential to be a special place of public use within Waikiki characterized by a real sense of connection to its adjacent built and open spaces.

The design proposes a use of materials appropriate to blending the unique quality of the development into the continuity of the Waikiki experience. Material colors have been selected to emphasize a concentration of natural earth tones with accent hues of varying colors that celebrate the area’s rich cultural heritage. The design of the building will include a blend of materials to be used throughout the project, including the use of natural woods, metal, and plaster combined with glass. Additionally, modest signage panels designed within the guidelines of the Waikiki Special District will be located within a three-foot high horizontal transom above the recessed doorways leading to each unit. Together, the qualitative use of materials and compositional elements found in 280 Beach Walk will give the development a tactile and approachable quality. At night, the qualities of the overall design will continue to be legible through a lighting design that places subtle emphasis on the key features of the landscape and building form.

2.4 PROPOSED FRONT-YARD, OPEN SPACE, GREEN LANDSCAPED SPACE, AND PEDESTRIAN ACCESS

The proposed architecture design of 280 Beach Walk will also be complimented by a landscape design that allows the public to experience the calming outdoor ambiance of Waikiki’s ideal climate. In accordance with the standard requirements of the City and County of Honolulu L.U.O and Waikiki Special District Design Guidelines, the building is to be placed fifteen feet back from the Beach Walk property line and maintain a 5-foot right of way (ROW) easement for public access and use (Figure 2-9).

The area of required front-yard space under the L.U.O is 2,949 SF. The proposed building footprint provides 2,992 SF of front-yard space (Figure 2-10). Further, the L.U.O requirement for open space is satisfied by the provision of area for front yard and the area of easements, which totals 3,654 SF.

The proposed design of the front-yard includes a gentle rolling curb-side berm placed to elevate the project’s ground plane in accordance with the flood-protection guidelines of the area. Dotted with tropical vegetation, the berm will establish a natural transition from the adjacent street and walkways to the proposal’s distinct linear plaza. Stair and ramp access at both the mauka and makai sides of the plaza will lead pedestrians to the plaza built of natural stone and cut to a pattern that blends into the experience of Waikiki. To accommodate for the proposed design, transferring the public right-of-way to an on-site easement would be required.

As a result, 2,349 SF of the 2,992 SF of front-yard space would be transferred into green landscaped space (Figure 2-11). The required landscaped area is the required front-yard less
necessary access ways and drives, which ranges from 1,000 SF to 1,975 SF. The preferred landscape scheme meets the requirement by providing a continuous ribbon of landscape that provides an elegant streetscape transition to the store fronts. Coconut palms arching over fragrant Plumeria trees that provide shade along the walkway is planned to create an effective landscape buffer between the street and the pedestrian areas. The canopies of trees will be maintained to allow pedestrians and viewers from vehicles to see the store fronts clearly under the canopies.

The landscaped area is to be accented with low growing dwarf Lauae fern, with colorful shrubs near the walkway of Hibiscus and Spider Lilies. The landscaped area will maintain sight lines along the street and from the street to the storefronts. Maintenance and upkeep of the landscaped areas will be the responsibility of the property owner.

Most of the pedestrian foot traffic emanates from ongoing retail and restaurant activities along Kalākaua Avenue. The propose front-yard area is wide enough to help create a comfortable pedestrian space near the storefronts that does not conflict or feel imposed upon from the street. Further, the preferred front-yard design scheme with the use of the landscaped berm along the front edge will deter pedestrians from illegally crossing Beach Walk from the adjacent Beach Walk Triangle Park. The resulting front-yard draws qualities of design standards from Kalākaua Avenue as the main street into Waikīkī’s auxiliary roadways such as Beach Walk, and promotes a public sense of place appropriate to the pedestrian use of the area within the immediate vicinity.

### 2.5 PROPOSED MODIFICATION OF PARKING AND LOADING AREAS

Most parking within the area is currently accommodated with limited on street metered parking and nearby parking garages. As per the requirements of the LUO, the ground floor level retail is exempt from any provisions for parking. With the proposed second floor dining establishment, there will be a need to provide one parking space per 800 SF, or the equivalent of 16 spaces. This requirement will be satisfied by the existing parking facility on parcel 048, which will undergo some renovation. The existing JDA requires that 26 additional spaces are dedicated for RGM Trust, as the owner of parcel 049. Total required parking under the LUO is 46 spaces.

The existing parking structure and adjacent surface parking lot, which are both accessed from Saratoga Road, can accommodate a maximum of 47 standard size vehicles and does not provide any designated loading spaces. Existing parking is managed via a paid-for self-parking system with an attendant on to collect parking fees and direct vehicle movements. The current parking layout is not consistent nor compliant with LUO standards and definitions.

Loading and delivery spaces are limited along Beach Walk. Most deliveries to be conducted for the 280 Beach Walk project will be conducted via Single-Unit Trucks and other small vehicles and are short-term with drivers taking no more than a few minutes to complete their deliveries. However, some vendors, notably beverage and food vendors, will take a longer time to service the on-site dining establishment. To accommodate for the anticipated delivery loading demand, a new loading area with three delivery bays to be accessed via Saratoga Road will be developed to provide back-of-house service to the retail and dining establishment (refer to Figure 3-1).

To provide for access and construction of the new on-grade loading dock, approximately 2,200 SF of the existing 1-story basement parking structure will be demolished along its east end. The ramp leading down to the existing below-grade parking level would be relocated. During this phase of selective demolition and construction of a new basement wall, some limited dewatering is anticipated.
Landscaping along the new parking area will include the use of Plumeria or Stemmadenia trees. These types of trees are medium canopy trees that provide fragrant flowers, canopies for shade and are consistent with the Waikiki Special District Guidelines as it pertains to the use of plant materials. The parking lot will be screened from Saratoga Road by a hedge of Hula Girl Hibiscus, maintained at a height of 30". This accent shrub treatment will extend along the planting areas that border adjacent properties or lots. A low groundcover, like Dwarf Laua‘e will be added throughout any planting area within the parking lot. The landscaped areas along the parking area will be automatically irrigated.

Additional but minor site and surface improvements in support of the parking, loading, and circulation aspects of the 280 Beach Walk development will occur on Parcels 048, 049, 058.

2.6 CONSTRUCTION SCHEDULE AND PROJECTED COSTS

Project construction would start immediately after issuance of necessary permits and approvals. Scheduled duration for construction is anticipated to be 12 months. Estimated costs for the proposed development are approximately $12.5 million. An order of magnitude estimate is provided as Appendix B.
Figure 2-1  280 Beach Walk Site Plan (REVISED)
Figure 2-2  280 Beach Walk Ground Floor Plan (REVISED)
Figure 2-3 280 Beach Walk 2nd Floor Plan (REVISED)
Figure 2-6  280 Beach Walk Elevation Study- West Elevation View
Figure 2-7 280 Beach Walk Elevation Study- North Elevation View (REFORMATTED)
Figure 2-8  280 Beach Walk Elevation Study- South Elevation View (REFORMATTED)
Figure 2-9  Required Front Yard and ROW Easement with Allowed Footprint (REVISED)
Figure 2-10  Proposed Building Footprint with Front Yard and ROW Requirement (REVISED)
Figure 2-11 280 Beach Walk Proposed Green Landscaped Space & Transferred Public ROW (REVISED)
SECTION 3.0
Description of the Environmental Setting, Potential Impacts, and Mitigation Measures
3.0 DESCRIPTION OF THE ENVIRONMENTAL SETTING, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This section describes the existing environmental setting and identifies possible impacts of the proposed project. Strategies to mitigate those potential impacts are also identified.

3.1 CLIMATE

Existing Conditions
With an annual average temperature ranging from the high-60s to the mid-80s degrees Fahrenheit (F), Waikīkī has a relatively dry climate. The average monthly low temperature is 64 degrees F in January and the average monthly high temperature is 88 degrees F in August and September. Nestled in the leeward rain shadow of the Koʻolau Mountains, Waikīkī has an average annual rainfall of 25 inches with most of it occurring between the months of November through January.

Winds from the northeast, known as tradewinds, are the most predominant over the Hawaiian Islands. In the winter, there is a shift in the wind patterns characterized by the arrival of the westerlies and frontal influences from the North Temperate Zone becoming more prevalent. Westerly winds typically are characterized by the presence of strong winds and high wave activity from the southwestern sector of the Pacific. Overall, the annual average wind speed in Waikīkī ranges from 9-11 miles per hour.

Anticipated Impacts and Mitigation Measures
The proposed action will have no effect on climatic conditions, and therefore no mitigation measures are required.

3.2 GEOLOGY AND TOPOGRAPHY

Existing Conditions
The island of Oʻahu was created through several stages of activity emanating from two volcanic domes. Through various stages of eruptions, erosion and land movement, the volcanic forms became the Waiʻanae and Koʻolau mountain ranges. The development of these large land mass forms emerged together, forming the island and causing submergence to occur. The project area is located approximately 0.25 miles north of the coastline. The regional topography is relatively flat but does slope gently toward the ocean. Ground surface elevation at the property is less than 10 feet above mean sea level.

Anticipated Impacts and Mitigation Measures
No adverse impacts to the geological conditions, topography, or drainage capability are anticipated as a result of this project.

There will be some minor landscaping activity done to the area fronting the new building, which will have no substantial alteration to the overall existing topography of the project site. It is not anticipated that significant grading will be required. No substantial fill or excavation is being proposed for the project. Therefore, the geology and topography of the area will not be significantly impacted. Mitigation measures related to soils and grading are described in the next section.
3.3 Soils

Existing Conditions

Waikīkī is situated upon a reef formation that extends from Kaka‘ako to the base of Lē‘ahi. Due to its location at the base of a once vast tributary system and in close proximity to Lē‘ahi crater, an alluvial mantle on its coral foundation covered the area. As early as 1909, drilling data showed that there is a regular deposition of terrigeneous clay and limestone overlying a substrate layer of coral, coralline algae, and shells. Additionally, the soil contains volcanic ash, olivine, and other lava residue.

The project site sits on a thick coastal caprock formation, approximately 700 to 800 feet thick, comprised of marine (calcareous) sediments, some of which have been imported to fill marshes and other local depressions. According to the O‘ahu soil survey (Figure 3-1), the project area and most of the Waikīkī coastline is underlain by Jaucus Sands (JaC), 0 to 15% slope. Soils within Jaucus Sands are characterized as well-drained calcareous soils developed from coral and seashells found on coastal plains near the ocean. The soil is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. Permeability is rapid and runoff is very slow. Additionally, most of the soil areas in the remaining makai portions of Waikīkī are indicated as Fill (FL).

Anticipated Impacts and Mitigation Measures

Based on geotechnical information derived from the investigated conditions on both the project site and adjacent properties, it is anticipated that a deep foundation system will be required for the proposed two-story building. The most viable option for this foundation system in Waikīkī would be the use of driven pre-cast piles 7 1/2 in diameter micropiles. The design team anticipates that the number of piles required for the massing of the project will be less than 90 piles up to a depth of 80 feet and should result in an installation period of only 4 weeks. Because of the short duration time of pile installation, the use of this foundation system would not have prolonged noise or vibration impact on the surrounding neighborhood. Moreover, the new generation of quieter hydraulic impact hammer equipment would be used, instead of the traditional diesel hammer driver. The hydraulic hammer frame and the drive cap are designed for the environmental advantages of low impact noise, no exhaust gas, and less vibration. Buildings on the immediately adjacent properties would be physically surveyed for their pre-existing condition before the onset of pile operations, in order to expedite the resolution of any vibration-related concerns during construction. The subsurface geology of this site does not have an upper coral ledge, and so vibrations would not be generated by driving through such a shallow hard stratum, but the energy of driving would be transmitted deeper where vibration would be attenuated at depth. These piles will be placed in holes drilled into the soil and grouted. Despite some cost premium for this type of system, the relatively small diameter of the piles will produce minimal displacement of materials to the surface, and there will be minimal noise and no impact induced vibrations. Due to the minimal associated environmental impact, this type of system has been most commonly used for low rise projects in the area in recent times. The micropiles would be interconnected by a series of pilecaps and grade beams. Fill is to be added to the site to increase the elevation of the building; therefore the pilecaps and grade beams would have minimal penetration into the existing grade. The slab-on-grade would be above grade. The grade beams will generally penetrate no more than 6" into the existing grade with the exception of small entry areas at the rear of the units and the loading dock area which would have foundations 1'-0" to 2'-9" below existing grade. In addition, perimeter grade beams would be up to 1'-3" below grade and there would be three elevator pits with foundations up to 5'-0" below grade.
Figure 3-1  Soil Classifications
Other construction-related activities will conform to the “Rules Relating to Soil Erosion Standards and Guidelines,” including strict erosion control and dust control measures. Primary fugitive dust control methods that will be implemented include regular watering of exposed soil areas, good housekeeping on the job site, and prompt landscaping, covering or paving of bare soils in areas where construction is completed. Siltation will be limited during construction through the use of silt fencing and sediment-absorbing devices. Once construction is complete, ground cover plantings, hardscape and other landscaping will be in place, effectively minimizing the soil loss. Any exposed on-site soils, whose permeability is high with slow runoff and slight erosion hazard, will absorb normal runoff events.

3.4 SURFACE AND GROUNDWATER RESOURCES & DRAINAGE

Existing Conditions
An assessment of existing surface and groundwater resources in the Lewers-Kālia-Beach Walk area was prepared in September 2001 by Tom Nance Water Resource Engineering for the Outrigger Waikīkī Beach Walk project. According to the study, basal groundwater does exist in the underlying calcareous sedimentary formation, which is on the order of 700 to 800 feet thick. Well tests conducted during the study indicated that the groundwater in the area is very saline, ranging from 70 to 95% seawater.

The Ala Wai Canal effectively intercepts all surface runoff from the watersheds inland of Waikīkī, so surface water is limited to locally generated rainfall runoff and is handled by the existing drainage system. Surface runoff from areas located mauka of the Outrigger property, including the 280 Beach Walk project site, will discharge into catch basins or manholes of the area’s surface drainage system. There is an existing 24 inch drain line along Beach Walk. The single ocean outlet next to the Outrigger Reef on the Beach Hotel is the sole discharge point for both surface and groundwater in the area. Ocean waters off the makai outlet from the project site are designated as Class A waters. Beneficial uses of Class A waters are fishing, swimming, surfing, recreational water activities, aesthetic enjoyment, and beach going, which are all very popular in the area.

Anticipated Impacts and Mitigation Measures
The type of retail land use proposed by the project development will be comparable to previous land use development on the project site, other existing boutique-style retail outlets, and significantly smaller than the ongoing redevelopment efforts of adjacent projects. A proposed 12” drain line will connect to the existing catch basin fronting the project site.

Groundcover, which is expressed as impervious surfaces versus landscaped areas, will be modified. It is assumed that surface runoff would be equivalent to approximately 20 inches per year over the impervious surfaces of the project area based upon 80% of the annual rainfall experienced in the general Waikīkī area. The remaining 20% is presumed to be lost to direct evaporation generally and percolation in the landscaped areas of the project. The quantity of surface runoff would not be significant and as stated, all of the percolate will eventually be discharged into the surface drainage system. Best Management Practices such as silt fencing and siltation-reducing devices will be utilized, as necessary, to mitigate impacts during construction. The impact to shallow groundwater will occur in the landscaped area of the project. The quantity of percolate to groundwater is not significant and all of the percolate will eventually be discharged into the surface drainage system. No change in the quality of the general area’s percolate is expected since landscaping activities will adhere to existing standards of practice.
3.5 **HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE HAZARDS**

A Phase 1 Environmental Site Assessment and subsequent field investigation conducted in June 2006 and are included as *Appendix C*.

**Existing Conditions**

In June 2006, a Phase I Environmental Site Assessment (ESA) was conducted for the project to identify any possible recognized environmental conditions (RECs) in connection with the property. The term “REC” as defined by the American Society for Testing and Materials (ASTM) is the “presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or the material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.” The study was prepared in conformance with procedural guidelines provided in ASTM E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment.

**Anticipated Impacts and Mitigation Measures**

The assessment revealed no evidence of current or historic RECs in connection with the property. However, there is potential that soil located on the project site has been impacted from suspect asbestos containing material (ACM) and suspect lead-based paint (LBP), based upon a Phase 1 ESA prepared in 2003 for the demolition of the Hula Hut restaurant. Suspect ACM in the form of remnants of spray-on fireproofing, remnants of black mastic behind wall coverings, remnants of gypsum wall boards and associated joint compound, remnants of cementations panels with wire mesh backing, stucco plastering on the exterior, and remnants of plaster on the interior and exterior walls were observed in the Hula Hut restaurant. The recommendation at that time was to test suspect ACM and LBP areas. According to the study, it was unclear whether such tests were performed. A subsequent field investigation was conducted on June 23, 2006. Five surface soil samples were collected from random spots within parcels 026 and 027. The samples were then sent to two different laboratories to test for lead and asbestos content. Laboratory results indicated that lead was not detected in any of the five soil samples. However, the results revealed that asbestos was detected in one of the five soil samples. However, the concentration of asbestos from this one sample was less than 1 percent. According to EPA asbestos regulations, ACM are defined as materials or products which contain more than 1 percent. Therefore, this sample is not defined as a ACM. As a result of this additional testing, there is no recommendation for additional investigation or remediation related to lead or ACM in the soil.

3.6 **NATURAL HAZARDS**

**Existing Conditions**

The project site lies within the 100-year flood zone designated AO on the National Flood Insurance Rate Map (#15003C0370, revised September 30, 2004), as shown in *Figure 3-2*. Flooding in the AO designated zone is usually shallow and consists of sheet flow on sloping terrain with a base flood average of 1 to 3 feet. Within the project site, the AO flood zone has an average flood depth of 2 feet.

Hurricanes are tropical storms that attain a minimum speed of 74 mph. The general season for hurricanes is between the months of June to December. The movement pattern of these systems can be erratic and unpredictable. The major hazards posed by a hurricane include violent winds, torrential rainfall, flooding, storm surge, and high surf.
Figure 3-2   FIRM Classification and Tsunami Inundation Zone Map
The majority of earthquakes in Hawai‘i are directly related to volcanic activity on the Island of Hawai‘i. The entire City and County of Honolulu lies in a seismic zone designated as 2A. Under the United Building Code (UBC) seismic provisions, a Zone 2A area could experience seismic activity between .075 and .10 of the earth’s gravitational acceleration (g-force).

In addition, the project site is located outside of the Tsunami Inundation Zone as demarcated on the maps for O‘ahu (Figure 3-2). Although having no bearing on the future potential of tsunami events and their impacts, historically, the south shore of O‘ahu, including Waikīkī, has been affected only minimally by past tsunami events.

**Anticipated Impacts and Mitigation Measures**

In general, flood, tsunami and earthquake conditions impose no major constraints on the project. All development at the site will be required to meet applicable building code standards for habitable structures and will be in compliance with the UBC and the City & County of Honolulu standard earthquake design provisions. The proposed project area will be developed at a +2 foot elevation. The project will comply with flood hazard requirements in accordance with current State and City & County of Honolulu standards, including the flood hazard development standards iterated in ROH, 21-9.10 (parts 4-6).

Potential mitigative measures include ensuring that retail employees and restaurant management are properly trained in assisting guests with appropriate procedures at the issuance of a natural disaster emergency. The identified O‘ahu Emergency Response Shelters closest to the project area are ‘Anuenue, Kāhala Elementary, Jefferson Elementary, McKinley High and Waikīkī Elementary Schools.

### 3.7 FLORA

**Existing Conditions**

The property currently includes a vacant gravel lot. The majority of the landscaping in the near vicinity is located at the Beach Walk Triangle Park to the east and the nearby Fort DeRussy area to the west. Within the general vicinity, numerous species of introduced, Native Hawaiian and Polynesian-introduced shrubs, groundcovers, trees and palms are present. None of these are rare or endangered.

**Anticipated Impacts and Mitigation Measures**

The majority of the current vegetation species adjacent to the project area are exotic to Hawai‘i. The development of the proposed project will not result in any adverse impacts to native plant species that are endangered, rare, or threatened.

Planned landscaping includes a blend of native and introduced species including the possible use of coconut and plumeria trees, dwarf lau‘ae fern, and spider lilies. The specific selection of plants is constrained by known utility ducts under this portion of the property and will require additional discussion with the City and County of Honolulu Department of Planning and Permitting and the respective utility companies.

### 3.8 FAUNA

**Existing Conditions**

Terrestrial fauna on the site and within the near vicinity is limited to rats, mice, and feral cats. The identification of avifauna that flock or reside within the project area include the common mynah,
cardinals, pigeons, doves, house finches, rice birds, and mockingbirds. These are common birds found throughout the urban areas of Honolulu. There are no rare, threatened, or endangered species on the site.

However, it should be noted that the manuokū, or white terns (*Gygis alba*) are common in the Northwestern Hawaiian Islands, but in the main Hawaiian Islands they are found only on O‘ahu, where they are listed as threatened by the State of Hawai‘i. According to a 2003 study, the manuokū currently are found only along the southeastern coast of O‘ahu, where they breed and roost exclusively in large trees. Some areas used by the manuokū on O‘ahu include Kalākaua Avenue and Waikīkī. This urban area experiences heavy pedestrian and vehicular traffic virtually 24 hours a day, but according to the study this does not inhibit reproduction of the manuokū, and it is possible that vehicular traffic actually protects tern nests by preventing predators from reaching nest trees.

**Anticipated Impacts and Mitigation Measures**

There are no anticipated impacts to the area’s vegetation and wildlife habitat. Although the manuokū are tolerant of people and noise, efforts should be made to minimize potential disturbances. Before conducting any work adjacent to any trees, the trees should be checked for nests or habitation to prevent any disruption. For instance, during the a nearby project, the demolition of the trees on the property was delayed until fledglings discovered during demolition preparation were able to fly away. During construction of the 280 Beach Walk project, similar actions of precaution will be implemented to ensure protection of known or discovered tern habitats in the project area.

### 3.9 COASTAL WATERS AND MARINE ECOLOGY

**Existing Conditions**

A study of ocean water quality and marine communities fronting the coastal region closest to the project area was conducted by Marine Research Consultants in September 2001 for the Outrigger Waikīkī Beach Walk Final EIS. According to this study, runoff from the mauka area of Waikīkī that encompasses the project site drains to the ocean through a box culvert with an outlet offshore of the beach (hereafter termed the “Outrigger Drain”). According to the study, the marine area off Waikīkī consists of a poorly defined embayment within Māmala Bay that extends from the Ala Wai Channel to the Kapahulu Groin area. The entire area has been altered substantially over the past decades, and was created from infilling of wetlands following the construction of the Ala Wai Canal.

**Ocean Water Quality**

Water quality parameters evaluated in the study included the nine specific criteria designated for open coastal waters in Chapter 11-54, Section 06 (Open Coastal Waters) of the Water Quality Standards, Department of Health, State of Hawai‘i, as well as additional constituents. In 2001, sampling was conducted within a corridor, which was bounded at the west by Fort DeRussy Beach, to the east by the Halekūlani Sand Channel, and centered on the drainage culvert.

Results of the 2001 water chemistry assessment revealed that water quality throughout the area off Waikīkī is surprisingly good with respect to State of Hawai‘i Water Quality Standards. Only a few samples had concentrations above the most stringent (i.e. dry) set of criteria. When the more lenient (wet) conditions (greater than 3 million gallons a day of freshwater are discharged) were applied, only one sample of NO₃ at the shoreline next to the box drain exceeded the water quality standards.
In March 2006, heavy rainfall caused an oversaturation of the ground, which resulted in a rupture of a 42-inch sewer main leading to a sewage spill into the Ala Wai Canal. Over 48 million gallons of sewage was deposited in the canal. The State Department of Health monitored the canal and outlying beach areas of Waikiki. After 10 days, the beaches were reopened for public use.

**Marine Biotic Community**

The biotic community structure of the Waikiki area is divided into two major zones. The inner zone, consisting of the region from the shoreline over the reef platform to the reef crest is primarily a sand and rubble-covered flat inhabited primarily by various species of algae. Reef corals, and most other epibenthic organisms, are sparse in the inner zone, primarily as a result of the continuous shifting of sand that is kept in motion by wave surge. The inner zone is the area that would be subjected to changes in water quality resulting from inputs from land.

The second major zone, which originates just seaward of the reef crest and extends seaward, is composed of a relatively flat “hardpan” limestone bottom. Because this zone is at depths below most of the destructive force of waves, and beyond the limits of sand scour, reef corals occur abundantly. As is typical on most coral reefs in Hawaii, the most dominant corals are *Porites lobata* and *Pocillopora meandrina*.

**Anticipated Impacts and Mitigation Measures**

The project is not anticipated to cause adverse effects to the nearshore waters and marine life during construction and operation. The proposed redevelopment of the property has little potential to alter the marine environment situated 0.25 miles from the project site. Reasonable steps will be taken in construction practices and operational procedures to ensure that the project does not involve unforeseen delivery of chemical materials to the nearshore ocean waters. As such, there should be no adverse impacts to the marine environment. Best Management Practices will be implemented in the project’s design, operation and maintenance.

3.10 AIR QUALITY

**Existing Conditions**

In Hawaii, both Federal and State environmental health standards pertaining to outdoor air quality are generally met due to prevalent trade winds and the absence of major stationary sources of pollutant emissions. The State Department of Health, Clean Air Branch has been monitoring ambient air quality in the State of Hawaii since 1957. In Waikiki, the National Air Monitoring Station is located at 2131 Kalakaua Avenue. This station was established for the monitoring of carbon monoxide. Other monitors on the island of Oahu are used to measure ambient air concentrations of the six criteria pollutants that the United States Environmental Protection Agency has promulgated National Ambient Air Quality Standards. The six criteria pollutants include: carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, ozone, and particulate matter less than or equal to 10 micrometers (PM$_{10}$).

**Anticipated Impacts and Mitigation Measures**

Construction activities are expected to generate short-term impacts to air quality, primarily from fugitive dust emissions. Site preparation of the project area will include the use of construction equipment that may create particulate matter (PM) emissions. The impact of construction activities on air quality will be mitigated by conforming to strict dust control measures, particularly those specified in the Hawaii Administrative Rules, Section 11-60.1-33 as related to fugitive dust; State Department of Health's (DOH) Water Quality Standards, Chapter 37-A, Public Health Regulations, 1968; and the U.S. Soil Conservation Service's Erosion and Sediment Control Guide for Hawaii.
These measures include soil wetting during grading activities, providing an adequate water source at the construction site prior to start up of activity, and use of dust fences adjacent to existing properties as appropriate to control fugitive dust emissions.

Short-term increases in vehicular emissions due to disruption of traffic by construction equipment mobilization will be alleviated by moving equipment and personnel to the site during off-peak traffic hours and coordinating with local police, as needed, for necessary traffic control and management around the immediate construction area.

### 3.11 Noise

#### Existing Conditions

The primary noise sources in the project area are traffic noise levels associated with Kalākaua Avenue, Kālia Road, and Saratoga Road due to the large volumes of traffic and heavy vehicles such as trucks and buses on those major thoroughfares. Adding to the traffic noise from the roadways are the relatively high noise levels of tour buses idling at curbside, sirens on police and emergency vehicles, outdoor mechanical equipment such as fans and air conditioning equipment at commercial and resort buildings, maintenance activities, and garbage and delivery truck operations.

In Hawai‘i, the State Department of Health (DOH) regulates noise from fixed mechanical equipment and construction activities. State DOH noise regulations are expressed in maximum allowable noise limits. Construction activities, which are typically noisier than the State DOH noise limits, are regulated through the issuance of permits allowing excessive construction noise during limited time periods.

#### Anticipated Impacts and Mitigation Measures

Unavoidable, but temporary, noise impacts may occur during the construction activities within the project area. 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. Adverse public health and welfare impacts from construction noise are not anticipated due to the temporary nature of the work, the availability of closure and air conditioning for noise mitigation at the majority of the apartment, resort, and commercial units in the project area, and due to applicable administrative regulatory controls of construction noise.

Construction vehicles and activities must comply with State DOH Hawai‘i Administrative Rules, Chapter 11-46, Community Noise Control. State DOH noise control regulations require a permit for construction activities that emit noise in excess of 95 decibels. Mitigation measures to minimize construction noise will include the use of mufflers to suppress loud equipment and limitations on the hours of heavy equipment operation as well as periodic monitoring of sound levels.

The proposed retail space and restaurant do not represent totally new activity centers for the project area. Risks of long-term adverse noise impacts from the proposed project are considered to be low and compliance with local noise regulations should be possible at these new establishments.
3.12 LAND USE

Existing Conditions
The urban core of Waikiki is comprised of approximately 507 acres. The proposed 280 Beach Walk project site is located on a parcel adjacent to Kalakaua Avenue and along Beach Walk in the Waikiki area. The surrounding area consists of resort hotels, timeshares, residences, and temporary visitor units with supporting commercial uses such as shops, restaurants, and entertainment venues. The project area, comprised of 0.81 acres, is located in the middle of the urban core, a former self-sufficient agricultural community that has been transformed into a global resort destination.

Development patterns on O‘ahu are set by State Land Use District designations, the City and County of Honolulu General Plan, City and County of Honolulu Primary Urban Center Development Plan and zoning district designations. The principal function of these plans and regulations is to specify where land uses such as commercial, residential, industrial, agricultural, open and public areas are permitted. The existing land use designations are briefly summarized below.

- State Land Use Designation - The proposed site is situated within the State Land Use Urban District (Figure 3-3). According to the Land Study Bureau Detailed Land Classifications, the area has been classified for “Urban” type uses.

- City and County of Honolulu Zoning - The subject property is located within the Resort Mixed Use Precinct and Resort Commercial Precinct of the Waikiki Special District (WSD) as defined by the City and County of Honolulu’s Land Use Ordinance (Figure 3-3). The project area is within the 300’ height restriction zone of the WSD (Figure 3-4).

- City and County of Honolulu’s Primary Urban Center Development Plan - The City and County of Honolulu’s Primary Urban Center Development Plan (PUCDP) approved by the community and City Council in 2004, designates the project area as Resort District Commercial (Figure 3-5). District Commercial areas, refer to a wide variety of commercial uses and related activities intended to serve district, regional, or islandwide populations. Uses typically include major office buildings, shopping centers, professional and business services, municipal services, and commercial activities located along major streets.

Anticipated Impacts and Mitigation Measures
The project site is situated in the middle of the urban core, a former self-sufficient agricultural and aquacultural community that has been transformed into a global resort destination. Given previous and existing uses at the project site, the proposed improvements are not considered to be significant.

- State Land Use Designation – The proposed project is situated within the urban district and the proposed project is classified as an “Urban” type use.

- City and County of Honolulu Zoning – This action is consistent with the Resort Mixed Use and Resort Commercial Precincts of the Waikiki Special District.

- City and County of Honolulu’s Primary Urban Center Development Plan – This action is consistent with the County and community’s long range plan for the area.
Figure 3-3  State Land Use Designation and County Zoning
Figure 3-4 Waikiki Special District Building Height Restrictions
Figure 3-5  City and County of Honolulu Primary Urban Center Development Plan
3.13 ROADWAYS AND TRAFFIC

A Traffic Impact Report (February 2007) was prepared by Wilson Okamoto Corporation and is included as Appendix D.

Existing Conditions
The existing roadways in the vicinity of the project area are owned by the City and County of Honolulu and maintained by its Department of Facilities Maintenance. Regional access to the project site is provided by the Lunalilo Freeway (H-1) via Kapi‘olani Boulevard, McCully Street, and Kapahulu Avenue. Additional regional access is provided by several major arterial streets including Ala Moana Boulevard and Kalākaua Avenue. Direct access to the project site is provided via Beach Walk and Saratoga Avenue. Parking is currently available from the Saratoga entrance.

Brief descriptions of the principal and adjacent streets serving access to or near vicinity of the project site are included below.

- Kalākaua Avenue – Kalākaua Avenue is a east-west major arterial. Between Ena Road and McCully Street, it provides four travel lanes eastbound and two travel lanes westbound. Between McCully Street and Royal Hawaiian, it operates as a one-way eastbound street with four travel lanes, except for one transit lane going west from Kuamo‘o Street to McCully Street.
- Beach Walk – Beach Walk is a one-lane, one-way collector street that runs south from Kalākaua Avenue to Kālia Road. No parking is allowed on the west side, but metered parking is allowed on the east side between Kalākaua Avenue and Waikīkī Royal.
- Saratoga Road – Saratoga Road is generally a two-lane, two-way roadway. At Kalākaua Avenue, Saratoga become Kalaimoku Street, a two-lane, one-way roadway that serves as the northbound couplet system between Kalākaua Avenue and Ala Wai Boulevard.
- Lewers Street- Lewers Street is a north-south local street from Ala Wai Boulevard to Kālia Road. North of Kalākaua Avenue, it provides one travel lane that runs one-way northbound with parking allowed on the west side, and a freight loading zone only on the east side. Between Kalākaua Avenue and Don Ho Lane, there is one travel lane northbound and 2 travel lanes southbound with no parking anytime on either side. South of Don Ho Lane, it provides one travel lane that runs one-way southbound with tour buses only on the west side and no parking on the east side.
- Kālia Road – Kālia Road is a two-lane, two-way roadway east of Lewers Street and converts to a two-lane, one-way (westbound) roadway between Lewers and Saratoga Road. Just west of Saratoga Road, Kālia Road becomes a predominantly two-lane, two-way roadway until its terminus at Ala Moana Boulevard.

Operational conditions at an intersection are expressed as a qualitative measure known as level of service (LOS). The LOS is determined by factors of speed, travel time, freedom to maneuver, traffic interruptions, driver comfort, and convenience. Letter designations ranging from ‘A’ to ‘F’ are used as a rating system with LOS A-C considered as satisfactory levels. LOS D is considered to be the minimum satisfactory level. LOS E is an undesirable condition with LOS F being an unacceptable level. The City and County of Honolulu has established LOS D as the minimum acceptable level of service for its intersections.
Anticipated Impacts and Mitigation Measures
The study evaluated a projection of year 2010 with and without the proposed 280 Beach Walk. The traffic study based its calculations for a restaurant area of up to 22,000 SF, as compared to the proposed use of 12,810 SF as described in Section 2.0 of this document.

Under Year 2010 conditions without the project, traffic operations in the project vicinity were expected to deteriorate from existing conditions during the weekday afternoon and Saturday evening peak periods due to the development of other projects in the vicinity. To assess potential traffic conditions in year 2010 with the proposed 280 Beach Walk, it was assumed based upon limitation of parking, high volumes of pedestrian traffic, and a high density of attractive destinations, that 40% of all generated trips by the proposed development are conservatively assumed to represent pedestrian activity.

Under 2010 conditions with the 280 Beach Walk development, traffic operations in the vicinity are generally expected to remain similar to without project conditions during the weekday afternoon and Saturday evening peak periods with two exceptions. The first exception is the northbound right-turn traffic movement during Saturday evenings at the intersection of Kalākaua Avenue and Saratoga Avenue. The LOS is anticipated to drop from a “B’-level condition without the project to a “C’ condition with the project. Similarly, the eastbound left-turn and through traffic movement at the intersection of Kālia Road and Saratoga Road is anticipated to operate at slightly lower levels of service during both peak periods.

Based upon the analysis of traffic data, the following are recommendations with project implementation:

- Maintain sufficient driveway width to accommodate safe vehicle ingress and egress.
- Maintain adequate turning radii at all project driveways to avoid or minimize vehicle encroachments to oncoming traffic lanes.
- Maintain adequate sight distances for motorists to safely enter and exit all project driveways.
- Maintain adequate on-site loading and off-loading service areas and prohibit off-site loading operations.

3.14 UTILITIES

3.14.1 Electrical and Communications
Electrical service for the project area is provided by Hawaiian Electric Company (HECO) which operates an integrated system of power generators and transmission facilities. Power for Waikiki is distributed primarily from HECO’s Pākele Substation in Pālolo Valley. In the vicinity of the project area, HECO maintains a grid of underground transmission lines consisting of 3-inch conduits. Telephone service in the project area is provided by Hawaiian Telcom. Oceanic Cable, Inc. provides cable TV to the project area by underground coaxial cables along Beach Walk and Saratoga Road.

Anticipated Impacts and Mitigation Measures
The proposed improvements will slightly increase the electrical power demand above existing levels. As a public utility, HECO has a regulatory obligation as well as an economic interest in providing reliable electrical power to its customers. By initiating early consultation with HECO, any necessary accommodations in the vicinity of the project area can be made to service the
proposed project. Such consultation is ongoing and will continue through the Waikīkī Special District (Major) Use permit application process.

Any necessary off-site improvements required to provide communication services without compromising the quality and reliability of service to their existing customers would be the responsibility of Hawaiian Telcom, and Oceanic Cable, respectively. Required project connections to the communication service systems will be coordinated with the respective service providers to minimize any potential disruption of service in adjacent areas and to ensure that the placement of conduits and pullboxes are sited appropriately within the project area.

3.14.2 Water
Water service for the project area is provided by the City and County of Honolulu Board of Water Supply (BWS). Existing waterlines in the vicinity of the project area are interconnected, thereby increasing service reliability by providing alternate routes for flows to reach users and to stabilize water pressure during periods of heavy usage. Major service lines in the vicinity of the project area include a 12-inch water main along Kālia Road with connections to the 12-inch main along Lewers Street, an 8-inch waterline along Beach Walk and a 6-inch waterline along Saratoga Road. Fire protection is provided by fire hydrants located within the sidewalk area of the roads adjacent to the project site.

Anticipated Impacts and Mitigation Measures
The primary project generator of water demand for domestic consumption will be the restaurant. Water conservation practices will be applied to the project site for landscaping irrigation. The proposed domestic waterline will be 2-½ inches. The proposed waterline connection for fire protection will be a 6-inch waterline.

Hydrant spacing adjacent to the project site currently also meets the minimum spacing standard of 250 feet, and no relocations or new fire hydrants will be required. The project architect will coordinate with the Fire Prevention Bureau of the Honolulu Fire Department during the project’s design development phase in order to ensure that all necessary improvements to meet on-site fire protection requirements will be included in the project.

Based upon the projection of a 400-seat restaurant and 19,000 SF of retail space, the estimated water demand from the 280 Beach Walk project is 260 fixture units at 102 gallons per minute. In consultation with the Board of Water Supply (BWS), the existing water system is adequate to accommodate the proposed development. However, the final decision on water availability will be confirmed by BWS when the building permit application is submitted for approval.

3.14.3 Wastewater Disposal
The sanitary sewer system serving Waikīkī is owned by the City and County of Honolulu and maintained by its Department of Environmental Services. Wastewater collected by the sanitary sewer system is conveyed to the City’s Sand Island Wastewater Treatment Plant (WWTP) which serves the Honolulu area from Kuli’ou‘ou to Moanalua and is designed to treat an average flow of 82 million gallons per day (mgd). The major sanitary sewer-lines collecting wastewater generated in the project area convey flows in the mauka direction to the Beach Walk Wastewater Pump Station (WWPS) which is located on Kūhiō Avenue in a lot south of Kai‘olu Street and Kūhiō Avenue. The Beach Walk WWPS is designed to handle an average daily flow of 15.7 mgd.

In March 2006, a significant break occurred with one of the main sewer lines under Kai‘olu Street and resulted in 48 million gallons of raw sewage being dumped into the Ala Wai Canal. The City’s
response to this break was the implementation of the Beach Walk Wastewater Emergency Bypass Project. The bypass generally parallels the existing 42-inch force main and is designed to serve as a temporary line to prevent future diversions of wastewater into the Waikīkī area until the permanent force main is constructed. The existing sewer line for the property is located along the rear of the project site in the utility corridor. The proposed 4" 6" sewer line lateral will connect to the existing manhole.

**Anticipated Impacts and Mitigation Measures**

Wastewater volumes generated by the proposed project will be comparable to the volume of domestic water consumed, with relatively minor losses to landscape irrigation and evaporation. The projected sewer demand is 472 Drainage Fixture Units. Design of sewer connections and mitigation of surcharged conditions of existing sewer lines require detailed field investigation and survey. An Application of Sewer Connection for the project was filed with the Department of Planning and Permitting and was approved with conditions.

**3.14.4 Gas**

The Gas Company (GASCO INC) owns existing gas lines in the project vicinity.

**Anticipated Impacts and Mitigation Measures**

Gas service for the proposed project will be provided by GASCO. Any necessary off-site improvements required to provide this service without compromising the quality and reliability of service to its existing customers would be the responsibility of GASCO. Required project connections to service lines will be coordinated with GASCO to minimize any potential disruption of service in adjacent areas.

**3.14.5 Solid Waste Disposal**

The proposed development is expected to generate primarily light, dry waste in items such as cardboard, papers, packaging, and other materials associated with the shipping and storage of retail and restaurant goods. Wet waste will result from restaurant activity and employee consumption of beverages and general hygiene practices. Building common trash containers will be located adjacent to the loading dock bay. Collection of this refuse will occur according to the standard operating procedures and schedule of the Department of Environmental Services Refuse Division. Refuse employees will have access to the site and trash room by means of the easement granted on parcel 049. A responsible recycling program will be encouraged by the provision of separate containers designated for specific types of waste.

**3.15 Public Safety Services**

**3.15.1 Police**

The Waikīkī region comprises District 6, as designated by the City and County of Honolulu Police Department. District 6 extends from the eastward slopes of Diamond Head through the Waikīkī Peninsula, ending at Atkinson Drive and includes 12 beats, from Beat 650 to 662. However, this district is not managed by sectors but by internal organizations, each designed to assist a specific group or community within Waikīkī and include the following: Residential, Business, Beaches and Parks, Special Events, Hotels, and Outside Agencies. There is a police substation located at 2405 Kalākaua Avenue.

**3.15.2 Fire**

The Waikīkī region is in the 2nd Battalion area designated by the Honolulu Fire Department. The region is served by three fire stations as follows:
• Station 2: The Pāwa’a Fire Station is located at Makaloa Street near Don Quijote (formerly known as Daiei Holiday Mart). It has a ladder and engine company, as well as a rescue company.
• Station 7: The Waikīkī Fire Station is located at the corner of Kapahulu Avenue and Paki Street. It has a ladder and engine company.
• Station 29: The Mō’ili’ili Fire Station is located on Date Street, between University Avenue and Kapi’ōlani Boulevard. It has a ladder and engine company.

First response for medical and fire emergencies at the project site and the surrounding area is provided by Station 2, the Pāwa’a Fire Station. In the event of a first response or alarm fire, Station 2 would send a ladder and engine company. Stations 7 and 29 would both send engine companies. If the fire is on the sixth or a higher story, this would constitute a second alarm fire, and an additional ladder company and two engine companies would respond.

At Station 2, there are 15 firefighters present in each of the three shifts. The medical responses at this station outnumber those at other stations. When available, ladder companies are the first to respond to medical calls. HFD works with the Emergency Medical Services, or EMS, who dispatches the closest available unit. This may be either an EMS ambulance or a fire company and depends on the type of emergency and location. Since there are only 16 EMS stations on O‘ahu, fire companies are frequently the first responder. It is estimated that Station 2 averages one response per shift. Depending on the traffic, it takes about five to eight minutes to reach the project area.

3.15.3 Emergency Medical Services
The Honolulu Emergency Services Department (EMS) is responsible for providing the following an efficient, effective and economical operation of the pre-hospital emergency medical care and emergency ambulance service; a comprehensive aquatic safety program at City beach parks, including lifeguard services; injury prevention, public education and public health programs; and coordination with other agencies and jurisdictions.

The EMS has 18 Advanced Life Support Ambulance vehicles and two Rapid Response Paramedic vehicles in Honolulu and maintains a staff of over 200 trained personnel. In an emergency response, either EMS personnel or the nearest fire station is notified as part of a co-response agreement with other emergency responders. Average response time depending on the nature of the call is 4-15 minutes. Waikīkī is covered primarily by an EMS unit at Fire Station 7 at the corner of Kapahulu Avenue and Paki Street and, secondarily, by an EMS unit located at Young Street and Kalākaua Avenue.

Anticipated Impacts and Mitigation Measures
The proposed project would increase the on-site population of employees and visitors by adding more retail and dining options in the area. The slight increase in population will require additional security and police protection services. As needed, private security could be utilized to lessen the need for public police protection. Design measures will ensure that public spaces are well-lit and visible as to deter the potential for crime-related opportunities. Similarly, the project would impact fire protection and medical emergency services with a slight increase in the de facto population of the immediate vicinity through the provision of additional retail and dining services. Design measures for the building will meet supply standards for hydrant spacing, fire flow, and other relevant building code requirements. Staff training initiated by retail and dining vendors will also provide an additional measure of safety and emergency response preparation.
3.16 SOCIO-ECONOMIC CHARACTERISTICS

Existing Conditions
The project site is located in the middle of the urban core of a global resort destination consisting of resort hotels, timeshares, and temporary visitor units with supporting commercial uses such as shops, restaurants, and entertainment venues. In 2000, an estimated 19,720 persons resided in Waikiki. According to the State Department of Business, Economic Development, and Tourism 2005 Data Book, an average of 71,756 visitors are present in Waikiki on a daily basis, resulting in a de facto population of 91,476 persons.

Waikiki has been and continues to be a major economic force for the City and County of Honolulu and the State as a whole. According to the State Department of Business, Economic Development, and Tourism Visitor Plant Inventory (2005), there were 111 visitor-destination properties within Waikiki consisting of 29,267 visitor units, representing 86% of the total island’s visitor unit count and 45% of the entire State inventory. Waikiki’s hotels, visitor attractions, and natural resources draw the bulk of tourists expenditures in the State, with approximately $5 billion of $11 billion spent annually in Waikiki. In addition to generating revenues that benefit the entire State, Waikiki also provides employment opportunities to local residents.

Anticipated Impacts and Mitigation Measures
The anticipated socio-economic impacts for the local community are not significant. The project will create short-term benefits as a result of design and construction employment. Long-term benefits of the proposed project will possibly include a slight increase in jobs created as a result of the expansion of retail and dining services. No specific socio-economic mitigation actions are recommended.

3.17 CULTURAL RESOURCES, PRACTICES, AND LANDSCAPES

A Cultural Impact Assessment (February 2007) was completed by Cultural Surveys Hawaii’i and its is included as Appendix E.

The project requires compliance with the State of Hawaii’s environmental review process under Chapter 343, HRS, which requires consideration of a proposed project’s effect on traditional cultural practices. Through document research and cultural consultation efforts, a cultural impact assessment was conducted, providing analysis of the proposed project’s impacts to cultural practices per the OEQC Guidelines for Assessing Cultural Impacts. The scope of the assessment included an examination of historical documents, including Land Commission Awards, native and foreign journal accounts, and historic maps to identify traditional Hawaiian activities; a review of existing archaeological information pertaining to sites on the property or near vicinity that would identify traditional land use activities or patterns; and interviews with persons knowledgeable about the historic and traditional practices in the project area and region.

Historical documentation indicates that, at the mid-nineteenth century, within the present project area were two fishponds, Loko Kapu’uiki and Loko Ka’ohai, that were part of the royal fishpond complex of the Kälia area. Some high ground existed in the project area, primarily under the existing parking structure in parcel 048. A small berm or causeway shown on an 1881 map by S.E. Bishop (Figure 3-6) also divided part of Loko Ka’ohai along the northern boundary of the project area.
Figure 3-6  280 Beach Walk Project Area Boundary Overlaid on 1881 S.E. Bishop Map

Source: CSH, February 2007
Evidence from nineteenth-century documents (the writings of John Papa ʻĪ, Māhele records, and an 1881 map) indicates that a trail from Honolulu to Waikīkī and beyond ran makai of the project area. It is likely that this trail was the traditional Hawaiian route through Waikīkī.

During the second half of the nineteenth century the Kālia fishponds, including Loko Kaʻohai, were leased to and operated by Chinese immigrants. An early indication of Waikīkī’s future, makai of the project area the Saratoga Baths opened on the site of the present Outrigger Reef on the Beach. Despite these changes, the Hawaiians of the Kālia area apparently were not completely displaced in the latter 1800s since several Hawaiian fishermen were recorded as living in Kālia during the 1890s.

During the first decades of the twentieth century, the current project area would be among the first developed lands of Waikīkī. Loko Kapuʻuiki would be filled for the creation of Ft. DeRussy and the two Loko Kaʻohai were filled to create the Beach Walk tract in 1911. In subsequent decades, the project area was among an enclave of individual residences – typically cottages – and apartment complexes. In the 1950s construction began on the first large hotel structures that today surround the project area.

Although the research of historical documentation is complete, necessary interviews with kamaʻaina and kūpuna and other community contacts are still being conducted. The findings from these interviews and “talk-story sessions” will be included in this Final EA. Preliminary discussions and subsequent ethnographic interviews with community contacts have centered on knowledge regarding natural and cultural resources and known traditional cultural practices specific to the project area. Specific questions were raised for the following broad categories: burials, trails, native gathering practices of plants, marine and fresh water resources, and historic properties.

**Anticipated Impacts and Mitigation Measures**

Traditional native Hawaiian cultural practices declined with the extensive land modification and urbanization of the greater Waikīkī area. As the wetlands were drained and ponds were filled to accommodate the continuing expansion of urban Honolulu, the traditional way of life for native Hawaiians was no longer as possible as once was in Waikīkī. As such, there no known or on-going traditional cultural practices in the vicinity of the current proposed project area.

Although the area has been graded and filled to accommodate previous development, the natural soil deposit is Jaucus sand and there may be intact sand strata below one or more fill layers. Cultural descendants of Waikīkī who had participated in the assessment indicated that there could be iwi kūpuna (ancestral human remains) within the project area. Native Hawaiian burial practices were such that the potential for encountering human burials in sandy deposits within the current proposed project area does exist. Additionally, the present project area is located in the previous location of two fishponds, Loko Kapuʻuiki and Loko Kaʻohai. Thus, remnant subsurface fishpond sediments could be encountered.

It is anticipated, based on historical research and previous archaeological projects, that evidence of pre-contact and early post-contact aquaculture, habitation, agriculture, and possibly burial practices may be found in the project area if intact Jaucus sand deposits remain below nineteenth and twentieth century fill layers.

Based on the above preliminary findings, no further formal cultural impact mitigation measures are warranted. It is recommended that as a precautionary measure, personnel involved in future
development activities in the area should be informed of the possibility of inadvertent cultural finds and should be made aware of the appropriate notification measures to follow.

3.18 ARCHAEOLOGICAL & HISTORIC RESOURCES

An archaeological assessment (January 2007) was completed by Cultural Surveys Hawai‘i and is included as Appendix F.

As a privately funded project on privately owned land, the proposed 280 Beach Walk Retail Development requires compliance with and review under state of Hawai‘i historic preservation review legislation (Hawai‘i Revised Statutes (HRS) Chapter 6E-42 and Hawai‘i Administrative Rules (HAR) 13-284). At the request of the First Round Pacific, LLC, CSH completed an archaeological inventory survey investigation, per the requirements of HAR Chapter 13-13-276, of the subject 0.7-acre parcel. Under Hawai‘i State historic preservation legislation, archaeological inventory surveys are designed to identify, document, and provide significance and mitigation recommendations for historic properties. Under this legislation, historic properties are defined as any “building, structure, object, district, area, or site, including heiau and underwater site, which is over fifty years old” (HAR Chapter 13-284-2).

A project’s effect and potential mitigation measures are evaluated based on the project’s potential impact to “significant” historic properties (those historic properties determined eligible, based on established significance criteria, for inclusion in the Hawai‘i Register of Historic Places [Hawai‘i Register]). Determinations of eligibility to the Hawai‘i Register result when a state agency official’s historic property “significance assessment” is approved by the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or when SHPD itself makes an eligibility determination for an historic property (HAR Chapter 13-284).

Existing Conditions

A brief and full pedestrian inspection of the project area confirmed that all standing architecture was less than 50 years old and that there were no surface historic properties. Accordingly, the archaeological assessment focused on a program of subsurface testing to locate any buried cultural deposits, which, based on the results of background research, CSH expected to find beneath layers of historic and modern fill.

For this report, historic is defined as anything older than 50 years and modern is defined as anything younger than 50 years. The sub-surface testing program consisted of the excavation of 11 backhoe trenches (Figure 3-7). Trenches were distributed throughout the project area to provide representative coverage and to assess the stratigraphy and potential for subsurface cultural resources for the project area. Trench locations were also selected to test specific portions of the project area where, based on background research, subsurface cultural deposits were thought more likely. These trenches provided additional documentation of specific cultural remains and/or stratigraphic layers and better established their geographic distribution.
Figure 3-7  Archaeological Trench Areas for 280 Beach Walk Project  

Source: CSH, January 2007
The testing program also focused on characterizing the project area’s buried land surface that predated the historic and modern fill layers. High areas of this older land surface, found in only the northern boundary of the project area, were more likely to be associated with significant cultural deposits.

For this survey, eleven backhoe trenches were randomly spaced and dug to a depth of 1.5 to 2.0 meters. Because of the high potential for human burials in Waikīkī, hand excavation in sand deposits was specifically undertaken to identify potential burial deposits. When sandy deposits were noted during excavation of the backhoe trench and were believed to be of sufficient depth to be natural, mechanical excavation stopped and an archaeologist entered the trench. Excavation continued by hand when jaucas sand deposits were identified. Because of the thick layers of fill and thin layers of pond sediment that were nearly ubiquitous throughout the project area, this hand excavation was not extensively utilized.

**Anticipated Impacts and Mitigation Measures**

In evaluating other previously conducted archaeological work in Waikīkī, Cultural Surveys Hawai’i, the contract archaeological firm hired for this project, had determined that .10 to 1.5 percent of an area’s acreage was the range surveyed. For the proposed 280 Beach Walk project, the subsurface testing program involved a sampling of 2.44% of the entire project area, which is considered to be one of the most thorough testing programs completed in the Waikīkī area. Based upon the test conducted, no subsurface historic properties were identified within the project area. In total, three artifact deposits were found in the project area: a basalt lithic, a green glass bottle, and a diffuse trash deposit.

None of these artifact deposits constitute a substantial deposit that is an excellent example of a site type, has the potential to yield information about the past, or was found to meet any other criteria for the Hawai’i State Register of Historic Places. However, given the known potential for human burials within the surrounding area, it is recommended that archaeological monitoring be employed as a contingency measure during construction.

This monitoring program will focus on identification and proper treatment if any isolated burials or disturbed remains predicted by background research are found and will gather additional information regarding the project’s non-burial archaeological deposits, should any be discovered. This archaeological monitoring program may consist of a combination of onsite and on-call monitoring of project construction.

Final verification and acceptance of the findings of the Archaeological Assessment is the responsibility of SHPD. Consultation and necessary mitigative coordination between project developers and SHPD will be ongoing and will continue through the Waikīkī Special District (Major) Use permit application process, as well as through project construction.

**3.19 VISUAL RESOURCES**

**Existing Conditions**

Within the objectives of the City and County of Honolulu’s Land Use Ordinance (LUO), there is an emphasis placed upon maintaining and improving the mauka views from public viewing areas in Waikīkī, especially from public streets. Additional emphasis is placed upon preserving a visual relationship with the ocean from Kalākaua Avenue, Kālia Road, and Ala Moana Boulevard. Further, views of Diamond Head are to also be protected and maintained from the Punchbowl Lookout.
A conglomeration of hotel buildings of varied heights dominates the visual landscape of the Lewers-Kālia area. Interspersed along the perimeters of existing structures are a series of trees and other natural vegetation. Currently, no shoreline or ocean views exist from Beach Walk due to frontal blockage of the coastline from existing buildings. Views toward the ocean along Saratoga Road are also restrictive due to the presence of existing structures within the project area and along the shoreline. Existing visual conditions are shown in Figures 3-8 and 3-9.

**Anticipated Impacts and Mitigation Measures**

There will be short-term effects to the visual quality within and near the project area during the construction of the new retail and restaurant center. Anticipated effects on the visual landscape will primarily be from construction equipment within the project area and temporary fencing that will block access to portions of the project area undergoing construction. Upon completion of the renovation and construction phases, the quality of the visual landscape will be improved.

The siting and elevation of the new two-story building will not significantly affect the view corridors. View planes from the mountains to the sea will not be significantly impacted. The application of Waikīkī Special District urban design guidelines, specifically building orientation and ground level design considerations, should also help ameliorate any potential additional visual concerns. The use of shading trees and shrubs in the landscape plan throughout the project area along with the use of design screens near the parking area will also help to maintain the visual quality along the streetscape of Saratoga and Beach Walk.

**3.20 POTENTIAL CUMULATIVE AND SECONDARY IMPACTS**

The proposed project is occurring at a time when multiple public and private entities are investing in the improvement of Waikīkī. As public and private amenities continue to revitalize Waikīkī, visitors and local residents alike will rediscover the area as a major visitor destination. Individual land owners, visitor industry operators, community and business organizations such as the Waikīkī Business Improvement District (BID), and government agencies will all play a role in shaping a Waikīkī that is unique, attractive, and safe. Improvement of this area of Waikīkī will help improve the image of Waikīkī as a whole for visitors and residents. The creation of additional restaurant and retail opportunities at a relatively small-scale may encourage nearby businesses to take similar measures to continue to improve the conditions within this area. Construction activity during the proposed project will generate direct employment as well as indirect and induced employment in construction-related industries. In the long term, the improved restaurant and retail space may require additional employees as well as additional goods and services from visitor industry businesses.
Figure 3-8  View of Project Area from Mauka Side of Kalākaua Avenue

Figure 3-9  View of Project Area from Beach Walk Triangle Park
SECTION 4.0
Alternatives to the Proposed Project
4.0 ALTERNATIVES TO THE PROPOSED PROJECT

This Draft Environmental Assessment evaluates alternatives to the proposed project described in Section 2.0. The following provides a discussion of the alternatives to the proposed project.

4.1 NO ACTION ALTERNATIVE

The no-action alternative is the baseline against which all other alternatives are measured. This analysis essentially presents the details of the future site and program conditions that will most likely result should the proposed renovations not proceed.

The no-action alternative will result in no improvements for these parcels within the urban core of Waikīkī. The result will be the potential for this area to be viewed as an area of urban blight, contributing to a feeling that this area would be a less desirable section of Waikīkī for residents and visitors to enjoy. “Patch and paint” improvements not requiring environmental studies or other permits will continue for the existing parking lot structure and fenced-in gravel lot.

The no-action alternative will prevent 280 Beach Walk Retail Development from becoming a part of the revitalization effort occurring in the immediate vicinity, including the efforts of the Waikīkī Beach Walk, the new Trump Tower, and the improvements to the Royal Hawaiian Shopping Center. The no-action alternative will also forego the opportunity to create an improved public gathering place with new retail and dining spaces and allow a pedestrian experience that has somewhat deteriorated to persist.

4.2 ALTERNATIVE LOCATIONS FOR PROPOSED PROJECT

It is the desire of First Round, LLC to revitalize its existing holdings. The proposed action is a long-term purposeful redevelopment of the property area under review. Given this objective, redevelopment of alternative sites was not considered.

4.3 ALTERNATIVE LAND USE CONSIDERATIONS FOR PROPOSED PROJECT

The project area is situated within the portion of the City and County of Honolulu Waikīkī Special District that allows for the development of structures up to 300 feet. One alternative land use configuration initially considered was the development of a twelve-story residential tower (approximately 160 feet) with an adjoining three-story structure (40 feet) that would have provided ground floor retail and two floors of parking above (Figures 4-1 and 4-2). A car bridge would have traversed across Parcel 058 to connect the existing two-story parking structure on Parcel 048 and 049 with the new three-story retail and parking structure.

Although this alternative would have resulted in a major redevelopment effort that could have potentially yielded significant financial potential, its scale was viewed by the landowner as not appropriate to the character and feel for this area. Further, a project of this scale would have the potential for greater impact to traffic conditions, infrastructure demands, possible subsurface historic resources, view planes, and socioeconomic conditions. Reconsideration of this land use alternative led to development of the preferred design, as outlined in Section 2.0 of this document.
Figure 4-1  Multi-Story Residential & Retail Tower Alternative Site Plan
280 BEACH WALK RETAIL DEVELOPMENT

Final Environmental Assessment

Figure 4-2  Multi-Story Residential and Retail Tower Alternative
4.4 ALTERNATIVE DESIGN SCHEMES

Public Right-of-Way Easement and Landscaping Scheme
An alternative to the proposed transfer of the public right-of-way (ROW) is to maintain the required 5 foot wide public ROW easement along Beach Walk (Figure 4-3). Pedestrian circulation would also be provided along the front of the building to allow for access to each of the retail units. The result of this alternative is a significant decrease in the amount of green landscaped space that would be provided from the preferred design scheme outlined in Section 2.0. This alternative, which would meet LVO requirements, would result in the provision of approximately 1,232 SF of green landscaped space as compared to 2,207 SF in the preferred alternative. A final determination of an approved front yard design scheme will be necessary for the acceptance of a Special District Permit (Major) application.

The alternative landscape scheme would have to integrate landscaping into areas that do not infringe upon existing right-of-way sidewalk. Thus, landscaping in this scenario is limited to two smaller pockets of planting areas. The result is less space and opportunity to install larger palms and other smaller trees. Due to root damage to paved surfaces, palm and tree root balls need to be setback from the paved edges. By adding more paved edges around a smaller planting area, there is less opportunity to use more trees and palms and their alignment within the planting area becomes more linear and less playful and aesthetic. Groundcover and shrub areas in this approach are also reduced.

Demolition of Existing Parking Structure
An alternative to the preferred design option was the consideration to demolish the entire parking structure. In this scenario, 7,400 SF of the existing parking structure would be affected. If the parking structure were to be demolished, one parking management option would be to provide a single paved lot with attended tandem spaces would be provided to yield the same quantity of parking spaces as would the partial demolition. Another viable alternative that could be evaluated during the design phase of the project is the use of a two-level parking stacker system, which creates the efficient use of a small area.

In either scenario, the above grade portion of the existing 1-story basement parking structure would be demolished to create space for the on-grade parking. The basement of the existing parking structure would remain in place and be infilled, therefore no new excavation of the parking area is necessary except for small shallow foundations for the proposed car stacking system. Any consideration will utilize landscaping and screening to minimize visual impact of parking area from the streetscape and pedestrian experience.

Demolition of the structure would generate more short-term related impact including affects related to noise, traffic, air quality, and the generation of solid waste that could not be retained or reused on site. Although the recommended mitigative measures outlined in Section 3.0 related to short-term construction-related impacts could be utilized, some additional measures would need to be employed to minimize these impacts. One of the more prominent impacts of this alternative is the generation of solid waste materials. The yield of solid waste would require additional measures to deliver, transfer, and dispose the material to an appropriate crushing or recycling facility or to the construction and demolition landfill in Nānākuli.
4.5 MATERIALS USED FOR PROPOSED PROJECT

Several alternatives for materials used were proposed for the project. Factors considered in the evaluation and selection of preferred designs and materials were based on compliance with building code and design guidelines, visual compatibility, cultural suitability, construction and maintenance costs, safety and feasibility. The detailed selection of materials to be used throughout the project, including the use of natural woods, metal, and plaster combined with glass will be finalized during the Special District Permit (Major) process.
Figure 4-3  Alternative Design Configuration- ROW Not Transferred to On-Site Easement (REVISED)

Required Landscape Area per L UO Definitions - DIAGRAM 03 (alt)

02.25.07  Scale: 1/10" = 1'-0"
SECTION 5.0
Applicable Land Use Plans and Policies
5.0 APPLICABLE LAND USE PLANS AND POLICIES

An important consideration in evaluating the potential impacts of a proposed action on the environment is how it may conform or conflict with approved or proposed land use plans, policies, and controls for the affected area. The project’s consistency with applicable land use policies set forth in Hawai’i State Land Use Law, the Hawai’i State Plan, the Coastal Zone Management Program, the City and County of Honolulu’s General Plan, the Primary Urban Center Development Plan, the applicable provisions of the Land Use Ordinance, the Waikiki Special District Design Guidelines, and Special Management Area guidelines are discussed.

5.1 HAWAI’I STATE LAND USE DISTRICT BOUNDARIES

Under the Chapter 205, HRS, all lands of the State are to be classified in one of four categories: urban, rural, agricultural, and conservation lands. The State Land Use Commission (LUC), an agency of the State Department of Business, Economic Development, and Tourism (DBEDT) is responsible for the standards and determining the boundaries of each district (Chapter 205-2(a), HRS). The LUC is also responsible to administer all requests for district reclassifications and/or amendments to district boundaries, pursuant to Chapter 205-4, HRS, and the Hawai’i Administrative Rules, Title 15, Chapter 15 as amended.

Discussion
The 280 Beach Walk property is situated within the State-designated Urban district. The proposed uses within the property are consistent with urban design guidelines and permitted activities and require no district reclassification or boundary amendment.

5.2 HAWAI’I STATE PLAN

The Hawai’i State Plan establishes a statewide planning system that provides goals, objectives, and policies which detail property directions and concerns of the State of Hawai’i. Priority guidelines relating to the economy, housing, population growth, facility systems, and the physical environment will be discussed as they relate to the 280 Beach Walk project. It is the goal of the State, under the Hawai’i State Planning Act (Chapter 226, HRS), to achieve the following:

- A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawai’i present and future generations.
- A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
- Physical, social, and economic well-being, for individuals and families in Hawai’i, that nourishes a sense of community responsibility, of caring, and of participation in community life (Chapter 226-4, HRS).

The objectives and policies of the State Plan that are pertinent to 280 Beach Walk project are discussed below.
Economy
The objectives for planning the State's economy include increasing and diversifying employment opportunities to provide a better economic quality of life for Hawai’i’s people. It is also the objective of the State to create a diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands. It is the policy of the State to:

- Expand existing markets and penetrate new markets for Hawai’i’s products and services (Chapter 226-6, HRS).

Visitor Industry Economy
It is the objective of the State to create and maintain a visitor industry that constitutes a major component of steady growth for Hawai’i's economy. It is the policy of the State to:

- Ensure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawai’i’s people.
- Improve the quality of existing visitor destination areas (HRS, Chapter 226-8).

Discussion
The 280 Beach Walk project is a modest investment into the future viability of this portion of Waikīkī. The project will be a small piece of a larger district effort of redevelopment in an area that has been identified as in need of improvements. The proposed development is consistent with the objectives and policies of the State Plan. The project will also promote the goals of the State of Hawai’i by enhancing and maintaining the visitor industry as a major component of steady growth for its economy by improving the quality of existing visitor destination areas.

5.3 Hawai’i Coastal Zone Management Program

The Coastal Management Program (CMP) is a comprehensive state plan that establishes and enforces standards and policies to guide the development of public and private lands within the coastal areas. In the State of Hawai’i, the CMP is articulated in the State Coastal Zone Management (CZM) Law (Hawai’i Revised Statutes, Chapter 205A). The Hawai’i CZM Law charges the counties with designating and administering Special Management Areas (SMA) within the State’s coastal areas. Any “development”, as defined by the CZM Law, that is located within the SMA requires a SMA Use Permit.

Discussion
The property is situated outside of the SMA (refer to Figure 1-3) and as such does not require an additional review under State CZM and County SMA rules.

5.4 City and County of Honolulu General Plan

Adopted by resolution in 1977, the General Plan for the City and County of Honolulu sets forth the long-range objectives for the general welfare and prosperity of the people of O’ahu and broad policies to attain those objectives. The General Plan provides objectives and policies intended to guide and coordinate City land use planning and regulation, and budgeting for operations and capital improvements. Provided below are the applicable objectives and policies of the City and County of Honolulu General Plan.
Economic Activity

Objective B: To maintain the viability of O‘ahu’s visitor industry.
  Policy 2: Provide for a high quality and safe environment for visitors and residents in Waikiki.
  Policy 3: Encourage private participation in improvements to facilities in Waikiki.

Discussion
The project will create short-term employment opportunities related to project construction and will enhance the quality of the visitor experience in Waikiki. The redevelopment efforts of the project reflect a commitment to and participation in the overall improvement of Waikiki.

Physical Development and Urban Design

Objective E: To create and maintain attractive, meaningful, and stimulating environments throughout O‘ahu.
  Policy 3: Encourage distinctive community identities for both new and existing districts and neighborhoods.
  Policy 4: Require the consideration of urban-design principles in all development projects.

Discussion
The proposed project occurs in an area that is already designated for urban resort and commercial use within the primary urban center. The project is consistent with the Waikiki Special District Guidelines and will contribute to the distinctive community of a revitalized commercial area within Waikiki.

5.5 City and County of Honolulu Primary Urban Center Development Plan

The City and County of Honolulu Primary Urban Center (PUC) includes the communities from Wai‘alae-Kahala to Pearl City. It is the most populated part of the State of Hawaii and is O‘ahu’s largest employment center. In keeping with the policies of the general plan, the PUC is planned to efficiently accommodate more intensive commercial, governmental, residential and recreational functions in a manner that safeguards and adds to the existing amenities of the city's urban environment.

The Development Plan for the PUC describes the desired urban character and the significant natural, scenic and cultural resources. It includes general guiding principles for the PUC and area specific guiding principles for Waikiki that detail appropriate land uses. The 280 Beach Walk project is located in the PUC. The applicable guiding principles are listed below.

1) Waikiki should continue to be maintained as Hawaii’s primary visitor destination area, with an emphasis on improving the quality of the environment and discouraging further high-density development in the area.

2) In order to promote a more pleasing and attractive urban setting and to maintain a strong sense of the nearness of open space and nature, a strong mauka-makai orientation needs to be promoted through the establishment and preservation of mauka-makai view corridors and open space belts along streams. Panoramic views, views of major landmarks, and view planes from Waikiki to the mountains shall also be protected.
Using these guiding principles, specific control measures are provided which detail appropriate types of activity to occur within Waikīkī. These controls are designed to enhance the attractiveness and quality of Hawaiʻi’s primary tourist destination area and its nearby residential areas. The relevant controls applicable to the project are discussed below.

- Resort and related commercial activities shall be concentrated in the area makai of Kūhiō Avenue and Ala Moana Boulevard.
- Existing views of the mountains, ocean and Diamond Head from streets, pedestrian corridors and major public places shall be preserved through more stringent development controls in terms of height, bulk, siting and setback. Such views shall be enhanced by appropriate landscaping requirements for private developments along view corridors and the appropriate landscaping of related streets.
- Landscaping along mauka-makai roadways that provide visual access to the mountains and the sea from Waikīkī shall be selected and situated to minimize the visual dominance of the paved surfaces and to maintain existing mauka and makai views along these roadways.

Discussion

The project area is located makai of Kūhiō Avenue and is within the District Commercial designated area of the PUC. As a retail-restaurant project, the proposed 280 Beach Walk is anticipated to support the policy of the PUC as it relates to visitor facilities by contributing to a plan for a vibrant and livable Waikīkī. The new two-story building will not affect view corridors. Overall, the physical design, programmatic spacing of retail and dining activities, and landscaping of the area will enhance the character and feel of adjoining land use activities at a scale that is low density. The proposed character of 280 Beach Walk meets the policies of the PUC regarding building design and the streetscape environment as it is designed to reflect a human scale, provide an attractive series of front entrances for the storefronts, and stimulates a pleasant pedestrian experience.

The PUC pedestrian network is aligned along Kalākaua Avenue, which designates this street as a high priority for pedestrian improvement. The preferred front-yard design of 280 Beach Walk will adhere to the PUC policy of making streets “pedestrian-friendly” by providing shade and buffering pedestrians from vehicular traffic entering Beach Walk via Kalākaua Avenue.

5.6 City and County of Honolulu Land Use Ordinance & WSD Guidelines

The purpose of the County Land Use Ordinance (LUO) is to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the Oʻahu general plan and development plans. The LUO is intended to provide reasonable development and design standards. These standards are applicable to the location, height, bulk and size of structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences or other purposes (Revised Ordinance for the City and County of Honolulu, Chapter 21).

Within the LUO, there are special design standards outlined for the development of Waikīkī. As a recognized symbol of Hawaiʻi, Waikīkī possesses allure as a tropical resort destination. Waikīkī continues to attract visitors from all parts of the world, serving as the cornerstones for the state’s tourist industry. Additionally, Waikīkī continues to serve as a vital employment center and as a home for thousands of full-time residents. Due to the City’s commitment to the socio-economic well being of Waikīkī, the area became designated as a Special District, with guidelines established to direct Waikīkī’s future and protect its unique Hawaiian identity (LUO, Sec. 21-9.80).
The 280 Beach Walk project is located partially within two zones of the Waikiki Special District: the Resort Mixed Use Precinct and the Resort Commercial Precinct (Figure 3-3).

The establishment of the Waikiki Special District was largely a response to the rapid development of the 1960s and 1970s, and the physical and social changes attributed to that development. As a sophisticated urban resort, diversity, and contrast characterize Waikiki. The LUO’s Special District Guidelines are a planning tool aimed at restoring the basic appeal of Waikiki as a pedestrian friendly environment. To complement the strong urban image that Waikiki possesses, there is an emphasis on developing creative and functional uses of the ground-level open space. The focus of open space helps to define a “Hawaiian sense of place” as stated in the objectives of the Waikiki Special District Guidelines that are enumerated in Section 9.80-1 of the LUO. The applicable objectives of the Waikiki Special District addressed by the 280 Beach Walk project are discussed below.

• Provide for a variety of compatible land uses which promote the unique character of Waikiki, emphasizing mixed uses.
• Provide opportunities for creative development capable of substantially contributing to rejuvenation and revitalization in the special district and able to facilitate the desired character of Waikiki for areas susceptible to change.
• Encourage architectural features in building design which complement Hawaii’s tropical climate and ambience, while respecting Waikiki’s urbanized setting. The provision of building elements such as open lobbies, lanais, and sunshade devices is encouraged.
• Maintain, and improve where possible: mauka views from public viewing areas in Waikiki, especially from public streets; and a visual relationship with the ocean, as experienced from Kalakaua Avenue, Kalia Road and Ala Moana Boulevard. In addition, improve pedestrian access, both perpendicular and lateral, to the beach and the Ala Wai Canal.
• Emphasize a pedestrian-orientation in Waikiki. Acknowledge, enhance and promote the pedestrian experience to benefit both commercial establishments and the community as a whole. Walkway systems shall be complemented by adjacent landscaping, open spaces, entryways, inviting uses at the ground level, street furniture, and human-scaled architectural details. Where appropriate, open spaces should be actively utilized to promote the pedestrian experience. (LUO, 9.80-1).

The Waikiki Special District Design Guidelines provide the vision for the redevelopment, renovation, and renewal of Waikiki. The guidelines are intended to promote building design that responds to Hawaii’s climate, relates to human scale and preserves significant public views. The design guidelines offer solutions to reduce perceptions of overcrowding while enhancing the overall aesthetic nature of Waikiki.

According to these design guidelines, the physical features of developments in Waikiki need to be improved and enhanced. The ideal of a Hawaiian sense of place reflects both an architectural style as well as implementing a sense of core values and perceptions in selected landscaped elements. The future design of Waikiki needs to embrace the significance of its rich history and incorporate it into contemporary design and context that allows people to be fully engaged with the natural and built environment.

Building Design
In developing the District Design Guidelines, the key elements incorporated into building design are: orientation and form, maintaining a link with the natural environment, developing areas to human scale, and preserving significant vistas. With these elements in mind, the results should
promote a sense of increased open space, enhance the allure and beauty of Waikiki, and reflect the values and spirit of these islands in the built environment (WSDG: 4; LUO, 21-9.80-4).

Ground Level Features
Within a development, attention should be given to pedestrian-oriented ground level features. A close indoor-outdoor relationship should be promoted. Design priority should include the visual links through a development connecting the sidewalk and other public areas with on-site open spaces, mountains and the ocean. In addition, other designs of the ground level built environment such as outdoor dining, vending carts, porte cocheres, walls and fences, shading, roof design and equipment screen, should always incorporate the elemental styles and textures that exist in the natural environment (WSDG: 8-16; LUO, 21-9.80-4 (c)(8)).

Landscaping/ Exterior Features
The physical development of Waikiki is dependent upon integrating the natural and built environment together. Key elements in this integration are the appropriate design, context, and materials used in developing the overall landscaping and exterior features of the area. Exterior features include but are not limited to garden landscaping, water features, sidewalks, lighting, and signage. Appropriate landscaping and exterior features should incorporate measures to have a minimal aesthetic and visual impact. In addition, the features should incorporate elements that are representative of the natural and cultural landscape (WSDG: 17-23; LUO, 21-9.80-4(c) (8)-(f)).

Urban Design Controls
All structures, open spaces, landscape elements and other improvements within the Waikiki Special District must meet the design standards of the LUO. In regards to the 280 Beach Walk project, the applicable elements are:

1) Major Streets: Kalakaua Avenue is identified as a major street that provides vehicular and pedestrian access through Waikiki. This street also functions as a view corridor with open space and public access. Development within and adjacent to this street needs to comply to a high degree with the District guidelines to realize the objectives relative to the streetscape.
2) Mini Parks: Beach Walk Triangle Park is one of several identified mini parks that allow for pockets of open space and provides a public focus for motorists and pedestrians. Visual and public access to these parks should be maintained and supported by surrounding uses.

Discussion
The continuity of the project design with the surrounding area will enhance existing retail and commercial space that maintains a sense of balance between the built and natural forms. The project unifies the property with the ongoing redevelopment of the area by incorporating a common design vocabulary and seamlessly tying the various project components together through strong physical and visual linkages at the ground level. The 280 Beach Walk project is aimed at enhancing the pedestrian experience through the open corridor of Beach Walk and Kalakaua Avenue, including the Beach Walk Triangle Park.

Site development criteria were developed based upon calculations derived from LUO standards and guidelines. These criteria are presented in Appendix G.
SECTION 6.0
Findings Supporting Anticipated Determination
6.0 FINDINGS SUPPORTING ANTICIPATED DETERMINATION

6.1 ANTICIPATED DETERMINATION

After reviewing the significance criteria outlined in Chapter 343, Hawai‘i Revised Statutes (HRS), and Section 11-200-12, State Administrative Rules, Contents of Environmental Assessment, the proposed action has been determined to not result in significant adverse effects on the natural or human environment. A Finding of No Significant Impact (FONSI) is anticipated for this project.

6.2 REASONS SUPPORTING THE ANTICIPATED DETERMINATION

The potential impacts of the planned development of 280 Beach Walk have been fully examined and discussed in this Draft Environmental Assessment. As stated earlier, there are no significant environmental impacts expected to result from the proposed action. This determination is based on the assessments as presented below for criterion (1) to (13):

(1) **Involve an irrevocable loss or destruction of any natural or cultural resources.**

As detailed in Section 3.0 of this report, the project does not involve any known loss or destruction of existing natural or cultural resources. The only specific area of concern is the unknown potential for the inadvertent discovery of subsurface historical or cultural resources, including the unknown possibility of an inadvertent discovery of *iwi kūpuna* (ancestral remains). The archaeological and cultural landscapes have been documented in studies conducted specifically for the project area, as well as other adjacent properties whose activities have required their own environmental review. Extensive sampling was conducted to test for the possibility of subsurface resources with only three artifacts found.

Given the possible potential for discovery of an inadvertent find, it is recommended that archaeological monitoring be conducted during construction. Consultation with families and individuals that have been recognized as lineal and cultural descendants for other projects in Waikiki are ongoing. Part of this process is to ascertain what would be culturally-appropriate procedures or protocols are to be implemented in the event that ancestral burials are discovered. In general, if any cultural, historic, or archaeological resources are unearthed or ancestral remains are inadvertently discovered, the State Department of Land and Natural Resources, Historic Preservation Division, the O‘ahu Island Burial Council representative, and participating interests from these families and individuals will be notified. The treatment of these resources will be conducted in strict compliance with the applicable historic preservation and burial laws.

(2) **Curtail the range of beneficial uses of the environment.**

The 280 Beach Walk project is part of an overall revitalization effort within the Beach Walk corridor of Waikiki. Existing uses conform to existing zoning and current land use designations, as the scale of the proposed project is significantly less than what is allowed under the LUO. The enhancements to the visitor experience that is anticipated upon completion of this project will continue to be compatible with the improvements to the environment and character within the immediate area and in Waikiki, in general.
(3) **Conflict with the State’s long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.**

The proposed project does not conflict with the State’s long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.

(4) **Substantially affects the economic or social welfare of the community or State.**

Short-term economic benefits anticipated during construction and landscaping will include direct, indirect, and induced employment opportunities and multiplier effects but not at a level that would generate significant economic expansion. Long-term economic benefits anticipated during future operations includes an expansion of dining services currently available to both kama‘aina and island visitors.

(5) **Substantially affects public health.**

The project is consistent with existing land uses and is not expected to affect public health. However, there will be temporary short-term impacts to air quality emanating from possible dust emissions and temporary degradation of the acoustic environment in the immediate vicinity resulting from construction equipment. Construction-related impacts of noise, dust, and emissions will be mitigated by compliance with the State Department of Health Administrative Rules. Anticipated duration of construction is 12 months.

(6) **Involves substantial secondary impacts, such as population changes or effects on public facilities.**

The new renovations would create only a very small potential increase of visitors to the area with an increased capacity to host a maximum of 400 guests at the restaurant with sufficient management and staff personnel. Additionally, the retail vendors will also attract visitors and require adequate staffing for each respective operation. The majority of these visitors to the project area are expected to be already staying somewhere in Waikiki. The overall impact to the project area and the effects on public facilities would be considerably minor.

(7) **Involves a substantial degradation of environmental quality.**

The proposed development will not involve a substantial degradation of environmental quality. To the contrary, improvements to the project area serve to transform a fenced vacant lot into a modest visitor destination in Waikiki. These improvements would not create impacts to known natural, cultural environmental resources.

(8) **Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.**

The 280 Beach Walk project is a small part of the overall improvement to the character of the immediate Beach Walk area but is not a precursor for other future actions.

(9) **Substantially affects a rare, threatened or endangered species, or its habitat.**

The current vacant gravel-filled parcels and the adjacent parcels contain no identified rare, threatened, or endangered species of terrestrial fauna or avifauna.

(10) **Detrimentally affects air or water quality or ambient noise levels.**

General short-term impacts associated with construction have been identified in this EA. Mitigation measures which are outlined in this EA will be applied during the on-going
construction activity of the 280 Beach Walk. No detrimental long-term impacts to air, water, or acoustic quality are anticipated with the proposed renovations.

(11) **Affects or is likely to suffer damage by being located in an environmentally sensitive area such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.**

The 280 Beach Walk property lies within the AO flood zone and lies outside of the designated tsunami zone. The proposed renovations will comply with the necessary design requirements and building codes within the flood district.

(12) **Substantially affects scenic vistas and view-planes identified in county or state plans or studies.**

The proposed project entails the construction of a two-story structure. Visual access to the mountains and the sea from mauka-makai roadways or from identified visual corridors will not be impacted by the project.

(13) **Require substantial energy consumption.**

The 34,500 - 34,199 SF retail building would increase power consumption in the Waikīkī area. However, the selection of energy-efficient systems for air-conditioning, lighting, water heating, and motorized equipment will help to reduce consumption needs and lower overall operational costs.
SECTION 7.0
Consulted Parties, Agencies, Organizations
and Individuals Receiving Copies of the EA
### 7.0 CONSULTED PARTIES, AGENCIES, ORGANIZATIONS AND INDIVIDUALS

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SECTION 8.0
References
8.0 REFERENCES


City and County of Honolulu, Planning Department (1992). General Plan for City and County of Honolulu.

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City and County of Honolulu, Department of Planning and Permitting (2002). Waikīkī Special District Guidelines.


State of Hawai‘i, DBEDT, Office of Planning (OSP). http://www.state.hi.us/dbedt/gis/download.htm

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APPENDIX A
Pre-Consultation Handout & Comments Received, and Draft EA Comment Letters and Provided Responses
January 22, 2007

Subject: Pre-Consultation for Draft Environmental Assessment
280 Beach Walk Retail Development
TMK: (1) 2-6-003: 026; 027; 048; 049; 058 (Waikiki, Oahu, Hawai‘i)

Dear Participant:

On behalf of First Round Pacific, LLC, Group 70 International, Inc. is currently undertaking the preparation of a Draft Environmental Assessment for the proposed development project in Waikiki. We are beginning with a pre-consultation process to consult agencies and other interested parties regarding the proposed project. Enclosed for your review and comment is a handout providing the project summary and overview of the 280 Beach Walk Retail Development project.

Please provide comments via telephone, email, fax, or U.S. Mail regarding the scope of our assessment. We would like to receive these comments no later than February 2, 2007.

Thank you for your participation in the pre-consultation for this environmental review process.

Sincerely,
GROUP 70 INTERNATIONAL, INC.

Kāwika McKeague
Senior Planner

Enclosures

CC: Cory Beall, Cory LLC
William Faluch, Eight Honolulu, LLC
City / County Development Plan: Primary Urban Center - Resort Mixed Use

SMA: Location outside of the SMA, no action required

Flood Zone: FIRM Zone AO (+2 feet)

Anticipated Determination: Finding of No Significant Impact (FONSI)

1.2 OVERVIEW OF PROPOSED PROJECT

First Round Pacific, LLC is proposing a retail development, which will be known as 280 Beach Walk. The project is situated on approximately 0.81 acres on the island of O‘ahu, in the moku (district) of Kona, within the ahupua‘a of Waikiki. The project site area is an approximately 35,256 square foot property located near the north end of the elongated block bounded by Kālia Road to the south, Kalākaaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. The project area is presently a largely empty lot that includes a two-level parking garage, a permanent access easement and, until recent demolition, low-rise buildings, including the site of the Hula Hut Restaurant.

Envisioned as a subtle yet important piece to the ongoing revitalization effort within the Waikiki corridor, the proposed project will contribute to an emerging trend of redevelopment that defines a key gateway experience to the State’s largest investment in the tourism industry. The design of the new building will orient each of the project’s retail units to directly face Kalākaaua Avenue. Each rental unit with direct access to the street will coexist with a second floor restaurant and outdoor dining experience in a building design that intends to reflect the diversity that makes Waikiki special and unique. The building design and appurtenant landscaping will comply with the requirements of the Waikiki Special District Design Guidelines in a manner that creates strong visual ties to the activity along Kalākaaua Avenue from the Beach Walk corridor.

The project area includes the following Tax Key Map (TMK) parcels: TMK 2-6-003:026, 027, 048, 049 and 058. While all the parcels are defined within a Joint Development Agreement (JDA), parcels 026 and 027 are the primary properties subject to redevelopment and are thus the focus of this environmental review. The project area proposed for development consists of a 34,500 square foot retail building comprising two floors containing six leased retail and restaurant spaces on parcels 026 and 027. The proposed development includes a series of two-story storefronts, accentuated with a vivid glazed-tile roof form that captures the street-oriented building expressions and traditions reminiscent of Honolulu’s earliest places of commerce. The proposed height of the building’s roof ridge is 50 feet, a dimension that closely references the existing conditions of the adjacent Burberry and Hawaiiana Hotel buildings.

An existing two-level parking structure occupies Parcel 048. Portions of the parking structure, its entrance and exit, are located on Parcel 049, which is not owned by First Round, LLC. Access via a perpetual access easement is secured between First Round, LLC and the adjoining property owner. The easement will continue to be utilized as a means for parking access as well as for access to a new loading dock for the proposed development. An existing ramp to the lower level of the structure is proposed to be relocated in order to allow vehicle access to the new loading dock of 280 Beach Walk. Parcel 058 is a utility easement. These three parcels will receive minor site and surface improvements in support of the parking, loading, and circulation requirements for the proposed project on parcels 026 and 027.

The surrounding area is heavily developed with commercial properties including extensive street-front retail, residential condominium high-rise structures, hotels, and public parking areas. Specifically, the proposed development is located adjacent to the Burberry Store and the Hawaiiana Hotel. A public landscape area and the ANA Office building are located directly across Beach Walk to the east of the project site. Within one block of the site area are newer developments such as the Outrigger Waikiki Beachwalk, Trump Tower, the Royal Hawaiian Shopping Center, and retailer’s such as Tiffany’s, Coach, Channel, and Tod’s.

Based upon preliminary review of historical photographs, maps, and land use records, the proposed development site had been used for a mixture of commercial, residential, and hospitality properties since prior to 1914. Most recently, the parcels of the JDA were occupied by a residential apartment-hotel building on parcel 027, and the Hula Hut restaurant on parcel 026. In 2000, the residential building on parcel 027 was demolished. Similarly, the restaurant building located on parcel 026 was demolished in 2004. Both parcels have remained vacant since that time. Currently, parcels 026 and 027 are gravel-covered vacant lots surrounded by a chain link fence.

1.3 HRS, CHAPTER 343 ENVIRONMENTAL ASSESSMENT PROCESS AND COUNTY REVIEW PROCESS

In accordance with the requirements of Chapter 343, Hawai‘i Revised Statutes, a Draft EA is being prepared as the proposed project is located within the City and County of Honolulu Waikiki Special District. Upon completion, the Draft EA will be submitted to the State Office of Environmental Quality and Control (OEQC). A notice of the Draft EA will then be published in the Environmental Notice, which will also commence a 30-day public review period.

The Draft EA will be presented in eight sections and will include the following content: a detailed summary and project description; a description of the environmental setting; a section that identifies potential impacts and prescribed mitigative measures on identified natural, cultural, socioeconomic resources as well as project demands on existing infrastructure; a description and analysis of alternatives; a discussion of the project’s relationship to State and County land designations; the anticipated determination and reasons for its belied outcome; a list of necessary permits and approvals; an updated list of agencies, organizations, and individuals that participated in the pre-consultation phase of the Draft EA; and a list of references cited or used in developing the Draft EA.

After the 30-day review period of the Draft EA has been completed, public comment received will be considered and addressed, as appropriate. A final EA will then be prepared, highlight key areas of the document that were revised, updated, or modified based upon information received during the public comment period.

Upon acceptance of the Final EA, a Finding of No Significant Impact (FONSI) is anticipated. A Special District (Major) use application would then be filed with the City and County of Honolulu Department of Planning and Permitting, Urban Design Branch for review and approval, as per the requirements of the Revised Ordinances of Honolulu, Chapter 21 (Land Use Ordinance), Article 9 (Special District Regulations). Construction would begin immediately after the issuance of the Special District (Major) use permit and other ministerial permits.
1.4 AGENCIES AND PUBLIC CONTACTED DURING THE PRE-CONSULTATION AND DRAFT EA REVIEW PERIODS

A list of agencies and other parties that were presented notice of the proposed development or will be contacted for input and comment regarding the proposed project prior to the publication of the Draft EA is provided below.

**Federal & State Agencies**
- Department of Business, Economic Development & Tourism, Office of Planning
- Department of Land and Natural Resources (DLNR), Director's Office
- DLNR, Office of Conservation and Coastal Lands
- DLNR, State Historic Preservation Division
- Office of Environmental Quality Control
- Office of Hawaiian Affairs

**City and County of Honolulu**
- Department of Planning & Permitting
- Department of Design & Construction
- Department of Environmental Services

**Elected Officials**
- State Senator Gordon Trimble
- State House Representative Scott Y. Nishimoto
- Council District Representative Charles Djou

**Other Parties and Associations**
- Waikiki Neighborhood Board Association No. 9, Robert Finley (Chair)
- Waikiki Improvement Association, Patricia Tam (Chair)
- RGM Trust
- Ross Petty
- Jay Shidler
- Saratoga Partners, LLC
- Dyer Beach Walk Holdings, LLC
- Soensens Family
- Florence T. Cooper
- Nomura Financial, LTD
- Nancy Walker
- Saratoga Apt-Hotel, Inc.
- Marie Lee Trust
- Uravenke International, Inc.
Mr. Kawika McKeague
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Mr. McKeague:

Subject: Pre-Consultation Memorandum for Draft Environmental Assessment

280 Beach Walk Retail Development
TMK: (1) 2-6-003: 026; 027; 048; 058
Waikiki, Oahu, Hawaii

Thank you for giving us the opportunity to comment on the above Pre-Consultation for Draft EA, 280 Beach Walk Retail Development.

The Department of Design and Construction has the following comment(s):

- A sewer connection application should be submitted to the Department of Planning and Permitting, Site Development Division, Wastewater Branch to determine adequacy of the existing lines.

Should there be any questions, please contact Jay Hamai, Assistant Chief, Wastewater Division, at 527-5037.

Very truly yours,

[Signature]
Eugene C. Lee, P.E.
Director

ECL:It (192099)
March 01, 2007

Mr. Eugene C. Lee, P.E.
Deputy Director
City and County of Honolulu
Department of Design and Construction
650 South King Street, 11th Floor
Honolulu, HI 96813

Subject: Pre-Consultation Comments for Draft Environmental Assessment
280 Beach Walk Retail Development

Dear Mr. Lee,

Thank you for your comment letter dated February 6, 2006 concerning the Pre-Consultation for the Draft Environmental Assessment (EA) of the 280 Beach Walk Retail Development Project.

As noted in your comment letter, a sewer connection application has been submitted by the project engineer to the Department of Planning and Permitting, Site Development Division, Wastewater Branch to determine the adequacy and available capacity of the existing sewer line. Analysis of project demand and available capacity will be disclosed in the Final EA upon receipt of the department's determination.

Upon completion, we will be providing your office with a copy of Draft EA for your review. We appreciate your input and participation in the pre-consultation process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Kawika McKeague
Senior Planner

cc: Sharon Nishiura
William Paluch
Mr. William Paluch  
February 6, 2007  
Page 2

development of the new building, including access, parking and loading spaces, they must 
remain jointly developed and be included in the special district permit (Major) application.

If the lots are not to be jointly developed, the applicant must apply for dissolution of the joint 
development by minor modification of the CUP. The applicant must show that the individual lots 
can independently meet the applicable zoning standards and regulations. The lots must also 
comply with conditions of Variance No. 2002VAR-42, which allowed the subdivision of a 
conforming lot into two (2) lots, one (1) of which lacked the minimum lot area. The EA should 
address these issues, as well as clearly identify the project boundaries and the proposed 
improvements.

Compliance with Land Use Ordinance (LUA) Requirements

Please note that we will only offer preliminary comments regarding the proposed project’s 
compliance with the LUA. These comments should not be construed as an endorsement of any 
submitted alternative diagram. A further review of the project’s compliance with the LUA, 
including potential final designs, will be completed during the environmental review process and 
applications for a Waikiki Special District Permit and/or building permit.

- We did not review or confirm the FAR and open space calculations. The development 
  standards, including the FAR and open space calculations, will be dependent on the lots 
  involved in the proposed project, especially since it appears that Parcel 58 is split-zoned 
  Resort Commercial Precinct and Resort Mixed Use Precinct.

- Under LUA Section 21-4.50, district or precinct boundary lines may be ignored only for the 
  purpose of very and minute requirements, provided the use is common to the districts or 
  precincts. However, under a joint development, other LUA requirements, such as the open 
  space requirement for the subdivision lot zoned Resort Mixed Use, may be met on any of 
  the subdivision lots that comprise the joint development "zoning lot", including a lot zoned 
  Resort Commercial Precinct. Please note, for example, that an area provided for open 
  space must meet the LUA definition of open space as well as the Waikiki Special District 
  design guidelines for open space, wherever it is located.

- The LUA requires that, except for necessary access drives and walkways, all yards be 
  landscaped. It may be difficult to support the diagrams showing the various alternatives for 
  the required landscaping or green space for the following reasons:
  - There appears to be a large number of storefront entry doors.
  - The proposed building could be set back farther from the front property line to allow 
    alternative walkway layouts that would be more consistent with the LUA.
  - The transfer of the public right-of-way (sidewalk) to an on-site easement is not 
    supportable for this project. In general, the relocation of the sidewalk to an on-site 
    easement is more appropriate for projects that are located along major streets, as 
    identified in the Waikiki Special District provisions, where the objectives include
March 01, 2007

Mr. Henry Eng, FAICP, Director
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

Subject: Pre-Consultation Comments for Draft Environmental Assessment
280 Beach Walk Retail Development

Dear Mr. Eng,

Thank you for your comment letter dated February 9, 2007 concerning the Pre-Consultation for the Draft Environmental Assessment (EA) of the 280 Beach Walk Retail Development Project.

As indicated in your letter, the proposed project resides within the Waikiki District and as such requires the approval of a Final EA, under the requirements of Hawaii Revised Statutes, Chapter 343. Further, the project will also require a County Special District Permit (Major) application to be filed and approved by your department.

As the affected parcels are jointly developed, the EA explains the proposed improvement and uses for each parcel and will be evaluated as a “single zoning lot”. Specific requirements to the Land Use Ordinance (LUO) are discussed in the EA. We anticipate that any identified concerns with the LUO requirements will be addressed, as appropriate, during the environmental review and completed during the application process for the Special District use application. The EA does provide an evaluation of alternative design considerations, including those requested in your attachment letter dated February 6, 2007.

Upon completion, we will be providing you with a copy of Draft EA for your review. We look forward to your input and continued participation during the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Kaswika McKeeague
Senior Planner

cc: Sharon Nishiura
William Paluch
March 01, 2007

Mr. Charles K. Djou
Councilmember, District IV
City and County of Honolulu
530 South King Street, #202
Honolulu, HI 96813

Subject: Pre-Consultation Comments for Draft Environmental Assessment
280 Beach Walk Retail Development

Dear Councilmember Djou,

Thank you for your comment letter dated January 31, 2007 concerning the Pre-Consultation for the Draft Environmental Assessment (EA) of the 280 Beach Walk Retail Development Project.

Upon completion, we will be providing you with a copy of Draft EA for your review. We look forward to your input and continued participation during the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

Kawika McKeague
Senior Planner

cc: Sharon Nishiura
William Pahiah
Mr. Eric J. Torrace  
Project Designer  
Lyon Associates, Incorporated  
841 Bishop Street, Suite 2006  
Honolulu, Hawai‘i 96813

Dear Mr. Torrace:

Subject: Your Letter Dated February 8, 2007 Requesting the Availability of Water to the Proposed Retail and Restaurant Development in Waikiki. TMK: 2-6-3-26, 27

Thank you for your letter on the proposed retail and restaurant development on Beachwalk.

The existing water system is presently adequate to accommodate the proposed development. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

If you have any questions, please contact Robert Chun at 745-6443.

Very truly yours,

KEITH S. SHIDA  
Principal Executive  
Customer Care Division

DEPARTMENT OF PLANNING AND PERMITTING  
CITY AND COUNTY OF HONOLULU  
660 SOUTH KING STREET • HONOLULU, HAWAI‘I 96813  
Phone: (808) 527-5927 • Fax: (808) 523-4210

SEWER CONNECTION APPLICATION

APPLICATION NO.: 2007/SCA-0117  
STATUS: Approved with conditions

DATE RECEIVED: 02/26/2007  
IWDP APP. NO.:  
PROJECT NAME: Proposed Restaurant and Retail Spaces / Restaurant/Retail

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SPECIFIC LOCATION: 270 & 286 Beach Walk St

APPLICANT: Lyon Associates, Inc., Mark Tonamine  
841 Bishop St, Suite 2006  
Honolulu, HI 96813

DEVELOPMENT TYPE: Restaurant and Retail

SEWER CONNECTION WORK DESIRED: Existing

OTHER USES: 250 seats/day; max. 400 seating; Retail

NON-RESIDENTIAL AREA: 19,900.00 s.f.

APPROXIMATE DATE OF CONNECTION: 07/27/2008

PROPOSED UNITS EXISTING UNITS UNITS TO BE DEMOLISHED

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REMARKS: Approval is for a restaurant (250 seats/day) and a retail with 19,900 S.F. space.

APPROVAL DATE: 03/06/2007  
EXPIRATION DATE: 03/05/2019

REVIEWED BY: Arturo Saavedra Jr.

Email: 025820716-001  
Job ID: 25820716

Initial Print Date: Tuesday March 6, 2007 11:29 am
February 26, 2007

Mr. Eric J. Torrace
Project Designer
Lyon Associates, Incorporated
841 Bishop Street, Suite 2005
Honolulu, Hawai`i 96813

Dear Mr. Torrace:

Subject: Your Letter Dated February 8, 2007 Requesting the Availability of Water to the Proposed Retail and Restaurant Development in Waikiki, TMK 2-6-3-26, 27

Thank you for your letter on the proposed retail and restaurant development on Beachwalk.

The existing water system is presently adequate to accommodate the proposed development. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

If you have any questions, please contact Robert Chun at 748-6443.

Very truly yours,

[Signature]

KEITH S. SHIDA
Principal Executive
Customer Care Division
Comment Letters Received During Draft EA Public Comment Period
Ms. Sharon Nishiura
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Ms. Nishiura:

SUBJECT: Draft Environmental Assessment for 280 Beach Walk Retail Development Project
Waikiki, Oahu, Hawaii
TMK: (1) 2-6-003: 026, 027, 048, 049, 058

Thank you for allowing us to review and comment on the subject application. The document was routed to the various branches of the Department of Health (DOH) Environmental Health Administration. We have the following Clean Water Branch, Clean Air Branch, Noise, Radiation & Indoor Air Quality Branch, and General comments.

Clean Water Branch

Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:
   a. Anti-degradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).
2. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:
   a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.
   b. Once through cooling water less than one (1) million gallons per day
   c. Hydro-testing water.
   d. Construction dewatering effluent.

You must submit a separate NOI form for each type of discharge at least 30 days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/gntl-index.html.

3. You must obtain an NPDES individual permit if there will be any other type of wastewater discharge not listed above from the proposed facilities. An application for an NPDES individual permit must be submitted at least 180 days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

4. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD’s determination letter for the project along with your NOI or NPDES permit application, as applicable.

5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State’s Water Quality Standards. Noncompliance with water quality requirements
Control of Fugitive Dust

Fugitive dust emissions occur during all phases of construction and operations. Activities close to existing residences, businesses, public areas or thoroughfares can cause dust problems. For cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance problems. We recommend that the contractors operate under a dust control management plan. The plan does not require the Department of Health approval, however it will help with identifying and minimizing the dust problems from the proposed project.

Examples of measures that can be included in the dust control plan are:

- a) Planning the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
- b) Providing an adequate water resource at the site prior to start-up of construction activities;
- c) Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d) Minimizing dust from shoulders and access roads;
- e) Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f) Controlling dust from debris being hauled away from the project site.

All activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust. If you have any questions, please contact the Clean Air Branch at 586-4200.

Noise, Radiation & Indoor Air Quality Branch

Project activities shall comply with the Administrative Rules of the Department of Health, Chapter 11-46, Community Noise Control. Should there be any questions, please contact Russell S. Takata, Environmental Health Program Manager, Noise, Radiation and Indoor Air Quality Branch, at 586-4701.
July 2, 2007

Mr. Kelvin H. Sunada, Manager
State of Hawai‘i
Department of Health
Environmental Planning Office
P.O. Box 3378
Hilo, HI 96720-0738

SUBJECT: Response to Comments Provided for
200 Beach Walk Retail Development Draft Environmental Assessment
TMK 2-6-005:026, 027, 048, 049, 058
Kailuki, O‘ahu, Hawai‘i

Dear Mr. Sunada:

Thank you for your comment letter (01 June 2007) directed to the City and County of
Honolulu, Department of Planning and Permitting for the 200 Beach Walk Retail
Development Draft Environmental Assessment (DEA). The following is offered in
response to your comments.

Clean Water Branch
The proposed development area is approximately 0.81 acres. Therefore, a NPDES is
not required since the total disturbed site is less than an acre.

Clean Air Branch
As discussed in the Section 3.10 (DEA), the expected air pollutant emissions generated
on-site during the construction period are due to vehicular movement, grading, concrete
and asphalt batch, and general dust-generating construction activities. The
proposed mitigation measures presented in the DEA employ dust control measures
that consist of, but are not limited to, frequent watering of unpaved roadways and
areas of exposed soil; providing an adequate water source at the site prior to start up
doing construction activity; and using dust fences adjacent to existing neighboring
properties.

Construction activity will be in compliance with applicable provisions of the Hawaii
Administrative Rules, Chapter 11-60.1. The mitigative measures provided in your
comment letter will be considered in the preparation of a dust control management
plan during the various phases of construction.

Noise, Radiation, & Indoor Air Quality Branch
Project construction and operation will be in compliance to applicable administrative
rules related to Community Noise Control. As appropriate, muffler systems will be
utilized on construction equipment to ensure permissible sound levels are maintained.
City & County of Honolulu  
Office of Environmental Quality Control  
Department of Planning & Permitting  
650 South King Street  
Honolulu, Hawaii 96813  
Attention: Sharon Nishiura

Ladies and Gentlemen:

Subject: Draft Environmental Assessment for the Proposed 280 Beach Walk Retail Development, Waikiki, Oahu, Tax Map Key: (1) 2-6-3:26,27,48,49,58

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources has no comment to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Russell Y. Tsuji  
Administrator

July 2, 2007

Mr. Russell Y. Tsuji, Administrator  
State of Hawai‘i  
Department of Land and Natural Resources  
Land Division  
P.O. Box 621  
Honolulu, HI 96809  

SUBJECT: Response to Comments Provided for 280 Beach Walk Retail Development Draft Environmental Assessment  
TMK 2-6-003:026, 027, 048, 049, 058  
Waikiki, Oahu, Hawaii

Dear Mr. Tsuji:

Thank you for the comment letter (04 May 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 280 Beach Walk Retail Development Draft Environmental Assessment.

Your comment letter and this response will be included in the Final Environmental Assessment. We appreciate your participation in the environmental review process.

Sincerely,

George Atta, AICP  
Principal, Chief Community Planner
Mr. Henry Eng, FAICP
Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Eng:

Subject: 280 Beach Walk Retail Development Draft Environmental Assessment (DEA) TMK 2-6-003: 26, 27, 48, 49, and 58

Thank you for requesting our review of the subject project.

We anticipate no significant impact to our State transportation facilities from the project.

We do wish to note, however, that we remain concerned and interested in the cumulative traffic impacts all of the upcoming projects (hotel/condominium/commercial) in the surrounding area will have on the east end of State Route 92 (Ala Moana Boulevard).

We appreciate the opportunity to provide our comments.

Sincerely,

BARRY FUKUNAGA
Director of Transportation

July 2, 2007

Mr. Barry Fukunaga, Director
State of Hawaii
Department of Transportation
659 Punchbowl Street
Honolulu, HI 96813-5097

SUBJECT: Response to Comments Provided for 280 Beach Walk Retail Development Draft Environmental Assessment
TMK 2-6-003: 26, 27, 48, 49, 58
Waikiki, Oahu, Hawaii

Dear Mr. Fukunaga:

Thank you for your comment letter (05 June 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 280 Beach Walk Retail Development Draft Environmental Assessment (EA).

We acknowledge your concern and interest in the cumulative impacts of all ongoing activities within the surrounding area on Route 92 (Ala Moana Boulevard). According to the findings in the Traffic Impact Assessment Report prepared for the Draft EA, approximately 40% of the total number of trips generated by the proposed development during both weekday PM and Saturday PM peak hours are conservatively assumed to be pedestrian trips. Projected peak hour traffic conditions along studied street corridors indicate that level of service will be slightly lower at only two intersections: a) the Kahala Road and Saratoga Road (eastbound, left-turn) intersection and b) the Kuhioana Avenue, Kalaimoku Street, and Saratoga Road intersection (northbound, right turn). However, the remaining critical movements around these intersections are anticipated to continue operating at levels of service similar to without project conditions. Given the size and scale of the proposed development, we anticipate the contribution to traffic conditions within this area of Waikiki will be minimal.

Your comment letter and this response will be included in the Final Environmental Assessment. We appreciate your participation in the environmental review process.

Sincerely,

George Atta, AICP
Principal, Chief Community Planner
June 8, 2007

Henry Eng
Department of Planning & Permitting
650 S. King Street, 7th Floor
Honolulu, HI 96813

RE: Draft Environmental Assessment for the Proposed 280 Beach Walk Retail Development,
Waikiki, O‘ahu, TMK: 2-6-3: 26, 27, 48, 49 and 58.

Dear Mr. Eng,

The Office of Hawaiian Affairs (OHA) is in receipt of your May 8, 2007 submission. We apologize for the delay in response and offer the following comments:

Although the applicant’s archaeological consultant claims to have conducted the most thorough Archaeological Inventory Survey in the history of Waikiki, due to the number of excavated trenches-per-acre, our staff would like to point out that an inventory consisting of 10 backhoe trenches, in an empty lot, may not be sufficient given the amount of known subsurface cultural resources of Waikiki. This is coupled with the fact that, as found on Page 3-23 of the Draft Environmental Assessment, “hand excavation was not extensively utilized” during the course of the survey.

Being that a Draft Environmental Assessment is a decision making document, it is crucial that it contain as much thorough and reliable information as possible. Historic properties and human burials encountered during archaeological monitoring are often not afforded much protection at all. In fact, if they are found within the construction footprint during the course of construction related activities, they are almost invariably disregarded. Being the case, our staff recommends that a much more thorough inventory, utilizing machine-assisted backhoe excavation, be conducted in support of the environmental review process.

OHA asks that, in accordance with Section 6E-46.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if the project moves forward, and if any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division (SHPD/LNBR) shall be contacted.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jesse Yee, Native Rights Policy Advocate, at (808) 594-0539 or jayee@oha.org.

Aloha,

Clyde W. Nii‘nii‘o
Administrator
We believe that the level of investigation for potential subsurface historical resources is demonstrative of the owner’s due diligence. We anticipate that the State Historic Preservation Division (SHPD) will concur with the findings and summary in its review of the Archaeological Assessment. We will continue to coordinate with SHPD if the event additional mitigation is deemed necessary.

Your comment letter and this response will be included in the Final Environmental Impact Statement. We appreciate your participation in the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George Atta, AICP
Principal, Chief Community Planner

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

May 8, 2007

TO: HENRY ENG, FAICP, DIRECTOR
FROM: KEITH S. SHIDA, PRINCIPAL EXECUTIVE
CUSTOMER CARE DIVISION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR 280 BEACHWALK
RETAIL DEVELOPMENT

The existing water system is presently adequate to accommodate the proposed development. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The construction drawings should be submitted for approval.

If you have any questions, please contact Robert Chun at 748-5443.
July 2, 2007

Mr. Keith S. Shida, Principal Executive
City and County of Honolulu
Board of Water Supply
Customer Care Division
630 South Beretania Street
Honolulu, HI 96813

SUBJECT: Response to Comments Provided for
280 Beach Walk Retail Development Draft Environmental Assessment
TAK 2-6-8035026, 027, 048, 049, 058
Waikiki, Oahu, Hawaii

Dear Mr. Shida:

Thank you for the comment letter (08 May 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 280 Beach Walk Retail Development Draft Environmental Assessment.

We acknowledge your assessment that the existing water system is adequate to accommodate the proposed development. We further recognize that the Board of Water Supply reserves the right to change its position until the building permit application has been approved.

The applicant will pay the necessary fees for water resource development, transmission, and daily storage.

Your comment letter and this response will be included in the Final Environmental Assessment. We appreciate your participation in the environmental review process.

Sincerely,

George Atia, AICP
Principal, Chief Community Planner

MEMORANDUM

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: EUGENE C. LEE, P.E., DIRECTOR

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, 280 BEACH WALK RETAIL DEVELOPMENT

Thank you for giving us the opportunity to comment on the above Draft Environmental Assessment.

The Department of Design and Construction has the following comment:

- 3.14.3 Wastewater Disposal – "The Proposed 4" sewer line lateral will connect to the existing manhole." The minimum size should be a 6" sewer line lateral.

Should you have any questions, please contact Jay Hamai at 768-8799.

ECL/Jt (207285)

C: DDC Wastewater Division
MEMORANDUM

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: LAVERNE HIGA, P.E., DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF FACILITY MAINTENANCE

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA)
280 BEACH WALK RETAIL DEVELOPMENT

Thank you for the opportunity to review and comment on the DEA, dated April 2007, for the subject development. Returned for your use is the DEA.

The development proposes to create open green space within the City right-of-way sidewalk area along Beach Walk and transfer the pedestrian right-of-way for public use to an on-site easement. It should be understood that maintenance and repairs to the on-site pedestrian easement shall be the responsibility of the property owner.

Should you have any questions, please call Charles Pignataro of the Division of Road Maintenance, at 484-7897.

Attachment
July 2, 2007

Ms. LaVerne Higa, P.E., Director
City and County of Honolulu
Department of Facility Maintenance
1000 Ululani Street, Suite 215
Kapolei, HI 96707

SUBJECT: Response to Comments Provided for 280 Beach Walk Retail Development Draft Environmental Assessment

TMK 2-6-003:026, 027, 049, 058
Wailuku, O'ahu, Hawai'i

Dear Ms. Higa:

Thank you for your comment letter (31 May 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 280 Beach Walk Retail Development Draft Environmental Assessment (EA).

We are optimistic that as the project proceeds through the Special District Permit (Major) process, the merits of the preferred design will be recognized and supported. If so, the applicant understands that maintenance and repairs of the proposed on-site easement will be its responsibility.

Your comment letter and this response will be included in the Final EA. We appreciate your participation in the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George Ata, AICP
Principal, Chief Community Planner

May 25, 2007

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: LESTER K. C. CHANG, DIRECTOR

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT - 280 BEACH WALK RETAIL DEVELOPMENT

Thank you for the opportunity to review and comment on the Draft Environmental Assessment relating to the 280 Beach Walk Retail Development in Wailuku.

We have reviewed the DEA and have the following comments:

1. The landscape rendering depicted in Figure 2-2, 280 Beachwalk Ground Floor Plan does not identify the type of plant material proposed for the project.

   Avoid plant material that can cause sidewalk and/or curb damage. When the planting palette for the project has been determined, the Landscape Design Consultant shall submit plans to the Division of Urban Forestry (DUF) for review and approval.

2. Please confirm that the private property owner will be responsible for all costs for the maintenance, repair, and utility bills for water and electricity usage for the landscape, irrigation, lighting and street furniture improvements within the road right-of-way.

3. Note: Number 2 above shall be stated on the project plans and specifications.
4 Refer to the most current copy of the Department of Planning and Permitting STANDARDS AND PROCEDURES FOR THE PLANTING OF STREET TREES in the preparation of the construction document plans and specifications.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

LESTER K. C. CHANG
Director
Mr. Kawika McKeague
Group 70 International, Inc.
925 Beshel Street, 5th Floor
Honolulu, Hawaii 96813

Dear Mr. McKeague:

Subject: Chapter 343, HRS, Draft Environmental Assessment
280 Beach Walk Retail Development
First Round Pacific, LLC
270 and 298 Beach Walk and 321 Saratoga Road - Waikiki
Tax Map Key 2-6-3: 26, 27, 48, 49 and 58

Transmitted for your response and incorporation into the Final Environmental Assessment (EA) are comments on the Draft EA received, thus far, by the Department of Planning and Permitting (DPP). In accordance with the provisions of Chapter 343, Hawaii Revised Statutes, you must respond, in writing, to these and any other comments that were submitted during the 30-day comment period (which began with the publication of a notice of availability of the Draft EA in The Environmental Notice on May 8, 2007). The Final EA must include these comments and responses, as well as the revised text, where needed.

Also, the following are the DPP’s comments on the Draft EA.

1. Introduction
   a. Identify the landowner of Parcel 49, which we understand is different from the landowner of the rest of the parcels.

2. Project Description
   a. Clarify that all of the parcels are jointly developed and not only Parcels 26 and 27. Also, explain the need for a perpetual access easement from the owner of Parcel 49 to access Parcels 48 and 26 since all of the parcels are already jointly developed under Conditional Use Permit No. 2000/CUP-84.

   b. Provide clearer conceptual plans. Several plans were blurry and difficult to understand. Also, the plans should reflect the required transitional height setbacks, the ingress and egress to the site, internal circulation and the parking and loading areas.

   c. Clarify what is meant by “green space.” It would be helpful to use the Land Use Ordinance (LUC) terminology of open space, required landscaping and required yards if the green space refers to any of those standards.

   d. If green space is the amount of landscaping, then it appears that Figures 2-1 to 2-3 shows less green space and more pavement than the amount identified on Figure 2-11.

   e. As explained in a February 6, 2007 letter to a representative of the applicant, the transfer of the public right-of-way (sidewalk) to an on-site easement is not supportable for this project. The proposed building could be set back farther from the front property line to allow alternative walkway layouts that would be more consistent with the LUC. In general, the relocation of the sidewalk to an on-site easement is more appropriate for projects that are located along major streets, as identified in the Waikiki Special District provisions, where the objectives include providing a greener pedestrian experience and a buffer between the pedestrians and vehicular traffic. The existing right-of-way along Beach Walk is narrow and likely contains underground existing utility lines, making it difficult to relocate the sidewalk onto the project site. Further, the new developments along Beach Walk, makai of the project site, are able to comply with requirements of the LUC without relocation of sidewalks.

   f. If the sidewalk is transferred to an on-site easement, a subdivision application will be required to designate the pedestrian easement. The sidewalk must comply with ADA design guidelines. The sidewalk must also be designed such that it eliminates blind corners from alley ways and doors.

   g. The existing parking structure is part of the overall project and must be included in discussions throughout the EA, when applicable.
3. Off-street parking and loading
   a. Identify the number of existing and/or proposed off-street parking and loading spaces throughout the project site. Describe (e.g., square footage, number of parking spaces, operation) the parking structure.
   b. Estimate the number of off-street parking and loading spaces that will be required under the LUO for the proposed project and how/where the required spaces will be provided.
   c. Explain whether the existing parking structure will provide parking for other uses besides the new retail development.
   d. Discuss potential impacts (e.g., obstruction of the footpath, hazards to pedestrians, damage to the underground utilities from the heavy vehicles) that the loading activities may have on the existing access and utility easement, since delivery vehicles must cross the easement to reach the proposed loading space. Identify measures to mitigate potential impacts.
   e. Explain how it was determined that most deliveries will be made by small vehicles as opposed to larger vehicles. Will the applicant only rent to tenants who use small delivery trucks? If larger vehicles may be used, explain how the project will accommodate deliveries by large vehicles.
   f. Loading spaces must be situated and conveniently located such that all vehicular maneuvering occurs on-site and vendors providing goods and services to the site find it convenient to utilize the project’s loading rather than conducting this activity on a public street. All internal driveways should be interconnected.
   g. Correct Figure 3-1. This figure relates to soils and not loading.

4. Drainage
   a. Describe how the project will comply with Section II (Storm Water Quality) of the “Rules Relating to Storm Drainage Standards” (i.e., post-construction BMPs).
   b. A drain connection license will be required to permit the connection of the proposed 12-inch drain line to the existing catch basin.
   c. Expand the discussion on surface drainage to explain that the vacant portion of the site was previously developed with commercial uses and, therefore, the current proposal should not effectively increase the potential surface runoff from the project site.

5. Traffic
   a. Identify the permanent storm water quality measures that will be incorporated in the design and construction of the project, since it was mentioned that surface runoff will eventually end up in Class A waters.
   b. The tables in the traffic impact analysis report (TIAR) do not appear to reflect the conditions associated with this development and may be the results of another study. If this is the case, adjust the tables accordingly. An updated TIAR may be required at the time of building permit if the project and/or driveway locations significantly change from what was originally presented.
   c. Adequate vehicular sight distance to pedestrians and other vehicles must be provided and maintained at all driveways.
   c. Construction plans for all work within and affecting City streets must be submitted for review. Traffic control plans during construction should also be submitted for review and approval. The progress schedule for this project must be closely coordinated with the other developments in the vicinity of this site to avoid any construction conflicts.

6. Wastewater. Identify the conditions of the approved Sewer Connection Application.

7. Cultural resources, archaeological and historical resources. The Final EA must include comments from the State Historic Preservation Division (SHPD) on the Cultural Impact Assessment and Archaeological Assessment included in the Draft EA. The Final EA must also address SHPD’s comments.

8. Alternatives. Discuss a design scheme that complies with the LUO and its corresponding impacts. The alternative to maintain the existing sidewalk in its present location does not appear to comply with the LUO. For example, the LUO requires that the front yard be paved, except for necessary access drives and walkways. The front yard contains a significant amount of paving. Instead, an alternative which is more consistent with the LUO may be to set the building farther back from the front property line to allow alternative walkway layouts and larger landscaped areas.

9. Development Plan. Primary Urban Center (PUC) Development Plan (DP) Policies, Section 3.4.2.2 Visitor Facilities, promotes a vibrant and livable Waikiki, including improvements to the quality of the street environment for pedestrians, and the scale and design of buildings.
   a. The EA and proposal should address its Saratoga Road frontage and how the parking structure renovation will enhance the pedestrian experience along this mauka view corridor (Figure 3.1). Right-of-way landscaping should be provided to
enhance mauka views. Improvements including on-site landscaping and parking garage façade treatments should be provided to improve the streetscape.

b. The pedestrian and open space network in the Beach Walk area should be expanded as a desirable feature of the redevelopment of Waikiki, adding to its accessibility and livability (for visitors and residents). The proposal should include opportunities for street level activities and outdoor dining along Beach Walk.

10. LUO

a. Provide additional details, plans and/or preliminary calculations showing the project's compliance (including the existing parking structure) with the LUO, including the Waikiki Special District development standards and design guidelines. Provide specific details on how the project will promote the design guidelines of the special district, including the provision for a pedestrian-oriented experience and potential improvements to enhance the appearance of the existing parking on Parcels 48 and 49.

b. The LUO definition of lot area excludes right-of-way for ingress and egress in favor of other uses, which would include the pedestrian access easement.

c. A new Conditional Use Permit for off-site parking may be required.

11. Include a section listing all required permits and approvals.

Should you have any questions, please contact Sharon Nishiura of our staff at 768-8031.

Very truly yours,

[Signature]

Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:pl
Enclosures
Doc. 542917
of concern can be adequately addressed during the phase of design
review. The existing utilities fronting the project site would not prohibit
the relocation of the sidewalk. Any existing utilities such as fire hydrants or
street lights would be in the landscaped area. The existing HECO vault at
the northeast corner could remain and only the cover would have to be
adjusted to provide a smoother surface connection.

If the preferred design scheme is accepted during the WSD permitting
process, all subsequent and necessary applications, including a subdivi-
sion application, will be submitted. The proposed sidewalk can be
designed to meet AADA requirements as well as proper measures for
pedestrian safety.

We acknowledge that the existing parking structure is part of the overall
redevelopment effort of project. Discussion of the proposed
improvements and impacts from the improvements of the parking structure
are included in the Final EA.

3. Off-street parking and loading

a. All parking requirements will be maintained on-site. The existing
agreement with the owner of Parcel 49 requires a provision of 26 stalls.
Existing parking is a paid-for self-parking system with an attendant to
collect parking fees and direct vehicle movements within a layout that
is not compliant with LUCO standards and definitions. The existing parking
structure and adjacent surface parking lot can accommodate a maximum
of 32 standard size vehicles and does not provide any designated loading
spaces.

b. As stated in the Draft EA, there is a LUCO provision to provide 16 parking
spaces for the second floor restaurant. Loading and unloading activities are
to occur on-site. The loading scheme includes the provision of 3 stalls.

c. Parking provisions are being designed to meet the needs of the new retail-
restaurant facility.

d. The existing utilities within the existing access and utility easement have
sufficient cover for City and County Standards and will not be damaged
by vehicular traffic.

e. The proposed loading area can accommodate Single Unit (SU) type trucks.

f. A delivery management plan has been designed to ensure that all
loading and unloading activities occur on-site.

g. Figure 3-1 is labeled correctly. However, in section 2.5 of the Draft EA we
incorrectly referenced the text description. The appropriate citation in the
text should have referenced Figure 2-1 (Site Plan). The citation has
been corrected in the Final EA. Further, Figure 2-1 has been reformatted
to an 11X17 for easier readability and clarity.

4. Drainage

a. The proposed project will use a flow-through based water quality control
system to comply with the Storm Water Quality Requirements.

b. A chain connection license will be obtained.

5. Traffic

a. As indicated on page 5 of the Traffic Impact Assessment Report (TIAR)
(Appendix D), the traffic volume on the Outrigger Waikiki Beach Walk
project, the existing conditions presented in the 280 Beach Walk TIAR,
are derived from the TIAR for the Waikiki Beach-Waikiki development prepared by
Willis Smith Associates in October 2004. This report detailed the existing traffic volumes and
conditions for the surrounding roadway network. However, as indicated
in the 280 Beach Walk TIAR, calculations for trip generation and
distribution were conducted specifically with the proposed
minimum build-out conditions for the proposed 280 Beach Walk retail-restaurant
program. Since the completion of the TIAR, the proposed retail-restaurant
program has been downsized so the anticipated conditions are less
than what was originally estimated in the TIAR.

b. Maintenance of adequate sight distance is included as a recommendation
in the TIAR (please reference Recommendation #1 in the TIAR).

c. Construction plans, including traffic control plans, will be submitted to the
City for review and approval.

6. Wastewater

A sewer connection approval was obtained by the City for 19,900 square
feet of retail space and 250 seats per day restaurant.

7. Cultural resources, archaeological, and historic resources. The Archaeological
Assessment (AA) was submitted to the State Historic Preservation Division (SHPD)
for its review and concurrence. As of this response letter, we have not received a
formal letter regarding SHPD's review. We acknowledge that the Final EA should
include the findings of SHPD in its review of the AA. Accordingly, the Final EA
will address identified concerns related to cultural, archaeological, and historic
resources. Unlike the AA, there is no statutory or administrative rule provision
that requires a separate review process by SHPD for the Cultural Impact Assessment
(BlA). The CBA and its findings were summarized within and provided for in its
entirety as Appendix E in the Draft EA. As one of the review agencies for the 280
Beach Walk Environmental Assessment, a copy of the EA was provided to
SHPD. SHPD did not provide a response to either the EA or the CBA during the
public review period.

8. Alternatives. Figure 3-3 has been revised in the Final EA to provide clarity to
how the selected alternative complies with the LUCO.

9. Development Plan

a. Section 5.5 of the Final EA provides further discussion as to how the
proposed project conforms to the applicable policies of Primary Urban
Center Development Plan. Further, Section 2.4 has been revised to provide further description for landscaping in both the preferred and alternative design scenarios.

b. The curvilinear features of the front-yard scheme accent a pedestrian-friendly experience. The purpose for the proposed pedestrian circulation pattern is to create opportunities for street-level experiences to be fostered, including the possibility of outdoor dining activities.

10. LUXO

a. A summary has been provided in Section 1.6 of the Final EA to elaborate on the design requirements that will need to be met for the project to comply with the County Land Use Ordinance development standards. Detailed design and development plans will be in accordance to the Waikiki Special District Design Guidelines, the Livable Community Project and the applicable provisions of the Primary Urban Center Development Plan. Final development and detailed design plans will be submitted with the filing of the Waikiki Special District (Major) Permit application.

b. Confirm with WP. We acknowledge that the definition of lot area excludes right-of-way for ingress or egress in favor of others, including pedestrian access easement. This will be deleted from the lot area calculation.

c. It is our position that the necessary parking requirements for the proposed project can be met and maintained on-site.

11. Section 1.5 (Necessary Permits and Approvals) had been added to the Final EA.

Your comment letter and this response will be included in the Final EA. We appreciate your continued participation in the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George Aita, AICP
Principal, Chief Community Planner

MEMORANDUM

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: MELVIN N. KAKU, DIRECTOR

SUBJECT: 280 BEACHWALK RETAIL DEVELOPMENT

Thank you for your April 25, 2007 letter, requesting our review of and comments on the draft environmental assessment for the subject project.

We have the following comments on the document:

1. The impact of increased pedestrian activity resulting from the project, such as pedestrians crossing Beachwalk, should be assessed. If required, measures to improve pedestrian safety should be proposed and discussed.

2. Parking and loading facilities must be designed to accommodate all parking and loading activities, including maneuvering, completely on-site.

Should you have any questions regarding these comments, please contact Ms. Faith Miyamoto of the Transportation Planning Division at Local 8350.

MELVIN N. KAKU

June 18, 2007
July 2, 2007

Mr. Melvin N. Kaka, Director
City and County of Honolulu
Department of Transportation Services
650 South King Street, 5th Floor
Honolulu, HI 96813

SUBJECT: Response to Comments Provided for
200 Beach Walk Retail Development Draft Environmental Assessment
TMK 2-6-6003:026, 027, 048, 049, 058
Waikiki, Oahu, Hawaii

Dear Mr. Kaka,

Thank you for your comment letter (18 June 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 200 Beach Walk Retail Development Draft Environmental Assessment (EA). The following is offered in response to your comments.

1. According to the findings in the Traffic Impact Assessment Report prepared for the Draft EA, approximately 40% of the total number of trips generated by the proposed development during both weekday and Saturday PM peak hours are conservatively assumed to be pedestrian trips. Most of the pedestrian traffic originates from ongoing retail and restaurant activities occurring along Kalakaua Avenue. As discussed in Section 2.3 of the Draft EA, we believe the proposed transfer of the public right-of-way to an on-site easement may be the appropriate solution for this area. The provision of the landscaped area along the edge of Beach Walk that fronts the property would deter pedestrians from illegally crossing the street from the Beach Walk Triangle Park direction. We feel these designs will improve pedestrian safety.

2. As shown in the Site Plan Figure 2-D of the Draft EA, the proposed parking and loading scheme is designed to support all associated project activities, including maneuvering, to occur on-site. Figure 2-1 has been reformatted in the Final EA for easier readability and clarity.

Your comment letter and this response will be included in the Final EA. We appreciate your participation in the environmental review process.

Sincerely,

George Atta, AICP
Principal, Chief Community Planner

GROUP 70 INTERNATIONAL, Inc.
3. Submit civil drawings to the HPD for review and approval.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 723-7151.

KENNETH G. SILVA
Fire Chief

July 2, 2007

Mr. Kenneth G. Silva, Fire Chief
City and County of Honolulu
Honolulu Fire Department
636 South Street
Honolulu, HI 96813-5007

SUBJECT: Response to Comments Provided for 280 Beach Walk Retail Development Draft Environmental Assessment
TKC 2-6-0805/026, 027, 048, 649, 058
Waikiki, O‘ahu, Hawai‘i

Dear Mr. Silva:

Thank you for your comment letter (23 May 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 280 Beach Walk Retail Development Draft Environmental Assessment (EA). The following is offered in response to your comments.

1. All first floor improvements will be within 150 feet of existing public streets that are accessible for fire department vehicles. There is an existing fire hydrant fronting the proposed building area along Beach Walk.

2. The private portion of the water system serving the proposed project, including all metered appurtenances will be designed to meet Board of Water supply standards for hydrant spacing and fire flow. There will be a 6” Detector Check Meter to supply fire sprinklers within the proposed building.

3. Upon completion of the detailed design phases of the project, civil drawings will be submitted to the department for review and approval.

Your comment letter and this response will be included in the Final EA. We appreciate your participation in the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George Atta, AIC
Principal, Chief Community Planner
TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: BOISSE P. CORREA, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
280 BEACH WALK RETAIL DEVELOPMENT
321 SARATOGA ROAD - WAIKIKI
TAX MAP KEYS: 2-8-9: 26, 27, 48, 49, AND 58

May 7, 2007

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

This project should have no significant impact on the facilities or operations of the Honolulu Police Department.

If there are any questions, please call Major Randal Macadangdang of District 6 at 529-3381 or Mr. Brandon Stone of the Executive Office at 529-3844.

BOISSE P. CORREA
Chief of Police

By

JOHN P. KERR
Assistant Chief of Police
Support Services Bureau
May 29, 2007

Mr. Kawka McKeague
Group 73 International, Inc.
925 Bethel Street - Fifth Floor
Honolulu, HI 96813-4307

Dear Mr. McKeague:

Re: 280 Beach Walk Retail Development
Waikiki, Oahu, Hawaii
TMK: 2-6-003: 026, 027, 048, 049 & 058

Thank you for the opportunity to comment on the above-referenced project. Hawaiian Electric Company, Inc. (HECO) has no objections at this time. The following comments were received from the Transmission & Distribution Division of our Engineering Department:

HECO has both existing overhead facilities (covered by R&W #1955-137) and underground facilities (covered by R&W #2001-021) within the subject property and will require continued access for maintenance purposes. We appreciate your efforts to keep us apprised of the planning process. As the project progresses, please continue to keep us informed. We will be better able to evaluate any effects on our system facilities further along in the project's development. We request that development plans show all affected HECO facilities and address any conflicts between the proposed plans and HECO's existing facilities. Please forward the pre-final development plans to HECO for review.

Should it become necessary to relocate HECO's facilities, please submit a request in writing and we will work with you so that construction of the project may proceed as smoothly as possible. Please note that there may be costs associated with any relocation work, and that such costs may be borne by the requestor. Because any redesign or relocation of HECO's facilities may cause lengthy delays, upon determination that HECO facilities will need to be relocated, HECO should be notified immediately in order to minimize any delays in or impacts on the project schedule.

Our point of contact for this project, and the originator of these comments, is Dustin Nakamoto (543-7783). I suggest dealing directly with him to coordinate HECO's continuing input in this project.

Sincerely,

Kirk S. Tomita
Senior Environmental Scientist

cc: OEQC
S. Nishiyama (DP&P/C&C)
W. Paluch (Eight, Inc.)
D. Nakamoto / P. Nakagawa / R. Tamayo

July 2, 2007

Mr. Kirk S. Tomita, Senior Environmental Scientist
Hawaiian Electric Company
P.O. 2750
Honolulu, HI 96840-0001

SUBJECT: Response to Comments Provided for 280 Beach Walk Retail Development Draft Environmental Assessment
TMK 2-6-003: 026, 027, 048, 049, 058
Waikiki, Oahu, Hawaii

Dear Mr. Tomita:

Thank you for your comment letter (29 May 2007) directed to our office for the 280 Beach Walk Retail Development Draft Environmental Assessment (EA). The following is offered in response to your comments.

Detailed design and development plans will be submitted with the filing of the Waikiki Special District (Major) Permit application. These plans will show all existing utility infrastructure within and adjoining the project area. These plans will be submitted to HECO for their review.

Currently, it has been determined that the existing HECO vault cover at the northeast corner of the project area would remain but would require that the cover may need to be adjusted to provide a smooth connection with the proposed design scheme. As such, this action and any other action requiring the relocation of HECO equipment will prompt a written request to be submitted to HECO during the Special District application process. We acknowledge that relocation of HECO equipment would require costs to be incurred by the owner. Any written request to HECO would be submitted in a timely manner to allow adequate time for review and implementation.

Your comment letter and this response will be included in the Final EA. We appreciate your participation in the environmental review process.

Sincerely,

George Atta, AICP
Principal, Chief Community Planner

Group 70 International, Inc., Architects + Planning + Interior Design + Building Diagnostics + Asset Management + Environmental Services
802 Bishop Street, 39th Floor • Honolulu, Hawaii 96813-0505 • Ph: (808) 535-5300 • Fax: (808) 535-5318 • www.group70.com • mail@group70.com
May 14, 2007

City and County of Honolulu
Department of Planning and Permitting
Attention: Sharon Nishiura
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: 280 Beach Walk Retail Development, Draft Environmental Assessment

Dear Ms. Nishiura:

Thank you for the opportunity to review said project. We received the Draft Environmental Assessment and have completed our review.

Telecommunication service connection shall be on Beach Walk, on the south east corner of the property. Adequate space shall be provided at the retail complex to mount our equipment. Electrical plans shall be submitted to our office for review. Civil and Architectural drawings may be requested should more information be required.

As for the six-foot utility access easement at the rear of the project, we are concerned with the proposed improvements within this area. There should always be a 24-hour access to our existing conduits and pullboxes before, during, and after construction. We may request that new conduits and/or pullboxes be placed based on what is being proposed for pedestrian traffic between the parking structure and the retail complex. Our reasoning is that we would incur more expense if there is a significant amount of concrete and/or decorative tiles or other landscaping that need to be replaced.

We will work with the project's consultants to satisfy their needs as well as protect our interests as well.

Should you have any questions, please call Noel Remigio at 840-5847 or 546-4747.

Sincerely,

N. Remigio
Manager – OSP Engineering, East & West Oahu

C: File (Waikiki)
July 2, 2007

Ms. Jill Lee, Manager
Hawaiian Telcom
OSP Engineering, East and West O'ahu
1177 Bishop Street
Honolulu, HI 96813

Dear Ms. Lee:

Thank you for your comment letter (14 May 2007) directed to the City and County of Honolulu, Department of Planning and Permitting for the 280 Beach Walk Retail Development Draft Environmental Assessment (DEA). The following is offered in response to your comments.

Detailed design and development plans will be submitted with the filing of the Waikiki Special District (Major) Permit application. These plans will show all existing utility infrastructure within and adjoining the project area. Electrical plans will be submitted to Hawaiian Telcom for their review. Additional civil and architectural plans will be provided as requested.

Access to telecommunication service connections within the project area will be improved and maintained to allow for 24-hour accessibility. Project designers will coordinate final design schemes with Hawaiian Telcom engineers to ensure that placement of necessary conduits and pull boxes are sited appropriately within the project area.

Your comment letter and this response will be included in the Final EA. We appreciate your participation in the environmental review process.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George Atta, AICP
Principal, Chief Community Planner

May 28, 2007

Group 70 International, Inc.,
Contact: Kawika McKeague
925 Bethel Street, 5th Floor
Honolulu, Hawai'i 96813

Thank you for the opportunity to comment on the Draft EA for the 280 Beach Walk Retail project. The Waikiki Neighborhood Board is glad to see appropriate in-fill retail development contributing to the continued renaissance of Waikiki. Our comments will focus on the aesthetics of the development and its consistency with the Special District Design Guidelines, the Waikiki Livable Community Project and pertinent provisions of the Primary Urban Center Development Plan.

The proposed roof is a major design feature of the development and therefore requires special consideration. Section 2.3 of the DEA identifies a glazed-tile roof design in a darker green color. While the tile roof is satisfactory, may we suggest a non-glazed tile in a more earth-tone color consistent with themes outlined on Page 7 of the Special District Design Guidelines. Possible options could include various shades of brown of a non-glazed/non-reflective variety. Examples of this type can be found throughout the officer base housing area of Hickam Air Force Base.

The storefront offsets are an appropriate and attractive feature providing articulation and a pleasing pedestrian-scale experience. However, more substantial column and beam framework components along with more detailed façade elements (not just glass curtain walls) would convey durability and permanence consistent with the design guidelines. Consistent and appropriately scaled signage would also be encouraged.

While there is not a consistent design vernacular among existing buildings surrounding the 280 Beachwalk site, incorporating the above recommendations may help the project to aesthetically blend better with its neighbors, as required by the design guidelines. The overarching theme of the Waikiki design guidelines is to provide a "Hawaiian sense of place" with
an emphasis on the pedestrian experience. We believe your project goes far towards complying with that theme. We look forward to reviewing any proposed changes to your design as a part of your SMA permit application.

Aloha,

Jeff Merz
Waikiki Neighborhood Board

cc: Robert Finley, Chair
Waikiki Neighborhood Board

First Round Pacific, LLC
Agent: Beall Corporation
4901 Kalaniana'ole Highway
Honolulu, HI 96821

City and County of Honolulu
Department of Planning and Permitting
Contact: Sharon Nishiura
650 S. King Street,
Honolulu, Hawai'i 96813

July 2, 2007

Mr. Jeff Merz, Vice-Chair
Waikiki Neighborhood Board, No. 9
2452 Tantalua Street PH 8
Honolulu, HI 96815

SUBJECT: Response to Comments Provided for
200 Beach Walk Retail Development Draft Environmental Assessment
TMIR 26-603/11/07, 027, 040, 049, 050
Waikiki, O'ahu, Hawai'i

Dear Mr. Merz:

Thank you for your comment letter (28 May 2007) directed to our office for the 200 Beach Walk Retail Development Draft Environmental Assessment (EA). The following is offered in response to your comments.

We appreciate and value the support of the project by the Waikiki Neighborhood Board (WNB). We recognize that the WNB may have some recommendations specific to detailed designs of the development. Detailed design and development plans will be in accordance to the Waikiki Special District Design Guidelines, the Waikiki Shopping Center Project and the applicable provisions of the Primary Urban Center Development Plans.

Final development and detailed design plans will be submitted with the filing of the Waikiki Special District Major Permit application. The use of alternative materials, forms, and scale of building design and signage will be evaluated and selected on the basis of meeting guideline requirements yet attempt to provide an accent in the design vocabulary of other retail shops along the portion of Kalakaua Avenue that lead to the Beach Walk.

We acknowledge that the WNB values that the project would provide a sense of place appropriate to Waikiki and aims to enhance the pedestrian experience from Kalakaua Avenue along Beach Walk and strengthens the area's pedestrian corridor to the shoreline.

We have one correction to make in your comment letter. The proposed project lies outside of the Special Management Area (SMA), therefore this project will not need to acquire a SMA Use permit. However, we do look forward to the WNB's continued participation during the planning and review of the Waikiki Special District (Major Permit application).

Your comment letter and this response will be included in the Final EA. We appreciate your participation in the environmental review process.

Sincerely,

George Atta, AICP
Principal, Chief Community Planner

Group 70 International, Inc.
APPENDIX B
Order of Magnitude Estimate for 280 Beach Walk Construction
## 280 Beachwalk
### Order of Magnitude

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**Established 1989 under License No. BC 15133**

Main Office - P.O. Box 4388 - Kaneohe, Hawaii 96744 - (808) 233-2200 - FAX (808) 239-4592

Commercial Division - 900 Fort Street Mall, Ste 1720 - Honolulu, Hawaii 96813 - (808) 523-2307 - FAX (808) 537-2707
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EXECUTIVE SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) performed by LFR Inc. (LFR) of the properties addressed as 270 and 286 Beachwalk Street, 321 Saratoga Road, and a public easement identified as Tax Map Key (TMK) 2-6-002-058; Honolulu, Oahu, Hawaii (the “Site”). LFR’s Environmental Site Assessment (ESA) has been prepared in general accordance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527-00.

On June 7, 2006, Teri Kazmierczak of LFR performed a visual inspection for the possible presence of recognized environmental conditions (RECs) such as petroleum products and/or hazardous substances at, or in the vicinity of, the Site as defined by ASTM E 1527-00. LFR’s investigation also included reconnaissance of adjacent properties, historical research, interviews, and a review of readily available and ascertainable local, state, and federal regulatory records regarding the presence of petroleum products or hazardous substances at, or in the vicinity of, the Site.

The property consists of four parcels of land totaling approximately 30,000-square feet in size. A two-story parking structure containing basement parking is located at 321 Saratoga Road. The remainder of the Site is unimproved and consists of vacant land covered with gravel. Based on review of Sanborn Fire Insurance Maps and historical aerial photographs, the Site has been used for a mixture of commercial and residential properties since prior to 1914. In 2000, an apartment building located at 270 Beach Walk (parcel :027) was demolished and parcel :027 has been vacant since that time. Similarly, the Hula Hut restaurant located at 286 Beach Walk (parcel :026) was demolished in 2004 and parcel :026 has been vacant since that time. Parcels :026 and :027 are currently appear to be one lot and are surrounded by a chain-linked fence.

At this time, this assessment has revealed no evidence of current or historic RECs in connection with the property; however, an issue of environmental concern was identified when reviewing previous environmental reports for the Site. Specifically, a Phase I ESA prepared by Edward K. Noda and Associates in December of 2003, identified suspect asbestos containing (ACM) within the exterior and interior Hula Hut restaurant located at 286 Beach Walk. In addition suspect lead-based paint (LBP) areas were identified on the exterior of the building. Edward K. Noda and Associates recommended testing suspect ACM and LBP areas. It is unknown whether such testing activities were ever performed. The building was later demolished and it is not known whether soil at the Site has been impacted with ACM or LBP.
1.0 INTRODUCTION

LFR Inc. (LFR) performed a Phase I Environmental Site Assessment (ESA) of the properties addressed as 270 and 286 Beachwalk Street, 321 Saratoga Road and a public easement, located within the Waikiki District of Honolulu, Hawaii ("the Site"; Figure 1). The property consists of four parcels of land totaling approximately 30,000-square feet in size. A two-story parking structure containing basement parking is located at 321 Saratoga Road. The remainder of the Site is unimproved and consists of vacant land covered with gravel. Based on review of Sanborn Fire Insurance Maps and historical aerial photographs, Site has been used for a mixture of commercial and residential properties since prior to 1914. In 2006, an apartment building located on parcel :027 (270 Beach Walk) was demolished and parcel :027 has been vacant since that time. In 2004, the restaurant located on parcel :026 (286 Beach Walk) was demolished and parcel :026 has been vacant since that time. Parcels :026 and :027 are currently surrounded by a chain-link fence.

The Site is currently owned by Round One USA Corporation ("the Owner"). We understand that the work described herein is being performed for Eight Inc. ("the Client") to evaluate environmental conditions associated with the property, to the extent feasible pursuant to the processes prescribed in ASTM E-1527-00 guidelines. The term "REC" as defined by ASTM is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that create a potential for contamination or injury to the public health or the environment from an actual or potential release of hazardous substances or petroleum products even under conditions in compliance with laws." The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This Phase I ESA includes information gathered from federal, state, and local agencies; personal interviews with people familiar with the Site and surrounding properties; and a site visit conducted by LFR representatives. The report is intended to meet the requirements of ASTM E-1527-00.

1.1 Purpose

The purpose of this assessment is to identify any recognized environmental conditions (RECs) in connection with the property, to the extent feasible pursuant to the processes prescribed in ASTM E-1527-00 guidelines. The term "REC" as defined by ASTM is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or the material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.2 Detailed Scope of Services

The Phase I ESA conducted by LFR included the following services:

- a reconnaissance-level visit of the Site to look for evidence of the release(s) of hazardous materials and petroleum products and to assess the potential for on-site releases of hazardous materials and petroleum products
- drive-by observations of adjacent properties and the site vicinity
- interviews with people familiar with the Site, as available
- review of regulatory and local agency files, as necessary
- review of historical documents, as available
- preparation of a report presenting our findings including a summary of conclusions and recommendations

1.3 Significant Assumptions

The purpose of this Phase I ESA is to provide appropriate inquiry into the previous ownership and use of the Site consistent with good commercial and customary practice in an effort to minimize liability. LFR also assumes that the information provided by Eight Inc., the regulatory database provider, and regulatory agencies is true and reliable.

1.4 Limitations and Exceptions

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by LFR and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, express or implied, is intended or given. To the extent that LFR relied upon any information prepared by other parties not under contract to LFR, LFR makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

The findings presented in this report apply solely to site conditions existing at the time when LFR's assessment was performed. It must be recognized, however, that an ESA is intended for the purpose of determining the potential for contamination through
limited research and investigative activities and in no way represents a conclusive or complete site characterization. Conditions in other parts of the project site may vary from those at the locations where data were collected. LFR’s ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100 percent confidence in ESA conclusions cannot reasonably be achieved.

LFR, therefore, does not provide any guarantees, certifications, or warranties that a property is free from environmental contamination. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

1.5 Special Terms and Conditions

The scope of work for this Phase I ESA did not include testing of electrical equipment for the potential presence of polychlorinated biphenyls (PCBs) or the assessment of natural hazards such as naturally occurring asbestos or methane gas, assessment of the potential presence of radionuclides, or assessment of non-chemical hazards such as the potential for damage from earthquakes or floods. This Phase I ESA also did not include an extensive assessment of the environmental compliance status of the Site or of the businesses operating at the Site, or a health-based risk assessment.

1.6 User Reliance

This Phase I ESA was conducted for the use and reliance by Eight Inc. and its successors and assignees, and may be relied upon by such parties. No use of the information contained in this report by others is permissible without receiving prior written authorization to do so from LFR Inc. We are not responsible for independent conclusions, opinions, or recommendations made by others or otherwise based on the findings presented in this report.

2.0 SITE DESCRIPTION

This section presents a general overview of the Site, improvements, and surrounding properties.

2.1 Location and Legal Description

The Site consists of four parcels of land, one of which is improved with a parking garage, totaling approximately 30,000-square feet in size. According to the City and County of Honolulu Department of Planning and Permitting, the parcels included in the Site are identified as the following:

- 286 Beachwalk Street - Tax Map Key (TMK) 1-2-6-3:026;
- 270 Beachwalk Street - TMK 1-2-6-3:027;
- 321 Saratoga Street – TMK 1-2-6-3:048; and;
- Public Easement - TMK 1-2-6-3:058.

2.2 Site and Vicinity General Characteristics

The Site is located within the Waikiki District of Honolulu. The Site is located within the Resort Commercial Precinct and Resort Mixed Use Precinct of the Waikiki Special District. The surrounding area is heavily developed with commercial properties, residential condominiums, high-rise structures, hotels, and public parking areas. A Site Vicinity Map and Site Map are presented as Figures 1 and 2, respectively.

2.3 Current Use of the Property

The property consists of four parcels of land totaling approximately 30,000-square feet in size. At the time of LFR’s Site visit on June 7, 2006, three of the parcels (parcels :026, :027, and :058) were vacant. Parcel :048, addressed as 321 Saratoga Road, is improved with a two-story parking structure containing a basement level. The remainder of the Site is unimproved and consists of vacant land covered with gravel. Based on review of Sanborn Fire Insurance Maps and historical aerial photographs, the Site has been used for a mixture of commercial and residential properties since prior to 1914. In 2000, an apartment building located on parcel :027 (270 Beach Walk) was demolished and parcel :027 has been vacant since that time. Similarly, the restaurant located on parcel :026 (286 Beach Walk) was demolished in 2004 and parcel :026 has been vacant since that time. Parcels :026 and :027 currently appear to be one lot and are surrounded by a chain-link fence.

The Site is bordered to the west by Saratoga Road and Beach Walk to the east. The public easement runs along the central portion of the Site in a north/south direction.

2.4 Current Uses of the Adjoining Properties

The following properties are located adjacent to the Site:

- The Site is bordered to the east by Beach Walk, beyond which is the Wyland Plaza. The Wyland Plaza is a multi-tenant commercial high-rise. At the time of LFR’s inspection, tenants included the Wayland Gallery, Planet Hollywood, Marie’s Health Food, and a parking garage.
- The Site is bordered to the west by Saratoga Road, beyond which is a United States Post Office building. A tennis court is located northwest of the Site and a public parking lot is located southwest of the Site beyond Saratoga.
The Hawaiian Hotel is located south of the Site. Burberry Plaza is located north of the eastern portion of the Site and a multi-tenant commercial structure and Arnold's Tiki Lounge are located north of the western portion of the Site (See Figure 2).

3.0 USER-PROVIDED INFORMATION

A representative of the property owner, Mr. Masahiko Sugino of Round One USA Corporation, was contacted regarding the following information (Appendix G).

3.1 Title Records

Chain-of-Title information was provided by the Client. No environmental land-use limitations or environmental liens are present within the Chain-of-Title documentation.

3.2 Environmental Liens or Activity and Use Limitations

Mr. Sugino is not aware of the presence of environmental clean-up liens or activity and land-use restriction. However, Mr. Sugino stated that there is a Joint Development Agreement (JDA) and an easement related to the property. My Sugino stated that these items are addressed in the Title Records for the property.

3.3 Specialized Knowledge

Mr. Sugino was asked the following questions as part of the assessment:

- Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
- Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user: a) Do you know the past uses of the property? b) Do you know of specific chemicals that are present or once were present at the property? c) Do you know of spills or other chemical releases that have taken place at the property? d) Do you know of any environmental cleanups that have taken place at the property?
- Do you know of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property?
- Do you know of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?
- Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

Mr. Sugino stated that there was a vacant building on-Site when the property was purchased. Since that time, the building has been demolished. Mr. Sugino was not aware of the nature of the building prior to vacancy. Mr. Sugino answered "No" to the remainder of the questions.

3.4 Commonly Known or Reasonably Ascertainable Information

Mr. Sugino was not aware of the presence of obvious indicators that point to the presence or likely presence of contamination at the property.

3.5 Valuation Reduction for Environmental Issues

Mr. Sugino believes that the purchase price for the property reasonably reflects the fair market value of the property.

3.6 Owner, Property Manager, and Occupant Information

No additional information was provided by the owner or Site occupants.

3.7 Reason for Performing Phase I

The reason for performing the Phase I ESA was to evaluate the presence of RECs in anticipation of a property purchase/acquisition.

4.0 RECORDS REVIEW

The following section presents the results of LFR's records review, including regulatory agency database information, topographic maps, historical aerial photographs, and historical Sanborn maps pertaining to the Site and surrounding area.

4.1 Standard Environmental Record Sources

Regulatory agency database information was obtained from Environmental Data Resources, Inc. (EDR), which maps and lists properties in federal and state
environmental databases with existing conditions or status that may have the potential to affect the Site. The database report is provided as Appendix A.

4.1.1 Federal Environmental Record Sources

4.1.1.1 National Priorities List (NPL; 1.0 mile radius)

The National Priorities List (NPL) is a subset of Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and identifies over 1,200 sites for priority cleanup under the Superfund program. An NPL site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the U.S. Environmental Protection Agency (EPA). Source: U.S. EPA.

There are no listed NPL properties within 1.0 mile of the Site.

4.1.1.2 Delisted NPL Site List (NPL; 1.0 mile radius)

The Delisted NPL Site List includes properties that have been delisted off the NPL. There are no delisted NPL properties within 1.0 mile of the Site.

4.1.1.3 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS; 0.5 mile radius)

CERCLIS contains data on potentially hazardous waste sites that have been reported to the U.S. EPA by states, municipalities, private companies, and private persons pursuant to the CERCLIS List. The CERCLIS List includes sites that are either proposed for the NPL or in the screening and assessment phase for possible inclusion on the NPL. Source: U.S. EPA/NTIS.

There are no sites on the CERCLIS within 0.5 mile of the Site.

4.1.1.4 CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP; 0.25 mile radius)

CERCLIS-NFRAP contains data on sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. Source: U.S. EPA/NTIS.

One facility, Stain Shinkawn Inc., located at 2300 Kalakaua Avenue, is listed on the CERCLIS-NFRAP database within a 0.5 mile radius of the Site. That facility, which is also listed on additional federal and state databases searched by EDR, is located approximately 1,430 feet southeast of the Site. Based on the inferred cross-gradient hydrologic direction and the distance from the Site, it appears unlikely that the facility will adversely affect environmental conditions at the Site and is therefore not discussed further in this report.

4.1.1.5 Corrective Action Report (CORRACTS; 1.0 mile radius)

CORRACTS identifies hazardous waste handlers with the Resource Conservation and Recovery Act (RCRA) corrective action activity. Source: U.S. EPA.

There are no CORRACTS listed facilities within a 1.0-mile radius of the Site.

4.1.1.6 RCRA Treatment, Storage, and Disposal (TSD) Facilities (0.5 mile radius)

RCRA TSD Facilities includes selected information on facilities that generate, transport, store, treat and/or dispose of hazardous waste, as defined by the RCRA. Source: U.S. EPA/NTIS.

There are no listed TSD properties within 0.5 mile of the Site.

4.1.1.7 RCRA Generators Lists (0.25 mile radius)

RCRA large-quantity generators (LQG) are those facilities that generate at least 1,000 kilograms per month (kg/month) of non-acutely hazardous waste or meet other applicable RCRA requirements. Resource Conservation and Recovery Information System (RCRIS) small-quantity generators (SQG) generate less than 1,000 kg/month of non-acutely hazardous waste or meet other applicable RCRA requirements.

One facility, the Royal Hawaiian Hotel, located at 2259 Kalakaua Avenue, is listed on the RCRA-LQG list within a 0.25 mile radius of the Site. This facility is located approximately 1,100 feet southeast and cross gradient of the Site. Based on the distance, and inferred hydrologic cross-gradient direction, this facility is not expected to adversely affect soil and groundwater conditions at the subject Site.

Eleven facilities were identified on the RCRA-SQG database within a 0.25 mile radius of the Site. One facility, the Royal Hawaiian Shooting Club, located at 2201 Kalakaua Avenue, was found to have a single violation in 2004. No violations associated with the generation of hazardous waste were found for the additional facilities listed on the RCRA-SQG databases.

4.1.1.8 Federal Institutional Control/Engineering Control Registries (Site only)

Federal institutional control and engineering control registries were requested in the database search.
The Site is not listed on the registries reported by EDR.

4.1.1.9 Emergency Response Notification System (ERNS; Site Only)

ERNS is a national database that records and stores information on reported releases of oil and hazardous substances. The database contains information on spill reports made to federal authorities including the U.S. EPA, U.S. Coast Guard, National Response Center, and Department of Transportation.

The Site is not listed on the ERNS database.

4.1.2 State Environmental Record Sources

ASTM E 1527-00 requires review of the following state databases.

4.1.2.1 State and Tribal-Equivalent CERCLIS Hazardous Waste Sites (SHWS; 1.0 mile radius)

The State Hazardous Waste database lists potential or confirmed hazardous substance release properties. There are twenty-six properties listed within 1.0 mile of the Site. Based on close proximity (less than 1/8 mile), two facilities are discussed below:

- **Waikiki Bazaar**, 2174 Kalakaua Avenue, is located approximately 200 feet east/southeast of the Site. During construction related activities at the facility, an unregulated UST was unearthed at the facility. At that time, an environmental assessment was conducted by Unitek to determine whether a release to the environment associated with the tank had occurred. Based on the findings of Unitek’s assessment, a No Further Action (NFA) letter was issued by the Hawaii DOH on November 10, 2005. Based on the closed status, it appears unlikely that this facility will adversely affect environmental conditions at the Site.

- **King Kalakaua Plaza (Waikiki Gateway Park),** Kalakaua and Kalaimoku Street, is located approximately 550 feet north of the Site. According to a NFA letter dated September 28, 1998, the DOH Hazard Evaluation and Emergency Response (HEER) office concluded that a release to the environment associated with the tank had occurred. The records on file at the DOH SHWB, however, indicate that the UST was removed in July 1990 and replaced with an additional 6,000 gallon gasoline UST in September 1992, and May 2000 did not indicate the presence of petroleum hydrocarbons in the groundwater. Based on the NFA listing, it appears unlikely that this property will affect soil or groundwater conditions at the Site.

The remaining facilities most likely will not impact the subject Site because they are either too far away (greater than 1/8 mile) from the Site or are located in an inferred hydraulic cross/down-gradient direction from the Site and, therefore, are not discussed further in this report.

4.1.2.2 State and Tribal-Equivalent SWF/LF, State Landfill (0.5 mile radius)

This database is an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

There are no properties listed within 0.5 mile of the Site.

4.1.2.3 State Leaking Underground Storage Tank Database (LUST; 0.5 mile radius)

The LUST database is a list of reported leaking UST incidents. The Site was not identified on the LUST database searched by EDR; however, the Post Office, which is located west of the Site, was identified. Eighteen additional properties were identified within a 0.5 mile radius of the Site. Based on close proximity (less than 1/8 mile), the files for five properties were reviewed at the State of Hawaii DOH. A summary of the files reviewed at the DOH follows:

- **United States Postal Service-Waikiki,** 330 Saratoga Road, is located west of the Site, beyond Saratoga Road. According to records on file at the DOH HEER office, a release from a 6,000-gallon gasoline UST was discovered at the facility during tightness testing conducted in March of 1989. No other information on this Site was available at the time of the HEER DOH records review.

- **United States Postal Service-Waikiki,** 330 Saratoga Road, is located west of the Site, beyond Saratoga Road. According to records on file at the DOH HEER office, a release from a 6,000-gallon gasoline UST was discovered at the facility during tightness testing conducted in March of 1989. No other information on this Site was available at the time of the HEER DOH records review.

The records on file at the DOH Solid and Hazardous Waste Branch (SHWB), the UST was removed in July 1990 and replaced with an additional 6,000 gallon gasoline UST in September 1990. Groundwater monitoring activities conducted in May 1991, September 1992, and May 2000 did not indicate the presence of petroleum hydrocarbons in the groundwater. According to the records on file at the DOH Solid and Hazardous Waste Branch (SHWB), the UST was removed in July 1990 and replaced with an additional 6,000 gallon gasoline UST in September 1990. Groundwater monitoring activities conducted in May 1991, September 1992, and May 2000 did not indicate the presence of petroleum hydrocarbons in the groundwater. According to the records on file at the DOH Solid and Hazardous Waste Branch (SHWB), the UST was removed in July 1990 and replaced with an additional 6,000 gallon gasoline UST in September 1990. Groundwater monitoring activities conducted in May 1991, September 1992, and May 2000 did not indicate the presence of petroleum hydrocarbons in the groundwater.

- **Kyotaru Hawaii Corporation,** 2160 Kalakaua Avenue, is located approximately 100-feet east of the Site. The files on this facility were not available at the DOH. However, this facility is listed as “clean-up complete” by the SHWB. Based on the closed status and the inferred cross-gradient hydrologic direction, it appears unlikely that this facility will adversely affect environmental conditions at the subject Site.

The remaining facilities most likely will not impact the subject Site because they are either too far away (greater than 1/8 mile) from the Site or are located in an inferred hydraulic cross/down-gradient direction from the Site and, therefore, are not discussed further in this report.
unlikely that this facility will adversely affect environmental conditions at the subject Site.

- **CM&D**, 2112 Kalakaua Avenue, is located approximately 360 feet north/northeast of the Site. The files on this facility were not available at the DOH. However, this facility is listed as “clean-up complete” by the SHWB. Based on the closed status, it appears unlikely that this facility will adversely affect environmental conditions at the subject Site.

- **King Kalakaua Plaza**, 2080 Kalakaua Avenue, is located approximately 550 feet north of the Site. This facility is described above in Section 4.1.2.1.

The remaining facilities most likely will not impact environmental conditions at the subject Site because they are either too far away (greater than 1/8 mile) from the Site or are located in an inferred hydrologic cross/down-gradient direction from the Site and, therefore, are not discussed further in this report.

### 4.1.2.4 State Registered Underground Storage Tank (UST; 0.25 mile radius)

This database contains listings for current UST sites.

There are thirteen properties including the Post Office located across the street from the Site identified within a 0.25 mile radius of the Site on the UST database. The Post office is described above in 4.1.2.1. Additional facilities identified within a 0.25 mile radius of the Site including Kyoto Hawaii Corporation, Yoneoka and Associates, CM&D, and King Kalakaua Plaza are also described above. The remaining facilities identified on the UST database are not expected to adversely impact environmental conditions at the subject Site because they are either too far away (greater than 1/8 mile) from the Site or no indications of a release are present. Therefore, these facilities are not discussed further in this report.

### 4.1.2.5 SPILLS (Site Only)

This database identifies properties that have had releases of hazardous substances to the environment reported to the DOH HEER office. The Site was not identified on the SPILLS database.

### 4.1.2.6 State Institutional Control/Engineering Control Registries (Site Only)

This database contains registry entries for institutional and engineering controls. There are no properties listed within 0.5 mile of the Site.

### 4.1.2.7 State and Tribal Voluntary Cleanup Sites (0.5 mile radius)

This database contains listings for current voluntary cleanup sites. There are no properties listed within 0.5 mile of the Site.

### 4.1.2.8 State and Tribal Brownfield Sites (0.5 mile radius)

This database contains listings for current brownfield sites. There are no properties listed within 0.5 mile of the Site.

### 4.2 Additional Environmental Record Sources

No additional environmental records were searched during this investigation.

### 4.3 Physical Setting

Based on a review of the United States Geological Survey (USGS) Honolulu, Hawaii 7.5-minute quadrangle map (USGS, 1983), the regional topography is relatively flat in the Site vicinity, but slopes gently toward the ocean approximately 0.25 mile to the southwest. Ground surface elevation at the Site is less than 10 feet above mean sea level (msl).

### 4.3.1 Geology

According to the U.S. Department of Agriculture’s Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (1972) surface and near surface soils in the subject area are classified as Jaucas sand, 0 to 15 percent slope (designated JaC). Soils within the Jaucas Series consist of excessively drained, calcareous soils that occur as narrow strips on coastal plains. In a representative profile of Jaucas Sand 0 to 15 percent slopes, the soil is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. Permeability is rapid and runoff is very slow to slow.

### 4.3.2 Hydrogeology

Data presented in Aquifer Identification and Classification for the Island of Oahu: Groundwater Protection Strategy for Hawaii (Mink and Lau, 1990) indicates that two aquifers are present beneath the site. Groundwater in the Site vicinity occurs within the Paliolo Aquifer System of the Honolulu Aquifer Sector. The upper aquifer is classified as a basal, unconfined, sedimentary aquifer with moderate salinity water (1,000 to 5,000 milligrams per Liter [mg/l] chlorides [Cl]). The aquifer has potential use, but not for drinking water and not considered ecologically important. The aquifer is replaceable with a high vulnerability to contamination. The lower aquifer is classified as a basal, confined, flanking aquifer with fresh water (less than 250 mg/l Cl). The aquifer is currently used as a drinking water source in areas north of the Underground Injection Control (UIC) line and is irreplaceable with a low vulnerability to contamination. The boundary between non-drinking water aquifers and underground sources of drinking water is referred to as the UIC line.

Groundwater flow is most likely towards the Pacific Ocean located approximately 1,000 feet south of the Site.
Nearby Water Wells

The well information presented below has been obtained from the Honolulu UIC Program Map Series of the State of Hawaii Department of Land and Natural Resources (DLNR, 1983). This map indicates no drinking water supply wells are located within a 1.0-mile radius of the Site. Six non-drinking water wells are located within a ½-mile radius of the Site (DLNR, 1991). The Site is located approximately 1,500 ft (0.28 mile) makai (seaward) and south/southwest of the Hawaii Department of Health (DOH) UIC line. Therefore, groundwater beneath the Site is not used as a drinking water source.

Nearest Surface Water Bodies

The nearest surface water bodies consist of the Pacific Ocean, which is located approximately 1,000 feet south of the Site, and the Ala Wai Canal, which is located approximately 1,500 feet north/northeast of the Site.

Annual Rainfall

Annual rainfall in the site vicinity is approximately less than 28 inches (70 centimeters [cm]) per year.

Applicable DOH Tier 1 Soil and Groundwater Action Levels

Based on the data presented above and the groundwater uses in the Site vicinity, applicable DOH Tier 1 action levels for this site are for rainfall less than 200 cm per year, and drinking water source not threatened.

4.4 Historical Use Information on the Property and Surrounding Area

To evaluate historical use of the property, LFR reviewed readily available historical Sanborn Fire Insurance Maps, aerial photographs, and historical topographic maps. A summary of each is provided below. Historical street directories were not available for the Site and are not included as part of this ESA.

4.4.1 Fire Insurance Maps

LFR contacted EDR to conduct a search for available historical Sanborn Fire Insurance maps for the Site and surrounding area. Sanborn maps were available for the years 1914, 1927, 1949, 1956, 1975, 1977, 1991, and 1993 (Appendix B). Based on a review of the historical Sanborn maps, there is no evidence that a gasoline service station was historically located on Site. However, several commercial structures have been depicted on the Site since approximately 1949. The nature of these commercial structures is not depicted and there is a potential for on-site properties of environmental concern (i.e. dry cleaners, photo-processing facilities, etc.). Sanborn Maps are presented as Appendix C. The following is a summary of the Sanborn Maps:

1914 Sanborn Map:
The Site is not shown on the earliest Sanborn Map provided by EDR. Residential dwellings are located south and southeast of the Site.

1927 Sanborn map:
The Site is divided into four parcels on the 1927 Sanborn map. The parcel located at 321 Saratoga Road contains a single residential structure. The parcel currently addressed as 286 Beach Walk contains three residential structures and a single commercial structure. The map labels the fourth structure as “The Louidor”, however, the nature of the structure is unknown. The parcel currently addressed as 270 Beach Walk contains two residential buildings. Residential dwellings are depicted in the general vicinity of the Site.

1949 Sanborn map:
The 1949 Sanborn map shows a second small building added to the parcel addressed as 321 Saratoga Road. The Beach Walk Inn is depicted at 286 Beach Walk and it appears that the residential structures have been converted to motel units. The largest structure on site is shown as a restaurant. It appears that additional units of the Beach Walk Inn are present to the east, across Beach Walk. Residential structures are depicted at 270 Beach Walk. Commercial structures including a restaurant, two taxi stands, an auto stand, and a car sales lot are depicted north of the Site, beyond Kalakaua Avenue, and numerous Inns and Hotels are depicted east of the Site beyond Beach Walk. The area west of the Site is depicted as Fort DeRussy U.S. Military Reservation.

1956 Sanborn map:
It appears that one of the motel units located at 286 Beach Walk has been converted to a commercial structure. The nature of the commercial structure is not depicted. No other significant changes from the 1949 map are depicted on the 1956 Sanborn map.

1975 and 1977 Sanborn Maps:
Individual structures shown on 286 and 270 Beach Walk on previous maps have been replaced in the 1975 Sanborn map by large single structures, one on each parcel. The quality of the maps prevents an accurate determination of the exact nature and use of the structures.Parcel 321 Saratoga Road is depicted as a parking area. Surrounding properties show the same development with few residential properties shown on the map, all having been replaced by larger structures.

1991 and 1993 Sanborn Maps:
No significant changes occur from the 1975 and 1977 Sanborn Maps. However, the quality of the maps is such that the nature of several of the on-Site structures can be ascertained. The Saratoga Road parcel is occupied by a two deck parking structure.
The Parcel addresses as 286 Beach Walk is occupied by the New Tokyo Restaurant and parcel addressed as 270 Beach Walk is identified as the Beach Walk Motor Hotel.

The surrounding properties are commercial in nature and include hotels, car rental facilities, office centers and restaurants.

4.4.2 Aerial photographs

LFR reviewed historical aerial photographs at R. M. Towill for the years 1949, 1970, 1978, and 2001. Photographs are presented in Appendix C. The following is a summary of the aerial photograph review:

June 8, 1949, photograph (black and white, 1”=300’ scale)
A single residential structure is located on the parcel addressed as 321 Saratoga Road. Four structures are visible on the parcel currently addressed as 286 Beach Walk. The southern most structure is relatively large and appears to be commercial in nature. Two structures, apparently residential, are located on the parcel currently addressed as 270 Beach Walk.

Residential structures are visible on the northern and southern abutting properties along Beach Walk and Saratoga Road. Large commercial structures are depicted north of the Site, beyond Kalakaua Avenue, and large structures appearing to be hotels and inns are located east of the Site, beyond Beach Walk. Fort DeRussy U.S. Military Reservation is located west of the Site, beyond Saratoga Road.

July 21, 1970, photograph (black and white, 1”= 300’ scale)
The residential structures located at 321 Saratoga Road have been demolished and the parcel appears to be vacant and used as a parking lot. One structure is present in the southern portion of the parcel addressed as 286 Beach Walk while the northern portion of the parcel is used as a parking area. One large structure is present on the parcel addressed as 270 Beach Walk. The exact nature of each structure could not be determined from the aerial photograph review.

Large commercial structures have been constructed north of the Site along Beach Walk and Saratoga Road replacing the residential structures visible on the 1949 aerial photograph. The Hawaiian Hotel has been constructed on the southern abutting property. Two rectangular shaped structures are located northwest of the Site, beyond Saratoga. The nature of the structures is unknown as they are not depicted on the Sanborn maps for this time period. Fort DeRussy Military Reserve is located west of the Site, beyond Saratoga Road. The remainder of the Site area consists of large commercial or hotel structures.

May 4, 1978, photograph (black and white, 1” = 300’ scale)
The parking structure has been constructed at 321 Saratoga Road. Two commercial structures are not visible in the center of the parcel addressed as 286 Beach Walk. The remainder of the parcel appears to be utilized for parking. The large commercial structures located east of the Site, beyond Beach Walk, have been demolished and the lots appear to be under construction. The Post Office is visible on the west of the Site, beyond Saratoga Road. Public parking areas are visible northwest and southwest of the Site, beyond Saratoga Road. No other significant changes from the 1970 photograph are visible on Site or in the Site vicinity.

June 8, 2001, photograph (black and white, 1” = 300’ scale)
The hotel structure located on 270 Beach Walk has been demolished and the parcel appears to be vacant. No other significant changes are visible on Site. A large commercial structure, currently known as the Wayland Plaza, has been constructed east of the Site, beyond Beach Walk. Tennis courts have been constructed north of the Post Office, located west of the Site.

4.4.3 Historical Topographic Maps

Historical topographic maps of the Site area were reviewed for the years 1959, 1969, 1983, and 1998. No structures are depicted on Site in any of the topographic maps reviewed. Fort DeRussy Military Reservation is depicted west of the Site, beyond Saratoga Road, in each of the maps. No other significant information is available on the topographic maps. Topographic maps are presented as Appendix D.

4.4.4 Street Directories

Street directory listings were not requested during the EDR database search as coverage for the area was not available.

4.5 Previous Reports

LFR reviewed three previous Phase I ESAs for the Site provided by the client: a Phase I ESA prepared by Noda and Associates and dated December 2003. Summaries of these reports are provided in the following sections.

In January of 1999, Noda and Associates prepared an ESA for TMKs 2.6-003:025, :026, :027, :048, and :049 on behalf of City Bank, Inc. At the time of the report two structures were present on Site, the Hula Hut restaurant (located on parcel :026) and a three story apartment building (located on parcel :027). The remainder of the property was covered by parking areas. Three concrete pad-mounted transformers were observed during the site visit, two of which may contain PCBs. Additionally, suspect asbestos containing materials (ACM) and suspect lead-based paint (LBP) were identified and Noda and Associates recommended testing suspect ACM and lead based paint areas. No other recognized environmental conditions in connection with the property were identified during the course of this ESA. Asbestos sampling and abatement were not performed as part of this ESA.


The Environmental Company (TEC) prepared a report dated July 19, 2001 detailing asbestos sampling and abatement conducted at the Site in 2000 and 2001. TEC reported that an initial investigation performed by Island Environmental Construction Management (IECM) dated May 26, 2000 certified that the ACM within the two on-Site structures, an apartment building located at 270 Beach Walk and former restaurant located at 286 Beach Walk, had been properly abated. Based on that report, the apartment building located at 270 Beach Walk was demolished. However, suspect ACM was identified during demolition of the former restaurant located at 286 Beach Walk. On May 8, 2001, Island Demo sampled the suspect material and results of sampling indicated the presence of asbestos. Consequently the DOH Noise, Radiation, and Indoor Air Quality Branch visited the Site. TEC was retained by the owner to oversee the abatement of the additional ACM identified within the site building. On July 19, TEC contacted the Noise Radiation and Indoor Air Quality Branch regarding the abatement of the additional ACM at the Site. According to TEC, all ACM had been properly abated from the building. TEC reported that the DOH gave final clearance of the Site and considered the case closed.

4.5.3 Phase I Environmental Site Assessment Report, 270 and 286 Beachwalk and 321 Saratoga Road, prepared by Edward K. Noda and Associates on December 8, 2003.

In December of 2003, Edward K. Noda and Associates prepared an ESA for the Site. At that time Noda and Associates reported that the Site contained two structures, a two-story concrete masonry parking structure located at 321 Saratoga Road and former restaurant building located at 286 Beach Walk. The remainder of the Site consisted of paved and gravel covered parking areas. At the time of the report the restaurant building was reported to be empty with no interior furnishings or fittings. Areas of minor staining were reported on the parking and driveway areas, the likely source being lubricants from vehicles parked on Site. Suspect ACMs in the form of remnants of spray-on fireproofing, remnants of black mastic behind wall coverings, remnants of gypsum wall boards and associated joint compound, remnants of cementation panels with wire mesh backing, stucco plastering on the exterior or the parking structure and former Hula Hut Restaurant, and remnants of plaster on the interior and exterior walls were observed. These materials were not identified in the previous reports prepared for the building. In addition suspect LBP areas were identified. Noda and Associates recommended testing suspect ACM and lead based paint areas. It is unknown whether such testing activities were ever performed.

5.0 SITE RECONNAISSANCE

On June 7, 2006, Ms. Teri Kazmierczak, a representative of LFR, performed a reconnaissance-level assessment of the Site to observe general site conditions and indications of the possible release(s) of chemicals to the subsurface. Ms. Kazmierczak was unaccompanied during the Site visit. Photographs taken during LFR's site inspection are included in Appendix E. Ms. Kazmierczak's qualifications are included in Appendix F.

5.1 Methodology and Limiting Conditions

LFR was unable to access the interior portions of 286 and 270 Beach Walk, as they were surrounded by a chain-linked fence. The methodology for the site visit included visiting the parking structure, then observing the exterior areas of the Site.

5.2 General Site Setting

The Site consists of an approximately 30,000- square foot parcel of land addressed as 286 and 270 Beach Walk, 321 Saratoga Road, and a public easement, within the Waikiki District of Honolulu, Hawaii. The topography of the Site is nearly level.

5.3 Subject Property Inspection

The subject Site includes four parcels of land, one of which is improved with a two story public parking structure. Site configuration is described above in Section 2.3. During LFR's investigation, parcels :026 and :027 (addressed as 270 and 286 Beach Walk, respectively) consisted of vacant land covered with gravel. Patches of sparse vegetation were visible on the parcel. These parcels appeared to be one lot and were surrounded by a chain-linked fence and LFR was unable to access the parcels. A small amount of amount of household debris including glass, aluminum, plastic and Styrofoam waste was observed along the exterior portions of the undeveloped areas on Site. No stockpile soil, pits, ponds, or lagoons were observed on the vacant portions of the Site.
Parcel 048 (addressed as 321 Saratoga Road) is occupied by a public parking structure. The two-story parking structure also contained a basement parking area. Slight petroleum staining, apparently from parked cars, was observed on the asphalt paving on the first and second floor of the parking structure. Several cracks were observed in the concrete on the basement level of the parking structure. Additionally, a storm water catch basin was observed at the entrance to the basement level. No staining was observed along the cracks in the concrete or near the storm water catch basin.

No electrical transformers were observed on-site. According to the previous Phase I ESA prepared for the Site by Edward K. Noda and Associates in January 1999, three concrete pad-mounted electrical transformers were present on the Site, two of which may have contained PCBs. These transformers appear to have been removed by Hawaii Electric Company (HECO) during demolition activities at the Site.

5.2.1 Hazardous Substances and Petroleum Products

No hazardous substance or petroleum products in connection with the Site beyond what would be considered de minimis volumes were readily observed during this investigation.

5.2.2 Storage Tanks

No evidence of ASTs or USTs, vent pipes, fill pipes, or access ways indicating USTs was identified during this investigation.

5.2.3 Odors

No readily noticeable strong, pungent, or noxious odors were identified during this investigation.

5.2.4 Pools of Liquid

No standing surface water, pools, or sumps containing liquids likely to be hazardous substances or petroleum products were identified during this investigation.

5.2.5 Drums

No storage drums were identified during this investigation.

5.2.6 Unidentified Substance Containers

No unidentified substance containers were observed during this investigation.

5.2.7 PCBs

No electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs were identified during this investigation.

5.2.8 Pits, Ponds, or Lagoons

The presence of pits, ponds, or lagoons on the property was investigated during the site visit. No pits, ponds or lagoons were identified during this investigation.

5.2.9 Stained Soil or Pavement

No areas of stained soil or pavement were observed.

5.2.10 Stressed Vegetation

Areas of sparse vegetation and patches of exposed soil were observed in the eastern portion of the Site. Stressed vegetation was observed within areas of sparse vegetation; however, it appears likely excess heat could account for dry or dying vegetation. No other areas of stressed vegetation were observed during this investigation.

5.2.11 Solid Waste

No evidence of areas that are apparently filled or graded suggesting trash construction debris, demolition debris, or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal were identified during the site visit. A small amount of household debris including glass, aluminum, plastic and Styrofoam waste was observed along the exterior portions of the undeveloped areas on-site.

5.2.12 Wastewater

The Site is serviced by the sanitary sewer system provided by the City and County of Honolulu. However, the site is currently not connected to the city sewer system as the majority of the Site is vacant.

5.2.13 Wells

No dry wells, irrigation wells, injection wells, monitoring wells, abandoned wells, or other wells were observed during this investigation.

5.2.14 Septic Systems

No on-site septic systems or cesspools were observed during this investigation.
6.0 INTERVIEWS

6.1 Interviews with Local Government Officials

No government officials were interviewed during this assessment.

7.0 FINDINGS

This section identifies known or suspect RECs, historical RECs, and de minimis conditions obtained during the ESA. No known RECs were identified during this Phase I ESA; however, the following issue of environmental concern was identified during the course of this investigation:

- A Final Report of Hazmat Program Management was prepared by TEC, in July 2001 which stated that ACM located within the former Hula Hut building located at 286 Beach Walk had been properly abated from the building. TEC reported that the DOH Noise, Radiation, and Indoor Air Quality Branch gave final clearance at the Site and considered the case closed. However, during a Phase I ESA prepared by Edward K. Noda and Associates in December of 2003, suspect ACM in the form of remnants of spray-on fireproofing, remnants of black mastic behind wall coverings, remnants of gypsum wall boards and associated joint compound, remnants of cementation panels with wire mesh backing, stucco plastering on the exterior, and remnant of plaster on the interior and exterior walls were observed within the Hula Hut restaurant. In addition, suspect LBP areas were identified. Edward K. Noda and Associates recommended testing suspect ACM and LBP areas. It is unknown whether such testing activities were ever performed. The building was later demolished and it is not known whether soil at the Site has been impacted with ACM or LBP.

7.1 De Minimis Conditions

The following issues of environmental interest are considered de minimis conditions as they do not present a material risk of harm to public health or the environment and would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies:

- Household debris (as noted in the photographs; Appendix E) was observed throughout the vacant portions of the Site. The debris does not rise to the level of a REC as it appears to consist of non-hazardous materials.
- Slight petroleum staining from parked cars was observed throughout the parking structure on Site. The slight petroleum staining does not rise to the level of a REC as staining is not present in significant quantities.

8.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment (ESA) of the properties addressed as 270 and 286 Beach Walk, 321 Saratoga Road, and a public easement identified as TMK 2-6-003:058 within the Waikiki District of Honolulu, Hawaii, the property. This report is in general accordance with the ASTM Standard Practice E 1527-00.

At this time, this assessment has revealed no evidence of current or historic recognized environmental conditions in connection with the property; however, there is a potential that soil located on the Site has been impacted from suspect ACM and LBP possibly present within the Hula Hut building located at 286 Beach Walk at the time of building demolition.
9.0 REFERENCES


APPENDIX A

EDR Report

The EDR Radius Map with GeoCheck®

Waikiki Beachwalk Property
270-286 Beachwalk Street
Honolulu, HI  96815

Inquiry Number: 1685160.6s

May 26, 2006
Thank you for your business.
Please contact EDR at 1-800-352-0050 with any questions or comments.
EXECUTIVE SUMMARY

US ENG CONTROLS ................................................. Engineering Controls Sites List
US INST CONTROL ................................................ Sites with Institutional Controls
DOD ................................................................. Department of Defense Sites
FUDS ................................................................. Formerly Used Defense Sites
US BROWNFIELDS .............................................. A Listing of Brownfields Sites
CONSENT .......................................................... Superfund (CERCLA) Consent Decrees
ROD ................................................................. Records Of Decision
UMTRA .............................................................. Uranium Mill Tailings Sites
ODD ................................................................. Open Dump Inventory
TRIS ................................................................. Toxic Chemical Release Inventory System
TSCA ................................................................. Toxic Substances Control Act
FTTS ................................................................. FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS ................................................................. Section 7 Tracking Systems
ICIS ................................................................. Integrated Compliance Information System
PARES .............................................................. PCB Activity Database System
MLIS ................................................................. Material Licensing Tracking System
MINES ............................................................ Mines Master Index File
FINDS ............................................................ Facility Index System/Facility Registry System
RAATS ............................................................. RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS
SWF/LF ............................................................. Permitted Landfills in the State of Hawaii
SPRLS .............................................................. Release Notifications
INST CONTROL .................................................. Sites with Institutional Controls
VCP ................................................................. Voluntary Response Program Sites
BROWNFIELDS ................................................... Brownfields Sites

TRIBAL RECORDS
INIAN RESERV .................................................... Indian Reservations

EDR PROPRIETARY RECORDS
Manufactured Gas Plants ....................................... EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations ................................ EDR Proprietary Historic Gas Stations
EDR Historical Cleaners ..................................... EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Siting a review of sites that have been removed and archived from the CERCLIS sites. Archived status indicates that, to the best of EPA’s knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL).

A review of the CERCLIS-NFRAP list, as provided by EDR, and dated 02/01/2006 has revealed that there is 1 CERCLIS-NFRAP site within approximately 0.5 miles of the target property.

**Equal/Higher Elevation**

**Address**

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RCRAInfo: RCRAInfo is EPA’s comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCREIS).

A review of the RCRA-LQG list, as provided by EDR, and dated 02/24/2006 has revealed that there are 11 RCRA-SQG sites within approximately 0.25 miles of the target property.

**Equal/Higher Elevation**

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## EXECUTIVE SUMMARY

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### STATE AND LOCAL RECORDS

SHWS: The State Hazardous Waste Sites records are the state’s equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health.

A review of the SHWS list, as provided by EDR, and dated 08/24/2005 has revealed that there are 26 SHWS sites within approximately 1 mile of the target property.

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## LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health’s Active Leaking Underground Storage Tank Log Listing.

A review of the LUST list, as provided by EDR, and dated 02/01/2006 has revealed that there are 19 LUST sites within approximately 0.5 miles of the target property.

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EXECUTIVE SUMMARY

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health’s Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 02/01/2006 has revealed that there are 13 UST sites within approximately 0.25 miles of the target property.

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Due to poor or inadequate address information, the following sites were not mapped:

Site Name | Database(s)
----------|-----------------|
WAIKIKI BEACHCOMBER HOTEL | FTTS
WAIKIKI MARINA HOTEL | FTTS
KAKAako BROWNFIELD PROJECT-UNIT 7 | SHWS, FINDS, BROWNFIELDS
KAKAako BROWNFIELD PROJECT-UNIT 5 | INST CONTROL
FORT RUGER | SHWS, FINDS
FORT RUGER FORMER FIRING RANGES | SHWS, FINDS, SPILLS
CANNON CLUB | SHWS, BROWNFIELDS, INST CONTROL
HALAWA STREAM CHANNEL PETROLEUM CONTAMINATION | SHWS
KAKAako BROWNFIELD PROJECT-UNIT 10 | SHWS, FINDS, BROWNFIELDS
KAKAako IMPROVEMENT DISTRICT 7 | SHWS, BROWNFIELDS
KEAUMOKU SUPERBLOCK PROJECT | SHWS, SPILLS, INST CONTROL
KAKAako BROWNFIELD PROJECT-UNIT 4 | SHWS, FINDS
KAKAako BROWNFIELD PROJECT-UNIT 2 | SHWS, FINDS
KAKAako BROWNFIELD PROJECT-UNIT 1 | SHWS, FINDS
STAN SHERIFF SPECIAL EVENTS ARENA | SHWS, FINDS, SPILLS
HAWAII HALL | SHWS
HAWAIIAN BITUMULS PAVING & PRECAST COMPANY, MOKULE | CERC-NIRAP
KMCAS LANDFILL | SWPUP
WAIKIKI BEACHCOMBER HOTEL | RCRA-SQG, FINDS
US ARMY FORT DERUSSY MILITARY RESERVE | ERNS
ALA WAI STATE BOAT HARBOR WAIKIKI | ERNS
EWA AND WAIKIKI BEACHES NEAR JETTY BETWEEN DERUSSY BEACH | ERNS
WAIKIKI YATCH BASIN ILIWI HOTEL ALAMOANA BLVD | ERNS
WAIKIKI YACHT CLUB | ERNS
WAIKIKI WATER SYSTEM | FINDS
POSENBURG RESIDENCE AT WAIKIKI RANCH | FINDS
WAIKIKI YACHT BASIN, OIL SHEEN | SPILLS
KALAKAUA AVENUE & RYCROFT ST, WAIKIKI AREA | SPILLS
S/KULU MANU, WAIKIKI BEACH | SPILLS
HAWAIIAN PRINCE HOTEL WAIKIKI | ICIS
## MAP FINDINGS SUMMARY

### FEDERAL RECORDS

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### Site 1 of 3 in cluster A

- **Location:** Honolulu, HI 96815 850 Cherry Avenue U.S. Postal Service
- **EPA ID Number:** UST
- **Database(s):** Site
- **Elevation:** 7/30/1990
- **Date Closed:** 1/7/1972
- **Installed:** 6000
- **Tank Capacity:** Permanently Out of Use
- **Tank Status:** R-1
- **Facility ID:** 9-101770
- **Project Officer:** Marku
- **UST:**

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**Incident:** LEAK. NOTIFICATION OF RELEASE OF PETROLEUM PRODUCT. UST WAS CONFIRMED AS HAVING A LEAK.
**Supplemental Loc. Text:**
**Result:**
**Assignment Date:** Not reported
**Activity Lead:** Not reported
**Assignment End Date:** Not reported
**Supplemental Loc. Text:**
**Substances:**
**UE:**
**Site Cleanup Completed**
**Facility Status:** 2005-12-22 00:00:00
**Facility Status Date:** 040067
**Release ID:** 9-101770
**Facility ID:** Manu

### Site 2 of 3 in cluster A

- **Location:** Honolulu, HI 96815 770 Kapiolani Blvd, Suite 702 Kyo
tau Hawaii Corporation
- **EPA ID Number:** UST
- **Database(s):** Site
- **Elevation:** 1/1/1986
- **Installed:** 8000
- **Tank Capacity:** Permanently Out of Use
- **Tank Status:** R-1
- **Facility ID:** 9-103722
- **Project Officer:** Takaba
- **UST:**

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**Incident:**
**Supplemental Loc. Text:**
**Result:**
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**Activity Lead:** Not reported
**Assignment End Date:** Not reported
**Supplemental Loc. Text:**
**Substances:**
**UE:**
**Site Cleanup Completed**
**Facility Status:** 2001-12-11 00:00:00
**Facility Status Date:** 010043
**Release ID:** 9-103722
**Facility ID:** Kylabel

### Site 3 of 3 in cluster A

- **Location:** Honolulu, HI 96815 330 Saratoga Rd
- **EPA ID Number:** UST
- **Database(s):** Site
- **Elevation:** 1/1/1986
- **Installed:** 8000
- **Tank Capacity:** Permanently Out of Use
- **Tank Status:** R-1
- **Facility ID:** 9-103722
- **Project Officer:** Takaba
- **UST:**

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<td>7/30/1990</td>
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**Incident:**
**Supplemental Loc. Text:**
**Result:**
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**Activity Lead:** Not reported
**Assignment End Date:** Not reported
**Supplemental Loc. Text:**
**Substances:**
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**Facility Status:** 2000-06-22 00:00:00
**Facility Status Date:** 890009
**Release ID:** 9-103722
**Facility ID:** Kylabel

### Site 1 of 5 in cluster B

- **Location:** Honolulu, HI 96815 East 2160 Kalakaua Ave
- **EPA ID Number:** UST
- **Database(s):** Site
- **Elevation:** 8/1/1994
- **Installed:** 8000
- **Tank Capacity:** Permanently Out of Use
- **Tank Status:** R-1
- **Facility ID:** 9-103722
- **Project Officer:** Takaba
- **UST:**

<table>
<thead>
<tr>
<th>Facility ID</th>
<th>Tank ID</th>
<th>Date Closed</th>
<th>Substance</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-103722</td>
<td>R-1</td>
<td>7/30/1990</td>
<td>Gasoline</td>
<td>UST</td>
</tr>
<tr>
<td>9-103722</td>
<td>R-1</td>
<td>7/30/1990</td>
<td>Gasoline</td>
<td>UST</td>
</tr>
</tbody>
</table>

**Incident:**
**Supplemental Loc. Text:**
**Result:**
**Assignment Date:** Not reported
**Activity Lead:** Not reported
**Assignment End Date:** Not reported
**Supplemental Loc. Text:**
**Substances:**
**UE:**
**Site Cleanup Completed**
**Facility Status:** 2001-12-11 00:00:00
**Facility Status Date:** 010043
**Release ID:** 9-103722
**Facility ID:** Kylabel

### Site 2 of 5 in cluster B

- **Location:** Honolulu, HI 96815 NNE 2142 Kalakaua Ave
- **EPA ID Number:** UST
- **Database(s):** Site
- **Elevation:** 8/1/1994
- **Installed:** 8000
- **Tank Capacity:** Permanently Out of Use
- **Tank Status:** R-1
- **Facility ID:** 9-103722
- **Project Officer:** Takaba
- **UST:**

<table>
<thead>
<tr>
<th>Facility ID</th>
<th>Tank ID</th>
<th>Date Closed</th>
<th>Substance</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-103722</td>
<td>R-1</td>
<td>7/30/1990</td>
<td>Gasoline</td>
<td>UST</td>
</tr>
<tr>
<td>9-103722</td>
<td>R-1</td>
<td>7/30/1990</td>
<td>Gasoline</td>
<td>UST</td>
</tr>
</tbody>
</table>

**Incident:**
**Supplemental Loc. Text:**
**Result:**
**Assignment Date:** Not reported
**Activity Lead:** Not reported
**Assignment End Date:** Not reported
**Supplemental Loc. Text:**
**Substances:**
**UE:**
**Site Cleanup Completed**
**Facility Status:** 2001-12-11 00:00:00
**Facility Status Date:** 010043
**Release ID:** 9-103722
**Facility ID:** Kylabel

### Site 3 of 5 in cluster B

- **Location:** Honolulu, HI 96815 WaiKiki Gun Club
- **EPA ID Number:** UST
- **Database(s):** Site
- **Elevation:** 8/1/1994
- **Installed:** 8000
- **Tank Capacity:** Permanently Out of Use
- **Tank Status:** R-1
- **Facility ID:** 9-103722
- **Project Officer:** Takaba
- **UST:**

<table>
<thead>
<tr>
<th>Facility ID</th>
<th>Tank ID</th>
<th>Date Closed</th>
<th>Substance</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-103722</td>
<td>R-1</td>
<td>7/30/1990</td>
<td>Gasoline</td>
<td>UST</td>
</tr>
<tr>
<td>9-103722</td>
<td>R-1</td>
<td>7/30/1990</td>
<td>Gasoline</td>
<td>UST</td>
</tr>
</tbody>
</table>

**Incident:**
**Supplemental Loc. Text:**
**Result:**
**Assignment Date:** Not reported
**Activity Lead:** Not reported
**Assignment End Date:** Not reported
**Supplemental Loc. Text:**
**Substances:**
**UE:**
**Site Cleanup Completed**
**Facility Status:** 2001-12-11 00:00:00
**Facility Status Date:** 010043
**Release ID:** 9-103722
**Facility ID:** Kylabel

---

**INTEGRATED COMPLIANCE INFORMATION SYSTEM**

**HAWAII-UNDERGROUND STORAGE TANK**

**Other Pertinent Environmental Activity Identified at Site:** FINDS

**Site Cleanup Completed**

**Facility Status:**

**Facility Status Date:**

**Release ID:**

**Facility ID:**

**UST:**

**RCRA:**

**HIROMO**
### Unitek Fired by Developer to Conduct Assessment

**Report:**
- Unitek hired by developer to conduct assessment.

**Initial Incident:**
- while excavating lot, an old UST was discovered

**Item:**
- petroleum

---

### Waikiki Bazaar (Continued)

**Site:**
- Site 5 of 5 in cluster B
- Actual: 3 ft.

**UST:**
- Project Officer: Li
- Facility Status: Site Cleanup Completed
- Facility Status Date: 2002-06-14 00:00:00
- Facility ID: 020003
- Release ID: 9-103734
- Tank ID: R-1
- Tank Tender: 362 ft.
- Relative: Higher
- Actual: 3 ft.

---

### Waikiki Bazaar

**Site:**
- Site 4 of 5 in cluster B
- Actual: 3 ft.

**UST:**
- Project Officer: Li
- Facility Status: Site Cleanup Completed
- Facility Status Date: 2002-06-14 00:00:00
- Facility ID: 020003
- Release ID: 9-103734
- Tank ID: R-1
- Tank Tender: 362 ft.
- Relative: Higher
- Actual: 3 ft.

---

### Waikiki Gun Club (Continued)

**RCRA Info:**
- Owner: CHRISTOPHER HAN
- EPA ID: HR000135764
- Contact: THOMAS PARK
- EPA ID: HR000135764

**TSDF Activities:**
- Conditionally Exempt Small Quantity Generator

**Violation Status:**
- Not reported

---

### Waikiki Bazaar

**Site:**
- Site 5 of 5 in cluster B
- Actual: 3 ft.

**UST:**
- Project Officer: Li
- Facility Status: Site Cleanup Completed
- Facility Status Date: 2002-06-14 00:00:00
- Facility ID: 020003
- Release ID: 9-103734
- Tank ID: R-1
- Tank Tender: 362 ft.
- Relative: Higher
- Actual: 3 ft.

---

### Waikiki Bazaar

**Site:**
- Site 4 of 5 in cluster B
- Actual: 3 ft.

**UST:**
- Project Officer: Li
- Facility Status: Site Cleanup Completed
- Facility Status Date: 2002-06-14 00:00:00
- Facility ID: 020003
- Release ID: 9-103734
- Tank ID: R-1
- Tank Tender: 362 ft.
- Relative: Higher
- Actual: 3 ft.

---

### Waikiki Bazaar

**Site:**
- Site 3 of 5 in cluster B
- Actual: 3 ft.

**UST:**
- Project Officer: Li
- Facility Status: Site Cleanup Completed
- Facility Status Date: 2002-06-14 00:00:00
- Facility ID: 020003
- Release ID: 9-103734
- Tank ID: R-1
- Tank Tender: 362 ft.
- Relative: Higher
- Actual: 3 ft.

---

### Waikiki Bazaar

**Site:**
- Site 2 of 5 in cluster B
- Actual: 3 ft.

**UST:**
- Project Officer: Li
- Facility Status: Site Cleanup Completed
- Facility Status Date: 2002-06-14 00:00:00
- Facility ID: 020003
- Release ID: 9-103734
- Tank ID: R-1
- Tank Tender: 362 ft.
- Relative: Higher
- Actual: 3 ft.
**SHWS**

- **Facility ID:** SHWS 003154872
- **Mailing Address:** Honolulu, HI 96815
- **Mailing Name:** K. YOUNG KALAKAUA PARTNERS INC.
- **Telephone:** (808) 924-6352
- **Contact:** DENNIS MIHO

**LC4**

- **Facility ID:** LC4 003154872
- **Mailing Address:** Honolulu, HI 96815
- **Mailing Name:** K. YOUNG KALAKAUA PARTNERS INC.
- **Telephone:** (808) 924-6352
- **Contact:** DENNIS MIHO

**RCRA**

- **Facility ID:** RCRA 003154872
- **Mailing Address:** Honolulu, HI 96815
- **Mailing Name:** K. YOUNG KALAKAUA PARTNERS INC.
- **Telephone:** (808) 924-6352
- **Contact:** DENNIS MIHO

**TSD**

- **Facility ID:** TSD 003154872
- **Mailing Address:** Honolulu, HI 96815
- **Mailing Name:** K. YOUNG KALAKAUA PARTNERS INC.
- **Telephone:** (808) 924-6352
- **Contact:** DENNIS MIHO

- **UST:**
  - **Site Name:** King Kalakaua Plaza Development
  - **Owner:** K. Young-Kalakaua Partners

- **IRC Relied On In Remedy:**
  - **Classification:** Conditionally Exempt Small Quantity Generator
- **TSDF Activities:**
  - **Classification:** Conditionally Exempt Small Quantity Generator

- **RCRA Info:**
  - **Owner:** OHANA REEF TOWERS
  - **Telephone:** (808) 924-6352

**Resource Conservation and Recovery Act Information System**

**Hazard:**

- **Gepa:** HR100099975
- **TSD EPA ID:** Not reported
- **Gen County:** Not reported
- **Tsd County:** Los Angeles
- **Tons:** 0.20
- **Facility Address:**
  - **Street:** 227 LEWES ST
  - **City:** HONOLULU
  - **State:** HI
  - **ZIP:** 96815

**FINDS:**

- **Other Pertinent Environmental Activity Identified at Site:**
  - **Classification:** Conditionally Exempt Small Quantity Generator
- **TSDF Activities:**
  - **Classification:** Conditionally Exempt Small Quantity Generator
- **Violation Status:** No violations found
### Map Findings

**Map ID**

**Direction**

**Distance**

**Distance (ft.)**

**Site**

**Database(s)**

**EDR ID Number**

**EPA ID Number**

<table>
<thead>
<tr>
<th><strong>EDR ID Number</strong></th>
<th><strong>Distance (ft.)</strong></th>
<th><strong>Database(s)</strong></th>
<th><strong>Site</strong></th>
<th><strong>Elevation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EDR ID Number</td>
<td>Distance (ft.)</td>
<td>Database(s)</td>
<td>Site</td>
<td>Elevation</td>
</tr>
</tbody>
</table>

#### OHANA REEF TOWERS (Continued)

- **County**: Not reported
- **Geocode**: HR80209875
- **TSO EPA ID**: Not reported
- **Gen County**: Not reported
- **Tsd County**: Los Angeles
- **Tons**: 0.20
- **Facility Address 2**: Not reported
- **Waste Category**: Off-specification, aged, or surplus organics
- **Disposal Method**: Not reported
- **Contact**: DENNIS MIHO
- **Telephone**: (808) 924-6352
- **Mailing Name**: Not reported
- **Mailing Address**: 227 LEWERS ST, HONOLULU, HI 96815
- **County**: Not reported

#### HALEKULANI HOTEL (Continued)

- **Geocode**: HD93944764
- **TSO EPA ID**: Not reported
- **Gen County**: Not reported
- **Tsd County**: Los Angeles
- **Tons**: 0.20
- **Facility Address 2**: Not reported
- **Waste Category**: Waste oil and mixed oil
- **Disposal Method**: Not reported
- **Contact**: MARK RUGENSTEIN
- **Telephone**: (808) 933-2311
- **Mailing Name**: Not reported
- **Mailing Address**: 2199 KALUA RD, HONOLULU, HI 96815
- **County**: Not reported

---

**RCRA ID(s):**

### HALEKULANI HOTEL

**E14**

**SSW**

**Site 1 of 2 in cluster E**

- **Owner**: HALEKULANI CORP
- **EPA ID**: HD93944764
- **Contact**: MARK RUGENSTEIN (808) 933-2311
- **Classification**: Conditionally Exempt Small Quantity Generator
- **TSDF Activities**: Not reported
- **Violation Status**: No violations found

**FINDS**

**RCRA ID(s):**

**HNR**

**HONOLULU, HI 96815**

**Spills**

**Site 1 of 2 in cluster E**

- **Owner**: HALEKULANI CORP
- **EPA ID**: HD93944764
- **Contact**: MARK RUGENSTEIN (808) 933-2311
- **Classification**: Conditionally Exempt Small Quantity Generator
- **TSDF Activities**: Not reported
- **Violation Status**: No violations found

**FINDS**

**Other Pertinent Environmental Activity identified at Site:**

- HAWAII ENGINE CONTROL SYSTEM
- HAWAII UNDERGROUND STORM SE TANK
- RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM
<table>
<thead>
<tr>
<th>E15</th>
<th>HALEKULANI HOTEL (Continued)</th>
<th>UST</th>
<th>1000601513</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>18-1-4</td>
<td>HONOLULU, HI 96815</td>
<td>982 ft.</td>
<td>Site 2 of 2 in cluster E</td>
<td>Relative: Higher 3 ft.</td>
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<tr>
<td>UST:</td>
<td>Facility ID: 9-1018/22</td>
<td>Tank ID: M-1</td>
<td>Actual: 1.8/1988</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tank Status: Currently In Use</td>
<td>Tank Capacity: 8000</td>
<td>Date Closed: 1/1/1983</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Owner: HALEKULANI HOTEL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field ID: 9-1018/22</td>
<td>Tank ID: M-1</td>
<td>Actual: 1.8/1988</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tank Status: Currently In Use</td>
<td>Tank Capacity: 8000</td>
<td>Date Closed: 1/1/1983</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Owner: HALEKULANI HOTEL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Greg Olmsted is the RPM. DOH, OCD, Public Works, GASCO, GTE, HECO, monitoring for CECs. ER completed.

Ignited the gas. Energized a secondary electrical supply line. The line arced/sparked and amount of gas accumulated in subsurface conduits operated by HECO, whom At approx. 10:00 p.m. to 2:30 a.m. on 12/8/94-12/9/94, an undetermined type & amount of gas explosion.

Result: Not reported
Assignment End Date: Not reported
End Date: 2005-08-24 00:00:00
Result/RI: Ongoing
Overall Status: Ongoing
File Under: City and County of Honolulu, Department of Parks and Recreation, Parks & Playgrounds
Restricted Use Comm: Not reported
Is Related On In Remedy: Not reported
Unit: Gateway Park
Elevation: 986 ft.
Relative: Higher (986 ft. Relative: Higher; Actual: 3 ft.)
Actual: 3 ft.
### Map Findings

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Direction</th>
<th>Distance</th>
<th>Direction (ft.)</th>
<th>EDR ID Number</th>
<th>Site Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL HAWAIIAN SHOOTING CLUB (Continued)</td>
<td>100/1078495</td>
<td>1/8-1/4 HONOLULU, HI 96815</td>
<td>1132 BISHOP STREET, SUITE 1700</td>
<td>ALOHA PETROLEUM, LTD.</td>
<td>HAWAII-UNDERGROUND STORAGE TANK</td>
</tr>
<tr>
<td>Actual Date Achieved Compliance:</td>
<td>05/24/2004</td>
<td>Regulation Violated:</td>
<td>HAR 11-262-34(a)(3)</td>
<td>Area of Violation:</td>
<td>GENERATOR-GENERAL REQUIREMENTS</td>
</tr>
<tr>
<td>Date Violation Determined:</td>
<td>04/21/2004</td>
<td>Actual Date Achieved Compliance:</td>
<td>05/24/2004</td>
<td>Regulation Violated:</td>
<td>HAR 11-262-34(a)(3)</td>
</tr>
<tr>
<td>Area of Violation:</td>
<td>GENERATOR-GENERAL REQUIREMENTS</td>
<td>Date Violation Determined:</td>
<td>12/11/2003</td>
<td>Actual Date Achieved Compliance:</td>
<td>05/24/2004</td>
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<tr>
<td>Actual Date Achieved Compliance:</td>
<td>05/24/2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are 1 violation record(s) reported at this site:

- **Compliance Evaluation Inspection**
  - Date of Compliance: 2004/05/24

**FNDS:**
- Other Pertinent Environmental Activity Identified at Site:
  - HAZNET:
    - RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

**GADGET:**
- Gas: HR/0010000469
- TSD EPA ID: CADD/039484310
- Gas County: 99
- Tsd Country: 99
- Tons: Not reported
- Facility Address 2: Other inorganic solid waste
- Waste Category: Disposal Method: Disposal, Other
- Contact: WARREN KAHAPA
- Phone: (808) 853-4222
- Mailing Name: Not reported
- Mailing Address: 2301 KALAKUA AVE STE A02 HONOLULU, HI 96815
- County: 99

**UST:**
- Facility ID: 9-100328
- Release ID: 98007
- Facility Status Date: 2004/02/01/2000
- Facility Status: Site Cleanup Completed
- Project Officer: Ruiz

**LUST:**
- Facility ID: 9-100328
- Release ID: 98007
- Facility Status Date: 2004/02/01/2000
- Facility Status: Site Cleanup Completed
- Project Officer: Mitchell

**UST:**
- Facility ID: 9-100328
- Release ID: 98007
- Facility Status Date: 2004/02/01/2000
- Facility Status: Confirmed Release
- Project Officer: Waterman
### IMM KALAKAUA (Continued)

**Owner:** ALOHA PETROLEUM LTD  
**Address:** 1132 BISHOP STREET, SUITE 1700  
**City:** Honolulu  
**State:** HI  
**Zip Code:** 96815

- **Facility ID:** 9-100328
- **Tank ID:** R-1
- **Tank Status:** Permanently Out of Use
- **Tank Capacity:** 550
- **Substance:** Used Oil
- **Installed On:** 2/6/1985
- **Date Closed:** 8/10/1994
- **EPA ID Number:** U001235162
- **Database:** HAWAII-UNDERGROUND STORAGE TANK

**Address:** 2255 KALAKAUA AVE, 2ND FLOOR  
**City:** Honolulu  
**State:** HI  
**Zip Code:** 96815

- **Facility ID:** 9-102646
- **Tank ID:** R-M-1
- **Tank Status:** Permanently Out of Use
- **Tank Capacity:** 1000
- **Substance:** Diesel
- **Installed On:** 12/30/1970
- **Date Closed:** 1/11/1992
- **EPA ID Number:** U001236003
- **Database:** HAWAII-UNDERGROUND STORAGE TANK

### ROYAL HAWAIIAN HOTEL (Continued)

**Visitation Status:** No violations found

**FINDS:**
- **Other Pertinent Environmental Activity Identified at Site:**
  - RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

**HCNET:**
- **GEPaid:** HRY000576182
- **TSDF EPA ID:** Not reported
- **Gen County:** Not reported
- **Crop County:** Not reported
- **TSDF Information:**
  - **Telephone:** (808) 931-8888
  - **Facility Status Date:** 2/6/1985
  - **Facility Status:** Not reported
  - **Waste Category:** Off-specification, aged, or surplus organics
  - **Disposal Method:** Transfer Station
  - **Owner:** KYO YA COMPANY, INC
  - **Transfer Station:**
    - **Disposal Method:**
      - **Off-specification, aged, or surplus organics**
    - **Location:**
      - **Street:** 2255 KALAKAUA AVE, 2ND FLOOR  
      - **City:** Honolulu  
      - **State:** HI  
      - **Zip Code:** 96815

**Address:** 2255 KALAKAUA AVE  
**City:** Honolulu  
**State:** HI  
**Zip Code:** 96815

- **Facility ID:** 9-102646
- **Tank ID:** R-M-1
- **Tank Status:** Permanently Out of Use
- **Tank Capacity:** 1000
- **Substance:** Diesel
- **Installed On:** 12/30/1970
- **Date Closed:** 1/11/1992
- **EPA ID Number:** U001236003
- **Database:** HAWAII-UNDERGROUND STORAGE TANK

**Address:** 2255 KALAKAUA AVE, 2ND FLOOR  
**City:** Honolulu  
**State:** HI  
**Zip Code:** 96815

- **Facility ID:** 9-102646
- **Tank ID:** R-M-1
- **Tank Status:** Permanently Out of Use
- **Tank Capacity:** 1000
- **Substance:** Diesel
- **Installed On:** 12/30/1970
- **Date Closed:** 1/11/1992
- **EPA ID Number:** U001236003
- **Database:** HAWAII-UNDERGROUND STORAGE TANK
## SHERATON WAIKIKI HOTEL (Continued)

**Incident:** On 08/25/93, at about 10:45PM, the Sheraton Waikiki Hotel experienced a minor oil spill. Approximately 1.5 Gals of #2 Diesel spilled from a vent onto the Hotel's roadway connecting Kalia Rd. & Helumoa Rd. The Vent is connected to 100.

**Initial:** Hotel Security responded by calling HPD, HFD & Hotel Housekeeping. Dept used absorbents to clean up the spill. Spill was confined to Roadway. Unitek was to be called in to properly dispose of absorbents. Hotel Engineering was investigating.

**Report:** Hotel Security responded by calling HPD, HFD & Hotel Housekeeping. Dept used absorbents to clean up the spill. Spill was confined to Roadway. Unitek was to be called in to properly dispose of absorbents. Hotel Engineering was investigating.

**UST:**
- **Facility ID:** 9-102630
- **Tank ID:** 4
- **Substance:** Diesel
- **Date Closed:** 12/30/1992
- **Tank Capacity:** 2900
- **Owner:** KOY YA COMPANY LTD
  - **Address:** 2255 KALAKAUA AVE, 2ND FLOOR
  - **City:** Honolulu, HI 96815
  - **County:** HONOLULU, HI 96815

## KYO YA COMPANY LTD (Continued)

**UST:**
- **Facility ID:** 9-102630
- **Tank ID:** R-M-1
- **Substance:** Diesel
- **Date Closed:** 11/9/1992
- **Tank Capacity:** 1000
- **Owner:** KOY YA COMPANY LTD
  - **Address:** 2255 KALAKAUA AVE, 2ND FLOOR
  - **City:** Honolulu, HI 96815
  - **County:** HONOLULU, HI 96815

---

**Site 7 of 7 in cluster F**

**Relative:**
- **Higher:** RCRA Site:
  - **EPA ID:** HR000116178
  - **Owner:** KOY YA COMPANY LTD
  - **Contact:** ERIC AU
  - **Classification:** Small Quantity Generator
  - **TSDF:** Not reported
  - **Violation Status:** No violations found
  - **RCRA Info:**
    - **HAZNET:**
      - **Gepid:** HR000116178
      - **TSDF EPA ID:** Not reported
      - **Gen County:** Not reported
      - **Tsd County:** Los Angeles
      - **Tons:** 0.22
      - **Facility Address 2:** Not reported
      - **Waste Category:** Waste oil and mixed oil
      - **Disposal Method:** Transfer Station
      - **Contact:** DAVID LEE

---

**Site 2 of 3 in cluster G**

**Relative:**
- **Higher:**
  - **Project Officer:** Li
  - **Facility Status:** Site Cleanup Completed
  - **Release ID:** 9-103574
  - **EPA ID:** HR000116178
  - **Owner:** KOY YA COMPANY LTD
  - **Contact:** ERIC AU
  - **Classification:** Small Quantity Generator
  - **TSDF:** Not reported
  - **Violation Status:** No violations found
  - **RCRA Info:**
    - **HAZNET:**
      - **Gepid:** HR000116178
      - **TSDF EPA ID:** Not reported
      - **Gen County:** Not reported
      - **Tsd County:** Los Angeles
      - **Tons:** 0.22
      - **Facility Address 2:** Not reported
      - **Waste Category:** Waste oil and mixed oil
      - **Disposal Method:** Transfer Station
      - **Contact:** DAVID LEE

---

**Site 3 of 3 in cluster G**

**Relative:**
- **Higher:**
  - **Project Officer:** Li
  - **Facility Status:** Site Cleanup Completed
  - **Release ID:** 9-103574
  - **EPA ID:** HR000116178
  - **Owner:** KOY YA COMPANY LTD
  - **Contact:** ERIC AU
  - **Classification:** Small Quantity Generator
  - **TSDF:** Not reported
  - **Violation Status:** No violations found
  - **RCRA Info:**
    - **HAZNET:**
      - **Gepid:** HR000116178
      - **TSDF EPA ID:** Not reported
      - **Gen County:** Not reported
      - **Tsd County:** Los Angeles
      - **Tons:** 0.22
      - **Facility Address 2:** Not reported
      - **Waste Category:** Waste oil and mixed oil
      - **Disposal Method:** Transfer Station
      - **Contact:** DAVID LEE
### FINDS

<table>
<thead>
<tr>
<th>EDR ID Number</th>
<th>Distance</th>
<th>Site</th>
<th>Elevation</th>
</tr>
</thead>
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<td>10014050540</td>
<td>1240 ft.</td>
<td></td>
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</tr>
<tr>
<td>1001543043</td>
<td>1240 ft.</td>
<td></td>
<td></td>
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</table>

### HALE Koa Hotel (Continued)

**Activity Lead:** Parmette Amyx  
**Assignment End Date:** Not reported  
**Result:** 8  
**Supplemental Loc. Text:** Not reported  
**Unit:** U.S. Army Engineers  
**Substances:** Petroleum  
**Incident:**  
- Diameter by 5-6 Long Tank was discovered during excavation for new sewer line. Military people were excavating the sewer trench at the time.
- Caller reported of petroleum release during ground excavation for waterline. Release occurred approx 1 week before notification as a result of lab sampling. Test indicated TPH oil/diesel present.
- Transformer (pad-mount) oil leaking into secondary containment, then overflowed from rains and onto soil. Sample taken and being run for PCB. 50g T-111 (21 gal). 2008 (25 gal)

**Report:** U.S. Army Engineers formulated plan for removal of tank & petroleum for groundwater.

- Caller reported of petroleum release during ground excavation for waterline. Release occurred approx 1 week before notification as a result of lab sampling. Test indicated TPH oil/diesel present.

None

**SHWS:**  
**Supplement:** Not reported  
**Restricted Use:** Not reported  
**Field:** Not reported  
**Supplemental Loc. Text:** Not reported  
**Result:** Not reported  
**Assignment:** Not reported  
**Assignment End Date:** Not reported  
**Activity Lead:** Not reported  
**End Date:** Not reported  
**Result:** Not reported  
**Overall Status:** Not reported  
**File Under:** Not reported  
**Soil Relied On in Remedy:** Not reported  
**Items:** Not reported  
**Site:** Not reported  
**Case Number:** Not reported  
**Island:** Oahu  
**Concentration:** Not reported  
**Units:** Not reported  
**Activity Type:** Not reported  
**Assignment Date:** Not reported  

### HALE Koa Hotel

**Activity Lead:** Pierrette Amyx  
**Assignment End Date:** Not reported  
**Result:** 8  
**Supplemental Loc. Text:** Not reported  
**Unit:** U.S. Armed Forces Recreation Center, Fort Derussy, 2055 Kalia Road, Honolulu, Oahu, HI 96815  
**Substances:** Petroleum  
**Incident:**  
- Diameter by 5-6 Long Tank was discovered during excavation for new sewer line. Military people were excavating the sewer trench at the time.
- Caller reported of petroleum release during ground excavation for waterline. Release occurred approx 1 week before notification as a result of lab sampling. Test indicated TPH oil/diesel present.
- Transformer (pad-mount) oil leaking into secondary containment, then overflowed from rains and onto soil. Sample taken and being run for PCB. 50g T-111 (21 gal). 2008 (25 gal)

**Report:** U.S. Army Engineers formulated plan for removal of tank & petroleum for groundwater.

None

**SHWS:**  
**Supplement:** Not reported  
**Restricted Use:** Not reported  
**Field:** Not reported  
**Supplemental Loc. Text:** Not reported  
**Result:** Not reported  
**Assignment:** Not reported  
**Assignment End Date:** Not reported  
**Activity Lead:** Not reported  
**End Date:** Not reported  
**Result:** Not reported  
**Overall Status:** Not reported  
**File Under:** Not reported  
**Soil Relied On in Remedy:** Not reported  
**Units:** Not reported  
**Site:** Not reported  
**Case Number:** Not reported  
**Island:** Oahu  
**Concentration:** Not reported  
**Units:** Not reported  
**Activity Type:** Not reported  
**Assignment Date:** Not reported
### HALE KOA HOTEL (Continued)

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Island</th>
<th>Numerical Quantity</th>
<th>Less Of/Greater Than</th>
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<tbody>
<tr>
<td>20040206-1195</td>
<td>Oahu</td>
<td>Not reported</td>
<td>Not reported</td>
<td>Gallons</td>
<td>Response</td>
<td>Not reported</td>
<td>Terry Corpus</td>
<td>Not reported</td>
<td>Not reported</td>
</tr>
</tbody>
</table>

**Substances:**
- Transformer Oil
- Transformer Oil
- Transformer Oil

**Incident:**
- Caller reported of petroleum release during ground excavation for water line. Release occurred approx 1 week before notification as a result of lab sampling. Caller reported of petroleum release during ground excavation for water line. Release occurred approx 1 week before notification as a result of lab sampling. Test indicated TPH oil/diesel present.

**Initial:**
- U.S. Army Engineers formulated plan for removal of tank & petroleum for groundwater
- U.S. Army Engineers formulated plan for removal of tank & petroleum for groundwater
- U.S. Army Engineers formulated plan for removal of tank & petroleum for groundwater

**Result:**
- Transformers (pad-mount) of leaking into secondary containment, then overflowed from rains and onto soil. Sample taken and being run for PCB. Built T-111 (21 gal) & 2058 (25 gal) from rains and onto soil. Sample taken and being run for PCB. Built T-111 (21 gal) & 2058 (25 gal) from rains and onto soil. Sample taken and being run for PCB.

**Assignment End Date:**
- 1997-10-01

**Response Activity Type:**
- UST

---

### CHEVRON 2002 KALAKAU A (Continued)

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<th>End Fill</th>
<th>Result Fill</th>
<th>Overall Status</th>
<th>File Under</th>
<th>Restricted Use Comm</th>
<th>Relied On In Remedy</th>
<th>Unit</th>
<th>Stakeholder Name</th>
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<td></td>
<td></td>
<td>1997-10-01 00:00:00</td>
<td></td>
<td>1997-10-01 00:00:00</td>
<td>NFA</td>
<td>DAAR NFA</td>
<td>Not reported</td>
<td>Not reported</td>
<td>Shell</td>
<td>Chevron 2002 Kalakaua</td>
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</tbody>
</table>

**Supplemental Loc. Text:**
- Site 1 of 3 in cluster I
- Site 2 of 3 in cluster I
- Site 3 of 3 in cluster I

**Relative to Site:**
- Higher
- Mixed

**Map Findings:**
- Site 1 of 3 in cluster I
- Site 2 of 3 in cluster I
- Site 3 of 3 in cluster I

**HAWAII ENGINE CONTROL SYSTEM**

**HAWAII UNDERGROUND STORAGE TANK**

- Supplement: Not reported
- Restricted Use: Not reported
- Field: Not reported
- Funding: Not reported
- Agreement Program: Not reported
- Activity Type: ISST
- Assignment Date: 1997-09-30 00:00:00
No violations found
Violation Status: Not reported
TSDF Activities: Small Quantity Generator
Classification: Not reported
Contact: HID984468306
EPA ID: (808) 949-1010
DAIO USA CORP
Owner:
1242 ft.
Relative: Higher
Actual: 3 ft.
1/8-1/4 HONOLULU, HI 96815
SE FINDS 2002 KALAKAUA AVE HID984468306 I35 RCRA-SQG DAIO USA CORP 1000742334
RCRA Info:
1263 ft.
Relative: Higher
Actual: 3 ft.
1/8-1/4 HONOLULU, HI 96815
SE FINDS 2314 KALAKAUA AVE HIR000113464 36 RCRA-SQG MACYS WEST WAIKIKI TRADE CTR 1005415834
RCRA Info:
1268 ft.
Relative: Higher
Actual: 3 ft.
1/8-1/4 HONOLULU, HI 96815
ESE FINDS 2255 KUHIO AVE HIR000034447 37 RCRA-SQG WAIKIKI TRADE CTR 1001213474
RCRA Info:
1430 ft.
Relative: Higher
Actual: 3 ft.
1/4-1/2 HONOLULU, HI 96815
SE FINDS 2330 KALAKAUA AVE 1100137781 38 SHWS STAN SHINKAWA INC 1003879128
RCRA Info:
1430 ft.
Relative: Higher
Actual: 3 ft.
1/4-1/2 HONOLULU, HI 96815
SE 2330 KALAKAUA AVE HID980497325 J39 CERC-NFRAP STAN SHINKAWA INC 100679728
RCRA Info:
1/4-1/2 HONOLULU, HI 96815
SE 2330 KALAKAUA AVE HID980497325 J39 CERC-NFRAP STAN SHINKAWA INC 100679728
RCRA Info:
1/4-1/2 HONOLULU, HI 96815
SE 2330 KALAKAUA AVE HID980497325 J39 CERC-NFRAP STAN SHINKAWA INC 100679728
RCRA Info:
JIMMY'S CHEVRON SERVICE INC
1925 KALAKAUA AVE
HONOLULU, HI 96815

RCRA-5-G
100303791

FINDS
HD01801085
LUST
UST

Photo Officer:
Okoji

Map ID
Direction
Distance
Distance (ft.)
Elevation
Database(s)
EDR ID Number
EPA ID Number

40
JIMMY'S CHEVRON SERVICE INC
1925 KALAKAUA AVE
HONOLULU, HI 96815

RCRA-5-G
100303791

FINDS
HD01801085
LUST
UST

41
JIMMY'S CHEVRON SERVICE INC (Continued)
1925 KALAKAUA AVE
HONOLULU, HI 96815

SHWS
5/08/2017

SPILLS
N/A

42
MOANA SURF RIDER HOTEL
2106 KALAKAUA AVE
HONOLULU, HI 96815

LUST
U001236002

UST
NA

UST:
Facility ID: 9-101006
Release ID: 970136
Facility Status Date: 1997-09-11 00:00:00
Facility Status: Site Cleanup Completed
Project Officer: Sadoyama

UST:
Facility ID: 9-101016
Release ID: 970136
Facility Status Date: 1997-09-11 00:00:00
Facility Status: Site Cleanup Completed
Project Officer: Sadoyama

UST:
Facility ID: 9-101016
Facility ID: 9-101006
Tank Status: Permanently Out of Use
Tank Capacity: 3000
Date Closed: 7/19/1955
Owner: CHEVRON PRODUCTS COMPANY
91-480 MALAKOLE ST.
Honolulu, HI 96815

UST:
Facility ID: 9-101016
Facility ID: 9-101006
Tank Status: Permanently Out of Use
Tank Capacity: 5000
Date Closed: 7/19/1955
Owner: CHEVRON PRODUCTS COMPANY
91-480 MALAKOLE ST.
Honolulu, HI 96815

UST:
Facility ID: 9-101016
Facility ID: 9-101006
Tank Status: Permanently Out of Use
Tank Capacity: 5000
Date Closed: 7/19/1955
Owner: CHEVRON PRODUCTS COMPANY
91-480 MALAKOLE ST.
Honolulu, HI 96815

### Map Findings

#### Site Information

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Direction</th>
<th>Distance</th>
<th>Database(s)</th>
<th>EPA ID Number</th>
<th>Site</th>
<th>Elevation</th>
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</thead>
<tbody>
<tr>
<td>K47</td>
<td>ESE</td>
<td>224 ft.</td>
<td>UST</td>
<td>9-100173</td>
<td>HONOLULU, HI 96815</td>
<td>1/4-1/2</td>
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<td>K48</td>
<td>ESE</td>
<td>2346 ft.</td>
<td>UST</td>
<td>9-100728</td>
<td>HONOLULU, HI 96813</td>
<td>1/4-1/2</td>
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<td>K49</td>
<td>WNW</td>
<td>2471 ft.</td>
<td>UST</td>
<td>9-101921</td>
<td>HONOLULU, HI 96815</td>
<td>1/4-1/2</td>
</tr>
</tbody>
</table>

#### Incident Details

**K47** AVS RENT-A-CAR

- **Substances:** Diesel Fuel
- **Incident:** Diesel Fuel Leak
- **Result:** Soil sampling
- **Report:** Removal of tank, tested soil and found TPH-d at 236 ppm.
- **Location:** Apartment Complex on Ala Wai Blvd.
- **Year:** 1994
- **Status:** Unregulated UST
- **Release ID:** 9-100173
- **Owner:** Gasoline

**K48** ABC STORE #21

- **Substances:** Diesel Fuel
- **Incident:** Diesel Fuel Leak
- **Result:** Soil sampling
- **Report:** Removal of tank, tested soil and found TPH-d at 236 ppm.
- **Location:** Apartment Complex on Ala Wai Blvd.
- **Year:** 1994
- **Status:** Unregulated UST
- **Release ID:** 9-100728
- **Owner:** Gasoline

**K49** DISCOVERY BAY

- **Substances:** Diesel Fuel
- **Incident:** Diesel Fuel Leak
- **Result:** Soil sampling
- **Report:** Removal of tank, tested soil and found TPH-d at 236 ppm.
- **Location:** Apartment Complex on Ala Wai Blvd.
- **Year:** 1995
- **Status:** Unregulated UST
- **Release ID:** 9-101921
- **Owner:** Gasoline
**MAP FINDINGS**

**MAP FINDINGS**

**HI SPILLS:**

**ILIKAI HOTEL (Continued) 1000267863**

**RNOS:**
Other Pertinent Environmental Activity Identified at Site:
HAWAII-UNDERGROUND STORAGE TANK
PERMIT-COMPLIANCE SYSTEM
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

**UST:**
- Facility ID: 9-102181
- Release ID: 900094
- Facility Status Date: 1994-09-26 00:00:00
- Project Officer: Sadayama

**HI SPILLS:**
- Case Number: 19930314
- Island: Oahu
- Numerical Quantity: Not reported
- Less Or Greater Than: Not reported
- Activity Type: Response
- Assignment Date: Not reported
- Result: 8
- Submittal Loc. Text: Not reported
- Unit: Whole Hotel, Ewa Entrance

**Substances:**
- Oil
- Unknown

**Incident:**
- OIL SPILL FROM ILIKAI HOTEL DRAINING INTO HARBOR.

**Initial:**
- SPILL CLEANED UP.
- On scene to pickup unknown and transport to UH for identification. Testing indicate unknown is Sodium Carbonate.

**Report:**
- SPILL CLEANED UP.
- On scene to pickup unknown and transport to UH for identification. Testing indicate unknown is Sodium Carbonate.

**Case Number:** 200030871-1325
- Island: Oahu
- Numerical Quantity: Not reported
- Less Or Greater Than: Not reported
- Activity Type: Response
- Assignment Date: 2003-09-27 00:00:00
- Activity Lead: Terry Corpus
- Result: 8
- Submittal Loc. Text: Not reported
- Unit: Whole substance in film canister found under bed

**Substances:**
- Unknown

**Incident:**
- OIL SPILL FROM ILIKAI HOTEL DRAINING INTO HARBOR.

**Initial:**
- SPILL CLEANED UP.
- On scene to pickup unknown and transport to UH for identification. Testing indicate unknown is Sodium Carbonate.

**Report:**
- SPILL CLEANED UP.
- On scene to pickup unknown and transport to UH for identification. Testing indicate unknown is Sodium Carbonate.
### ILIKAI HOTEL (Continued)

- **Gepaid**: HD982402166
- **TSD EPA ID**: CA0059-84310
- **Gen County**: 99
- **Tsd County**: 99
- **Tons**: 0.22
- **Facility Address 2**: Not reported
- **Waste Category**: Not reported
- **Disposal Method**: Treatment, Tank
- **Contact**: KENNETH POYNTER
- **Telephone**: (808) 949-3811
- **Making Name**: Not reported
- **Making Address**: 1777 ALA MoANA BLVD

**HONOLULU, HI 96815**

**Database(s)**: Site

**Site Elevation**: Not reported

### HOBRON HOTEL (Continued)

- **File Under**: Hobron Hotel, LLC
- **Restricted Use**: This site has restrictions on its use. See the hardcopy file for a description of the restrictions in use.

**IC Relied on in Remedy**: Not reported

**County**: 99

**Gepaid**: HD982402166

**TSD EPA ID**: CA0059-84310

**Gen County**: 99

**Tsd County**: 99

**Tons**: 0.2

**Facility Address 2**: Not reported

**Waste Category**: Not reported

**Disposal Method**: Disposal, Other

**Contact**: KENNETH POYNTER

**Telephone**: (808) 949-3811

**Making Name**: Not reported

**Making Address**: 1777 ALA MoANA BLVD

**HONOLULU, HI 96815**

**Database(s)**: Site

**Site Elevation**: Not reported

---

**Data for Additional CA HAZNET Records**

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</tbody>
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**Not reported**

**NOT REPORTED**

**ALL USES**

**HOBRON HOTEL**

**1001026751**

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**ISOLANI SCHOOL PETROLEUM ODDOR**

**5183 KAMOKU ST**

**NE**

**2820 ft.**

<table>
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<tr>
<th>County</th>
<th>Relative Higher</th>
<th>Actual 3 ft.</th>
<th>SHWS:</th>
<th>Supplement:</th>
<th>Not reported</th>
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IOLANI SCHOOL PETROLEUM ODOR (Continued)

Less Or Greater Than : Not reported
Units : Not reported
Activity Type : Response
Assignment Date : 2000-08-14 00:00:00
Activity Lead : Liz Galvez
Assignment End Date : Not reported
Result : 8
Supplemental Loc. Text : Not reported
Unit : Iolani School Petroleum odor
Substances : Not reported

Incident : Report of a petroleum odor while geotechnical borings were being conducted. Location: in front of driveway of maintenance residence (by swimming pool and track field).

Initial : SOSC requested: 1) air monitoring - flammability potential; 2) sampling and analysis to determine what type of petroleum; 3) determine past usage of site.

End Eff : 2005-08-24 00:00:00
Result (R) : Ongoing
Overall Status : Ongoing
File Under : State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority
Restricted Use Comm : Not reported
Is Released On Remedy : Not reported
Unit : Hawaii Convention Center
Site Name : Hawaii Convention Center

HI SPILLS:

Case Number : 19960314-00100

Assignment Date : 1996-02-14 00:00:00
Activity Lead : Not reported
Assignment End Date : Not reported
Result : 8
Supplemental Loc. Text : Kalakaua Ave & Kapilani Blvd
Unit : Convention Center
Substances : Lubricating Oil

Incident : Lubricating oil leaked from a drum.

Initial : Dewatering activities causing oil sheen in Ala Wai Canal

End Eff : 1996-02-14 00:00:00
Result (R) : Ongoing
Overall Status : Ongoing
File Under : State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority
Restricted Use Comm : Not reported
Is Released On Remedy : Not reported
Unit : Hawaii Convention Center
Site Name : Hawaii Convention Center

HI SPILLS:

Case Number : 19960207-1016

Assignment Date : 1996-02-07 10:10:00
Activity Lead : Terry Corpus
Assignment End Date : Not reported
Result : 8
Supplemental Loc. Text : Kalakaua Ave & Kapilani Blvd
Unit : Convention Center
Substances : Lubricating Oil

Incident : Lubricating oil leaked from a drum.

Initial : Dewatering activities causing oil sheen in Ala Wai Canal

End Eff : 1996-02-07 10:10:00
Result (R) : Ongoing
Overall Status : Ongoing
File Under : State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority
Restricted Use Comm : Not reported
Is Released On Remedy : Not reported
Unit : Hawaii Convention Center
Site Name : Hawaii Convention Center

HI SPILLS:

Case Number : 19970301-1010

Assignment Date : 1997-03-01 10:10:00
Activity Lead : Not reported
Assignment End Date : Not reported
Result : 8
Supplemental Loc. Text : Kalakaua Ave & Kapilani Blvd
Unit : Convention Center
Substances : Lubricating Oil

Incident : Lubricating oil leaked from a drum.

Initial : Dewatering activities causing oil sheen in Ala Wai Canal

End Eff : 1997-03-01 10:10:00
Result (R) : Ongoing
Overall Status : Ongoing
File Under : State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority
Restricted Use Comm : Not reported
Is Released On Remedy : Not reported
Unit : Hawaii Convention Center
Site Name : Hawaii Convention Center

HI SPILLS:
HAWAII CONVENTION CENTER (Continued)

Island: Oahu
Case Number: 19980406-1349
Hawaii Convention Center White Liquid Emptying Into Ala Wai
Units: Not reported
Substances: UNKN white liquid
Incident: Lubricating oil leaked from a drum.
Dewatering activities causing oil sheen in Ala Wai Canal
Strong offensive fumes from C/C truck laying down some kind of brick sealer at the convention center.
Initial: 1/6/97, rec'd UST4 Closure Report.
USCG notified. Dewatering activities stopped.

New Convention Center brick sealer not C & C. Spraying sealer over a month,
subcontractor, Ala Wai Park promoted. 8 to 9 workers usually roll it on.
Coast Guard lead.

HAWAII CONVENTION CENTER (Continued)

Island: Oahu
Case Number: 19990604-1349
Hawaii Convention Center Brick Sealer Odor
Units: Not reported
Substances: Not reported
Incident: Lubricating oil leaked from a drum.
Dewatering activities causing oil sheen in Ala Wai Canal
Strong offensive fumes from C/C truck laying down some kind of brick sealer at the convention center.
Initial: 1/6/97, rec'd UST4 Closure Report.
USCG notified. Dewatering activities stopped.

New Convention Center brick sealer not C & C. Spraying sealer over a month,
subcontractor, Ala Wai Park promoted. 8 to 9 workers usually roll it on.
Coast Guard lead.
### HI SPILLS:

**OUTRIGGER PRINCE KUHIO HOTEL (Continued)**

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**Initial:**
- **ABT 200 GALLONS OF DIESEL GAS SOILED WHEN UST HOME HEATING OIL TANK WAS OVER FILLED:**
  - pump shut off. Muranaka Environmental hire to assess clean-up efforts

- **ABT 200 GALLONS OF DIESEL GAS SOILED WHEN UST HOME HEATING OIL TANK WAS OVER FILLED:**
  - pump shut off. Muranaka Environmental hire to assess clean-up efforts

**Supplemental Loc. Text:**
- **OUTRIGGER PRINCE KUHIO HOTEL**

---

**Case Number:** 19910925
- **Island:** Oahu
- **Numerical Quantity:** 200
- **Less Or Greater Than:** Not reported
- **Units:** Gallons
- **Activity Type:** Response
- **Assignment Date:** Not reported
- **Activity Lead:** Terry Corpus
- **Assignment End Date:** Not reported
- **Result:** 8
- **Supplemental Loc. Text:** Not reported
- **Unit:** Outrigger Prince Kuhio

**Substances:** Diesel Fuel

**Incident:**
- ABOUT 200 GALLONS OF DIESEL GAS SOILED WHEN UST HOME HEATING OIL TANK WAS OVER FILLED
  - Between 4:00 a.m. and 5:30 a.m., failure occurred of valve between day tank and main tank. Boiler is used for hot water heater. Day tanks are located on the 9th and 10th floors. The spill went down the side of building and into a sump

**Report:**
- ABOUT 200 GALLONS OF DIESEL GAS SOILED WHEN UST HOME HEATING OIL TANK WAS OVER FILLED
  - pump shut off. Muranaka Environmental hire to assess clean-up efforts

---

**Case Number:** 19950307-2
- **Island:** Oahu
- **Numerical Quantity:** 50
- **Less Or Greater Than:** Not reported
- **Units:** Gallons
- **Activity Type:** Response
- **Assignment Date:** Not reported
- **Activity Lead:** Chris Takeda
- **Assignment End Date:** Not reported
- **Result:** 8
- **Supplemental Loc. Text:** Not reported
- **Unit:** Outrigger Prince Kuhio Hotel

**Substances:** Diesel Fuel

**Incident:**
- ABOUT 200 GALLONS OF DIESEL GAS SOILED WHEN UST HOME HEATING OIL TANK WAS OVER FILLED
  - Between 4:00 a.m. and 5:30 a.m., failure occurred of valve between day tank and main tank. Boiler is used for hot water heater. Day tanks are located on the 9th and 10th floors. The spill went down the side of building and into a sump

---

**Case Number:** 19940521-000
- **Island:** Oahu
- **Numerical Quantity:** 0
- **Less Or Greater Than:** Not reported
- **Units:** Gallons
- **Activity Type:** Response
- **Assignment Date:** Not reported
- **Activity Lead:** Chris Takeda
- **Assignment End Date:** Not reported
- **Result:** 8
- **Supplemental Loc. Text:** Not reported
- **Unit:** Outrigger Prince Kuhio Hotel

**Substances:** Diesel Fuel

**Incident:**
- ABOUT 200 GALLONS OF DIESEL GAS SOILED WHEN UST HOME HEATING OIL TANK WAS OVER FILLED
  - Between 4:00 a.m. and 5:30 a.m., failure occurred of valve between day tank and main tank. Boiler is used for hot water heater. Day tanks are located on the 9th and 10th floors. The spill went down the side of building and into a sump

---

**Relativ...
THAT THE DRILL WATER NEEDS TO BE CONTAINED AS PER AGREEMENT IN DEVELOPMENT PLAN
C. WINTERS CONTACTED THE DEVELOPMENT AND CONTRACTOR COMPANIES AND INFORMED THEM AT THE PROPERTY. See also 920309. FOLLOW UP LETTER TO FIRST DEVELOPMENT INC., REGARDING SITE ASSESSMENTS PERFORMED None Noted in Report

Initial:
OF KAPIOLANI. INTERVIEWED MRS. WINTERS WHO WILL CONTACT FIRST DEVELOPMENT. WATER IS BEING DISCHARGED ONTO SIDEWALK AND STREET. Have petroleum hydrocarbon - oily sheen in Ala.
Incident:
Not reported
Substances:
Petroleum hydrocarbons, Spent solvents & thinners
Result:
Not reported
Assignment End Date:
Not reported
Assignment Lead:
Not reported
Activity Type:
Not reported
Units:
Not reported
Less Or Greater Than:
Not reported
Numerical Quantity:
Not reported
Island:
Oahu
19900411-1
Case Number:
THAT THE DRILL WATER NEEDS TO BE CONTAINED AS PER AGREEMENT IN DEVELOPMENT PLAN
C. WINTERS CONTACTED THE DEVELOPMENT AND CONTRACTOR COMPANIES AND INFORMED THEM AT THE PROPERTY. See also 920309. FOLLOW UP LETTER TO FIRST DEVELOPMENT INC., REGARDING SITE ASSESSMENTS PERFORMED None Noted in Report

Initial:
OF KAPIOLANI. INTERVIEWED MRS. WINTERS WHO WILL CONTACT FIRST DEVELOPMENT. WATER IS BEING DISCHARGED ONTO SIDEWALK AND STREET. Have petroleum hydrocarbon - oily sheen in Ala.
Incident:
Not reported
Substances:
Petroleum hydrocarbons, Spent solvents & thinners
Result:
Not reported
Assignment End Date:
Not reported
Assignment Lead:
Not reported
Activity Type:
Not reported
Units:
Not reported
Less Or Greater Than:
Not reported
Numerical Quantity:
Not reported
Island:
Oahu
19920128
Case Number:
THAT THE DRILL WATER NEEDS TO BE CONTAINED AS PER AGREEMENT IN DEVELOPMENT PLAN
C. WINTERS CONTACTED THE DEVELOPMENT AND CONTRACTOR COMPANIES AND INFORMED THEM AT THE PROPERTY. See also 920309. FOLLOW UP LETTER TO FIRST DEVELOPMENT INC., REGARDING SITE ASSESSMENTS PERFORMED None Noted in Report

Initial:
OF KAPIOLANI. INTERVIEWED MRS. WINTERS WHO WILL CONTACT FIRST DEVELOPMENT. WATER IS BEING DISCHARGED ONTO SIDEWALK AND STREET. Have petroleum hydrocarbon - oily sheen in Ala.
Incident:
Not reported
Substances:
Petroleum hydrocarbons, Spent solvents & thinners
Result:
Not reported
Assignment End Date:
Not reported
Assignment Lead:
Not reported
Activity Type:
Not reported
Units:
Not reported
Less Or Greater Than:
Not reported
Numerical Quantity:
Not reported
Island:
Oahu
19900821-5
Case Number:
THAT THE DRILL WATER NEEDS TO BE CONTAINED AS PER AGREEMENT IN DEVELOPMENT PLAN
C. WINTERS CONTACTED THE DEVELOPMENT AND CONTRACTOR COMPANIES AND INFORMED THEM AT THE PROPERTY. See also 920309. FOLLOW UP LETTER TO FIRST DEVELOPMENT INC., REGARDING SITE ASSESSMENTS PERFORMED None Noted in Report

Initial:
OF KAPIOLANI. INTERVIEWED MRS. WINTERS WHO WILL CONTACT FIRST DEVELOPMENT. WATER IS BEING DISCHARGED ONTO SIDEWALK AND STREET. Have petroleum hydrocarbon - oily sheen in Ala.
Incident:
Not reported
Substances:
Petroleum hydrocarbons, Spent solvents & thinners
Result:
Not reported
Assignment End Date:
Not reported
Assignment Lead:
Not reported
Activity Type:
Not reported
Units:
Not reported
Less Or Greater Than:
Not reported
Numerical Quantity:
Not reported
Island:
Oahu
19900821-1
Case Number:
Upon receipt of written notification, site to be referred to the HEER ISST. Report: extent of contamination Excavated soil and stockpiled on site; samples are being taken to determine initial removal Soil contamination discovered upon a 750 gallon Underground Storage Tank (UST) incident. Substances: Hydraulic Fluid

Continental Auto Service

Report: Upon receipt of written notification, site to be referred to the HEER ISST.

Relative: Not reported

Higher: Not reported

HAWAII ENGINE CONTROL SYSTEM

ABC STORE UNDERGROUND STORAGE TANK REMOVAL (Continued)

Unit: ABC Store Underground Storage Tank Removal

Activity Lead: Liz Galvez

Assignment End Date: 1999-10-08 00:00:00

Result: N/A

Overall Status: SDAR NFA

File Under: Continental Auto Services

Restricted Use Comm: Not reported

ic Relied On In Remedy: Not reported

Unit: ABC Store Underground Storage Tank Removal

File Name: ABC Store Underground Storage Tank Removal

HI SPILLS:

Case Number: 19990110-1030

Island: Oahu

Numerical Quantity: Not reported

Less Or Greater Than: Not reported

Units: Not reported

Activity Type: Response

Assignment Date: 1999-01-19 00:00:00

Result: Not reported

Supplemental Loc. Text: Not reported

Unit: Continental Auto Services

Substance: Hydraulic Fluid

Incident: Free product of Hydraulic fluid discovered upon soil and groundwater (which is 1 ft below ground surface upon removal of a hoist on 1/15/99)

Initial: None - only initial notification taken.

Report: Dawson Env (contractors to the PRP) excavated 4 cubic yards of soil to date.

Awaiting lab results. Refer to ISST upon receipt of written followup.


END fill:

1999-10-08 00:00:00

Assignment End Date:

Charley Langer

Activity Lead:

1999-09-30 00:00:00

Assignment End Date:

1999-10-08 00:00:00

End fill:

1999-10-08 00:00:00

Result fill:

1999-10-08 00:00:00

Assignment End Date:

Liz Galvez

Activity Lead:

1998-09-03 00:00:00

Assignment Date:

Not reported

Result:

Not reported

Assignment End Date:

Dawson Env (contractors to the PH III excavated 4 cubic yards of soil.)

WAITING lab results. Refer to ISST upon receipt of written followup.


END fill:

1999-10-08 00:00:00

Assignment End Date:

Liz Galvez

Activity Lead:

1999-01-19 00:00:00

Assignment End Date:

1999-10-08 00:00:00

End fill:

1999-10-08 00:00:00

Result fill:

1999-10-08 00:00:00

Assignment End Date:

Liz Galvez

Activity Lead:

1998-09-03 00:00:00

Assignment Date:

Not reported

Result:

Not reported

Assignment End Date:

Dawson Env (contractors to the PH III excavated 4 cubic yards of soil.)

WAITING lab results. Refer to ISST upon receipt of written followup.

HI SPILLS:

Case Number: 19941013
Island: Oahu
Numerical Quantity: Not reported
Loss Or Greater Than: Not reported
Units: Not reported
Activity Type: Response
Assignment Date: Not reported
Assignment End Date: Not reported
Result: 8
Supplemental Loc. Text: Not reported
Unit: McDonald's Restaurants
Substances: Gasoline
Incident:
C & C work crew noticed gasoline odor while excavating dead tree. Service stations are located across King street and next to McDonalds. Shaun on water noticed by the crew on 10/13/94. There was a tree dead within a week at the location.

On April 9, 1999, two borings were drilled for geotechnical analysis of subsurface soils in conjunction with planned construction project. Soil and groundwater contaminated with petroleum product were encountered in the borings.

Initial: referred to UST section of Solid and Hazardous Waste Branch
Report: referred to UST section of Solid and Hazardous Waste Branch
The borings were backfilled with the soil and drill cuttings removed during the drilling.

ARCO AM/PM #82111 (TEXACO 61-1004446)

NNE 2105 S KING ST    N/A
1/2-1 N63 SHWS
4776 ft.

Case Number: 19990429-1156
Island: Oahu
Numerical Quantity: Not reported
Loss Or Greater Than: Not reported
Units: Not reported
Activity Type: Response
Assignment Date: Not reported
Assignment End Date: Not reported
Result: 8
Supplemental Loc. Text: Not reported
Unit: McDonald's Restaurant Soil & Groundwater Contamination
Substances: Petroleum
Incident:
The borings were backfilled with the soil and drill cuttings removed during the drilling.

SHWS:

Assignment Date: 1999-04-29 00:00:00
Assignment End Date: Not reported
Supplemental Loc. Text: Not reported
Unit: McDonald's Restaurant Soil & Groundwater Contamination
Substances: Petroleum
Incident:
C & C work crew noticed gasoline odor while excavating dead tree. Service stations are located across King street and next to McDonalds. Shaun on water noticed by the crew on 10/13/94. There was a tree dead within a week at the location.

On April 9, 1999, two borings were drilled for geotechnical analysis of subsurface soils in conjunction with planned construction project. Soil and groundwater contaminated with petroleum product were encountered in the borings.

Initial: referred to UST section of Solid and Hazardous Waste Branch
Report: referred to UST section of Solid and Hazardous Waste Branch
The borings were backfilled with the soil and drill cuttings removed during the drilling.

WILIWILI AND KING STREETS EXCAVATION

SHWS 100819066
10/00 1377310
4856 ft.

Case Number: 19990429-1156
Island: Oahu
Numerical Quantity: Not reported
Loss Or Greater Than: Not reported
Units: Not reported
Activity Type: Response
Assignment Date: Not reported
Assignment End Date: Not reported
Result: 8
Supplemental Loc. Text: Not reported
Unit: Former ARCO AM/PM #82111
Substances: Petroleum
Incident:
The borings were backfilled with the soil and drill cuttings removed during the drilling.

SHWS:

Assignment Date: 1999-04-29 00:00:00
Assignment End Date: Not reported
Supplemental Loc. Text: Not reported
Unit: Former ARCO AM/PM #82111
Substances: Petroleum
Incident:
The borings were backfilled with the soil and drill cuttings removed during the drilling.

SHWS:

Assignment Date: 1999-04-29 00:00:00
Assignment End Date: Not reported
Supplemental Loc. Text: Not reported
Unit: Former ARCO AM/PM #82111
Substances: Petroleum
Incident:
The borings were backfilled with the soil and drill cuttings removed during the drilling.
### Wiliwili and King Streets Excavation (Continued)

**Supplement:** A2 290 S King (former Texaco str), TMK 127007012

**Restricted Use:** Not reported

**Field:** Not reported

**Funding:** Not reported

**Agreement/Program:** State Site

**Activity Type:** Ranking

**Assignment Date:** 2004-05-05 00:00:00

**Activity Lead:** Eni Cady/Lama

**Assignment End Date:** 2004-05-20 00:00:00

**Result:** Refer to SHWS

**Overall Status:** SDAR NFA

**File Under:** Verizon Hawaii

**Restricted Use Comm:** Not reported

**On Reliability In Remedy:** Not reported

**Unit:** Wiliwili and King Streets Excavation

**File:** 2001-06-15 No Further Action (NFA) - Unrestricted Use (Zoned Industrial)

**IC Relied On In Remedy:** No Further Action (NFA) - Unrestricted Use (Zoned Industrial)

**Funding:** SDAR NFA

**Activity Type:** Screening

**Assignment:** 2004-01-10 00:00:00

**End fill:** 2004-01-10 00:00:00

**Result Fill:** SDAR NFA

**Overall Status:** SDAR NFA

**File Under:** AMM Family Patners, Ccio Mr. Roy Sekiguchi

**Restricted Use Comm:** The Site is limited to commercial use. The parking lot cover (asphalt) must remain in place, otherwise the ash layer with lead contamination at 15" bgs must be removed.

**IC Relied On in Remedy:** Not reported

**Unit:** 2700 South King Street

**File:** 2000 South King Street

**Comments:** This site has restrictions on its use.

**Funding:** Not reported

**Activity Type:** Screening

**Assignment:** 2003-11-28 00:00:00

**Activity Lead:** Clarence Calahan

**Assignment End Date:** 2004-01-03 00:00:00

**Result:** No Further Action (NFA) - Unrestricted Use (Zoned Industrial)

**Overall Status:** SDAR NFA

**File Under:** AMM Family Patners, Ccio Mr. Roy Sekiguchi

**Restricted Use Comm:** The Site is limited to commercial use. The parking lot cover (asphalt) must remain in place, otherwise the ash layer with lead contamination at 15" bgs must be removed.

**IC Relied On in Remedy:** Not reported

**Unit:** Wiliwili & King St, install manhole & conduits

**Substances:** Oil/petroleum

**Incident:** Install manhole and conduits for Hawaiian Telephone. (10 x 8 trench) Texaco gas station at the location.

**Initial:** Pending

**Report:** Pending

**Case Number:** 19440512-3

**Island:** Oahu

**Numerical Quantity:** Not reported

**Less Or Greater Than:** Not reported

**Units:** Not reported

**Activity Type:** Response

**Assignment:** Not reported

**Activity Lead:** Not reported

**Assignment End Date:** Not reported

**Result:** 8

**Supplemental Loc. Test:** Wiliwili & King St, excavated pit, confirmed petroleum presence. Gas station is next to excavation pit.

**HI INSTITUTIONAL CONTROL:**

**File Under:** AMM Family Patners, Ccio Mr. Roy Sekiguchi

**Restricted Use:** This site has restrictions on its use.

**Comments On Restricted Use:** This site has restrictions on its use. The parking lot cover (asphalt) must remain in place, otherwise the ash layer with lead contamination at 15" bgs must be removed.

**IC Relied On in Remedy:** Not reported

**HI SPOILS:**

**Case Number:** 20031128-0074

**Island:** Oahu

**Numerical Quantity:** Not reported

**Less Or Greater Than:** Not reported

**Units:** Not reported

**Activity Type:** Response

**Assignment:** 2003-11-28 00:00:00

**Activity Lead:** Luis Galvez

**Assignment End Date:** 2003-12-02 00:00:00

**Result:** 8

**Supplemental Loc. Test:** Lead Above DOH Tier 1 Action Levels
Substances: Lead

Incident: Lead above DOH Tier 1 action levels in 2 boreholes at concentrations of 432 and 5400 mg/kg. No lead detected in groundwater samples. Quantity released unknown.

Initial: NFA for Emergency Response - send to BST.

Report: NFA for Emergency Response - send to BST.

2000 SOUTH KING STREET  (Continued) S106815419

Honolulu City and County After Hours Sewage Maint. "Cleaned and Disinfected" the removed blockage, cleaned, disinfected, deodorized sewage was recovered. Case Closed to File. Line was cleared by C & C Sewage Maintenance Crew. Approximately 20 Gals of

Cleaned, disinfected and deodorized. removed blockage, cleaned, disinfected, deodorized sewage was recovered. Case Closed to File. Line was cleared by C & C Sewage Maintenance Crew. Approximately 20 Gals of

20 gallons, 5 gallons into the storm drain, of sewage spilled. sewage spill Line Blockage ( Grease ) causing 20+ Gallons sewage spillover

Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

removed blockage, cleaned, disinfect, deodorized

Cleaned, disinfect, and deodorized.

Report: Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

removed blockage, cleaned, disinfect, deodorized

Hono City and County After Hours Sewage Maint. "Cleaned and Disinfected the affected area.

Supplemental Loc. Text: Not reported

Unit: 1551 Kapiolani Blvd, sewage spill

Substances: sewage

Incident: Line Blockage ( Grease ) causing 20+ Gallons sewage spillover sewage spill

20 gallons, 5 gallons into the storm drain, of sewage spilled.

Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

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Cleaned, disinfect, and deodorized.

Report: Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

removed blockage, cleaned, disinfect, deodorized

Hono City and County After Hours Sewage Maint. "Cleaned and Disinfected the affected area.

Supplemental Loc. Text: Not reported

Unit: 1551 Kapiolani Blvd, 5 gallons into storm drain

Substances: Sewage

Incident: Line Blockage ( Grease ) causing 20+ Gallons sewage spillover sewage spill

20 gallons, 5 gallons into the storm drain, of sewage spilled.

Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

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Cleaned, disinfect, and deodorized.

Report: Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

removed blockage, cleaned, disinfect, deodorized

Hono City and County After Hours Sewage Maint. "Cleaned and Disinfected the affected area.

Supplemental Loc. Text: Not reported

Unit: 1551 Kapiolani Blvd, line blockage of grease

Substances: Sewage Spill

Incident: Line Blockage ( Grease ) causing 20+ Gallons sewage spillover sewage spill

20 gallons, 5 gallons into the storm drain, of sewage spilled.

Line was cleaned by C & C Sewage Maintenance Crew. Approximately 20 Gals of sewage was recovered. Case Closed to File.

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Supplemental Loc. Text: Not reported

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Substances: Sewage Spill

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Supplemental Loc. Text: Not reported

Unit: 1551 Kapiolani Blvd, line blockage of grease

Substances: Sewage Spill

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removed blockage, cleaned, disinfect, deodorized

Cleaned, disinfect, and deodorized.
To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required. Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

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CERCLIS:
Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, local governments, or PRPs. The data includes site name, address, owner, date data arrived at EDR, date made active in reports, number of days to update, and other information.

Date of Government Version: 02/01/2006

Hazardous Materials Information Reporting System (HMIRS)

Source: U.S. Department of Transportation

HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005

CORRACTS:
Corrective Action Report

Source: EPA

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/21/2006

US INST CONTROL:
A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as deed restrictions, or physical methods that create a physical barrier to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006

FUDS:
Formerly Used Defense Sites

Source: US Army Corps of Engineers

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/02/2006

ERNS:
Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/05/2005

GCRS:
Governmental Corporate Records Secured

Source: National Archives Center, United States Courthouse

Governmental Corporate Records Secured System. GCRS records and stores information on records of oil and hazardous substances at federal facilities.

Date of Government Version: 12/05/2005

RCRA:
Resource Conservation and Recovery Act

Source: USGS

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA). It includes information on RCRA facilities, hazardous waste sites, and other regulatory data.

Date of Government Version: 02/02/2006

US-eng Controls:
An Engineering Controls Sites List

Source: EPA

US-eng Controls: An Engineering Controls Sites List. Engineering controls include various forms of caps, barriers, and other methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/15/2006

US Brownfields:
A Listing of Brownfields Sites

Source: EPA

US Brownfields: A Listing of Brownfields Sites. Brownfields are defined as sites where the potential for adverse effects on human health or the environment exists due to the presence of hazardous substances, pollutants, or contaminants.

Date of Government Version: 01/22/2006

US BROWNFIELDS:
A Listing of Brownfields Sites

Source: EPA

US BROWNFIELDS: A Listing of Brownfields Sites. Brownfields are defined as sites where the potential for adverse effects on human health or the environment exists due to the presence of hazardous substances, pollutants, or contaminants.

Date of Government Version: 02/01/2006

DOD:
Department of Defense Sites

Source: US Army Corps of Engineers

The listing includes locations of Department of Defense properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/02/2006

ERNS:
Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/02/2006

UAT:
Underground Air Tank

Source: EPA

UAT is a system for tracking underground air tanks.

Date of Government Version: 01/22/2006

ERNS:
Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/02/2006
In the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments (TBA) program is designed to help states, cities, and municipalities—especially those without EPA Brownfields Assessment Demonstration Pilots—minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and technical assistance for environmental assessments of brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA’s Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients, states, political subdivisions, territories, and Indian tribes become Brownfield Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreements for specified brownfields-related clean up activities.

Date of Government Version: 11/29/2005
Date Data Arrived at EDR: 12/05/2005
Date Made Active in Reports: 01/30/2006
Number of Days to Update: 56

Source: Environmental Protection Agency

Telephone: 202-566-2777
Last EDR Contact: 03/13/2006
Next Scheduled EDR Contact: 06/12/2006
Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 04/20/2005
Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library

Telephone: Varies
Last EDR Contact: 03/13/2006
Next Scheduled EDR Contact: 07/24/2006
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision, ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 02/07/2005
Date Data Arrived at EDR: 01/06/2006
Date Made Active in Reports: 02/23/2006
Number of Days to Update: 46

Source: EPA

Telephone: 703-416-0223
Last EDR Contact: 04/05/2006
Next Scheduled EDR Contact: 07/03/2006
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. The mills shut down, large piles of the sand-like materials (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005
Date Data Arrived at EDR: 11/28/2005
Date Made Active in Reports: 01/30/2006
Number of Days to Update: 63

Source: Department of Energy

Telephone: 540-485-0511
Last EDR Contact: 03/20/2006
Next Scheduled EDR Contact: 06/19/2006
Data Release Frequency: Varies

OQL: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle C Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 09/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346
Last EDR Contact: 03/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

TSS: Toxic Release Inventory System
Toxic Release Inventory System (TRIS) identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 07/13/2002
Date Made Active in Reports: 08/17/2002
Number of Days to Update: 35

Source: EPA

Telephone: 202-566-2500
Last EDR Contact: 03/21/2006
Next Scheduled EDR Contact: 09/19/2006
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act (TSCA) identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plantsite.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/27/2004
Date Made Active in Reports: 05/21/2004
Number of Days to Update: 24

Source: EPA

Telephone: 202-360-8521
Last EDR Contact: 04/13/2006
Next Scheduled EDR Contact: 07/17/2006
Data Release Frequency: Every 4 Years

FTTS: FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/17/2006
Date Data Arrived at EDR: 01/24/2005
Date Made Active in Reports: 02/27/2006
Number of Days to Update: 34

Source: EPA

Telephone: 202-366-1667
Last EDR Contact: 03/20/2006
Next Scheduled EDR Contact: 06/19/2006
Data Release Frequency: Quarterly

FTTS NSF: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 01/17/2006
Date Data Arrived at EDR: 01/24/2005
Date Made Active in Reports: 02/27/2006
Number of Days to Update: 34

Source: EPA

Telephone: 202-366-1667
Last EDR Contact: 03/20/2006
Next Scheduled EDR Contact: 06/19/2006
Data Release Frequency: Quarterly

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/01/2004
Date Data Arrived at EDR: 05/11/2004
Date Made Active in Reports: 05/22/2004
Number of Days to Update: 11

Source: EPA

Telephone: 202-564-4203
Last EDR Contact: 05/25/2006
Next Scheduled EDR Contact: 07/17/2006
Data Release Frequency: Annually

QCS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006
Date Data Arrived at EDR: 04/27/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 20

Source: Environmental Protection Agency

Telephone: 202-364-0308
Last EDR Contact: 03/11/2006
Next Scheduled EDR Contact: 07/17/2006
Data Release Frequency: Quarterly
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## Voluntary Remediation Program Sites

**VCP:** Voluntary Remediation Program Sites

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<th>Number of Days to Update</th>
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**Number of Days to Update:** 14  
**Data Release Frequency:** Varies  
**Source:** USGS  
**Telephone:** 202-208-3710  
**Last EDR Contact:** 05/12/2006  
**Next Scheduled EDR Contact:** 08/07/2006  
**Data Release Frequency:** Semi-Annually

## BROWNFIELDS

**Brownfields Sites**

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**Telephone:** 202-208-3710  
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**Data Release Frequency:** Semi-Annually

## TRIBAL RECORDS

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**Source:** USGS  
**Telephone:** 202-208-3710  
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**Next Scheduled EDR Contact:** 08/07/2006  
**Data Release Frequency:** Semi-Annually

## EDR PROPRIETARY RECORDS

### Manufactured Gas Plants

**EDR Proprietary Manufactured Gas Plants**

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas plants were used in the United States from the 1890's to 1950's to produce a gas that could be distributed and used as fuel. These plants used coal, oil, or a mixture of coal, oil, and water, and the byproducts of the gas production, such as coal tar, oily waste containing volatile and non-volatile chemical sludges, oils, and other compounds that are potentially hazardous to human health and the environment. The database was extracted from the transportation category including some oil, but primarily gas pipelines.

**Date Data Arrived at EDR:** 02/08/2005  
**Date Made Active in Reports:** 02/08/2005  
**Number of Days to Update:** 177  
**Data Release Frequency:** Semi-Annually

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**Source:** USGS  
**Telephone:** 202-208-3710  
**Last EDR Contact:** 05/12/2006  
**Next Scheduled EDR Contact:** 08/07/2006  
**Data Release Frequency:** Semi-Annually

### Electric Power Transmission Line Data

**Electric Power Transmission Line Data**

This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000 Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

**Date Data Arrived at EDR:** 02/08/2005  
**Date Made Active in Reports:** 02/08/2005  
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**Data Release Frequency:** Semi-Annually

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**Source:** USGS  
**Telephone:** 202-208-3710  
**Last EDR Contact:** 05/12/2006  
**Next Scheduled EDR Contact:** 08/07/2006  
**Data Release Frequency:** Semi-Annually

## EDR Historical Auto Stations

**EDR Historical Auto Stations**

EDR has searched selected national collections of business directories and has collected listings of potential gas stations/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

**Date Data Arrived at EDR:** 09/18/2005  
**Date Made Active in Reports:** 09/18/2005  
**Number of Days to Update:** 14  
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**Date Data Arrived at EDR:** 09/18/2005  
**Date Made Active in Reports:** 09/18/2005  
**Number of Days to Update:** 14  
**Data Release Frequency:** Varies  
**Source:** EDR, Inc.  
**Telephone:** N/A  
**Last EDR Contact:** N/A  
**Next Scheduled EDR Contact:** N/A  
**Data Release Frequency:** Varies

## Sensitive Receptors

**Sensitive Receptors**

There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

**AHA Hospitals**

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

**Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

**Nursing Homes**

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

**Public Schools**

Source: National Center for Education Statistics
Telephone: 202-554-7800

The National Center for Education Statistics' database includes information on public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.
**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**

Target Property Elevation: 3 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.
GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

<table>
<thead>
<tr>
<th>Era</th>
<th>System</th>
<th>Series</th>
<th>Code</th>
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### Soil Layer Information

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<th>Boundary</th>
<th>Soil Texture Class</th>
<th>AASHTO Group</th>
<th>Unified Soil</th>
<th>Permeability Rate (in/hr)</th>
<th>Soil Reaction (pH)</th>
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<tbody>
<tr>
<td>1</td>
<td>0 inches</td>
<td>sand</td>
<td>Coarse-Grained SOILS, Sands, Sands with fines, Silty Sand.</td>
<td>30.00</td>
<td>Max: 30.00 Min: 10.00</td>
<td>7.00</td>
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<tr>
<td>2</td>
<td>6 inches</td>
<td>stratified</td>
<td>Granular materials (35 pt. or less passing No. 300), Silty or Silty Gravel and Sand.</td>
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<td>Max: 30.00 Min: 6.00</td>
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<tr>
<td>3</td>
<td>30 inches</td>
<td>un Weathered</td>
<td></td>
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### Local/Regional Water Agency Records

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.
### FEDERAL USGS WELL INFORMATION

<table>
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<th>WELL ID</th>
<th>LOCATION FROM TP</th>
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<td>3-1750-002</td>
<td>0.5 - 1 Mile SSE</td>
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### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

No Wells Found

### STATE DATABASE WELL INFORMATION

<table>
<thead>
<tr>
<th>MAP ID</th>
<th>WELL ID</th>
<th>LOCATION FROM TP</th>
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<tbody>
<tr>
<td>01</td>
<td>3-1750-002</td>
<td>0.5 - 1 Mile SSE</td>
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Note: PWS System location is not always the same as well location.
### GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

<table>
<thead>
<tr>
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<tr>
<td>Chloride value</td>
<td>0</td>
<td>Test date:</td>
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</tr>
<tr>
<td>Pumping Test rate</td>
<td>230</td>
<td>Drop in water Lvl:</td>
<td>1.0</td>
</tr>
<tr>
<td>Pumping Test rate</td>
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<td>Chloride Test:</td>
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<td>Use:</td>
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<td>Use Description:</td>
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<tr>
<td>Use year</td>
<td>74</td>
<td>Water Top Elev:</td>
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### GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

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- **Distance**: 3-1750-004
- **Elevation**: 3-1750-007
- **Database**: GEOCHECK
- **EDR ID Number**: 3-1750-004
- **Well**: HI WELLS
- **Well ID**: 3-1750-004
- **Island Code**: 3
- **Island Name**: Oahu
- **Well no**: 1750-04
- **Well name**: Waikiki
- **Yr drilled**: 1965
- **Driller**: SAMSON-SMOKC
- **Quadrant**: 13
- **Latitude**: 21170D
- **UTM**: Y
- **Gps**: N
- **Owner/Use**: Hilton Hotel
- **Old number**: H20E
- **Well name**: 1750-04
- **Well no**: Oahu
- **Island name**: 3
- **Island Code**: 3-1750-004
- **Well ID**: HI WELLS
- **Well no**: 1750-07
- **Well name**: Waikiki
- **Yr drilled**: 1965
- **Driller**: SAMSON-SMOKC
- **Quadrant**: 13
- **Latitude**: 21170D
- **UTM**: Y
- **Gps**: N
- **Owner/Use**: Hilton Hotel
- **Old number**: 1750-04
- **Well name**: HI WELLS
- **Well no**: 1750-07
- **Island name**: Oahu
- **Island Code**: 3-1750-007
- **Well ID**: HI WELLS
- **Well no**: 1750-07
- **Well name**: Waikiki
- **Yr drilled**: 1965
- **Driller**: SAMSON-SMOKC
- **Quadrant**: 13
- **Latitude**: 21170D
- **UTM**: Y
- **Gps**: N
- **Owner/Use**: Hilton Hotel
- **Old number**: 1750-04
- **Well name**: HI WELLS
- **Well no**: 1750-07
- **Island name**: Oahu
- **Island Code**: 3-1750-007
- **Well ID**: HI WELLS
- **Well no**: 1750-07
- **Well name**: Waikiki
- **Yr drilled**: 1965
- **Driller**: SAMSON-SMOKC
- **Quadrant**: 13
- **Latitude**: 21170D
- **UTM**: Y
- **Gps**: N
- **Owner/Use**: Hilton Hotel
- **Old number**: 1750-04
- **Well name**: HI WELLS
- **Well no**: 1750-07
- **Island name**: Oahu
- **Island Code**: 3-1750-007
- **Well ID**: HI WELLS
- **Well no**: 1750-07
- **Well name**: Waikiki
- **Yr drilled**: 1965
- **Driller**: SAMSON-SMOKC
- **Quadrant**: 13
- **Latitude**: 21170D
- **UTM**: Y
- **Gps**: N
- **Owner/Use**: Hilton Hotel
- **Old number**: 1750-04
- **Well name**: HI WELLS
- **Well no**: 1750-07
- **Island name**: Oahu
- **Island Code**: 3-1750-007
- **Well ID**: HI WELLS
- **Well no**: 1750-07
- **Well name**: Waikiki
- **Yr drilled**: 1965
- **Driller**: SAMSON-SMOKC
- **Quadrant**: 13
- **Latitude**: 21170D
Wid:
Island Name:
Well name:
Yr drilled:
Quad_map:
Longitude:
Gps:
Old number:
Type:
Ground Elev:
Solid casing Depth:
Use:
Use year:
Chloride value:
Pumping Test rate:
Chloride Test:
Units:
Annual Draft:
Geology:
Installed:
Max chlorides:
Min chlorides:
Bot_hole depth:
Bot_perf depth:
Pump Capacity:
Tax map key:
Latest head mmt:
Current Cl mmt:
Pump Inst. Date:
Transmissivity:
Pump depth:

B12
ENE
1/2 - 1 Mile
Higher

Solid casing Depth:
Use:
Use year:
Chloride value:
Pumping Test rate:
Chloride Test:
Units:
Annual Draft:
Geology:
Installed:
Max chlorides:
Min chlorides:
Bot_hole depth:
Bot_perf depth:
Pump Capacity:
Tax map key:
Latest head mmt:
Current Cl mmt:
Pump Inst. Date:
Transmissivity:
Pump depth:

3-1749-013
Oahu
Kapahulu
1889
13
1574926
N
34Not Reported
14
430
SLD
28
216
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
-486
Not Reported
Not Reported
Not Reported
20.8
Not Reported
Not Reported
0
Not Reported

402
SLD
71
83
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
-457
Not Reported
Not Reported
Not Reported
12.7
Not Reported
Not Reported
0
Not Reported

Island Code:
Well no:
Old name:
Driller:
Latitude:
UTM:
Owner/user:
Well_type:
Casing dia:
Well depth:
Perf casing Depth:
Use Desc:
Water Top Elev:
Test date:
Drop in water Lvl:
Temperature:
Pump Capacity:
Static Water Lvl:
Geology desc:
Last Measured:
Max Cl year:
Min Cl year:
bot_solid depth:
Well Capacity:
Draft (mgd):
Aquifer code:
Cur head mmt:
Const. Date:
Surveyor:
Pump intake elev:

Perf casing Depth:
Use Desc:
Water Top Elev:
Test date:
Drop in water Lvl:
Temperature:
Pump Capacity:
Static Water Lvl:
Geology desc:
Last Measured:
Max Cl year:
Min Cl year:
bot_solid depth:
Well Capacity:
Draft (mgd):
Aquifer code:
Cur head mmt:
Const. Date:
Surveyor:
Pump intake elev:

3-1749-013

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3
1749-13
Not Reported
Not Reported
211721
Y
Whee L Y
Not Reported
8
500
Not Reported
Sealed
23
Not Reported
Not Reported
Not Reported
0
20.8
Not Reported
Not Reported
Not Reported
Not Reported
-416
Not Reported
Not Reported
30101
Not Reported
01/01/1889 00:00:00
Not Reported
Not Reported

HI WELLS

Not Reported
Sealed
18.5
Not Reported
Not Reported
Not Reported
0
12.7
Not Reported
Not Reported
Not Reported
Not Reported
-391
Not Reported
Not Reported
30101
Not Reported
01/01/1917 00:00:00
Not Reported
Not Reported

GEOCHECK ® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:
Island Name:
Well name:
Yr drilled:
Quad_map:
Longitude:
Gps:
Old number:
Type:
Ground Elev:

B14
ENE
1/2 - 1 Mile
Higher

Wid:
Island Name:
Well name:
Yr drilled:
Quad_map:
Longitude:
Gps:
Old number:
Type:
Ground Elev:
Solid casing Depth:
Use:
Use year:
Chloride value:
Pumping Test rate:
Chloride Test:
Units:
Annual Draft:
Geology:
Installed:
Max chlorides:
Min chlorides:
Bot_hole depth:
Bot_perf depth:
Pump Capacity:
Tax map key:
Latest head mmt:
Current Cl mmt:
Pump Inst. Date:
Transmissivity:
Pump depth:

13
NE
1/2 - 1 Mile
Higher

Map ID
Direction
Distance
Elevation

3-1749-002
Oahu
Kapahulu
1881
13
1574924
N
28Not Reported
13

3-1749-003
Oahu
Kapahulu
1882
13
1574936
N
40Not Reported
10
Not Reported
OTH
74
0
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
-720
Not Reported
Not Reported
Not Reported
0
Not Reported
Not Reported
0
Not Reported

Island Code:
Well no:
Old name:
Driller:
Latitude:
UTM:
Owner/user:
Well_type:
Casing dia:
Well depth:

Island Code:
Well no:
Old name:
Driller:
Latitude:
UTM:
Owner/user:
Well_type:
Casing dia:
Well depth:
Perf casing Depth:
Use Desc:
Water Top Elev:
Test date:
Drop in water Lvl:
Temperature:
Pump Capacity:
Static Water Lvl:
Geology desc:
Last Measured:
Max Cl year:
Min Cl year:
bot_solid depth:
Well Capacity:
Draft (mgd):
Aquifer code:
Cur head mmt:
Const. Date:
Surveyor:
Pump intake elev:

EDR ID Number

3-1749-002

3-1749-003

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3
1749-02
Not Reported
Not Reported
211720
Y
Shee Y C
Not Reported
6
428

HI WELLS

3
1749-03
Not Reported
COOKE-PEDDLER
211734
Y
Magoon Trust
Not Reported
Not Reported
730
Not Reported
Other
0
Not Reported
Not Reported
Not Reported
0
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
30101
Not Reported
01/01/1882 00:00:00
Not Reported
Not Reported

HI WELLS

Database

GEOCHECK ® - PHYSICAL SETTING SOURCE MAP FINDINGS


### GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

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<td>Chloride value:</td>
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<td>Use Deck:</td>
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<tr>
<td>Pumping Test rate:</td>
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<td>Water Top Elev:</td>
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<tr>
<td>Chloride Test:</td>
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<tr>
<td>Units:</td>
<td>Not Reported</td>
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<tr>
<td>Annual Draft:</td>
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<td>Installed:</td>
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<td>Temperature:</td>
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<tr>
<td>Max chloride:</td>
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</tr>
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### GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

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<tr>
<td>Use:</td>
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<tr>
<td>Chloride Test:</td>
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<td>Well depth:</td>
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### Map ID
- **Direction**: Distance
- **Elevation**: Database
- **EDR ID Number**: 3-1749-001
- **Map ID**: 3-1749-023
- **Wid**: 3-1749-001
- **Island Name**: Oahu
- **Well no**: 1749-01
- **Yr drilled**: 1964
- **Max Chlorides**: Not Reported
- **Min Chlorides**: Not Reported
- **Last Measured**: Not Reported
- **Well Depth**: 407
- **Type**: PCl
- **Owner/Use**: K
- **Top Elev**: Not Reported
- **Use**: Sealed
- **Units**: Not Reported
- **Temperature**: Not Reported
- **Pumping Test Rate**: Not Reported
- **Transmissivity**: Not Reported

### Map ID
- **Direction**: Distance
- **Elevation**: Database
- **EDR ID Number**: 3-1750-013
- **Wid**: 3-1750-013
- **Island Name**: Oahu
- **Well no**: 1750-13
- **Yr drilled**: 1972
- **Max Chlorides**: Not Reported
- **Min Chlorides**: Not Reported
- **Last Measured**: Not Reported
- **Well Depth**: 229
- **Type**: PCl
- **Owner/Use**: K
- **Top Elev**: Not Reported
- **Use**: Sealed
- **Units**: Not Reported
- **Temperature**: Not Reported
- **Pumping Test Rate**: Not Reported
- **Transmissivity**: Not Reported
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<tr>
<th>Map ID</th>
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<th>Database</th>
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<td>3-1769-008</td>
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<td>South</td>
<td>1/2 - 1 Mile Higher</td>
<td>0</td>
<td>3-1750-012</td>
</tr>
<tr>
<td>23</td>
<td>South</td>
<td>1/2 - 1 Mile Higher</td>
<td>0</td>
<td>3-1750-010</td>
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**HI WELLS 3-1769-008**

- **Well no:** 3-1769-012
- **Island Code:** 3
- **Island Name:** Oahu
- **Well depth:** 4
- **Ground Elev:** 18
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 63-2A
- **Old number:** Ala Moana Ctr
- **Owner/user:** NG
- **YUTM:** 1575041
- **Longitude:** 211733
- **Latitude:** 13
- **Quad_map:** NOT WHITON
- **Driller:** 1967
- **Yr drilled:** Not Reported
- **Old name:** Ala Moana
- **Well name:** 1750-10
- **Well no:** Oahu
- **Island Name:** 3
- **Island Code:** 3-1750-010
- **Wid:** 22

**HI WELLS 3-1750-012**

- **Well no:** 3-1750-012
- **Island Code:** 3
- **Island Name:** Oahu
- **Well depth:** 10
- **Ground Elev:** 4
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 24-Old number
- **Old number:** Chang Kim
- **Owner/user:** NG
- **YUTM:** 1574912
- **Longitude:** 211712
- **Latitude:** 13
- **Quad_map:** Not Reported
- **Driller:** 1888
- **Yr drilled:** Not Reported
- **Old name:** Kapahulu
- **Well name:** 1749-08
- **Well no:** Oahu
- **Island Name:** 3
- **Island Code:** 3-1749-008
- **Wid:** 21

**HI WELLS 3-1750-010**

- **Well no:** 3-1750-010
- **Island Code:** 3
- **Island Name:** Oahu
- **Well depth:** 10
- **Ground Elev:** 88
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 4

**GEOCHECK® PHYSICAL SETTING SOURCE MAP FINDINGS**

- **Surveyor:** Not Reported
- **Pump Inst. Date:** Not Reported
- **Const. Date:** Not Reported
- **Current Cl mmt:** Not Reported
- **Cur head mmt:** 0
- **Latest head mmt:** 30102
- **Transmissivity:** 0
- **Bot_perf depth:** Not Reported
- **bot_solid depth:** Not Reported
- **Bot_hole depth:** Not Reported
- **Min Cl year:** Not Reported
- **Min chlorides:** Not Reported
- **Max Cl year:** Not Reported
- **Max chlorides:** Not Reported
- **Chloride Test:** Not Reported
- **Drop in water Lvl:** Not Reported
- **Pumping Test rate:** Not Reported
- **Test date:** 0
- **Chloride value:** 20.1
- **Water Top Elev:** 74
- **Use year:** Not Reported
- **Use Desc:** Not Reported
- **Use:** Other
- **Perf casing Depth:** Not Reported
- **Solid casing Depth:** Not Reported
- **Well depth:** 10
- **Ground Elev:** 4
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 24-Old number
- **Old number:** Chang Kim
- **Owner/user:** NG
- **YUTM:** 1574912
- **Longitude:** 211712
- **Latitude:** 13
- **Quad_map:** Not Reported
- **Driller:** 1888
- **Yr drilled:** Not Reported
- **Old name:** Kapahulu
- **Well name:** 1749-08
- **Well no:** Oahu
- **Island Name:** 3
- **Island Code:** 3-1749-008
- **Wid:** 21

**GEOCHECK® PHYSICAL SETTING SOURCE MAP FINDINGS**

- **Surveyor:** Not Reported
- **Pump Inst. Date:** Not Reported
- **Const. Date:** 01/01/1888
- **Current Cl mmt:** Not Reported
- **Cur head mmt:** 26.5
- **Latest head mmt:** 30101
- **Transmissivity:** 0
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- **bot_solid depth:** Not Reported
- **Bot_hole depth:** Not Reported
- **Min Cl year:** Not Reported
- **Min chlorides:** Not Reported
- **Max Cl year:** Not Reported
- **Max chlorides:** Not Reported
- **Chloride Test:** Not Reported
- **Drop in water Lvl:** Not Reported
- **Pumping Test rate:** Not Reported
- **Test date:** 51
- **Chloride value:** 20.1
- **Water Top Elev:** 74
- **Use year:** Not Reported
- **Use Desc:** Not Reported
- **Use:** Other
- **Perf casing Depth:** Not Reported
- **Solid casing Depth:** Not Reported
- **Well depth:** 10
- **Ground Elev:** 4
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 24-Old number
- **Old number:** Chang Kim
- **Owner/user:** NG
- **YUTM:** 1574912
- **Longitude:** 211712
- **Latitude:** 13
- **Quad_map:** Not Reported
- **Driller:** 1888
- **Yr drilled:** Not Reported
- **Old name:** Kapahulu
- **Well name:** 1749-08
- **Well no:** Oahu
- **Island Name:** 3
- **Island Code:** 3-1749-008
- **Wid:** 21

**GEOCHECK® PHYSICAL SETTING SOURCE MAP FINDINGS**

- **Surveyor:** Not Reported
- **Pump Inst. Date:** Not Reported
- **Const. Date:** Not Reported
- **Current Cl mmt:** Not Reported
- **Cur head mmt:** 0
- **Latest head mmt:** 30101
- **Transmissivity:** 0
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- **bot_solid depth:** Not Reported
- **Bot_hole depth:** Not Reported
- **Min Cl year:** Not Reported
- **Min chlorides:** Not Reported
- **Max Cl year:** Not Reported
- **Max chlorides:** Not Reported
- **Chloride Test:** Not Reported
- **Drop in water Lvl:** Not Reported
- **Pumping Test rate:** Not Reported
- **Test date:** 0
- **Chloride value:** 20.1
- **Water Top Elev:** 74
- **Use year:** Not Reported
- **Use Desc:** Not Reported
- **Use:** Other
- **Perf casing Depth:** Not Reported
- **Solid casing Depth:** Not Reported
- **Well depth:** 10
- **Ground Elev:** 4
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 24-Old number
- **Old number:** Chang Kim
- **Owner/user:** NG
- **YUTM:** 1574912
- **Longitude:** 211712
- **Latitude:** 13
- **Quad_map:** Not Reported
- **Driller:** 1888
- **Yr drilled:** Not Reported
- **Old name:** Kapahulu
- **Well name:** 1749-08
- **Well no:** Oahu
- **Island Name:** 3
- **Island Code:** 3-1749-008
- **Wid:** 21

**GEOCHECK® PHYSICAL SETTING SOURCE MAP FINDINGS**

- **Surveyor:** Not Reported
- **Pump Inst. Date:** Not Reported
- **Const. Date:** Not Reported
- **Current Cl mmt:** Not Reported
- **Cur head mmt:** 0
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- **Bot_hole depth:** Not Reported
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- **Min chlorides:** Not Reported
- **Max Cl year:** Not Reported
- **Max chlorides:** Not Reported
- **Chloride Test:** Not Reported
- **Drop in water Lvl:** Not Reported
- **Pumping Test rate:** Not Reported
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- **Chloride value:** 20.1
- **Water Top Elev:** 74
- **Use year:** Not Reported
- **Use Desc:** Not Reported
- **Use:** Other
- **Perf casing Depth:** Not Reported
- **Solid casing Depth:** Not Reported
- **Well depth:** 10
- **Ground Elev:** 4
- **Casing dia:** Not Reported
- **Type:** Not Reported
- **Well_type:** 24-Old number
- **Old number:** Chang Kim
- **Owner/user:** NG
- **YUTM:** 1574912
- **Longitude:** 211712
- **Latitude:** 13
- **Quad_map:** Not Reported
- **Driller:** 1888
- **Yr drilled:** Not Reported
- **Old name:** Kapahulu
- **Well name:** 1749-08
- **Well no:** Oahu
- **Island Name:** 3
- **Island Code:** 3-1749-008
- **Wid:** 21
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<th>Old name</th>
<th>Use year</th>
<th>Use Desc</th>
<th>Use</th>
<th>Annual Draft</th>
<th>Installed</th>
<th>Max chlorides</th>
<th>Min chlorides</th>
<th>Bot hole depth</th>
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## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### HI WELLS 3-1749-007

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<tbody>
<tr>
<td>Island: Oahu</td>
<td></td>
</tr>
<tr>
<td>Well name: Waikiki</td>
<td></td>
</tr>
<tr>
<td>Year drilled: 1893</td>
<td></td>
</tr>
<tr>
<td>Quail map: 13</td>
<td></td>
</tr>
<tr>
<td>Latitude: 211664</td>
<td></td>
</tr>
<tr>
<td>UTM: Y</td>
<td></td>
</tr>
<tr>
<td>Gps: N</td>
<td></td>
</tr>
<tr>
<td>Owner/user: Campbell Est</td>
<td></td>
</tr>
<tr>
<td>Use: Well type: Not Reported</td>
<td></td>
</tr>
<tr>
<td>Use year: 16</td>
<td></td>
</tr>
<tr>
<td>Water Top Elev: 74</td>
<td></td>
</tr>
<tr>
<td>Pump Inst Date: 01/01/1893 00:00:00</td>
<td></td>
</tr>
<tr>
<td>Transmissivity: 4</td>
<td></td>
</tr>
<tr>
<td>Pump intake elev: Not Reported</td>
<td></td>
</tr>
<tr>
<td>Pump depth: Not Reported</td>
<td></td>
</tr>
</tbody>
</table>
No PWS currently has or had major violation(s) or enforcement.

Population: 645,741

Treatment Class: Mixed (treated and untreated)

City Served:
- Pearl City
- Kaneohe
- Kailua
- Honolulu
- Hono-Wind-Pearl
- Aiea

Facility Longitude and Facility Latitude:
- Facility Longitude: 157° 50' 2.0000"
- Facility Latitude: 21° 35' 39.0000"
- Facility Longitude: 157° 30' 0.0000"
- Facility Latitude: 21° 36' 39.0000"
- Facility Longitude: 157° 51' 32.0000"
- Facility Latitude: 21° 35' 22.0000"
- Facility Longitude: 157° 53' 53.0000"
- Facility Latitude: 21° 35' 17.0000"
- Facility Longitude: 157° 53' 46.0000"
- Facility Latitude: 21° 34' 50.0000"
- Facility Longitude: 157° 53' 12.0000"
- Facility Latitude: 21° 33' 15.0000"
- Facility Longitude: 157° 53' 12.0000"
- Facility Latitude: 21° 34' 41.0000"
- Facility Longitude: 157° 53' 44.0000"
- Facility Latitude: 21° 34' 30.0000"
- Facility Longitude: 157° 53' 44.0000"
- Facility Latitude: 21° 35' 17.0000"
- Facility Longitude: 157° 53' 46.0000"
- Facility Latitude: 21° 35' 22.0000"
- Facility Longitude: 157° 53' 43.0000"
- Facility Latitude: 21° 35' 37.0000"
- Facility Longitude: 157° 53' 43.0000"
- Facility Latitude: 21° 36' 30.0000"
- Facility Longitude: 157° 52' 0.0000"

Number of sites tested: 2

Federal EPA Radon Information for Zip Code: 96815
- Zone 1 indoor average level > 4 pCi/L
- Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L
- Zone 3 indoor average level < 2 pCi/L

Federal Area Radon Information:
- Number of sites tested: 2
- Living Areas - 1st Floor: 0.600 pCi/L, 100%, 0%, 0%
- Living Areas - 2nd Floor: 0.650 pCi/L, 100%, 0%, 0%
- Basement: Not Reported, Not Reported, Not Reported, Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

RADIERTICAL SOURCE INFORMATION

Treatment Class: Mixed (treated and untreated)

Population: 645,741

PWS currently has or had major violation(s) or enforcement: No
TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW® Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) heads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-472-0559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS
PWS: Public Water Systems
Source: EPA Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PHYSICAL SETTING SOURCE RECORDS SEARCHED
APPENDIX B

Historical Sanborn Maps

Sanborn® Map Report

Ship To: Jon Mollison
LFR Inc
220 South King Street
Honolulu, HI 96813

Order Date: 5/26/2006 Completion Date: 5/31/2006

Inquiry #: 1685160.7S
P.O. #: 005-11082-00

Site Name: Waikiki Beachwalk Property
Address: 270-286 Beachwalk Street/321 Saratoga
City/State: Honolulu, HI 96815
Cross Streets: 321 Saratoga Road

Customer Project: Waikiki Beachwalk
1164579BRU 808-522-0321

Based on client-supplied information, fire insurance maps for the following years were identified:

- 1914 - 1 Map
- 1927 - 1 Map
- 1949 - 1 Map
- 1956 - 1 Map
- 1975 - 1 Map
- 1977 - 1 Map
- 1991 - 1 Map
- 1993 - 1 Map

Limited Permission to Photocopy

LFR Inc, the client, is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. It is the client’s responsibility to ensure that the client, its customer, and any agent with whom the client shares this report and its contents do not make any additional copies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR’s copyright policy, a copy of which is available upon request.

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USER’S GUIDE

This User’s Guide provides guidelines for accessing Sanborn Map® images and for transferring them to your Word Processor.

Reading Sanborn Maps

Sanborn Maps document historical property use by displaying property information through words, abbreviations, and map symbols. The Sanborn Map Key provides information to help interpret the symbols and abbreviations used on Sanborn Maps. The Key is available from EDR’s Web Site at: http://www.edrnet.com/reports/samples/key.pdf

Organization of Electronic Sanborn Image File

Sanborn Map Report, listing years of coverage
User’s Guide
Oldest Sanborn Map Image
Most recent Sanborn Map Image

Navigating the Electronic Sanborn Image File

1. Open file on screen.
2. Identify TP (Target Property) on the most recent map.
3. Find TP on older printed images.
4. Using Acrobat® Reader®, zoom to 250% in order to view more clearly. (200-250% is the approximate equivalent scale of hardcopy Sanborn Maps.)
   A. On the menu bar, click “View” and then “Zoom to...”
   B. Or, use the magnifying tool and drag a box around the TP

Printing a Sanborn Map From the Electronic File

EDR recommends printing images at 300 dpi (300 dpi prints faster than 600 dpi)
To print only the TP area, cut and paste from Acrobat to your word processor application.

Acrobat Versions 6 and 7
1. Go to the menu bar
2. Click the “Select Tool”
3. Draw a box around the area selected
4. “Right click” on your mouse
5. Select “Copy Image to Clipboard”
6. Go to Word Processor such as Microsoft Word, paste and print.

Acrobat Version 5
1. Go to the menu bar
2. Click the “Graphics Select Tool”
3. Draw a box around the area selected
4. Go to “Menu”
5. Highlight “Edit”
6. Highlight “Copy”
7. Go to Word Processor such as Microsoft Word, paste and print.

Important Information about Email Delivery of Electronic Sanborn Map Images

Images are grouped into one file, up to 2MB.
In cases where in excess of 6-7 map years are available, the file size typically exceeds 2MB. In these cases, you will receive multiple files, labeled as “1 of 3”, “2 of 3”, etc. including all available map years.
Due to file size limitations, certain ISPs, including AOL, may occasionally delay or decline to deliver files. Please contact your ISP to identify their specific file size limitations.
APPENDIX D

Historical Topographic Maps
Appendix D
Waikiki Beach Walk Property, Honolulu, HI
Topographic Map dated 1998

APPENDIX E

Site Photographs
Photograph 1: View of the public easement (parcel: 058), which runs in a north/south direction through the center of the lot, facing south.

Photograph 2: View of the catch basin located on the basement level of the parking structure present on parcel: 048.

Photograph 3: View of the cracked concrete in the basement level of the parking lot.

Photograph 4: View of the second floor of the parking structure, facing west.
Photograph 5: View of the northwestern abutting property from the second floor of the parking structure, facing north.

Photograph 6: View of Burberry Plaza, located on the northeastern abutting parcel, facing northeast from the second floor of the parking structure.

Photograph 7: View of parcels :026 and :027 (286 and 270 Beach Walk), facing east.

Photograph 8: View of parcels :026 and :027 and the northern abutting Burberry Plaza taken from Beach Walk, facing south/southwest.
Photograph 9: View of the southern abutting Hawaiian Hotel, taken from Beach Walk, facing northwest.

Photograph 10: View of the U.S. Postal Service building, located west of the Site, beyond Saratoga Road (facing northwest).

APPENDIX F

Qualifications of Environmental Professional
Ms. Kazmierczak serves as a Project Geologist for LFR Inc.’s Environmental Engineering Department in the Honolulu, Hawaii office. Ms. Kazmierczak’s primary responsibilities include the coordination, implementation, compilation, and writing of environmental site assessments (ESAs) to meet the requirements of state and federal regulations. The majority of the ESAs are for financial clients and property transfers. The ESAs are completed in accordance with industry guidelines established by American Society for Testing and Materials (ASTM) Standard E1527-00.

In conducting ESAs, Ms. Kazmierczak is responsible for site inspection, photographic documentation, background and historical research (including interviews and document review), and determinations as to the potential impact of hazardous materials to soil and groundwater at the property site. Ms. Kazmierczak is responsible for mapping surficial geology, designating soil horizons, assessing the vegetation, and determining the overall extent of damage to the environment.

Ms. Kazmierczak also has experience with Phase II subsurface investigations, underground storage tank (UST) closure projects, and National Pollutant Discharge Elimination System (NPDES) permitting and compliance. Additional responsibilities performed by Ms. Kazmierczak include proposal preparation and project budgets for many environmental projects. Ms. Kazmierczak also has been directly involved in researching and evaluating environmental concerns and developing cost estimates for proposed environmental projects.

EDUCATION
Northeastern University: B.S. Environmental Geology, 2001

REPRESENTATIVE EXPERIENCE
• Various Residential/Commercial Properties, Nationwide. Conducted Phase I-Environmental Site Assessments at many properties utilizing information gathered from local town/city offices, state and federal databases, interviews, site walkovers and assessments of adjacent properties. Properties investigated include a metal plating facility, textile manufacturer, gasoline service stations, automotive repair garages, electric switchboard manufacturer, commercial office buildings and cold storage facilities.


• UST Removal and Service Station Closure Activities, Multiple Site, Hawaii. Tasks included subcontractor oversight, collection of appropriate soil and groundwater samples, petroleum impacts remediation, interaction with regulatory agency, and preparation of reports.

• Site Inspections and Storm Water Sampling for NPDES compliance, Hawaii. Tasks included conducting semi-annual inspections to ensure facility compliance with NPDES permitting regulations, annual storm water training, annual storm water sampling, preparation of compliance plans and reports.

REGISTRATION/CERTIFICATION
OSHA Hazardous Waste Operations and Emergency Response 40-Hour Training
Asbestos Inspector Certification
Department of Transportation, Hazardous Materials Transportation Training
Medic First Aid Emergency Responder Trained

PROFESSIONAL HISTORY
LFR Inc., Project Geologist, May 2001 to present
Green Environmental, Staff Geologist, June 1999 to December 1999
APPENDIX G

Interview Documentation

Phase I Environmental Site Assessment

User Provided Information Questionnaire

The ASTM standard for Phase I ESAs requires that the user (usually the client) be responsible for certain information that is included in the Phase I report. The following questions are being provided to you as the "user". You may or may not know specifics about what is being asked.

Name: Masahiko Sugino
Organization: Round One USA Corp.
Subject Site: 270, 285 Beachwalk Ave, 321 Saratoga Rd, TMK (11) 2-6-3, Parcels 26, 27, 48, 58
Signed: [Signature]

NOTE: We have provided past Phase I reports we are aware of to the buyer as part of the due diligence materials. Knowledge of the seller is limited to the actual knowledge of Masahiko Sugino, without the obligation to inspect or review company records.

1. Title Records: Do you currently have any title records for the site?
   A preliminary title report was recently prepared by Title Guaranty and will be e-mailed to you.
   (If "yes", please mail, fax, or e-mail a copy to JDA)

   See above.

2. Are you aware of any environmental cleanup items against the property that are filed or recorded under federal, tribal, state or local law? No

3. Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? We are not aware of any such unrecorded items, other than State of Hawaii and County of Honolulu statutes, laws and ordinances that affect all property owners. As for recorded restrictions, we bring your attention to the Joint Development Agreement (JDA) and easements related to the property, and all other items set forth in the title report. Please contact Dave Jurbala at Chaney Brooks with respect to copy of JDA and title report.
June 28, 2006

LFR Inc. (LFR) has prepared this letter to describe the results and recommendations related to surface soil sampling performed on June 23, 2006 at 286 Beach Walk, Honolulu, Hawaii (“the Site”). Surface soil sampling was performed for Eight Inc. (“the Client”) to obtain data to evaluate whether soil has been impacted by asbestos containing materials (ACM) or lead-based paint (LBP) prior to the completion of a proposed property transaction. The work was performed in accordance with the terms and conditions of the Professional Services Agreement between LFR and Eight Inc. dated June 23, 2006.

Background

During a Phase I Environmental Site Assessment conducted by LFR in June 2006, an issue of environmental concern was identified when reviewing previous environmental reports for the Site. Specifically, a Phase I ESA prepared by Edward K. Noda and Associates in December of 2003, identified suspect ACM within the exterior and interior of Hula Hut restaurant formerly located at the Site. In addition suspect LBP areas were identified on the exterior of the building. Edward K. Noda and Associates recommended testing suspect ACM and LBP areas. It is unknown whether such testing activities were performed. The building was later demolished and it is not known whether soil at the Site has been impacted with ACM or LBP.

Field Investigation

LFR conducted surface soil sampling was conducted on June 23, 2006 to assess the potential presence of ACM and LBP in the soil at the Site. A discussion of field activities associated with this investigation is presented below.
Pre-Field Activities

Prior to commencement of field activities, LFR prepared a site-specific Health and Safety Plan (HSP) for use by LFR employees during surface soil sampling activities as required by the Occupational Safety and Health Administration (OSHA) (29 CFR 1910.120).

Surface Soil Sampling

On June 23, LFR collected 5 surface soil samples from random locations on-site to adequately assess presence of ACM or LBP within the shallow soil, if any. Prior to sampling at each location, LFR used a shovel to remove six to eight inches of gravel noted to be covering much of the Site. The samples then were collected from 1.0 foot to 1.5 feet below ground surface (bgs) in locations were building material were observed (sample locations B-1 and B-2) or 1.5 feet to 2.0 feet bgs in locations were building materials were not observed (sample locations B-3, B-4, and B-5). Sample locations are presented on Figure 2. Soil at the Site consisted of fill material. The interface between fill material and native soil was not observed at the total depth sampled (2.0 feet bgs). Based on the extensive development on-site and in the Site vicinity since 1914, it is likely that fill material has been located on-site since that time.

A portion of each sample was placed in 4-ounce glass jars and transported under chain-of-custody protocol to Oceanic Analytical Laboratory (OAL) in Aiea, Hawaii for analysis of total lead using EPA Method 6010B. An additional portion of each sample was placed in a zip-lock bag and transported under chain-of-custody protocol to White Environmental Consultants, Inc. (WEC) for analysis of asbestos using Polarized Light Microscopy with Dispersion Staining (PLM/DS) in accordance with the Environmental Protection Agency (EPA) Method 600/M4-82-020 per 40 CFR 763, subpart F, App. A. The samples were analyzed on rush 24-hour turn-around-time.

Results

Analytical results for the five soil samples are summarized in Tables 1 and 2 and laboratory reports are presented in Appendix A. Laboratory results indicated that lead was not detected in the five soil samples at levels above the applicable State of Hawaii Department of Health (DOH) Environmental Action level (EAL) for lead. Additionally, laboratory results indicated that less than 1% (<1%) asbestos was detected in the soil collected from sample location B-3 (sample identified as BW-B3-2.0'). Asbestos was not detected in the remaining samples. Lead and asbestos laboratory results are provided as Appendix A and Appendix B, respectively.

Conclusions and Recommendations

Soil sampling analytical results indicated that lead was not identified above the applicable DOH EAL (Table 1) in the five samples collected. Asbestos was detected in one soil sample, BW-B3-2.0' at a concentration of <1.0% asbestos (Table 2). Building materials and suspect ACM were not observed in the soil at this location. According to EPA asbestos regulations per 40 CFR 763, subpart E, ACM are defined as “...any material or product which contains more than 1 percent asbestos.” Therefore, materials containing <1% asbestos are not considered asbestos containing. Based on these results, LFR does not recommend additional soil investigation or remediation related to lead or ACM in the soil at this time.

Please call me at (808) 522-0321 if you have any questions or comments regarding this report.

Sincerely,

Terese A. Kazmierczak
Project Geologist

Attachments:

TABLES
1 Lead Sampling Analytical Data
2 Asbestos Sampling Analytical Data

FIGURES
1 Site Vicinity Map
2 Site Plan

APPENDICES
A Total Lead Analytical Laboratory Results
B Asbestos Analytical Laboratory Results
# Table 1

<table>
<thead>
<tr>
<th>Location Material Sample ID</th>
<th>Collection Date</th>
<th>Lead (1) (mg/kg) (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample location B-1 Soil BW-B1-1.5</td>
<td>6/23/2006</td>
<td>23.1</td>
</tr>
<tr>
<td>Sample location B-2 Soil BW-B2-1.5</td>
<td>6/23/2006</td>
<td>79.0</td>
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<tr>
<td>Sample location B-3 Soil BW-B3-2.0</td>
<td>6/23/2006</td>
<td>104.0</td>
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<tr>
<td>Sample location B-4 Soil BW-B4-2.0</td>
<td>6/23/2006</td>
<td>13.3</td>
</tr>
<tr>
<td>Sample location B-5 Soil BW-B5-2.0</td>
<td>6/23/2006</td>
<td>41.0</td>
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</tbody>
</table>

Notes:

(1) Total lead analyzed using EPA Method 6010B

(2) mg/kg = milligrams per kilogram

(3) DOH Environmental Action Levels (EALs) for sites where groundwater is not a current or potential drinking water source and located greater than 150 meters from a surface water body.

(4) BW-B1-1.5 = Beach Walk, collected at location B1 at a depth of 1.5 feet below ground surface


Checked by: JMM Date: 6/27/2006

June 27, 2006

EPA Region IV / Martin, J.R., Technical Reviewer

Soil Sampling Letter Report

Lead Analytical Results

Table 1
**Table 2**

**Asbestos Analytical Results**

286 Beach Walk, Honolulu, Hawaii

Eight Inc.

June 23, 2006

<table>
<thead>
<tr>
<th>Location</th>
<th>Material</th>
<th>Sample ID</th>
<th>Collection Date</th>
<th>Asbestos (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample location B-1</td>
<td>Soil</td>
<td>BW-B1-1.5</td>
<td>6/23/2006</td>
<td>nad</td>
</tr>
<tr>
<td>Sample location B-2</td>
<td>Soil</td>
<td>BW-B2-1.5</td>
<td>6/23/2006</td>
<td>nad</td>
</tr>
<tr>
<td>Sample location B-3</td>
<td>Soil</td>
<td>BW-B3-2.0</td>
<td>6/23/2006</td>
<td>&lt;1%</td>
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<tr>
<td>Sample location B-4</td>
<td>Soil</td>
<td>BW-B4-2.0</td>
<td>6/23/2006</td>
<td>nad</td>
</tr>
<tr>
<td>Sample location B-5</td>
<td>Soil</td>
<td>BW-B5-2.0</td>
<td>6/23/2006</td>
<td>nad</td>
</tr>
</tbody>
</table>

Notes:
1. Analytical results presented in percent asbestos fibers by volume and analyzed using EPA Method 600/R-93/116 (PLM/DS).
2. nad = no asbestos fibers detected
3. BW-B1-1.5 = Beach Walk, collected at location B1 at a depth of 1.5 feet below ground surface
4. <1% = less than one percent

Checked by: JMM Date: 6/27/2006

---

**Asbestos Sampling Analytical Data**
FIGURE 1

Site Vicinity Map

Site Vicinity Map

Waikiki Beach Walk Property, Honolulu, HI

Site Vicinity Map

Map created with TOPO © 2002 National Geographic (www.nationalgeographic.com/topo)

LFR

Figure 1
FIGURE 2

Site Plan

Source: City and County of Honolulu
Department of Planning and Permitting

Approximate distance between B-2 and B-3 is 42 feet

Hawaiian Hotel

Waikiki District, Honolulu, HI

Wyland Plaza

Burberry Plaza (retail store)

Commercial Properties

Arnold's Tiki Lounge

Parking Garage

Chain-linked fence

Post Office

Tennis Courts

Public Parking Lot

3:026) (TMK 2-6-003:027)

39'43'

40'42'

40'

180'

Approximate distance between B-2 and B-3 is 42 feet

Explanation

Haleiwa

Ka Waikiki District
Total Lead Analytical Laboratory Results

June 27, 2006

Teri Kazmierczak
Levine Fricke
220 South King Street, Suite 1200
Honolulu, HI 96813
TEL: (808) 521-0321
FAX: (808) 521-0366

RE: Waikiki Beach Walk, 005-11082-01

Dear Teri Kazmierczak:

Oceannic Analytical Laboratory, Inc. received/relogged 5 samples on 6/26/2006 08:30 AM for the analyses presented in the following report.

The total number of pages in the report including this Cover Letter, Sample Summary, Case Narrative, Result Summary, QC Summary, Chain of Custody form(s), Re-log Request Form and/or any attachment(s) is 12.

All data presented in the following report are relevant only to the samples as received and to the items tested by the laboratory. All data are calculated based on wet weight except where noted in the reporting unit. The report meets all applicable NELAC standards and shall not be reproduced except in full, without the written approval of the laboratory.

There were no problems with the analyses and all data for associated QC met laboratory specifications except where noted in the Case Narrative.

Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

If you have any questions regarding these test results, please feel free to call.

Oceannic Analytical Laboratory, Inc.

Aslan Scott
Laboratory Director
## Work Order Sample Summary

**Client:** Levine Fricke  
**Project:** Waikiki Beach Walk, 005-11082-01  
**Work Order:** 0606169  
**Date Received:** 6/26/2006

### Analytical Report for Samples

<table>
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<th>Client Sample ID</th>
<th>Collection Date</th>
<th>Sample On Hold</th>
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<td>0606169-01A</td>
<td>BW-B1-1.5'</td>
<td>06/23/2006 14:45</td>
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<tr>
<td>0606169-02A</td>
<td>BW-B2-1.5'</td>
<td>06/23/2006 14:55</td>
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<td>0606169-03A</td>
<td>BW-B3-2.0'</td>
<td>06/23/2006 15:15</td>
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<tr>
<td>0606169-04A</td>
<td>BW-B4-2.0'</td>
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</tr>
<tr>
<td>0606169-05A</td>
<td>BW-B5-2.0'</td>
<td>06/23/2006 15:45</td>
<td></td>
</tr>
</tbody>
</table>

## Result Summary

**Client:** Levine Fricke  
**Work Order:** 0606169  
**Project:** Waikiki Beach Walk, 005-11082-01  
**Client Sample ID:** BW-B1-1.5'  
**Tag Number:**  
**Collection Date:** 06/23/2006 14:45  
**Matrix:** SOIL  
**Lab ID:** 0606169-01A

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**Analyte:** SW6010B  
**Qualifier:** J - Analyte detected below quantitation limits  
**Qualifier:** B - Analyte detected in the associated Method Blank  
**Qualifier:** S - Spike Recovery outside accepted recovery limits  
**Qualifier:** R - RPD outside accepted recovery limits  
**Qualifier:** ND - Not Detected at the Reporting Limit  
**Qualifier:** E - Value exceeds Maximum Contaminant Level  
**Qualifier:** * - Value exceeds Maximum Contaminant Level

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**Client:** Levine Fricke  
**Work Order:** 0606169  
**Project:** Waikiki Beach Walk, 005-11082-01  
**Lab ID:** 0606169-02A  
**Date:** Jun 27, 2006

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N - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
* - Value exceeds Maximum Contaminant Level

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### Oceanic Analytical Laboratory, Inc. Result Summary

**Client:** Levine Fricke  
**Work Order:** 0606169  
**Project:** Waikiki Beach Walk, 005-11082-01  
**Lab ID:** 0606169-03A  
**Date:** Jun 27, 2006

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J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
* - Value exceeds Maximum Contaminant Level

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## Oceanic Analytical Laboratory, Inc. Result Summary

### Project: Waikiki Beach Walk, 005-11082-01

### Client: Levine Fricke
### Work Order: 0606169
### Lab ID: 0606169-04A
### Collection Date: 06/23/2006 15:30
### Matrix: SOIL
### Client Sample ID: BW-B4-2.0

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- * - Value exceeds Maximum Contaminant Level

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### Project: Waikiki Beach Walk, 005-11082-01

### Client: Levine Fricke
### Work Order: 0606169
### Lab ID: 0606169-05A
### Collection Date: 06/23/2006 15:45
### Matrix: SOIL
### Client Sample ID: BW-B5-2.0

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- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- * - Value exceeds Maximum Contaminant Level

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### QC Summary

**Sample Matrix Spike**

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**Laboratory Control Spike**

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**Qualifiers**

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- %REC - % Recovery
- S - Spike Recovery outside established recovery limit
- DF - Dilution Factor
- RPD - Relative Percent Difference

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### QC Summary

**Sample Matrix Spike**

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**Laboratory Control Spike**

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<td>80 120</td>
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**Qualifiers**

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- %REC - % Recovery
- S - Spike Recovery outside established recovery limit
- DF - Dilution Factor
- RPD - Relative Percent Difference
Oceanic Analytical Laboratory, Inc.

QC Summary
Method Blank

Date: Jun 27, 2006

Client: Levine Fricke
Work Order: 0606169
Project: Waikiki Beach Walk, 005-11082-01

Sample ID: MB-13667
Batch ID: 13667
Test Code: SW6010B
Prep Date: 6/26/2006
Analysis Date: 6/26/2006

Units: mg/Kg

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- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- % REC - % Recovery
- DF - Dilution Factor
- RPD - Relative Percent Difference

Notes:
- Analyte Result Value
- Ref Val
- %REC
- RPD
- RPD Limit
- Qualifiers

Client ID: Run ID: IC2_060626A
# APPENDIX B

## Asbestos Analytical Laboratory Results

### Bulk Sample Analysis for Asbestos

**WEC Project #: H06-752**

**Client Project #:**

**Collection Date:** 6/23/2007

**Analysis By:** K.Walls

**Analysis Date:** 6/26/2007

**Received By:** Mercado

**Received Date:** 6/26/2007

**Building:** Honolulu, Hawaii

**Location:** Waikiki Beach Walk

## Sample Details:

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<td>Soil</td>
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<td>H106-4071</td>
<td>Soil</td>
<td>280 Beach Walk</td>
<td>95%</td>
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<tr>
<td>BW-0-2</td>
<td>H106-4071</td>
<td>Soil</td>
<td>280 Beach Walk</td>
<td>98%</td>
</tr>
</tbody>
</table>

**Asbestos Analysis:**

- **None Detected**
- **% Other Fibrous Materials:** 2%
- **% Non-Fibrous Materials:** 98%

**Material Assumptions:**

- Homogeneous
- Color: Brown

**Other Fibrous Materials:**

- **Chrysotile:**
  - % Asbestos: <1%
  - % Other Fibrous Materials: 2%
  - % Non-Fibrous Materials: 95%

- **Asbestos:**
  - % Other Fibrous Materials: 2%
  - % Non-Fibrous Materials: 98%

- **Fibrous Materials:**
  - % Other Fibrous Materials: 26%
  - % Non-Fibrous Materials: 90%
## Bulk Sample Analysis for Asbestos

**WEC Project #: H06-752**

**Client Project #:**

**Report #:** 15067

**Report By:** Mercado, J.

**Report Date:** 6/20/2006

<table>
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### ASBESTOS

- None Detected

#### % Other Fibrous Materials:

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<th>% Non-Fibrous Materials</th>
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</thead>
<tbody>
<tr>
<td>brown</td>
<td>98%</td>
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</table>

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**Kanokihip Walls**

Date: 5/25/2006

Kanokihip Walls, Lab Analyst

Date: 5/26/2006

Emily Pugh, Technical Reviewer

---

Analysis performed by EPA Method 600R-93/115 with dispersion staining microscopy. All quantities reported are based on visual estimations by PLM, unless point counting method is requested and noted for the sample. Test report relates only to items tested and must not be used by client to claim product endorsement by NVLAP or any agency of the U.S. Government. Test reports must not be reproduced without the approval of WEC Inc., and are subject to WEC Inc. General Terms and Conditions (see reverse). White Environmental Consultants, Inc. is an NVLAP accredited laboratory for bulk asbestos analysis. (LabP 200300-09)
APPENDIX D
Traffic Impact Report for the 280 Beach Walk Waikīkī Development
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Traffic Impact Report for the 280 Beach Walk Waikiki Development

I. INTRODUCTION

A. Purpose of Study

The purpose of this study is to identify and assess the traffic impacts resulting from the proposed 280 Beach Walk Waikiki development on the island of Oahu. The project site for the proposed retail development is located adjacent to Beach Walk south of Kalakaua Avenue.

B. Scope of Study

This report presents the findings and conclusions of the traffic study, the scope of which includes:

1. Description of the proposed project and surrounding roadway network.
2. Summary of existing and future without project traffic conditions.
3. Development of trip generation characteristics for the proposed project.
4. Superimposition of site-generated traffic over future traffic conditions.
5. Identification of traffic impacts resulting from the proposed project.
6. Recommendations of improvements, if appropriate, to mitigate the traffic impacts resulting from the proposed project.

II. PROJECT DESCRIPTION

A. Location

The proposed 280 Beach Walk Waikiki development will be located in Waikiki on the island of Oahu (see Figure 1) and is further identified as Tax Map Keys: 2-6-03: 26, 27, and 58. The project site is bounded by other retail establishments to the north, Beach Walk to the east, a hotel to the south, and a parking structure to the west. Vehicular access to the project site will be provided via an existing driveway off Saratoga Road serving the parking structure to the west.

B. Project Characteristics

The proposed 280 Beach Walk development will be located on an existing vacant lot adjacent to Beach Walk south of Kalakaua Avenue. The proposed project, which is expected to be completed and occupied by the Year 2008, will entail the construction of a two-story building with approximately 10,225 square feet of retail
space and an approximately 22,550 square foot restaurant. In addition, the finished floor elevation of the new building will be approximately 2 feet higher than the existing lot elevations to ensure that the building is outside of the flood zone. Consequently, the existing sidewalk along Beach Walk will be realigned to accommodate the change in elevation resulting in a landscaped, meandering sidewalk similar to other developments in the vicinity. There are no new parking areas proposed for the development since parking stalls for employees and visitors will be provided within the existing parking structure located east of the project site. As such, vehicular access to the project site will be provided via the existing driveway for this structure off Saratoga Road.

III. AREA ROADWAY SYSTEM

The area roadway system in the vicinity of the proposed project site is comprised of a number of north-south oriented connector roadways which include Beach Walk, Saratoga Road, Kalaimoku Street, Olohana Street, Lewers Street, and Royal Hawaiian Avenue, and east-west oriented roadways which include three smaller connector roadways, Kalia Road, Helu Road, and Don Ho Lane, and three major arterial roadways, Kalakaua Avenue, Kuhio Avenue, and Ala Wai Boulevard.

Extending between Kalia Road and Kalakaua Avenue, Beach Walk is a one-lane, one-way (southbound) roadway and Saratoga Road is generally a two-lane, two-way roadway. At Kalakaua Avenue, Saratoga Road becomes Kalaimoku Street, a two-lane, one-way roadway that serves as the northbound half of a couplet system between Kalakaua Avenue and Ala Wai Boulevard. The other half of that couplet is comprised of Olohana Street which is a two-lane, one-way (southbound) roadway. Located east of these roadways, Lewers Street originates at Kalia Road as a two-lane, one-way (southbound) roadway and continues north on to Don Ho Lane where it converts to a four-lane, two-way roadway until Kalakaua Avenue. North of Kalakaua Avenue, Lewers Street continues as a two-lane, one-way (northbound) roadway until its terminus at Ala Wai Boulevard.

Kalia Road starts as a two-lane, two-way roadway east of Lewers Street and converts to a two-lane, one-way (westbound) roadway between Lewers Street and Saratoga Road. Just
east of Saratoga Road, Kalia Road once again becomes a predominantly two-lane, two-way roadway until its terminus at Ala Moana Boulevard. North of Kalia Road, Helumoa Street is a one-lane, one-way (eastbound) roadway between Beach Walk and Lewers Street and a two-lane, two-way roadway east of Lewers Street while Don Ho Lane is a two-lane, two-way roadway between Lewers Street and Royal Hawaiian Avenue. Further north, Kalakaua Avenue is a generally four-lane, one-way roadway that serves as the eastbound half of a couplet system providing access through Waikiki with Ala Wai Boulevard, a predominantly three-lane, one-way (westbound) roadway with a 24-hour parking lane located on the north side of the roadway. Kuhio Avenue, generally a four-lane, two-way roadway, runs parallel to Kalakaua Avenue approximately midway between the couplet and serves as a secondary access roadway through Waikiki.

IV. EXISTING TRAFFIC CONDITIONS

The proposed project will be located in close proximity to the proposed Waikiki Beach Walk development, Phase 1 of which is currently under construction. The proposed project includes the renovation of the Reef Towers, Waikiki Village and Tower, and Reef on the Beach, and the construction of a new retail complex along Lewers Street and a new condominium/hotel along Kalanianaole Avenue. Due to the size and complexity of the Waikiki Beach Walk project in comparison to the proposed 280 Beach Walk Waikiki retail development, the existing conditions presented in this report are derived from the Traffic Impact Analysis Report (TIAR) for the Waikiki Beach Walk development prepared by Wilbur Smith Associates in October 2004 which detailed the existing traffic volumes and conditions for the surrounding roadway network. According to the overall TIAR, traffic operations in the vicinity were generally acceptable during all of the peak periods with the exception of the study intersections along Lewers Street. Heavy pedestrian traffic streams along this roadway influence the levels of service and vehicular queuing at these intersections resulting in low levels of service. However, the TIAR indicated that the capacity analysis performed for the study overestimated the existing delays at those intersections and that field observations indicated that the actual delays were significantly shorter. The existing weekday and Saturday peak hour traffic conditions presented in the TIAR are included as Figures 3 and 4.
V. PROJECTED TRAFFIC CONDITIONS

A. General

As previously mentioned, the 280 Beach Walk Waikiki retail project is located in close proximity to the Waikiki Beach Walk development. As such, the projected conditions reflected in this report are associated with the completion year of the Waikiki Beach Walk development rather than the 280 Beach Walk Waikiki project to assess the impact of the retail project. As such, existing traffic conditions were projected to the Year 2010 to determine the impact of the proposed project.

B. Total Traffic Volumes Without Project

The traffic assessment performed for the Year 2010 conditions without the 280 Beach Walk Waikiki development was based upon the projections included in the TIAR for the Waikiki Beach Walk development prepared by Wilbur Smith Associates in October 2004 and the supplemental "Traffic Impact Report for the Proposed Beach Walk Waikiki" prepared in January 2006, and utilizing procedures presented in the "Highway Capacity Manual", Transportation Research Board, 2000. The Year 2010 without project conditions reflect anticipated traffic increases due to regional growth, other projects in the area such as the completion of the Lagoon Tower, Kalia Tower, and Waikikian time-share development at the Hilton Hawaiian Village, and the construction of the 2100 Kalakaua development, and the Waikiki Beach Walk development which includes the conversion of Kalia Road to a two-way roadway between Saratoga Road and Lewers Street, and intersection modifications at the intersection of Kalia Road and Saratoga Road.

The projected Year 2010 weekday PM and Saturday evening peak hour traffic operating conditions in the project vicinity without the Waikiki Beach Walk development are shown in Figures 5 and 6, and detailed in Table 1. The assessment, which was based on the concept of Level of Service (LOS) and performed by the "Synchro" software, developed by Trafficware of Albany, California, focused on the weekday afternoon and Saturday evening peak hours since these periods represent the hours during which vehicular and pedestrian traffic volumes are the highest. LOS is a quantitative and qualitative assessment of traffic operations. Levels of Service are
YEAR 2010 WEEKDAY PM PEAK HOUR OF TRAFFIC WITHOUT PROJECT
defined by LOS “A” through “F”. LOS “A” represents ideal or free-flow traffic operating conditions and LOS “F” represents unacceptable or potentially congested traffic operating conditions. LOS “B”, “C”, “D”, and “E” represent the intermediate traffic operational characteristics between the two extremes of LOS “A” and LOS “F”. The LOS definitions are included in Appendix A.

Table 1: Year 2010 Peak Hour Traffic Conditions Without Project

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<td>Eastbound</td>
<td>TH</td>
<td>B</td>
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<tr>
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<td>Southbound</td>
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<td>B</td>
</tr>
<tr>
<td>Kalakaua Ave/</td>
<td>Eastbound</td>
<td>LT-TH-RT</td>
<td>A</td>
</tr>
<tr>
<td>Kalaimoku St/</td>
<td>Northbound</td>
<td>TH</td>
<td>C</td>
</tr>
<tr>
<td>Saratoga Rd</td>
<td></td>
<td>RT</td>
<td>C</td>
</tr>
<tr>
<td>Kalakaua Ave/</td>
<td>Eastbound</td>
<td>LT-TH</td>
<td>B</td>
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<td>RT</td>
<td>C</td>
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<td>Kalakaua Ave/</td>
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<td>Royal Hawaiian Ave</td>
<td>Northbound</td>
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<td>C</td>
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<td>Don Ho Lu/Lewers St</td>
<td>Southbound</td>
<td>LT-TH</td>
<td>C</td>
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<td>Southbound</td>
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<td>Kalia Rd/Saratoga Rd</td>
<td>Eastbound</td>
<td>LT-TH</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>TH</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RT</td>
<td>A</td>
</tr>
<tr>
<td>Kalia Rd/Beach Walk</td>
<td>Southbound</td>
<td>RT</td>
<td>C</td>
</tr>
</tbody>
</table>

*Although lane is designated as a shared through and right-turn lane, most through vehicles utilize other lanes due to the high turning volumes.

Under Year 2010 conditions without the 280 Beach Walk Waikiki retail development, traffic operations in the project vicinity are expected to deteriorate from existing conditions during the weekday afternoon and Saturday evening peak periods due to the development of other projects in the vicinity. However, the conversion of Kalia Road to a two-way roadway and the redistribution of traffic in the vicinity as a result of the Waikiki Beach Walk development are expected to alleviate projected conditions.

C. Trip Generation

The trip generation methodology used in this study is based upon generally accepted techniques developed by the Institute of Transportation Engineers (ITE) and published in “Trip Generation, 7th Edition,” 2003. The ITE trip generation rates are developed empirically by correlating the vehicle trip generation data with various land use characteristics such as the number of vehicle trips generated per 1,000 square feet of development. For the purpose of this report, 10% of the total daily trip ends for Saturday were assumed to occur during the evening peak period. Table 2 summarizes the project site trip generation characteristics applied to the weekday PM and Saturday evening peak hours of traffic.
Table 2: Peak Hour Trip Generation

<table>
<thead>
<tr>
<th>SPECIALTY RETAIL CENTER</th>
<th>PROJECTED TRIP ENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEPENDENT VARIABLE: 1,000 sf of development = 10,225</td>
<td></td>
</tr>
<tr>
<td>WEEKDAY PM PEAK</td>
<td>ENTER 20</td>
</tr>
<tr>
<td></td>
<td>EXIT 26</td>
</tr>
<tr>
<td></td>
<td>TOTAL 46</td>
</tr>
<tr>
<td>SATURDAY EVENING PEAK</td>
<td>ENTER 22</td>
</tr>
<tr>
<td></td>
<td>EXIT 21</td>
</tr>
<tr>
<td></td>
<td>TOTAL 43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH TURNOVER SIT-DOWN RESTAURANT</th>
<th>PROJECTED TRIP ENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEPENDENT VARIABLE: 1,000 sf of development = 22.55</td>
<td></td>
</tr>
<tr>
<td>WEEKDAY PM PEAK</td>
<td>ENTER 150</td>
</tr>
<tr>
<td></td>
<td>EXIT 96</td>
</tr>
<tr>
<td></td>
<td>TOTAL 246</td>
</tr>
<tr>
<td>SATURDAY EVENING PEAK</td>
<td>ENTER 179</td>
</tr>
<tr>
<td></td>
<td>EXIT 178</td>
</tr>
<tr>
<td></td>
<td>TOTAL 357</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTALS</th>
<th>PROJECTED TRIP ENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEKDAY PM PEAK</td>
<td>ENTER 170</td>
</tr>
<tr>
<td></td>
<td>EXIT 122</td>
</tr>
<tr>
<td></td>
<td>TOTAL 292</td>
</tr>
<tr>
<td>SATURDAY EVENING PEAK</td>
<td>ENTER 201</td>
</tr>
<tr>
<td></td>
<td>EXIT 199</td>
</tr>
<tr>
<td></td>
<td>TOTAL 400</td>
</tr>
</tbody>
</table>

Since the proposed development will be located in an area with limited parking, high volumes of pedestrian traffic, and a high density of attractive destinations, a high number of trips generated by the proposed development may be considered walking trips. As such, for the purpose of this report, 40% of the total number of trips generated by the proposed development are conservatively assumed to represent pedestrian trips during both the weekday PM and Saturday PM peak hours of traffic. Table 3 summarizes the adjusted project trip generation totals for the proposed 280 Beachwalk development.

Table 3: Adjusted Peak Hour Trip Generation Totals

<table>
<thead>
<tr>
<th>TOTALS</th>
<th>PROJECTED TRIP ENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEKDAY PM PEAK</td>
<td>ENTER 102</td>
</tr>
<tr>
<td></td>
<td>EXIT 73</td>
</tr>
<tr>
<td></td>
<td>TOTAL 175</td>
</tr>
<tr>
<td>SATURDAY EVENING PEAK</td>
<td>ENTER 121</td>
</tr>
<tr>
<td></td>
<td>EXIT 115</td>
</tr>
<tr>
<td></td>
<td>TOTAL 240</td>
</tr>
</tbody>
</table>

D. Trip Distribution

Figures 7 and 8 show the distribution of site-generated traffic during the AM and PM peak periods. Vehicular access to the project site will be provided via an existing driveway along Saratoga Road that serves a parking structure to the west. The directional distribution of vehicles at this driveway was based upon the prevalent directional distribution of traffic along Saratoga Road. As such, 82.7% of the vehicles were assumed to be traveling northbound during the weekday PM peak period and 17.3% were assumed to be traveling southbound. During the Saturday evening peak period, 95.4% were assumed to be traveling northbound and 4.6% were assumed to be traveling southbound. All southbound entering vehicles were assumed to turn right from Kalakaua Avenue onto Saratoga Road and the directional distribution at the intersection of Kalakaua Avenue with Oohana Street was assumed to remain similar to existing conditions. All southbound exiting and northbound entering vehicles were assumed to be traveling to and from Kaia Road west of Saratoga Road while the directional distribution of all northbound exiting vehicles was assumed to remain similar to existing conditions at the intersection of Kalakaua Avenue with Saratoga Road and Kalaimoku Street. All right-turning vehicles at that intersection were assumed to travel along Kalakaua Avenue through the remaining study intersections to destinations outside the study area.
E. Total Traffic Volumes With Project

Figures 9 and 10 show the cumulative AM and PM peak hour traffic conditions resulting from the projected external traffic and the 280 Beach Walk Waikiki retail development. The cumulative volumes consist of site-generated traffic superimposed over Year 2010 projected traffic demands. The traffic impacts resulting from the proposed project are addressed in the following section.

VI. TRAFFIC IMPACT ANALYSIS

The Year 2010 cumulative weekday PM and Saturday evening peak hour traffic conditions with the development of 280 Beach Walk Waikiki development are summarized in Table 4. The projected Year 2010 without project operating conditions are provided for comparison purposes. LOS calculations are included in Appendix B.

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Critical Movement</th>
<th>Weekday PM</th>
<th>Saturday Evening</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>w/out Proj</td>
<td>w/ Proj</td>
</tr>
<tr>
<td>Kalakaua Ave/ Olohana St</td>
<td>Eastbound</td>
<td>TH</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT</td>
<td>B</td>
</tr>
<tr>
<td>Kalakaua Ave/ Kalauasku St/ Suratoga Rd</td>
<td>Eastbound</td>
<td>LT-TH-RT</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Northbound</td>
<td>TH</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RT</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalakaua Ave/ Lewers St</td>
<td>Eastbound</td>
<td>LT-TH</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RT*</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Northbound</td>
<td>TH</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RT</td>
<td>C</td>
</tr>
<tr>
<td>Kalakaua Ave/ Royal Fawian Ave</td>
<td>Eastbound</td>
<td>TH-RT</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Northbound</td>
<td>RT</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT-TH</td>
<td>C</td>
</tr>
<tr>
<td>Don He Le/ Lewers St</td>
<td>Westbound</td>
<td>LT</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RT</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT</td>
<td>C</td>
</tr>
</tbody>
</table>

*Although lane is designated as a shared through and right-turn lane, most through vehicles utilize other lanes due to the high turning volumes.
YEAR 2010 WEEKDAY PM PEAK HOUR OF TRAFFIC WITH PROJECT
Table 4 Year 2010 Peak Hour Traffic Conditions (Without and With Project)

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Critical Movement</th>
<th>Weekday PM w/out Proj</th>
<th>Weekday PM w/ Proj</th>
<th>Saturday Evening w/out Proj</th>
<th>Saturday Evening w/ Proj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helumos St/ Lewers St</td>
<td>Westbound</td>
<td>LT</td>
<td>E</td>
<td>E</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT-TH</td>
<td>B</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Kalia Rd/ Saratoga Rd</td>
<td>Eastbound</td>
<td>LT-TH</td>
<td>B</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>TH</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>RT</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Kalia Rd/ Beach Walk</td>
<td>Southbound</td>
<td>RT</td>
<td>C</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Kalia Rd/ Lewers St</td>
<td>Eastbound</td>
<td>TH</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>TH</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>LT-RT</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

Under Year 2010 conditions with the 280 Beach Walk Waikiki development, traffic operations in the project vicinity are generally expected to remain similar to without project conditions during the weekday afternoon and Saturday evening peak periods. The northbound right-turn traffic movement at the intersection of Kalakaua Avenue with Saratoga Road and Kalaimoku Street is anticipated to operate at a slightly lower level of service during the PM peak period while the eastbound left-turn and through traffic movement at the intersection of Kalia Road and Saratoga Road is anticipated to operate at a slightly lower levels of service during both peak periods. The remaining critical movements at this intersection, as well as, the other study intersections are anticipated to continue operating at levels of service similar to without project conditions.

VII. RECOMMENDATIONS

Based on the analysis of the traffic data, the following are the recommendations of this study associated with the project implementation:

1. Maintain sufficient driveway width to accommodate safe vehicle ingress and egress.
2. Maintain adequate turning radii at all project driveways to avoid or minimize vehicle encroachments to oncoming traffic lanes.

3. Maintain adequate sight distances for motorists to safely enter and exit all project driveways.
4. Maintain adequate on-site loading and off-loading service areas and prohibit off-site loading operations.

VIII. CONCLUSION

The proposed 280 Beachwalk development entails the construction of a two-story building that is expected to house retail shops and a restaurant with parking provided within an existing parking structure located east of the project site. With the development of the proposed project, traffic operations at the study intersections along Kalakaua Avenue, Lewers Street, and Kalia Road are anticipated to continue operating at acceptable levels of service during the weekday PM and Saturday evening peak periods. As such, the proposed 280 Beach Walk Waikiki development is not expected to have a significant impact on traffic operations in the project vicinity.
APPENDIX E

Interim Report: Final Cultural Impact Assessment for the Proposed 280 Beach Walk Retail Development
Cultural Impact Assessment for the Proposed 280 Beachwalk Retail Development,
Waikīkī Ahupua’a, Honolulu (Kona District), O‘ahu
TMK [1] 2-6-003: 026, 027, 048, 049, and 058

Prepared for
First Round Pacific, LLC

Prepared by
Lisa Gollin, Ph.D.,
David Shidelar, M.A.
and
Hallett H. Hammatt, Ph.D.
Cultural Surveys Hawai‘i, Inc.
Kailua, Hawai‘i
(Job Code: WAIKI 14)

June 2007

Cultural Impact Assessment Report for the Proposed 280 Beachwalk Retail Development,
Waikīkī Ahupua’a, Honolulu (Kona District), O‘ahu
TMK [1] 2-6-003: 026, 027, 048, 049, and 058

Management Summary

<table>
<thead>
<tr>
<th>Title</th>
<th>Cultural Impact Assessment for the Proposed Waikīkī Beachwalk Amusement Center, Waikīkī Ahupua’a, Kona District, O‘ahu Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>June 2007</td>
</tr>
<tr>
<td>Project Numbers/Job Code</td>
<td>Cultural Surveys Hawai‘i Inc. (CSH) Job Code: WAIKI 14</td>
</tr>
<tr>
<td>Agencies</td>
<td>State of Hawai‘i Department of Land and Natural Resources / State Historic Preservation Division (DLNR / SHPD); State of Hawai‘i Department of Health / Office of Environmental Quality Control (DOH / OEQC)</td>
</tr>
<tr>
<td>Project Location</td>
<td>The project area – TMK 2-6-003: 026, 027, 048, 049, and 058 – comprises an approximately 30,376 square foot property near the north end of the elongated block bounded by Kālia Road to the south, Kalākaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. It is shown on the 1998 USGS 7.5 Minute Series topographic map, Honolulu Quadrangle. A portion of this property was the former Hula Hut restaurant.</td>
</tr>
<tr>
<td>Land Jurisdiction</td>
<td>Private, First Round Pacific, LLC</td>
</tr>
<tr>
<td>Project Acreage</td>
<td>Approximately 0.70 acres (30,376 square feet)</td>
</tr>
<tr>
<td>Project Description</td>
<td>The project area is proposed for development of a 34,500 square foot retail building comprising two floors of six leased retail and restaurant spaces on parcels 026 and 027. Ground disturbance associated with the retail project will be limited to these parcels and will include borings related to foundation pile installation and excavation related to the project area’s development, to include structural footings, utility installation, and landscaping. Minor modifications to an existing parking structure on parcel 048 and surface improvements to the perpetual access easement, parcel 049, are also components of this project.</td>
</tr>
<tr>
<td>Area of Potential Effect (APE)</td>
<td>For the current cultural impact assessment, the project’s APE is the same as the project area, i.e., the approximately 0.70-acre footprint of the proposed Waikīkī Beachwalk Retail Development project. While this investigation focused on the project APE, the study area included the entire ahupua‘a of Waikīkī.</td>
</tr>
<tr>
<td>Document Purpose</td>
<td>At the request of First Round Pacific, LLC, CSH undertook this cultural impact assessment. The project requires compliance with the State of Hawai‘i environmental review process [Hawaii Revised Statutes (HRS) Chapter 343], which requires consideration of a proposed project’s effect on traditional cultural practices. Through document research and cultural consultation efforts this document provides information pertinent to the assessment of the proposed project’s impacts to cultural practices (per the OEQC’s Guidelines for Assessing Cultural Impacts). The document is intended to support the project’s environmental review and may also serve to support the project’s historic preservation review under HRS Chapter 6E-42 and Hawai‘i Administrative Rules Chapter 13-284.</td>
</tr>
</tbody>
</table>
Consultation Effort
Hawaiian organizations, agencies and community members were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and the vicinity. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), and the O‘ahu Island Burial Council. This effort was made by letter, e-mail, telephone, and in person contact. In the majority of cases, letters were mailed along with a map and an aerial photograph of the project area.

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Cultural Surveys Hawai‘i Job Code: WAIK I 14

Management Summary

Consultation Effort
Hawaiian organizations, agencies and community members were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and the vicinity. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), and the O‘ahu Island Burial Council. This effort was made by letter, e-mail, telephone, and in person contact. In the majority of cases, letters were mailed along with a map and an aerial photograph of the project area.

Identified Cultural Issues
Based on the findings of this assessment, there are no ongoing cultural practices in the vicinity of the current proposed project area. However, survey respondents, some of whom are cultural or lineal descendants, spoke of burials in the area. Cultural descendants of Waikīkī participating in this assessment indicated that there could be i‘o‘i (human remains, bones) in the project area. Native Hawaiian burial practices were such that the potential for encountering human burials within the current project area does exist. Additionally, the present project area is located in the previous location of two fishponds, Loko Kapu‘uiki and Loko Ka‘ohai. Thus, remnantsubsurface fishpond sediments could be encountered.

Cultural Impact Recommendations
Based on the findings of this assessment, no cultural impact mitigation measures are warranted. Cultural Surveys Hawai‘i recommends that as a precautionary measure, personnel involved in future development activities in the area should be informed of the strong possibility of inadvertent cultural finds, including human remains, and should be made aware of the appropriate notification measures to follow.

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Section 8 References Cited .......................................................... 71
1. Project Background

At the request of First Round Pacific, LLC, Cultural Surveys Hawai‘i (CSH) is conducting a cultural impact assessment of a 0.70-acre project area in Waikīkī Ahupua‘a, Honolulu (Kona) District, Island of O‘ahu (TMK 2-6-003: 026, 027, 048, 049 and 058). The project site area is an approximately 30,376 square foot property located near the north end of the elongated block bounded by Kālia Road to the south, Kalākaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. The project area is presently a largely empty lot that includes a two-level parking garage, a permanent access easement and, until recent demolition, low-rise buildings, including the site of the Hula Hut Restaurant. The project area is proposed for development of a 34,500 square foot retail building comprising two floors of six leased retail and restaurant spaces on parcels 026 and 027. Ground disturbance associated with the retail project will be limited to these parcels and will include borings related to foundation pile installation and excavation related to the project area's development, to include structural footings, utility installation, and landscaping. Minor modifications to an existing parking structure on parcel 048 and surface improvements to the perpetual access easement, parcel 049, are also components of this project. Figure 1 shows this project area on a USGS topographic map, Figure 2 on a tax map key (TMK) map, and Figure 3 on an aerial photograph.

1.2 Scope of Work

The scope for the cultural impact assessment includes:

1. Examination of historical documents, Land Commission Awards, and historic maps with the specific purpose of identifying traditional Hawaiian activities including gathering of plant, animal and other resources or agricultural pursuits as may be indicated in the historic record.

2. A review of the existing archaeological information pertaining to the sites on the property as they may allow us to reconstruct traditional land use activities and identify and describe the cultural resources, practices and beliefs associated with the parcel and identify present uses, if appropriate.

3. Interviews with persons knowledgeable about the historic and traditional practices in the project area and region.

4. Preparation of a report on items 1-3 summarizing the information gathered related to traditional practices and land use. The report will assess the impact of the proposed action on the cultural practices and features identified.
1.3 Environmental Setting

1.3.1 Natural Environment

The project area is flat and averages 2 meters (6 feet) above mean sea level. The water table is typically 1.3 m to 2.0 m below the current land surface.

The modern shoreline at present day Waikīkī Beach is 400 meters (1312 ft) to the south. The old, natural shoreline approximately follows the modern shoreline in the vicinity of the project area, though it has been altered somewhat.

The average rainfall in this coastal area of Waikīkī is between 20-30 inches per year, with temperatures ranging from 60 to 85 degrees Fahrenheit (Armstrong 1973:56). Northeasterly trade winds prevail throughout the year, although their frequency varies from more than 90% during the summer months to 50% in January; the average annual wind velocity is approximately 10 miles per hour (Okamoto 1998:2-1). At the start of the inventory survey fieldwork, vegetation within the project area was limited to a few ornamental trees and shrubs in the south corners of the project area.

The USDA Soil Survey (Foote et al. 1972) classifies the project area’s soils as “Jaucas sand” (JaC) (Figure 4). Jaucas sand is described as:

- The slope range of this soil is 0 to 15 percent, but in most places the slope does not exceed 7 percent. Included in mapping were narrow strips of beaches and areas of Pulehu, Mokuleia, and Keau soils.
- In a representative profile the soil is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. In many places the surface layer is dark brown as a result of accumulation of organic matter and alluvium. The soil is neutral to moderately alkaline throughout the profile.
- Permeability is rapid, and runoff is very slow to slow. The hazard of water erosion is slight, but wind erosion is a severe hazard where vegetation has been removed. The available water capacity is 0.5 to 1.0 inch per foot of soil. In places roots penetrate to a depth of 5 feet or more. Workability is slightly difficult because the soil is loose and lacks stability for use of equipment. (Foote et al. 1972)

Though classified as jaucas sand, historic maps indicate that the project area is largely in the footprint of a number of ponds. While jaucas sand deposits are likely present in the project area, they are probably thin or mixed with wetland sediments. There could be high sand berm, low marshy areas, and fishpond sediments (refer to the historical documentation section, below). These lower areas would have been filled and subsequent development of Waikīkī permanently changed the area, allowing for its current, fully urbanized character.

1.3.2 Built Environment

The project area is located within central Honolulu and is surrounded by modern urban development including high-rise condominiums, apartments and hotels, streets, sidewalks, and utility infrastructure. The project area is bounded by Beach Walk to the east, Saratoga Road to the west, and two-story hollow tile apartment buildings to the north and south. The central portion of the project area, within Parcels 026 and 027 contained two modern structures, one of which was the Hula Hut Restaurant (refer to Figure 3). These structures were demolished in 2004 and 2005. The southwest portion of the project area, Parcel 048, contains a two-level, partially subterranean parking garage. The northwest portion of the project area is a perpetual access easement that is paved in asphalt. Less than half a dozen ornamental shrubs and small trees are still extant in the very southern corners of the project area.
Figure 1. Portion of the 1998 Honolulu USGS 7.5-minute topographic quadrangle, showing location of project area.

Figure 2. Tax map showing the project area.
Introduction

Figure 3. 2005 USGS orthophoto quad showing the project area, the former Hula Hut Restaurant, the existing parking structure and the access easement from Saratoga Road.

Figure 4. Overlay of Soil Survey of the State of Hawai’i (Foote et al. 1972), indicating sediment types within the project area. Source: Soils Survey Geographic Database (SSUGRO) 2001, U.S. Department of Agriculture.
1.4 Methods

Historical documents, maps and existing archaeological information pertaining to the sites in the vicinity of this project were researched at the State Historic Preservation Division library, and the Cultural Surveys Hawai‘i library. Information on Land Commission Awards was accessed through Waihona Aina Corporation’s Mähele Data Base (www.waihona.com). The State Historic Preservation Division, Office of Hawaii Affairs, Island Burial Council, and members of other community organizations were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the study area and the surrounding vicinity. The names for potential community contacts were also provided by colleagues at CSU and from the researcher’s familiarity with people who live in or around the study area. Some of the prospective community contacts were not available to be interviewed as part of this project. A discussion of the consultation process can be found in the section on “Community Consultations.” Please refer to Table 3 for a complete list of individuals and organizations contacted.

Section 2  Traditional and Historic Background

2.1 Mythological and Traditional Accounts of Waikīkī Ahupua‘a

Waikīkī had a previous life, long before the first tourist arrived or the first hotel was built. Rekindling a love for Waikīkī’s past has been the passion of author/historian Dr. George Kanahele. Traditionally, for Hawaiians, the moʻolelo (story) sought to do more than explain: it sought to re-enchant the mind and spirit. In his book Waikīkī 100 B.C. to 1900 A.D. An Untold Story, Dr. Kanahele sums up the following legends of Waikīkī reflecting the elements of water that once flourished in the lands of Waikīkī and whose rolling surf still breaks upon the shores of Waikīkī (Kanahele 1995:1).

2.1.1 Kamālili (the pebble lizard)

Waikīkī’s earliest moʻo (lizard, dragon, waterspirit) god was probably Kamālili (literally, the pebble lizard) who was slain by Hiʻaka, Pele’s sister. The legend relates that:

Hiʻaka and Wahineʻōna were escorting Lohe‘au (Pele’s lover-prince) back to Pele on the island of Hawai‘i. During the return journey they left their canoe at Waikīkī and walked up toward Kamālili. When they arrived at the particular spot (said to be where the old stone church stood in the 1920s), a heavy gust of wind blew, and Wahineʻōna and Lohe‘au felt invisible hands pulling their ears back. They called to Hiʻaka for help. She knew that it was the lizard god, Kamālili, who did it and told the other gods to keep closely behind her. A short distance away, they met Kamālili who wanted to fight. Hiʻaka removed her outside skirt which concealed bolts of lightning and struck him with them. His body was cut to pieces and the pieces turned into the long, low hill across from Waikīkī’s Kōhala School. (Kanahele 1995:42)

2.1.2 The Shark God Ka‘ehu

Shark stories accompany surfing stories in myth as well as in real life because the ‘man-eating’ shark is the most feared element in surfing. One legend that is popular even today is about the little yellow shark Kaʻeʻe‘u of Pearl Harbor who was endowed with magical power by his ancestor Kamoha‘a‘i‘i, the shark god and brother of Pele.

One day Kaʻeʻe‘u called his shark friends to accompany him to Puna. On the way they stopped at Waikīkī where they met Pehu, a man-eating shark from Maui, who was swimming back and forth at Kalehuawehe in wait for an unsuspecting surfer.

Kaʻeʻeʻu asked what Pehu was doing there and he replied, “I’m catching a crab for my breakfast.” “We’ll help you catch your crab,” Kaʻeʻeʻu said, and told him to go near the coral reef while he and his friends would drive them shoreward, allowing Pehu to catch this crab easily. He was pleased with the plan and swam close to the reef where he hid himself in its shadows.
Then Ka'elu told his friends, "We must kill this man-eater because he is destroying our people. Let's try to push him into the shallow water."

Soon two surfers appeared and when Pehu kept to catch one, Ka'elu and his friends pushed the surfer aside and hurled Pehu over the reef into a deep hole in the coral. The more he thrashed about to escape, the more trapped he became.

When the surfers saw what had happened, they were not as afraid of Pehu and moved to the hole to kill him. As they cut into his body they discovered the remains of their own people. Out of respect, they delivered them to Pele'ula (an area with many healing heiau located in Kau, now downtown Honolulu) and burned the remains. Ka'elu had many more adventures that had a similar objective, the punishment of other man-eaters from the great sea. (Kanahele 1995:58-59)

2.1.3 Surfing with Kelea

Surfing was one of the principal attractions of Wai'Kiki to both chiefs and commoners. So important was surfing that there is a major heiau dedicated to the nalu or surf, and its riders. At the "surfing heiau" of Papa'ena'ena, a terraced structure built at the foot of Diamond Head, is where surfers came to offer their sacrifices in order to obtain mana and knowledge of the surf. The site overlooked what surfers call today "First Break," the start of the Kahunuate surfing course which extended to Kawewehe (the deep, dark surf) at Kalia. Although everyone, including women and children, surfed, it was the chiefs who dominated the sport, and one of the best among Wai'Kiki's chiefs was Kalamakua. He came from a long ancestry of champion surfers whose knowledge, skill and mana were handed down and passed on from generation to generation. The story of his romantic meeting with Keleanino'ana'api'api ("Great Kele who flutters," has been preserved as a reminder of the role that surfing played in the history of Wai'Kiki (Kanahele 1995:56-58).

One day this beautiful chiefess with "clear skin and sparkling eyes," who then resided in Wai'awa (in Central O'ahu), was visiting Wai'Kiki with a few of her ladies-in-waiting. She entered the coconut grove and beach of Kawewehe which was located just east of the Halekulani Hotel. Here is where the sick came to bathe and to be healed. They would wear limu kala (seaweed) leis and leave them in the water as a request to the gods for forgiveness of past wrongs which was the cause of much illness.

The residents welcomed Keleanino'ana'api'api and offered her coconuts to eat. She remarked that Wai'Kiki was "the most pleasant place we have seen," to which her hosts replied, "This is a place for enjoyment. Over there is the kou grove of Kahaloa where one may view the surfing of the chiefs and of the ali'i nei Kalamakua. Kahaloa, or "Long Place," was also a beach area located today between the Royal Hawaiian and Halekulani hotels and noted for its fragrant ipo'a seaweed. When she asked if she could borrow a surfboard, the Wai'Kikians were surprised because they thought people from Wai'awa were only adept at "slicing mo'okiku ferns and pipo'lo stalks," not at surfing. They did not know that their visitor was originally from Maui where she surfed with all the chiefs. She was too beautiful to refuse and someone gave her a board.

Before she entered the water, she "rubbed off the red dirt of 'Ewa from her feet so as to look fresh," and then paddled off like an expert, moving easily and noiselessly without the least heeling over. Instead of starting at the first break where surfing was the "surfing heiau" of the ali'i wahine mansion and knowledge of the surf. The story of his romantic meeting with Keleanino'ana'api'api ("Great Kele who flutters," has been preserved as a reminder of the role that surfing played in the history of Wai'Kiki (Kanahele 1995:56-58).

When she reached shore, he took hold of her board and asked, "Are you Kelea?"

"Yes," she answered. As she stood up, in naked splendor, he removed his feathered shoulder cap and wrapped it around her. Then he guided her to a place and made her his ali'i. (Kanahele 1995:56-58)

2.1.4 Pre-contact to Early 1800s

Wai'Kiki, by the time of the arrival of Europeans in the Hawaiian Islands during the late eighteenth century, had been a center of population and political power on O'ahu. According to Martha Beckwith (1940), by the end of the fourteenth century, Wai'Kiki had become the seat of power for the ruling chiefs of Oahu. The preeminence of Wai'Kiki continued into the eighteenth century and is betokened by Kamehameha's decision to reside there upon wresting control of O'ahu by defeating the island's chief, Kalmikoule. The nine-teenth-century Hawaiian historian John Papa 'Ii, himself a member of the ali'i, described the king's Wai'Kiki residence:

Kamehameha's houses were at Puaaliihi, maui of the old road, and extended as far as the west side of the sands of Apukenau. Within it was Helehona where Kaahumanu ma went to while away the time. The king built a stone house there, enclosed by a fence . . . . (‘Ii 1959: 17)

‘Ii further noted that the "place had long been a residence of chiefs. It is said that it had been Keauapilani's home, through her husband Kahalana, since the time of Kahekili."

Chiefly residences, however, were only one element of a complex of features sustaining a large population that characterized Wai'Kiki up to pre-contact times. Beginning in the fifteenth century, a vast system of irrigated taro fields was constructed, extending across the littoral plain from Wai'Kiki to lower Mönoa and Pālolo valleys. This field system— an impressive feat of engineering the design of which is traditionally attributed to the chief Kalama— took advantage of streams descending from Makiki, Mönoa and Pālolo valleys which also provided

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ample fresh water for the Hawaiians living in the *ahupua'a*. Water was also available from springs in nearby Mā'ili and Panahou. Closer to the Waikīkī shoreline, coconut groves and fishponds dotted the landscape. A sizeable population developed amidst this Hawaiian-engineered abundance. Captain George Vancouver, arriving at "Whytheete" in 1792, captured something of this profusion in his journals:

> On shores, the villages appeared numerous, large, and in good repair; and the surrounding country pleasingly interspersed with deep, though not extensive valleys; which, with the plains near the sea-side, presented a high degree of cultivation and fertility.

> [Our] guides led us to the northward through the village, to an exceedingly well-made causeway, about twelve feet broad, with a ditch on each side. This opened our view to a spacious plain, which, in the immediate vicinity of the village, had the appearance of the open common fields in England; but, on advancing, the major part appeared to be divided into fields of irregular shape and figure, which were separated from each other by low stone walls, and were in a very high state of cultivation. These several portions of land were planted with the *eddo* or *taro* root, in different stages of inundation; none being perfectly dry, and some from three to six or seven inches under water. The causeway led us near a mile from the beach, at the end of which was the water we were in quest of. It was a rivulet five or six feet wide, and about two or three feet deep, well banked up, and nearly motionless; some small rills only, finding a passage through the dams that checked the sluggish stream, by which a constant supply was afforded to the *taro* plantations.

> [We] found the plain in a high state of cultivation, mostly under immediate crops of *taro*; and abounding with a variety of wild fowl, chiefly of the duck kind . . . The sides of the hills, which were at some distance, seemed rocky and barren; the intermediate vallies, which were all inhabited, produced some large trees, and made a pleasing appearance. The plain, however, if we may judge from the labour bestowed on their cultivation, seemed to afford the principal proportion of the different vegetable productions on which the inhabitants depend for their subsistence. (Vancouver 1798: I, 161-164)

Further details of the exuberant life that must have characterized the Hawaiians use of the lands that included the *ahupua'a* of Waikīkī are given by Archibald Menzies, a naturalist accompanying Vancouver's expedition:

> The verge of the shore was planted with a large grove of cocoanut palms, affording a delightful shade to the scattered habitations of the natives. Some of those near the beach were raised a few feet from the ground upon a kind of stage, so as to admit the surf to wash underneath them. We pursued a pleasing path back to the plantation, which was nearly level and very extensive, and laid out with great neatness into little fields planted with *taro*, yams, sweet potatoes and the cloth plant. These, in many cases, were divided by little banks on which grew the sugar cane and a species of *Draecena* without the aid of much cultivation, and the

> whole was watered in a most ingenious manner by dividing the general stream into little aqueducts leading in various directions so as to be able to supply the most distant fields at pleasure, and the soil seemed to repay the labour and industry of these people by the luxuriancy of its productions. Here and there we met with ponds of considerable size, and besides being well stocked with fish, they swarmed with water fowl of various kinds such as ducks, coots, water hens, bitterns, plovers and curlews. (Menzies 1920:23-24)

However, the traditional Hawaiian focus on Waikīkī as a center of chiefly and agricultural activities on southeastern O'ahu was soon to change, disrupted by the same Euro-American contact that produced the first documentation (including the records cited above) of that traditional life. The *ahupua'a* of Honolulu - with the only sheltered harbor on O'ahu - became the center for trade with visiting foreign vessels, drawing increasing numbers of Hawaiians away from their traditional environments. Kamehameha himself moved his residence from Waikīkī to the coast near Honolulu harbor, likely in order to maintain his control of the lucrative trade in sandalwood that had developed. By 1828, the missionary Levi Chamberlain, describing a journey into Waikīkī, would note:

> Our path led us along the borders of extensive plats of marshy ground, having raised banks on one or more sides, and which were once filled with water, and replenished abundantly with esculent fish; but now overgrown with tall rushes waving in the wind. The land all around for several miles has the appearance of having once been under cultivation. I entered into conversation with the natives respecting this present neglected state. They ascribed it to the decrease of population. (Chamberlain 1956:26)

Tragically, the depopulation of Waikīkī was not simply a result of the attractions of Honolulu (where, by the 1820s, the population was estimated at 6,000 to 7,000), but also of the European diseases that had devastating effects upon the Hawaiian populace.

### 2.1.5 Mid-Nineteenth Century and the Māhele

The depopulation of Waikīkī, however, was not total and the *ahupua'a* continued to sustain Hawaiians living traditionally into the mid-nineteenth century. Land Commission Awards associated with the mid-nineteenth century Māhele document awardees continuing to maintain fishponds and irrigated and dry-land agricultural plots though on a greatly reduced scale than had been possible previously with adequate manpower.

Toward the mid-nineteenth century, the Organic Acts of 1845 and 1846 initiated the process of the Māhele, the division of Hawaiian lands, which introduced private property into Hawaiian society. In 1848 the crown, the Hawaiian government, and the ali'i (royalty) received their land titles. Subsequently in the Māhele, Land Commission Awards (LCAs) were given to commoners and others who could prove residency on and use of the parcels they claimed.

An 1881 Hawaiian Government survey map by S.E. Bishop – with locations of LCA parcels indicated – provides a detailed record of the physical landscape of Waikīkī before the transformations of the twentieth century. When the map was copied in 1922, additional material from subsequent government surveys was added, including locations of road corridors not present in 1881. A portion of the 1922 copy shows fishponds within and adjacent to the present
project area that can be located by the routes of Kalākaua Avenue, Saratoga Road, Kālia Road, and Lewers Road (Figure 5).

The two fishponds – Loko Kapu’uiki and Loko Ka’ohai – within and extending beyond the project area are among the complex of Kālia fishponds, comprising 71.70 acres, that were awarded to Mataio Keōkana’al in Land Commission Award 104-FL (Fort Lands). Keōkana’al, born in Hilo on Hawai‘i Island in the 1790s, was governor of O‘ahu at the time of the Māhele. He was the father of Alexander Liholiho (King Kamehameha IV), Lot Kamehameha (King Kamehameha V), Princess Victoria Kamāmalu, Princess Ruth Ke‘elikolani, and Moses Kekuāina. Following his death in November 1868 his daughter, Princess Ruth, inherited his lands.

Māhele records for two Land Commission Award (LCA) parcels makai of the project area – LCA 1436, parcel 1, awarded to Kaleipao; and LCA 1513, parcel 1 awarded to Wailehua –
provide insights into traditional Hawaiian utilization of this portion of Waikīkī up to the middle of the nineteenth century.

Land Commission Award 1436 was awarded to a woman named Kalaipaopao (not “Kaleipaopao” as recorded on the 1881 map). Kalaipaopao’s own testimony reveals the extent of her land holdings in Waikīkī (www.waihona.com):

To the Land Commissioners, Greetings:

I hereby tell of my claim for two lo‘i in the ‘īli of Kanuku, named Aula, of the ahupua‘a of Waikīkī, and some rows of taro hills from Kaahumanu I and two sections of stream gotten at the same time. Two lo‘i were from Nalaweha, and a small houselot here at Kawehewehe and a stream called Kawehewehe. The length of my occupation of this house site and the sections of stream and the rows of [taro] hills in Hohe, is from Kaahumanu I, and the acquisition of a stream was after the work of Kīnā‘u at Kaipuni. That was when my makuakane, Ahia, acquired them. I was his kaakamakihine. There were two of us by Ahia—myself, Kalaiapiaopao, a female, also a male; however, I inherited all of it. I also have some lands on Hawai‘i at Waimea, called Pauahi, and in Kohala, called Paoo, yet, perhaps the proper procedure in the dividing of the Mo‘i is yet to be done. This is my claim presented by me, in accordance with the good which you are doing, and it is the truth which has been told. I am, with thanks,

KALAIPAOPAO
Waikīkī, Oahu
December 9, 1847

The parcel shown on the 1881 map is Kalaipaopao’s house lot (Figure 5). Her testimony identifies this area as Kawehewehe, which also names the stream shown on the west side of her house lot. The full 1881 map shows her taro lo‘i parcels “in the ‘īli of Kanuku” were located within the bounds of the present-day Ala Wai Golf Course. Her testimony also indicates that her occupancy on these lands dates back at least to the 1820s and the regency of Kaahumanu. The mention of also having lands on Hawai‘i Island at Waimea and Kohala suggests that Kalaiapiaopao or her family, while not themselves ali‘i (royalty), may have had some association with chiefs who had granted them their lands.

Land Commission Award 1513 was awarded to a man named Wailehua who identifies his Waikīkī land holdings (www.waihona.com):

To the Land Commissioners, Greetings:

I hereby tell of my land claim at Pahupahuapuaa in Waikīkī, island of Oahu, consisting of eight lo‘i, one houselot, one kule, that is what I tell you.

WAILEHUA
Kahehewehe at Waikīkī, Dec. 4, 1847

The parcel shown on the 1881 map is Wailehua’s house lot. The full 1881 map shows that Wailehua’s taro lo‘i parcels were located within the bounds of the present-day Ala Wai Golf Course. A witness for Wailehua named Nalaueha gave further details on the claimant and his claim (www.waihona.com):

Wailehua’s land is from Kaahumanu I: he has been konohiki from the time of Kaahumanu to the present time under V. Kamamalu. One patch had been objected because there were no men doing prison detail. It had been Kinolu’s patch and upon his death, it was acquired by Kamaukoli.

Wailehua is revealed to have been the konohiki or headman of the ahupua‘a who received his lo‘i in the ‘īli of Kanuku, named Aula, of the lands directly from Ka‘ahumanu.

Fragments of Hawaiian History

In 1810 (1959: 89), including the trail from Honolulu to Waikīkī:

The trail from Kawaiahao which led to lower Waikīkī went along Kaananiau, into the coconut grove at Pawaa, the coconut grove of Kaaukual, then down to Pinaio; along the upper side of Kahanaumakai’s coconut grove, along the border of Kaikapu pond, into Kawehewehe; then through the center of Helumea of Puaaliihi, down to the mouth of the Apusheau stream... (T‘ 1959: 92)

To the Land Commissioners, Greetings:

I hereby tell of my land claim at Pahupahuapuaa in Waikīkī, island of Oahu, consisting of eight lo‘i, one houselot, one kule, that is what I tell you.

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Wailehua is revealed to have been the konohiki or headman of the ahupua‘a who received his lands directly from Ka‘ahumanu.

These Māhele documents—along with those for adjacent parcels—suggest that, up to the early historic period, this portion of Waikīkī was the location of house lots for Hawaiians who were not ali‘i but who may have had some association with chiefly figures. The Hawaiians living here typically had taro lo‘i further mauka in areas presently known as McCully, Mō‘ili‘ili, and Kapahulu.

2.1.6 Waikīkī Trail and Kawehewehe

In Fragments of Hawaiian History John Papa ʻĪʻi described the “Honolulu trails of about 1810” (1959: 89), including the trail from Honolulu to Waikīkī:

The trail from Kawaiahao which led to lower Waikīkī went along Kaananiau, into the coconut grove at Pawaa, the coconut grove of Kaaukual, then down to Pinaio; along the upper side of Kahanaumakai’s coconut grove, along the border of Kaikapu pond, into Kawehewehe; then through the center of Helumea of Puaaliihi, down to the mouth of the Apusheau stream... (T‘ 1959: 92)

The 1881 map (see Figure 5 above) shows Kaikapu pond to the west of the present project area. In the Māhele records cited above, Kalaiapiaopao identifies the makai portion of the present project area as Kawehewehe.

Based on ʻĪʻi’s description, the trail from Honolulu to Waikīkī in 1810 coursed through the makai side of the present Fr. DeRussy grounds and continued makai of the present project area in the vicinity of Kālia Road. It is likely that this trail was a long-established traditional route through Waikīkī.

The place name Kawehewehe recorded by ʻĪʻi and in the Māhele records is also of note. It does not only identify a land area in Waikīkī; according to Hawaiian scholars, it also names:

[The] Seaweed entrance and channel off Grey’s Beach, just east of the Hale-kā-lani Hotel, Waikīkī, Honolulu. The sick were bathed here as treatment. The patient might wear a seaweed (limu-kalai) lei and leave it in the water as a request that his sins be forgiven, the lei being a symbol.

2.1.7 Later-Nineteenth Century

As the nineteenth century progressed, Waikīkī was becoming a popular site among foreigners, mostly American, who had settled on O‘ahu; an 1865 article in the Pacific Commercial Advertiser mentioned a small community that had developed along the beach. The
area continued to be popular with the ali`i (the Hawaiian royalty) and several notables had residences there. A visitor to O`ahu in 1873 described Waikīkī as “a hamlet of plain cottages, whither the people of Honolulu go to revel in bathing clothes, mosquitoes and solitude, at odd times of the year” (Bliss 1873).

By 1892, Waikīkī had 542 acres planted in rice, representing almost 12% of the total 4,659 acres planted in rice on O`ahu. Most of the former taro lo`i converted to rice fields were located mauka of the present Ala Wai Boulevard.

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In addition to leasing and buying lands for rice farming, Chinese immigrants during the second half of the nineteenth century leased Hawaiian ponds for raising fish – including `ama`ama (mullet), awa (milkfish), and goldfish – and ducks. In the 1890s, ponds in the Kālia area were being leased to and managed by Chinese named Ah Kaiu and Leong Fook (Kanahele 1995:128). While they no longer operated the Kālia fishponds, several Hawaiian fishermen were recorded as living in the Kālia area of Waikīkī in the last decade of the nineteenth century; among those listed in the Directory of the Hawaiian Kingdom in 1890 were: George Ainao, Kahanamui, Kainoa, Kalauu, Kamanoulu, Kaua, Kanoho, Liiwaa, Paahao, Pule, Kepa, and Nisooko (Kanahele 1995:151). Two historic photographs from the late nineteenth century reveal the character of the Waikīkī landscape in the vicinity of the project area. Figure 6 is a view of the Kālia fishponds, looking toward Leahi Crater (Diamond Head). Coordinating the features shown in the photograph – including the buildings and configuration of the ponds – with those indicated on the 1881 map, it is likely that the photograph shows the southeast end of the Kālia pond field that includes Loko Kapuuiki and Loko Ka`ohai in the present project. Figure 7 shows the Waikīkī coastline, apparently in the vicinity of the present Hikikilani Hotel grounds. The photograph indicates the area was occupied by closely packed wooden structures – again, likely the same ones indicated in this area on the 1881 map.

As was happening in other locales, in the 1880s, groups of Chinese began leasing and buying, from the Hawaiians of Waikīkī, former taro lands for conversion to rice farming. The taro lands’ availability throughout the islands in the late 1800s reflected the declining demand for taro as the native Hawaiian population diminished.

The Hawaiian Islands were well-positioned for rice cultivation. A market for rice in California had developed as increasing numbers of Chinese laborers immigrated there since the mid-nineteenth century. Similarly, as Chinese immigration to the islands also accelerated, a domestic market opened.

The primary market for both husked rice and paddy raised in all parts of the Hawaiian Islands was in Honolulu. The number of Chinese in the islands created a large home demand.

In 1880 the home market was made more secure by an increase in the duty on rice imported into Hawai`i to 1½ cents on paddy and 2½ cents on hulled rice. It resulted in further checking the importation of foreign rice and giving an immense impetus to the home product. (Coulter and Chan 1937:13)
2.1.8 1900 to 1920

During the first decade of the twentieth century, the U.S. War Department acquired more than 70 acres in the Kālia portion of Waikīkī for the establishment of a military reservation called Fort DeRussy, named in honor of Brig. Gen. R.E. DeRussy of the Army Corps of Engineers.

On 12 November 1908, a detachment of the 1st Battalion of Engineers from Fort Mason, California, occupied the new post...

Between 1909 and 1911 the engineers were primarily occupied with mapping the island of O‘ahu. At DeRussy other activities also had to be attended to - especially the filling of a portion of the fishponds which covered most of the Fort. This task fell to the Quartermaster Corps, and they accomplished it through the use of an hydraulic dredger which pumped fill from the ocean continuously for nearly a year in order to build up an area on which permanent structures could be built. Thus the Army began the transformation of Waikīkī from wetlands to solid ground. (Hibbard and Franzen 1986:79)

All the fishponds were filled by 1928.

The U.S. military was not alone in the effort to fill in the fishponds of Kālia during the early decades of the twentieth century. The growing population of Honolulu was creating a demand for housing in the surrounding neighborhoods. The realtor Percy Pond undertook to transform Loko Ka‘ohai which occupies the majority of the present project area:

Pond’s involvement with Waikīkī began in 1911, when he purchased the Loko Ka‘ohai fishpond, as well as a parcel on Diamond Head. He took land from the latter to fill the former, which he subdivided as the Beach Walk tract. The six-acre fishpond cost $3,250, or 1.5 cents/square foot, to acquire, and when filled the subdivision lots sold for 10 cents to 15 cents/square foot. By 1927, land in this area was valued at approximately $2/square foot. (Hibbard and Franzen 1986:104)

A fire insurance map of 1914 indicates that the present project area was outside of the five areas in Waikīkī where residential and commercial structures were concentrated in the early twentieth century (Figure 8). The five areas were located: 1) maka‘a of the project area, around the intersections of K Rd., Beach Walk, and Lower’s Rd.; 2) near the intersection of Ewa Road and Kalakaua Avenue; 3) maka‘a of Kālia Road on the west side of Ft. DeRussy; 4) clustered around the Moana Hotel on Kalakaua Avenue; and 5) in Kapahulu on the ‘ewa side of Makee Road (the present Kapahulu Avenue). The fire insurance map also reveals the relative isolation of Waikīkī, in the early twentieth century, from the encroaching grid of modern Honolulu streets.
2.1.9 1920s to 1930s

Not only was the present project area transformed in the twentieth century. Great changes were taking place just offshore. The reef off Fort DeRussy was dynamited to create a channel through which 14-inch guns were floated to their emplacements at DeRussey. Kina‘u Wilder, in her reminiscences of her family’s life in Waikīkī, recorded the devastating effects of this action:

And then the Army brought in an eighteen inch gun to Fort de Russey [sic], right next to the old Lewers place which is now the famous Halekulani Hotel. Why the gun could not have been brought in by land I will never know. They brought it by barge instead. In order to reach the emplacement, it was necessary to break through the reef just beyond the spot where our raft floated. This completely changed the pattern of the currents. The beach at Waikiki was never the same. Instead of the reef holding the sands of the beach and preventing them from being carried out by the changing tides, the sand was swept through the hole in the reef, never to return. What had been a glorious sandy beach—which no other beach on earth could touch—was nothing. Property owners lost anywhere from ten to thirty feet of their ocean frontage. Everyone was forced to put up seawalls to keep from losing their houses as well. Instead of running from the grass right on out to the ocean, we had to go down slippery steps to a miserable little strip of sand which, during certain months, was non-existent. At times I could jump from our seawall right into the water. (Wilder 1978:72)

An article in the Honolulu Star-Bulletin of September 2, 1933 (section 3, pg.1) confirms the loss of beach space:

Much of the broad beach which existed in 1913 has also disappeared. It used to be possible to dive into the breakers from the porch of the bathhouse in Merlon Emman’s back yard, but even that is no longer being done.

An insight into life this section of Waikīkī in the 1920s and 1930s is provided by Betty Dyer Sorensen whose family lived at the corner of Kalākaua Avenue and Beach Walk. Her parents, John and Mabel Dyer, had bought a 7055-square-foot lot at 290 Beach Walk for $1500 in 1918. Mrs. Sorensen describes the house her parents built there, in which she lived following her birth in 1922 until her marriage in 1946:

The front porch was on the mauka (mountain) side, and it caught the mountain breezes. It was painted buff with white trim and was in the Twenties bungalow style. (Sorensen 1995:30-31)

In the 1920s, Waikīkī was a small neighborhood

...with little cottages, inexpensive apartments and a few nice houses. People liked to live there because it was so close to the ocean and to transportation. The streetcars went down Kalākaua Avenue; Waikīkī’s main thoroughfare, all the way from Diamond Head to the business section of downtown Honolulu, three miles away. The few tourists who visited either stayed with friends for at least a month or they rented a cottage. (Sorensen 1995:1)
Mrs. Sorensen recalls that there were "lots of apartments on Beach Walk, rented by people who worked in downtown Honolulu" (Sorensen 1995: 34). However, remnants of the former Waikīkī landscape also remained near Beach Walk:

Across the street from our house, on the corner of Beach Walk and Kalākaua Avenue, was a large swampy area known as the duck ponds. It was a several block area consisting of coral with water on the surface. It was whitish from the coral. We could dig down in our own back yard and reach the water level in less than two feet. (Sorensen 1995: 54)

Mrs. Sorensen summarizes the types of Waikīkī tourists and their accommodations she remembers during her childhood:

The Waikīkī of my growing-up years in the 1920's and 30's consisted of the Moana Hotel, the Halekulani Hotel, the Royal Hawaiian Hotel, and the Niumalu Hotel, plus several boarding-type hotels and many small cottages. Wealthy tourists came out from Chicago and other snowy areas to spend the entire winter. Some even brought their own car and their own driver, and maid. It was the talk of the town when one family from Chicago even brought a French maid. (Sorensen 1995: 55)

The project area and the surrounding neighborhood during the period Mrs. Sorensen recalls are shown in fire insurance maps of 1927 (Figure 9). Where in 1914 only a portion of the area had been developed, structures now fill the entire landscape. Confirming Mrs. Sorensen's description, the neighborhood is shown to be an enclave of cottages and apartment buildings. While individual dwellings predominate, apartments, inns, and a boarding house are also present. At the intersection of Board Walk and Kalākaua Avenue is The Louidor, a boarding house near Mrs. Sorensen's family's home. On the Diamond Head side of Lewers Road is the Waikīkī Court apartments (on the site of the present Ohana Reef Towers).

During the 1920s, Waikīkī landscape would be transformed when the construction of the Ala Wai Drainage Canal, begun in 1921 and completed in 1928, resulted in the draining and filling in of the remaining ponds and irrigated fields of Waikīkī, including the "duck ponds" recalled by Mrs. Sorensen. The canal was one element of a plan to urbanize Waikīkī and the surrounding districts:

The [Honolulu city] planning commission began by submitting street layout plans for a Waikīkī reclamation district. In January 1922 a Waikīkī improvement commission resubmitted these plans to the board of supervisors, which, in turn, approved them a year later. From this grew a wider plan that eventually reached the Kapahulu, Mo‘ili‘ili, and MācCully districts, as well as lower Mānoa...

The standard plan for new neighborhoods, with allowances for local terrain, was to be that of a grid, with 80-foot-wide streets crossing 70-foot-wide avenues at right angles so as to leave blocks of house lots about 260 by 620 feet. Allowing for a 10-foot-wide sidewalk and a 10-foot right-of-way [alley] down the center of each block, there would be twenty house lots, each about 60 by 120 feet, in each block. (Johnson 1991:311)

During the course of the Ala Wai Canal’s construction, the banana patches and ponds between the canal and the mauka side of Kalākaua Avenue were filled and the present grid of streets was laid out. These newly created land tracts spurred a rush to development in the 1930s. An article in the Honolulu Star-Bulletin in 1938 extolled the area’s progress:

The expansion of apartment and private residence construction is no secret. Examination of building permits will show that more projects have been completed during the past year, and more are now underway in this area, than in any other section of the territory.

These developments are being made by island residents who have recognized the fact that Waikīkī presents the unparalleled possibility for safe investment with excellent return. (Newton 1938:10)

The writer speculated that the “future of Waikīkī is assured.”

A U.S. Army aerial photograph of 1935 shows the agglomeration of apartment buildings and private residences that completely filled the present project area and the surrounding neighborhood (Error! Reference source not found.).
Cultural Impact Assessment Report for the 280 Beach Walk Retail Development

Figure 9. 1927 fire insurance map with parcels comprising present project area indicated

Figure 10. 1935 aerial photograph showing the project area and the surrounding areas of Waikīkī fully developed (US Army-Hawaii Archives)
2.1.10 1940s

The entrance of the United States into World War II following the Japanese bombing of Pearl Harbor on December 7, 1941 put on hold plans for the development of Waikīkī as a tourist destination. Until the war’s end in 1945, the tourist trade was non-existent “…since the Navy travel to and from Hawai‘i and did not allow pleasure trips” (Brown 1989: 141). For the duration of the war, Waikīkī was transformed into a recreation area for military personnel.

It was not the same Waikīkī as before the war, though; barbed wire barricades now lined its sands, and there were other changes too. Fort DeRussy became a huge recreation center, with a dance hall called Mahiahi that attracted thousands of men at a time. The Moana Hotel continued to function, but many other establishments and private homes in the area were taken over by the military. (Brown 1989: 141)

In August 1943, four cases of dengue fever, transmitted by the bite of infected *Aedes* mosquitoes, were reported in Waikīkī. During the epidemic that ensued, more than 1000 people were afflicted. On August 8, 1943, the military declared “out-of-bounds” the portion of Waikīkī bordered by the ocean, the Ala Wai Canal, and Kāiulani Avenue, “Without servicemen or tourists, Waikīkī district seemed a deserted village” (Hodge and Ferris 1950:55).

Nearing the war’s end, concerns began arising over the future of Waikīkī. An article in the *Honolulu Advertiser* of July 16, 1945 (sec. 1, pg.1) decried “honky-tonks” that had sprung up in Waikīkī during the course of the war, and asked: “Can anyone look at present-day Kalakaua Ave. – lined with makeshift curio shops, noisy ‘recreation’ centers, eyesores that pass under the name of lunchrooms and miscellany of ‘joints’ – and hope that Waikīkī can stage a comeback [as a tourist destination]?”

2.1.11 1950s

Fire insurance maps of 1951 (Figure 11) reveal changes throughout the present project area and the surrounding properties since the neighborhood was documented on the 1927 map (Figure 9). Retail establishments now fill the parcels along Kalākaua Avenue. Rooming houses and apartments appear on parcels along Saratoga Road, Beach Walk, and Lewers Road. Many of the houses shown on the 1927 map have now been divided into duplexes and triplexes.

By the mid-1950s there were more than fifty hotels and apartments from the Kālia area to the Diamond Head end of Kapi‘olani Park. Located within and in the vicinity of the present project area were the Reef Hotel and Edgewater Hotel on Kālia Road, the Ainahau apartments at 260 Lewers Rd., the Marja apartment-hotel at 342 Lewers Rd., the Polynesian Hotel at 314 Beachwalk, and the Polynesian apartment-hotel at 339 Saratoga Rd.

Development of hotel properties in Waikīkī during the 1950s raised concern over public rights of way for access to the Waikīkī beach, which like all of Hawai‘i’s beaches is public from the ocean to the high water mark. An article in the *Honolulu Star-Bulletin* of January 16, 1957 (pg.10) noted that there were no public rights of way to the beach for “nearly a half mile strip in the heart of Waikīkī” from “the Diamond Head side of the Surfriker Hotel to the Ewa side of the Hōloluani Hotel.”

The lack of public access ways to the beach was of real concern since the population, by the mid-1950s, was not limited to transient tourists but also included 11,000 permanent residents living in 4,000 apartments in stucco or frame buildings. As the 1951 fire insurance map indicates, many of these apartment buildings were located in and around the current project area.
2.2 Summary

Historical documentation indicates that, at the mid-nineteenth century, within the present project area were two fishponds, Loko Kapu‘uki and Loko Ka‘ohai, that were part of the royal fishpond complex of the Kālia area. Some high ground existed in the project area, primarily under the existing parking structure in parcel 048. A small berm or causeway shown on an 1881 map by S.E. Bishop also divided part of Loko Ka‘ohai along the northern boundary of the project area.

Evidence from nineteenth-century documents (the writings of John Papa‘ikū, Māhele records, and an 1881 map) indicates that a trail from Honolulu to Waikīkī and beyond ran makai of the project area. It is likely that this trail was the traditional Hawaiian route through Waikīkī.

During the second half of the nineteenth century the Kālia fishponds, including Loko Ka‘ohai, were leased to and operated by Chinese immigrants. An early indication of Waikīkī’s future, makai of the project area, the Saratoga Baths opened on the site of the present Outrigger Reef on the Beach. Despite these changes, the Hawaiians of the Kālia area apparently were not completely displaced in the latter 1800s since several Hawaiian fishermen were recorded as living in Kālia during the 1890s.

During the first decades of the twentieth century, the current project area would be among the first developed lands of Waikīkī. Loko Kapu‘uki would be filled for the creation of Ft. DeRussy and the two Loko Ka‘ohai were filled to create the Beach Walk tract in 1911. In subsequent decades, the project area was among an enclave of individual residences – typically cottages – and apartment complexes. In the 1950s, construction began on the first large hotel structures that today surround the project area.
Section 3  Previous Archaeological Research

The ahupua‘a of Waikīkī, in the centuries before the arrival of Europeans, was an intensely utilized area, with abundant natural and cultivated resources, that supported a large population. In the nineteenth and early twentieth centuries, after a period of depopulation, Waikīkī was reanimated by Hawaiians and foreigners residing there, and by farmers continuing to work the irrigated field system, which had been converted from taro to rice. Farming continued up to the first decades of the twentieth century until the Ala Wai Canal drained the remaining ponds and irrigated fields. Remnants of the pre-contact and historical occupation of Waikīkī have been discovered and recorded in archaeological reports, usually in connection with construction activities related to urban development, or infrastructural improvements. These discoveries, which have occurred throughout Waikīkī, have included many human burials, traditional Hawaiian and historic, as well as pre-contact Hawaiian and historic cultural deposits. As previously stated, the project area, and most of coastal Waikīkī, is underlain by Jaucus Sands (JaC) (Foote et al. 1972). On several Hawaiian islands, and indeed throughout Waikīkī, Jaucus sands have been documented to contain traditional Hawaiian burials. A list of archaeological projects conducted in the Waikīkī area is presented in Table 1 with the location of most shown in Figure 12. A supplementary listing of burial Waikīkī finds held in the osteological collections of the Bernice Pauahi Bishop Museum is presented in Table 2. A discussion of projects focusing on burial finds follows.

N.B. Emerson reported on the uncovering of human burials during the summer of 1901 on the property of James B. Castle, the site of the present Elks Club, in Waikīkī during excavations for the laying of sewer pipes (Emerson 1902:18-20). Emerson noted:

The soil was white coral sand mixed with coarse coral debris and sea-shells together with a slight admixture of red earth and perhaps an occasional trace of charcoal. The ground had been trenched to a depth of five or six feet, at about which level a large number of human bones were met with, mostly placed in separate groups apart from each other, as if each group formed the bones of a single skeleton. Many of the skulls and larger bones had been removed by the workmen before my arrival, especially the more perfect ones. (Emerson 1902:18)

Emerson’s report on the find describes the remains of at least four individuals, all presumed to be Hawaiian. Associated burial goods were also exposed during excavation; these included “a number of conical beads of whale-teeth such as the Hawaiians formerly made” and “a number of round glass beads of large size.” The glass beads “can be assigned with certainty to some date subsequent to the arrival of the white man” (Emerson 1902:19). Also located with the beads was a “small sized niho-palaoa, such as was generally appropriated to the use of the chiefs” which had been “carved from the tooth of the sperm-whale” and which was “evidently of great age” (Emerson 1902:19).

It is widely assumed that at the time of the construction of the Royal Hawaiian Hotel that many human burials and other archaeological finds were encountered. Kanauhele (1995-99) writes of an “‘ulu maika course was part of the royal sports complex of Kahumukomokoko in Helumoa”

Table 1. Previous Archaeological Investigations in Waikīkī Ahupua‘a

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of Investigation</th>
<th>General Location</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerson 1902</td>
<td>Burial recovery account</td>
<td>Present Elks Club</td>
<td>At least four individuals, all presumed to be Hawaiian and associated burial goods</td>
</tr>
<tr>
<td>McAllister 1933</td>
<td>Island-wide survey</td>
<td>All of O‘ahu</td>
<td>Waikīkī listed as Site 60</td>
</tr>
<tr>
<td>1963 Bishop Museum burial recovery</td>
<td></td>
<td>2431 Prince Edward Street</td>
<td>Two + individuals from a construction trench</td>
</tr>
<tr>
<td>Honolulu Star-Bulletin; 1963; Yost 1971</td>
<td>Burial recovery account</td>
<td>Present Outrigger Canoe Club</td>
<td>27 Burials</td>
</tr>
<tr>
<td>1964 Bishop Museum Site Files</td>
<td>Burial recovery account</td>
<td>Fronting the Surfrider Hotel</td>
<td>4 burials?</td>
</tr>
<tr>
<td>1976 Bishop Museum Site Files</td>
<td>Burial recovery account</td>
<td>Hale Koa Hotel</td>
<td>Six burials</td>
</tr>
<tr>
<td>Nakamura 1979</td>
<td>History Graduate Thesis</td>
<td>Waikīkī</td>
<td>History of Waikīkī with focus on the radical changes in land use that occurred in the early 20th century</td>
</tr>
<tr>
<td>Neller 1980</td>
<td>Monitoring Report</td>
<td>Kālia Burial Site; Hilton Hawaiian Village</td>
<td>Brief field inspection: partial recovery of 3 historic Hawaiian burials, trash pit from 1890’s, no prehistoric Hawaiian sites</td>
</tr>
<tr>
<td>Bishop Museum 1981</td>
<td>Testing, Excavations, &amp; Monitoring</td>
<td>Haikulani Hotel</td>
<td>Intact cultural deposits found</td>
</tr>
<tr>
<td>Neller 1981</td>
<td>Reconnaissance Survey</td>
<td>Haikulani Hotel</td>
<td>Limited background research on area</td>
</tr>
<tr>
<td>Acon 1983</td>
<td>Historical Research</td>
<td>‘Ewa to Diamond Head</td>
<td>Nine walks through Waikīkī, photos, maps and historical info</td>
</tr>
<tr>
<td>Davis 1984</td>
<td>Archaeological and Historical Investigation</td>
<td>Haikulani Hotel</td>
<td>48 historic and prehistoric features excavated with six human burials reported</td>
</tr>
<tr>
<td>Neller 1984</td>
<td>Informal Narrative Report</td>
<td>Paioakalani Street</td>
<td>Recovery of seven human skeletons at construction site</td>
</tr>
<tr>
<td>Reference</td>
<td>Type of Investigation</td>
<td>General Location</td>
<td>Findings</td>
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</tr>
<tr>
<td>Beardsley, and Kaschko</td>
<td>Archaeological monitoring and data recovery</td>
<td>Pacific Beach Hotel Office Annex</td>
<td>2 burials and cultural deposits</td>
</tr>
<tr>
<td>Griffin 1987</td>
<td>Burial Recovery Report</td>
<td>Kilauea Ave. near corner of Kailua St.</td>
<td>Bones removed and bagged by construction crew, burial found in makai wall of gas pipe excavation</td>
</tr>
<tr>
<td>SHPD 1987</td>
<td>Burial, Recovery Report</td>
<td>Kailua Ave. and Kailua Street</td>
<td>From excavation adjacent to Moana Hotel (site -9901)</td>
</tr>
<tr>
<td>Bath, and Kawachi 1989</td>
<td>Burial, Recovery Report</td>
<td>Ala Wai golf Course</td>
<td>2 burials</td>
</tr>
<tr>
<td>Davis 1989</td>
<td>Reevaluation Survey &amp; Historical Research</td>
<td>Fort DeRussy</td>
<td>Fishponds and other features are buried in this area. Sites -457 and -4577 are fishponds, 4570 is a remnant cultural deposit</td>
</tr>
<tr>
<td>Riford 1989</td>
<td>Background Literature Search</td>
<td>TMK: 2-6-014</td>
<td>List of literature pertaining to Waikiki area</td>
</tr>
<tr>
<td>Rosendahl 1989</td>
<td>Inventory Survey, Preliminary Report</td>
<td>Fort DeRussy</td>
<td>Historic artifacts, no human remains</td>
</tr>
<tr>
<td>Athens 1990</td>
<td>Letter</td>
<td>TMK: 2-6-023</td>
<td>Letter to SHPD listing human remains at IARI lab from Pacific Beach Hotel, and Barbers Point Generating Station</td>
</tr>
<tr>
<td>Hurst 1990</td>
<td>Historical Literature Search</td>
<td>Waikiki Hotel</td>
<td>Background and planning document. No fieldwork was done</td>
</tr>
<tr>
<td>Chigioji 1991</td>
<td>Assessment</td>
<td>2 parcels, TMK 2-6-24-35-68 and 80-83, TMK 2-6-24-34-40 &amp; 42-45</td>
<td>Formerly a corner of the ‘Ainahi estate, remainder of parcels, former ‘auwai, kalo and rice fields; test excavations and specific sampling strategy recommended</td>
</tr>
<tr>
<td>Davis 1991</td>
<td>Monitoring Report</td>
<td>Fort DeRussy</td>
<td>See also Davis 1989. Subsurface features and material remains date to early post-contact times (c. 1780s to 1790s) through the mid-19th century</td>
</tr>
<tr>
<td>Kennedy 1991</td>
<td>Monitoring Report</td>
<td>TMK: 2-6-022-014 IMAX theatre location</td>
<td>Pollen and bulk-sediment δ¹³C samples from ponded sediments were recovered. The three δ¹³C dates and pollen sequence were inverted.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Reference</th>
<th>Type of Investigation</th>
<th>General Location</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHPD 1991</td>
<td>Public Inquiry</td>
<td>TMK: 2-6-024-036</td>
<td>Bones were determined to be non-human and part of the extensive fill material present</td>
</tr>
<tr>
<td>Simons, et al. 1991</td>
<td>Interim Field Study, Monitoring &amp; Data Recovery</td>
<td>Moana Hotel Area</td>
<td>8 burials, preliminary osteological analysis indicates pre-contact type; pre-and post artifactual material recovered</td>
</tr>
<tr>
<td>Hurbett, et al. 1992</td>
<td>Monitoring Report</td>
<td>TMK: 2-6-008-001</td>
<td>Site -2870 (3 burials) found by Neller in 1980. This report is on testing and monitoring in same area</td>
</tr>
<tr>
<td>Pietrusewsky 1992a</td>
<td>PA Report</td>
<td>Moana Hotel</td>
<td>Right half of human mandible found by hotel guest</td>
</tr>
<tr>
<td>Rosendahl 1992</td>
<td>Monitoring Report</td>
<td>Hilton Hawaiian Village</td>
<td>Identified 12 historic refuse pits, 3 historic to modern trenches</td>
</tr>
<tr>
<td>Streck 1992</td>
<td>Memorandum for Record</td>
<td>Fort DeRussy</td>
<td>Human burial discovery (believed to be late prehistoric Hawaiian) during data recovery excavations, May, 20, 1992</td>
</tr>
<tr>
<td>Cleghorn 1993</td>
<td>Inadvertent Discovery of Human Remains</td>
<td>Waikiki Aquarium</td>
<td>Remains of one human individual, mandible identified</td>
</tr>
<tr>
<td>Dagher 1993</td>
<td>Inadvertent Discovery of Human Remains</td>
<td>Waikiki Aquarium</td>
<td>Human remains of at least one person identified, excavation recommended.</td>
</tr>
<tr>
<td>Dega, and Kennedy 1993</td>
<td>Inadvertent Discovery of Remains</td>
<td>Waikiki Aquarium</td>
<td>Discovery of unidentified bone fragments, all remains turned over to SHPD</td>
</tr>
<tr>
<td>Hammatt, and Chigioji 1993</td>
<td>Archaeological Assessment</td>
<td>16-Acre Portion of the Ala Wai Golf Course</td>
<td>Not associated with any known surface archaeological site, however prehistoric and early historic occupation layers associated with loʻi system remain intact below modern fill. Specific sampling strategy and potential burial testing recommended</td>
</tr>
<tr>
<td>Carlson, et al. 1994</td>
<td>Report of Human Remains</td>
<td>Realignment of Kahului Road, Fort DeRussy</td>
<td>Approximately 40 human burials (the majority were recovered in a large communal burial feature &amp; a cultural enriched layer that contained postholes</td>
</tr>
<tr>
<td>Reference</td>
<td>Type of Investigation</td>
<td>General Location</td>
<td>Findings</td>
</tr>
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</tr>
<tr>
<td>Maly, et al. 1994</td>
<td>Archaeological and Historical Assessment Study</td>
<td>Convention Center Project Area</td>
<td>Recommend subsurface testing to determine presence or absence of cultural deposits and features</td>
</tr>
<tr>
<td>Hammatt, and Shideler 1995</td>
<td>Sub-surface Inventory Surface</td>
<td>Hawai‘i Convention Center Site, 1777 Kalākaua Ave.</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Jourdane 1995</td>
<td>Inadvertent Discovery of Human Remains</td>
<td>Paoakalani Avenue</td>
<td>Human skeletal remains discovered in planted strip between street and sidewalk fronting hotel</td>
</tr>
<tr>
<td>Simons, et al. 1995</td>
<td>Data Recovery Excavations</td>
<td>Fort DeRussy</td>
<td>Historic and prehistoric artifacts, and midden materials collected from 7 occupation layers. 6 prehistoric cultural features recorded: ‘auwai bands and channels, fishpond walls and sediments, a possible lei, and hearths</td>
</tr>
<tr>
<td>Cleghorn 1996</td>
<td>Inventory Survey</td>
<td>TMK: 2-6-01:6,23, 25, 26, 28, 61, 69</td>
<td>7 backhoe trenches excavated, no sites located</td>
</tr>
<tr>
<td>Grant 1996</td>
<td>Historical Reference</td>
<td>Waikīkī</td>
<td>Historical information about Waikīkī prior to 1900</td>
</tr>
<tr>
<td>Hammatt, and Shideler 1996</td>
<td>Data Recovery Excavations</td>
<td>Hawai‘i Convention Center Site</td>
<td>No clear evidence that Kiu‘ili Pond sediments present in project area; no further work recommended</td>
</tr>
<tr>
<td>McDermott, et al. 1996</td>
<td>Inventory Survey</td>
<td>‘Ainalau Estate</td>
<td>Burned remains of ‘auwai and lo‘i and human burial found. 14C dates</td>
</tr>
<tr>
<td>Denham, et al. 1997</td>
<td>Data Recovery Report</td>
<td>Fort DeRussy</td>
<td>Excavations conducted at fishponds, 14C dates mid-17th C.</td>
</tr>
<tr>
<td>Denham, and Pantaleo 1997</td>
<td>Monitoring and Excavations Report</td>
<td>Fort DeRussy</td>
<td>Final Report does not include SHPD recommendations. 10 subsurface features and 9 burial locations found. 14C dates</td>
</tr>
<tr>
<td>Beardsley, and Kaschko 1997</td>
<td>Monitoring and Data Recovery Report</td>
<td>Pacific Beach Hotel Office Annex</td>
<td>Traditional Hawaiian cultural deposits and 2 human burials. 3 14C dates</td>
</tr>
<tr>
<td>Hammatt, and Chiogioji 1998</td>
<td>Assessment</td>
<td>King Kalākaua Plaza Phase II</td>
<td>No surface archaeological sites, documented human burials, presence of subsurface cultural deposits (both pre-contact Hawaiian and historic provenance)</td>
</tr>
<tr>
<td>Hammatt, and Chiogioji 1998</td>
<td>Assessment</td>
<td>King Kalākaua Plaza Phase II</td>
<td>No surface archaeological sites, documented human burials, presence of subsurface cultural deposits (both pre-contact Hawaiian and historic provenance)</td>
</tr>
</tbody>
</table>

Reference to Cultural Impact Assessment Report for the 280 Beach Walk Retail Development 36

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of Investigation</th>
<th>General Location</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammatt, and McDermott 1999</td>
<td>Burial Intermittent Plan and Report</td>
<td>Kalākaua Avenue</td>
<td>Two human burials found</td>
</tr>
<tr>
<td>Perzinski, et al. 1999</td>
<td>Monitoring Report</td>
<td>Akong Ala Wai Blvd., Kalākaua Ave., Ala Moana Blvd., &amp; 'Ewa Rd.</td>
<td>Two human burials found (1 preceding monitoring); pockets of disturbed layers still exist. Burial #2 previously disturbed</td>
</tr>
<tr>
<td>Rosendahl 1999</td>
<td>Interim Report: Inventory Survey</td>
<td>Fort DeRussy</td>
<td>This area is part of the old shoreline</td>
</tr>
<tr>
<td>Hammatt, and Chiogioji 2000</td>
<td>Archaeological Assessment</td>
<td>Honolulu Zoo Parcel</td>
<td>Majority of zoo parcel unlikely to yield significant cultural deposits. However, strong possibility of significant subsurface cultural deposits in the SW portion. Monitoring is recommended in this area</td>
</tr>
<tr>
<td>LeSuer, et al. 2000</td>
<td>Inventory Survey</td>
<td>King Kalākaua Plaza Phase II</td>
<td>Site -5796 has been adversely affected by land alteration of the project area. Site - 4970, has been adequately documented</td>
</tr>
<tr>
<td>Perzinski, et al. 2000</td>
<td>Burial Findings</td>
<td>Kalākaua Ave. between Ka‘ūlani &amp; Monsarrat Avenues</td>
<td>44 sets of human remains; 37 disinterred, 7 left in place; believed to be Native Hawaiian, interred prior to 1820</td>
</tr>
<tr>
<td>Cleghorn 2001 a &amp; b</td>
<td>Mitigation</td>
<td>Burger King Construction Site</td>
<td>Concerning three incidents of uncovered human remains while locating a buried sewer-line for the ABC’s store</td>
</tr>
<tr>
<td>Corbin 2001</td>
<td>Inventory Survey</td>
<td>Hilton Waikīkī Property</td>
<td>No arch. sites were found during excavations of the area</td>
</tr>
<tr>
<td>Elmore, and Kennedy 2001</td>
<td>Burial Report</td>
<td>Royal Hawaiian Hotel</td>
<td>Human remains found during trench excavations for conduit. The in situ remains were left in place, while the disturbed remains were re-interred with the others</td>
</tr>
<tr>
<td>McGuire, and Hammatt 2001</td>
<td>Cultural Assessment</td>
<td>Waikīkī Beach Walk Project Akong Lewers St., Beach Walk, Kālia Rd. &amp; Saratoga Rd.</td>
<td>Primary cultural concern identified as inadvertent burial discovery. Cultural monitoring recommended for all subsurface work within project area</td>
</tr>
<tr>
<td>Perzinski, and Hammatt 2001 a</td>
<td>Monitoring Report</td>
<td>Kapi‘olani Bandstand</td>
<td>A charcoal layer was observed, concentrated on the SW side of the bandstand; recovered indigenous basalt lamp with a handle, from the SE end of the bandstand</td>
</tr>
</tbody>
</table>

Reference to Cultural Impact Assessment Report for the 280 Beach Walk Retail Development 37
<table>
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<th>Reference</th>
<th>Type of Investigation</th>
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</thead>
<tbody>
<tr>
<td>Perzinski, and Hammatt 2001b</td>
<td>Monitoring Report</td>
<td>Kap'olani Park</td>
<td>No cultural layer, artifacts, midden or human burials were encountered during the excavations</td>
</tr>
<tr>
<td>Perzinski, and Hammatt 2001c</td>
<td>Monitoring Report</td>
<td>Kalākaua Avenue from the Natatorium to Poni Moʻi Road</td>
<td>No cultural layer, artifacts, midden or human burials were encountered during the excavations</td>
</tr>
<tr>
<td>Rosenzweig 2001</td>
<td>Assessment Study</td>
<td>Outrigger Walk</td>
<td>Assessment of previous archaeology and historical literature</td>
</tr>
<tr>
<td>Wineski and Hammatt 2001</td>
<td>Monitoring Report</td>
<td>TMK: 1-2-6-025.000</td>
<td>There is a possibility that Hawaiian or Historic materials as well as human burials may still be present within the project area</td>
</tr>
<tr>
<td>Borthwick et al. 2002</td>
<td>Inventory Survey</td>
<td>71,000 sq. ft. parcel, TMK: 2-6-016.002</td>
<td>No burials were found during testing; absence of dry jausas sand deposits indicate that burial finds are unlikely in project area</td>
</tr>
<tr>
<td>Bush and Hammatt 2002</td>
<td>Monitoring Report</td>
<td>Kalākaua Avenue, between Ala Moana Blvd. and Kapahulu Ave.</td>
<td>Encountered 4 human burials, probably pre-contact Native Hawaiians; several historic trash pits; entire pig within an imu pit (estimated date, A.D. 1641-1671); gleyed muck associated with former ponds</td>
</tr>
<tr>
<td>Calis 2002</td>
<td>Monitoring Report</td>
<td>Lemon Road</td>
<td>No historic deposits, major previous disturbance</td>
</tr>
<tr>
<td>Elmore and Kennedy 2002</td>
<td>Monitoring Report</td>
<td>Fort DeRussy</td>
<td>No findings</td>
</tr>
<tr>
<td>Mann and Hammatt 2002</td>
<td>Monitoring Report</td>
<td>Liliʻuokalani Avenue and Ulumu Avenue</td>
<td>5 burial finds of 6 individuals; two historic trash pits</td>
</tr>
<tr>
<td>Putzi and Cleghorn 2002</td>
<td>Monitoring Report</td>
<td>Hilton Hawaiian Village</td>
<td>No findings during monitoring of trench excavations for sewer connections</td>
</tr>
<tr>
<td>Wineski, Perzinski, Shideler et al. 2002a</td>
<td>Monitoring Report</td>
<td>Kalākaua Ave. between Kaʻuʻilani and Monsarrat Avenues</td>
<td>44 human burials encountered, 37 disinterred; buried habitation layer identified, with traditional Hawaiian artifacts, midden, firepits, &amp; charcoal; fragment of light gauge rail, remnant of Honolulu Transit trolley system, observed; low energy alluvial sediments associated with the now channelled mauliwai Kukaunahi also observed</td>
</tr>
<tr>
<td>Reference</td>
<td>Type of Investigation</td>
<td>General Location</td>
<td>Findings</td>
</tr>
<tr>
<td>---------------------------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hammatt, and Shideler 2006b</td>
<td>Archaeological Assessment</td>
<td>0.015-Acre Parcel at the Corner of Kāhūi and Kapahulu TMK: 2-6-027:052</td>
<td>No significant finds, study area abuts former Ku‘eauahahi Stream (now overlain by Kapahulu Avenue)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Account</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1913</td>
<td>…two individuals from Waikīkī… FR* page 1; BPBM records indicate this was ID No OA0002 &amp; 0003 from the Sacred Hearts Convent, Waikīkī</td>
<td></td>
</tr>
<tr>
<td>1916</td>
<td>…one individual from Waikīkī… FR* page 2; BPBM records indicate this was ID No OA0009 a “sand burial”</td>
<td></td>
</tr>
<tr>
<td>1917</td>
<td>“from unknown location in Waikīkī” BPBM records indicate this was ID No OA0012 (no details)</td>
<td></td>
</tr>
<tr>
<td>1923</td>
<td>…one individual from the ‘Ăinahau district, Waikīkī… FR* page 2; BPBM records indicate this was ID No OA0018 “found by Hawaiian Dredging Company by dredge Kewalo”</td>
<td></td>
</tr>
<tr>
<td>1923</td>
<td>…five individuals from Helumoa, Waikīkī, Oʻahu were collected by Kenneth P. Emory. Museum information indicates they were victims of the 1853 smallpox epidemic…</td>
<td></td>
</tr>
<tr>
<td>1926</td>
<td>…one individual from Waikīkī…found during house construction FR* page 3; BPBM records indicate this was ID No OA0087 from a residence in Waikīkī</td>
<td></td>
</tr>
<tr>
<td>1927</td>
<td>…one individual from Waikīkī… FR* page 3</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>3207 Noela Drive “found at rear of donor’s property during excavation BPBM records indicate this was ID No OA0211 and OA0212</td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>…two individuals from Waikīkī… FR* page 7; BPBM records indicate this was ID No OA 0315 discovered at the Reef Hotel Waikīkī</td>
<td></td>
</tr>
<tr>
<td>1957</td>
<td>…nine individuals from Waikīkī… FR* page 8; BPBM records indicate this was ID Nos OA0391 to OA0402 from Dad Center located along Kalākaua Avenue</td>
<td></td>
</tr>
<tr>
<td>1961</td>
<td>…one individual from Waikīkī… FR* page 8; BPBM records indicate this was ID No OA0419 from 331 Saratoga Avenue</td>
<td></td>
</tr>
<tr>
<td>1962</td>
<td>…one individual from Waikīkī… FR* page 9; BPBM records indicate this was ID No OA0421 “from sand burial near Reef Hotel”</td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>…five individuals from Waikīkī… FR* page 9; BPBM records indicate this was ID No OA0424 “found on Edgewater Drive near Reef Hotel” [it would be atypical for the BPBM to assign one ID No. to 5 burials]</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Account</td>
<td>Source</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>1963</td>
<td>96 individuals from Waikīkī [donated by Bowen]</td>
<td>FR* page 9; BPBM records indicate this was ID Nos OA0425 to OA0455 “from Old Outrigger Canoe Club Premises.” Note: Bishop Museum records from 1963 specify the finds donated by Robert N. Bowen on January 22, 1963 were from “the Old Outrigger Canoe Club Premises.” However the 1/24/63 Honolulu Advertiser article concerns burial finds at the present club location by the Eil’s Club.</td>
</tr>
<tr>
<td>1964</td>
<td>Four individuals from Waikīkī</td>
<td>FR* page 9; BPBM records indicate this was ID No OA0464 “from site on beach in front of old Outrigger Canoe Club.” It would be atypical for the BPBM to assign one ID No. to 4 burials.</td>
</tr>
<tr>
<td>1965</td>
<td>“Human remains collected from San Souci Beach, Waikīkī”</td>
<td>BPBM records indicate this was ID No OA0633</td>
</tr>
<tr>
<td>1966</td>
<td>Two accessions from 2431 Prince Edward Street</td>
<td>BPBM records indicate this was ID No OA0462 &amp; OA0467 from ‘a‘awa side of lot makai of Prince Edward Street</td>
</tr>
<tr>
<td>1967</td>
<td>One individual from Waikīkī</td>
<td>FR* page 11; BPBM records indicate this was ID No OA0516 from the “Tahiti by Six” at the International Market Place</td>
</tr>
<tr>
<td>1970</td>
<td>Eight individuals from Waikīkī [donated by the Sheraton Hawai‘i Corp. recovered during excavations for tank construction]</td>
<td>FR* page 11; BPBM records indicate this was ID No OA0522 on Sheraton Hawai‘i Corp Property logged in on 3/6/1970</td>
</tr>
<tr>
<td>1981</td>
<td>Eight individuals from Waikīkī [donated by Bertell Davis]</td>
<td>FR* page 12; BPBM records indicate this was ID Nos OA0565 to OA0571 “from unknown location in Waikīkī; also OA0572 “recovered through archaeological excavation at the Halekulani hotel, Waikīkī”</td>
</tr>
<tr>
<td>1996</td>
<td>One individual from Waikīkī [acquired during the early 1900s]</td>
<td>FR* page 14</td>
</tr>
</tbody>
</table>

FR* = Federal Register January 28, 1998 (Volume 63, Number 18)

Figure 12. U.S. Geological Survey topographic map, showing previous archaeological survey areas in Waikīkī
and states that: “When excavations for the Royal Hawaiian Hotel were made in the early 1920s many 'ulu maika disce were found.” It seems highly probable that the “five individuals from Helimoa, Waikīkī, O'ahu” that were collected by Kenneth P. Emory of the Bishop Museum in October of 1923 and reported as “victims of the 1853 smallpox epidemic” came from construction related to the Royal Hawaiian Hotel (Federal Register January 28, 1998 Volume 63, Number 18 page 2; BPBM records indicate this was ID Nos OA0019 – OA0023).

In the 1920s and 30s the first systematic archaeological survey of O'ahu was conducted by J. C. McAllister (1933). He recorded four heiau (temples), three of which were located at the ʻānaʻa reaches of Waikīkū Ahupua'a in lower Mānoa Valley. The fourth heiau - Papa'ena'ena - was located at the foot of Diamond Head crater in the environs of the present Hawai'i School for Girls. Papa'ena'ena Heiau is traditionally associated with Kamehameha I, who was said to have visited the heiau before setting off to battle for Ni'ihau and Kauai in 1804. Five years later, according to John Papa 'Īi, Kamehameha placed at Papa'ena'ena the remains of an adulterer - "all prepared in the customary manner of that time" (ʻĪi 1959:50-51).

In 1963, two human skulls and other human remains were recovered in a construction trench at 2431 Prince Edward St. (Bishop Museum site On-A4-23, cited in Neller 1984).

Multiple burials were encountered in 1963 during excavation for the construction of the present Outrigger Canoe Club at the Diamond Head end of Kalākaua Avenue. As reported in an article in the Honolulu Star Bulletin on Jan. 24, 1963:

The Outrigger Canoe Club yesterday dedicated its new site [on land adjacent to and leased from the Elks Club], an ancient Hawaiian burial ground in Waikīkī…

Robert Bowen of the Bishop Museum has been working closely with Ernest Souza, Hawaiian Dredging superintendent, on the removal of skeletons unearthed on the site, between the Colony Surf and the Elks Club…

Most of the bodies were buried in the traditional hoolewela position, with the legs bound tightly against the chest.

One of the skeletons, Bowen said, shows evidence of a successful amputation of the lower forearm, indicating that the Hawaiians knew this kind of operation before the arrival of Europeans.

The ages of the skeletons ranged from children to 40-year-old men and women. The average life span of the Hawaiians at the time was about 32 years. (Honolulu Star-Bulletin, Jan. 24, 1963:1A)

A total of 27 burials were encountered according to Yost (1971:28). Apparently, no formal archaeological report on the burials was produced.

Bishop Museum records show 31 accessions of human remains (ID Nos OA0425 to OA0455) donated by Robert N. Bowen on January 22, 1963 stating that they were all from "the Old Outrigger Canoe Club Premises" which suggests the former location by the Royal Hawaiian Hotel. However, the 1/24/63 Honolulu Star Bulletin article concerns burial finds at the present club location by the Elks Club. The Federal Register of January 28, 1998 (Volume 63, Number 18 page 4281) asserts that: “In 1963, human remains representing 96 individuals from Waikīkī O'ahu were collected and donated to the Bishop Museum by Robert N. Bowen. There is a mystery here. The Honolulu Star-Bulletin and Yost accounts speak only of mass burials at the present Outrigger Canoe Club Premises (by the Elks Club) while the Bishop Museum records speak only of mass burials at the old Outrigger Canoe Club Premises (by the Royal Hawaiian) and the Federal Register provides no locational data within Waikīkī but gives a significantly greater number of individuals (96) than suggested in the Yost history of the Outrigger (which specifies 27 burials). Given the close relationships of the dates of the report of Bowen's work on multiple burials at the present Outrigger Canoe Club (Jan. 24, 1963) and the date of accession of remains at Bishop Museum (Jan. 22, 1963), and noting that there is no account in the Bishop museum records of remains from the “new” Outrigger Canoe Club location, it appears most likely to us that all of the burials reported were actually from the present “new” Outrigger Canoe Club location. This remains uncertain.

In 1964, sand dune burials, a traditional Hawaiian mortuary practice, were revealed as beach sand eroded from the Surfside Hotel (Bishop Museum Site Files).

It seems highly probable that “…eight individuals from Waikīkī…” [donated] by the Sheraton Hawai'i Corp… recovered during excavations for tank construction… in March 1970 were indeed associated with the initial construction of the hotel (Federal Register January 28, 1998 Volume 63, Number 18 page 11; BPBM records indicate this was ID No OA0522 found on Sheraton Hawai'i Corp Property logged in on 3/6/1970).

In 1976, during construction of the Hale Koa Hotel, adjacent to the Hilton Hawaiian Village Hotel, six burials were unearthed, five of apparent prehistoric or early historic age, and one of more recent date (Bishop Museum Site Files).

In 1980, three burials were exposed at the Hilton Hawaiian Village during construction of the hotel's Tapa Tower. Earl Neller of the (then named) State Historic Preservation Program was called in upon discovery of the burials and conducted fieldwork limited to three brief inspection of the project area. Neller's (1980) report noted:

The bones from three Hawaiian burials were partially recovered; one belonged to a young adult male, one a young adult female, and one was represented by a child. The former was buried bound tightly against the chest.

It is suspected that other important historic archaeological sites exist in the highly developed concrete jungle of Waikīkī, with discrete, dateable trash deposits escalated to the different ethnic and social groups that occupied Waikīkī over the last 200 years. (Neller 1980:5)

Neller also documented the presence of trash pits, including one from the 1890s, which contained "a large percentage of luxury items, including porcelain tableware imported from China, Japan, the United States, and Europe" (Neller 1980:5). He further notes:

It is suspected that other important historic archaeological sites exist in the highly developed concrete jungle of Waikīkī, with discrete, dateable trash deposits escalated to the different ethnic and social groups that occupied Waikīkī over the last 200 years. (Neller 1980:5)

Between December 1981 and February 1982, archaeologists from the Bishop Museum led by Bertell Davis conducted a program of excavations and monitoring during construction of the new
Halekūlani Hotel (Davis 1984). Six human burials were recovered along with “animal burials [and] cultural refuse from prehistoric Hawaiian (firepits, and a large collection of bottles, ceramics, and other materials from trash pits and privies dating to the late 19th century” (Davis 1984:i). Age analysis of volcanic glass recovered from the site led Davis to conclude: “For the first time we can now empirically date . . . settlement in Waikīkī to no later than the mid-1600s” (Neller 1980:5). Just as significant to Davis was the collection of historic era material at the Halekūlani site; he states:

[The] Halekūlani excavations clearly demonstrate that there is a definite need to consider historic-period archaeology as a legitimate avenue of inquiry in Hawaiian research. Furthermore, archaeology in the urban context can yield results every bit as significant as in less developed areas. Development in the 19th and early 20th centuries clearly has not destroyed all archaeological resources in Waikīkī, Honolulu, or in any of the other urbanized areas of Hawai‘i. (Neller 1980:5)

In 1989, skeletal remains were unearthed on the grounds of the Ala Wai Golf Course during digging of an electrical line trench for a new sprinkler system. The trench had exposed a pit containing two burials (Bath and Kawachi 1989: 2) and associated artifacts. The excavation was conducted by BioSystems, Inc., and directed by Glenn Davis. Analysis included in the report concludes that both sets of remains “appear ancient” (Bath and Kawachi 1989: 2)

Davis’ (1989, 1991) excavation and monitoring work at Fort DeRussy documented substantial subsurface archaeological deposits, prehistoric, historic, and modern. These deposits included buried fishpond sediments, ‘anawai [irrigation ditch] sediments, midden and artifact enriched sediments, structural remains such as post holes and fire pits, historic trash pits, and a human burial. Davis’ (1991) report documents human activity in the Fort DeRussy beachfront area from the sixteenth century to the present.

The work at Fort DeRussy continued in 1992 when BioSystems researchers built upon Davis’ work (Simons et al. 1995). BioSystems research documents the development and expansion of the fishpond and ‘anawai system in this area. The ‘anawai system was entered on the State Inventory of Historic Places (SIHP) as State Site 50-80-14-4970. As indicated on the 1881 map by S. E. Bishop discussed above, this ‘anawai enters the Fort DeRussy grounds through the present project area. Remains of the fishpond and ‘anawai deposits, as well as habitation deposits, were documented below modern fill deposits. This research, along with that of Davis (1991), clearly demonstrates that historical document research can be an effective guide to locating late prehistoric/early historic subsurface deposits, even amidst the development of Waikīkī.

In 1992, Hurlbett et al. (1992) conducted additional monitoring and testing in this same area as Neller (1980). The state site -2870 was given to the three burials first found by Neller. Additional subsurface features, postdating 1881, were found during trenching operations.

The realignment of Kīlia Road at Fort DeRussy in 1993 uncovered approximately 40 human burials. A large majority of these remains were recovered in a large communal burial feature (Carlson et al. 1994). The monitoring and excavations associated with this realignment uncovered a cultural enriched layer that contained post holes.

In 1993, during construction activities at the Waikīkī Aquarium, directly adjacent to the present project area, fragmentary human remains were discovered scattered in a back dirt pile, although no burial pit was identified (Dega and Kennedy 1993).

On April 28, 1994, an inadvertent burial discovery was made during excavation for a water line at the intersection of Kalākaua Avenue and Ku‘uipo Street (just mauka of Fort DeRussy). These remains represented a single individual (McMahon 1994). In 1995, the remains of one individual were discovered in situ during construction activities on Paoakalani Street, fronting the Waikīkī Sunset Hotel (Jourdane 1995).

In 1996, Pacific Legacy, Inc. conducted an archaeological inventory survey of the block bounded by Kalākaua Avenue, Kūhiō Avenue, ‘Olohana Street, and Kālia Road at Fort DeRussy. The survey included excavation of seven backhoe trenches. The subsurface testing indicated that
From January 2000 to October 2000, 40 human burials were encountered during archaeological monitoring of the Kāhū Beach Extension/Kalākaua Promenade project (Winiwski, Perzinski, Souza, et al. 2002b). Six of these were located within a coralline sand matrix. The four others were partial and previously disturbed within fill. Additionally, a major cultural layer was found and documented, apparently part of the same major cultural layer associated with the waterline project between Kaʻailani and ʻOhua Avenues.

In April 2001 human remains were inadvertently disturbed during excavations associated with the construction of a spa at the Royal Hawaiian Hotel (Elmore et al. 2001). Archaeological Consultants of the Pacific, Inc. was responsible for the documentation of the remainder of the burial and carrying out the instruction of DLNR/ SHPD. The burial and burial location were assigned State Site # 50-80-14-5937. The partially disturbed burial was encountered on the North side of the hotel in the spa garden. The burial was recorded as a post contact burial based on associated artifacts including one shell button found in situ and three more shell buttons found in the disturbed material. A single drilled dog tooth was found also during excavation but could not be positively associated with the site.

In May 2nd and June 14th, 2001, two in situ and two previously disturbed human burials were encountered at the site of a new Burger King (Cleghorn 2001a and 2001b) and an adjoining ABC Store (Cleghorn 2001b). The first burial was located at the intersection of ʻOhu Street and Kalākaua Avenue (Cleghorn 2001a and 2001b). Because of their proximity to five burials encountered during the Kalākaua 16” Water Main Installation (Winiwski, Perzinski, Shideler, et al. 2002a), they were included in the previously assigned State Site 50-80-14-5861. Three of these burials were recovered, and one was left in place. Volcanic glass fragments were found in association with one of the burials. A cultural layer was also observed which contained moderate to heavy concentrations of charcoal and fragments of volcanic glass. Historic era artifacts, including a bottle fragment, plastic and glass buttons, a ceramic fragment, and metal fragments were also encountered within fill materials.

In 2001 and 2002, CSH (Mann and Hammatt 2002) performed archaeological monitoring for the installation of 8- and 12-inch water mains on Uluniu Avenue and Liliʻuokalani Avenue. During the course of monitoring, a burial find, consisting of six individuals, were recorded within the project area. Four burial finds were recorded on Uluniu Avenue; three of these inadvertent finds were found in fill sediment. Due to the nature of the three burial finds in fill, it was concluded that no State Site number(s) be assigned to these three previously disturbed burials. The only primary in situ burial encountered on Uluniu Avenue was assigned State Site # 50-80-14-5861. The fifth burial, consisting of two individuals in fill material, was recorded from Liliʻuokalani Avenue. Since three burials had been found in the immediate vicinity during a previous project (Winiwski, Perzinski, Souza, et al. 2002b) and had been assigned to Site #50-80-14-5859, the two new individuals were recorded as Feature H of this previously recorded site.

In 2004, Cultural Surveys Hawai‘i conducted an archaeological inventory survey and cultural impact evaluation for the Ala Wai Gateway project site (Freeman et al. 2005). The project site comprised TMK 2-6-031:002, 003, 004, 005, and 006, which are bounded by Ala Wai and Ala Moana boulevards, Hobron Lane, and Līʻpēʻeʻe Street. Four historic properties were documented in the survey including human remains, a cultural layer and a fishpond remnant.
In 2005 Cultural Surveys Hawai‘i conducted an archaeological inventory survey of a 72,135 square foot (1.67 acre) project area on Kāio‘o Drive (TMK [1] 2-6-012: 37, 38, 39, 40, 41, 42, 43, 44, 55, 56, 57) (O’Hare et al. 2005). One, Site 50-80-14-6848, a pre-contact firepit radiocarbon dated to AD 1470-1660, was recorded.

Three areas of very high densities of burials have been previously reported from Waikīkī: in 1963 from the present Outrigger Canoe Club (apparently 96 burials – but see discussions above), in 1993 in a communal burial feature uncovered during the realignment of Kālia Road at Fort DeRussy (approximately 40 human burials, Carlson et al. 1994) and during a Kalākaua Avenue waterline project near the intersection with Kealohilani Avenue (18 burials; Perzinski et al. 2000). It seems probable that additional areas with a high density of burials will be encountered in the future.

In summary, past archaeological research, from the beginning of the twentieth century to the present has produced evidence that traditional Hawaiian cultural deposits, historic trash deposits, and, most notably, human burials, do exist throughout the breadth of the Waikīkī area. It is of special concern that two to three burials were recorded by the Bishop Museum in the early 1960s, within or just outside the current project area. Two of these three were found near the ‘Ohana Reef Hotel, which was located on the corner of Kālia Road and Saratoga Road, within the southwestern corner of the current study area.

Section 4  Community Consultations

4.1 Results of the Prior Cultural Impact Evaluation for the Project Area

A Cultural Impact Evaluation was prepared by CSH for the project area in 2005 for a different project proponent, for a project that was not pursued (Chiogioji et al. 2005). Between this Cultural Impact Evaluation and the current study, the project area has not been developed or otherwise changed and the project area for these two independent projects corresponds exactly. The prior cultural study was designed to fulfill cultural consultation requirements pursuant to Hawai‘i Revised Statutes (HRS) Chapter 343 and the Office of Environmental Quality’s Guidelines for Assessing Cultural Impacts, as well as to support the now defunct project’s review under historic preservation review under HRS Chapter 6E-42 and HAR Chapter 13-284.

This prior cultural consultation effort sought information from individuals knowledgeable about the project area’s history and past land use. The focus of that consultation was to identify ongoing traditional cultural practices and historic properties within the project area. In the course of this evaluation, no ongoing traditional cultural practices or concerns were identified for the study area. None of the community contacts queried for this assessment identified any ongoing traditional cultural practices specifically within the project area.

Based on the Chiogioji et al. (2005) investigation, the potential to disturb Native Hawaiian burials represent the project’s only potential adverse impact upon Native Hawaiian historic properties. Some community members expressed concern for burials, though others focused only on the history of the fishpond, Loko Ka‘ōhali. Consulted kama‘āina Clarence A. Medeiros Jr., indicated that it was highly likely that burials could be found in the project area because of the customary Hawaiian practice of burying family members within their pa hale (yard). Heidi Guth from the Office of Hawaiian Affairs expressed a desire to have iwi found during the inventory survey follow standard procedure with the O‘ahu Island Burial Council and recommended monitoring during construction. Van Horn Diamond, O‘ahu Island Burial Council Chair, noted that the Afong Family used to live in the area and were of Hawaiian descent. Consulted kama‘āina, Mrs. Paulette Ka‘anohi Kakekini, indicated that her great-grandfather, Ialua, raised mo‘oi, a fish that was preferred by the chiefs, in a pond seen on a map provided for the cultural consultation (either Loko Ka‘ōhali and Loko Kapu‘uki).

4.2 Results of the Current Community Consultation

Throughout the course of the current assessment, an effort will be made to contact and consult with Hawaiian cultural organizations, government agencies, and individuals who might have knowledge of and/or concerns about traditional cultural practices specifically related to the project area. An initial effort was made by letter, e-mail, telephone and in person contact. In the majority of cases, letters along with a map and aerial photograph of the project area were mailed with the following text:

At the request of First Round Pacific, LLC, Cultural Surveys Hawai‘i (CSH) is conducting a cultural impact assessment of a 0.70-acre project area in Waikīkī Ahupua‘a, Honolulu (Kona) District, Island of O‘ahu (TMK 2-6-003: 026, 027, 048, 049, and 058).
The project site area is an approximately 30,376 square feet square foot property located near the north end of the elongated block bounded by Kalia Road to the south, Kalakaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. The project area is presently a largely empty lot that includes a two-level parking garage, a permanent access easement and, until recent demolition, low-rise buildings, including the site of the Hula Hut Restaurant. The project area is proposed for development of a 34,500 square foot retail building comprising two floors of six leased retail and restaurant spaces on parcels 026 and 027. Ground disturbance associated with the retail project will be limited to these parcels and will include borings related to foundation pile installation and excavation related to the project area’s development, to include structural footings, utility installation, and landscaping. Minor modifications to an existing parking structure on parcel 048 and surface improvements to the perpetual access easement, parcel 049, are also components of this project. Please see enclosed map and aerial photograph of the project area.

The purpose of this cultural study is to assess potential impacts to cultural practices as a result of future development in Waikiki. We are seeking your knowledge and guidance regarding the following aspects of our study:

- General history and present and past land use of the project area.
- Knowledge of cultural sites which may be impacted by future development of the project area - for example, historic sites, archaeological sites, and burials.
- Knowledge of traditional gathering practices in the project both past and ongoing.
- Cultural associations of the project area, such as legends and traditional uses.
- Referrals of kāpuna or elders and kamaʻaina who might be willing to share their cultural knowledge of the project area and the surrounding ahu pua’a lands.
- Any other cultural concerns the community might have related to Hawaiian cultural practices within or in the vicinity of the project area.

Several (3–5) attempts were made to contact individuals, organizations, and agencies apposite to the cultural impact assessment for Waikiki. The results of all consultations are presented in Table 3. Excerpts from more extensive interviews specifically related to Waikiki and its environs are presented in Section 5 below.

### Table 3. Community Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization, Affiliation</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>Apaka, Jeff</td>
<td>Waikiki Neighborhood Board Subdistrict 2-Chair</td>
<td>CSH spoke to Mr. Akapa at the Waikiki Neighborhood Board meeting on April 10, 2007. He was given materials and he said he would get back to CSH. On April 23, 2007, CSH sent a reminder email and a copy of the outreach letter. CSH also telephoned and talked to him. CSH spoke to Mr. Apaka by phone on May 6, 2007. After reviewing the project description and maps he shared that he has no relevant information specific to the project site.</td>
</tr>
<tr>
<td>Ayau, Edward</td>
<td>Hui Malama O Na Iwi O Hawai’i Nei</td>
<td>CSH sent an email to Mr. Ayau on March 5, 2007, including the community contact letter and maps of the project area. After no response to the initial email was received, CSH followed up by sending 3 reminder emails, the last sent on June 1, 2007. (Mr. Ayau has requested that CSH only send CIA review request letters by email.) The email was forwarded by Mr. Ayau to Ms. Paulette Kaʻanohi Kaleikini. See Ms. Kaleikini’s statement below.</td>
</tr>
<tr>
<td>Chinen, Melanie</td>
<td>SHPD Burials Program-Burials Facilitator</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24, 2007. Additionally, CSH requested a list of Recognized Cultural Descendants of Waikiki from the SHPD. In a visit to SHPD on February 6, 2007, Richelle Paresa (SHPD office clerk) stated that Ms. Chinen was reviewing the letter and list request, and will get back to CSH in the next few weeks. On March 2 and 6, CSH left messages for Richelle. On March 6, CSH spoke to Richelle who stated that it is extremely difficult to obtain a list of cultural descendants from SHPD or even to obtain a response from Ms. Melanie Chinen. CSH sent an email to the SHPD on March 12, 2007.</td>
</tr>
<tr>
<td>Name</td>
<td>Organization, Affiliation</td>
<td>Results</td>
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<tr>
<td>Diamond, Van Horn</td>
<td>O‘ahu Island Burial Council Chair</td>
<td>CSH sent an email on March 13, 2007. CSH conducted a phone interview on April 3, 2007. Mr. Diamond shared the following: “When the Hawaiian Hut was opened, people had odd feelings about the area, like there were bad spirits there. They can be a little sensitive to the area. I would like to find someone who knows a little history of the place. People who performed at HH had problems.” Mr. Diamond suggested that CSH access the Hawaiian community to address the spiritual aspects of the project, and referred CSH to Kehaulani Kruse.</td>
</tr>
<tr>
<td>Harris, Cy K.</td>
<td>Cultural Descendant of Waikī</td>
<td>CSH sent a letter on May 17, 2007. CSH phoned May 22, 2007 and left a message. CSH called on May 29, 2007, and Mr. Harris supplied a statement provided in Section 5 below.</td>
</tr>
<tr>
<td>Kaleikini, Paulette Ka‘anohi</td>
<td>Cultural Descendant of Waikī</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24. Ms. Kaleikini replied in an email sent on March 12 that CSH was welcome to re-publish the interview she gave for the prior cultural study conducted on the Beachwalk area of Waikī. The ‘ilima of Kalia was the birth sands of three generations of her ‘ohana (family). Her siblings (8) were born there, her mother and all her siblings (8) were born there, and her mother’s father and his siblings (6) were born there. Mrs. Kaleikini’s great grandfather was George William Keaweamahi who built the houses where they were born and lived. Her great great-grandfather’s sister was Napua whose son was William Luther Moehonua who was the governor of Maui under Kalākaua and uncle to Kalākaua. He was also cousin to her great great grandfather (Ialua) and kahu (honored attendant, guardian) to Moehonua, his name was Kaaua. The fresh water pond that you see on the map was where her great great-grandfather, Ialua raised mo‘i that was preferred by the chiefs, including Kamehameha I who was close relative to her kūpuna. Paulette’s kūpuna were kahus of the chiefs. Her kūpuna were also healers; as kahu usually are. They grew their own ʻāu (medicinal plants) on the ‘ilima. They also gathered limu from the ocean close by in the vicinity of what is now an R &amp; R Resting place for the military. Often her mother would take her to the beach to gather limu. In a follow-up email sent to CSH on June 13, Ms. Kaleikini stated that she had visited the Kalia area over the weekend of June 9-10, and offered these additional comments: “I could no longer see the landscaped boundaries of Kalia ‘ili [subdivision of an ali‘i‘ū] (a). Kalia, the one hanau (the birth sands) of my grandfather, my mother and my siblings are lost under piles of concrete, Kalia is gone. It was a disgusting visit for me, it gripped my na‘au [heart, gut]. Kalamai i‘au [I’m sorry, My apologies], that’s all I have to add.”</td>
</tr>
<tr>
<td>Name</td>
<td>Organization, Affiliation</td>
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<tr>
<td>Keohokilole, Adrian K.</td>
<td>Cultural Descendant of Waikiki</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24. CSH telephoned March 6, 2007, but the voice mailbox was too full to receive messages. CSH called on May 10, 2007, and was referred to Mr. Keohokilole’s sister Emalia, who may have comments.</td>
</tr>
<tr>
<td>Keohokilole, Emalia E.</td>
<td>Cultural Descendant of Waikiki</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24. CSH called on May 10, 2007, and was told by Ms. Keohokilole to send the letter again. She will be the one to call back as she does not like to receive calls at work. Ms. Keohokilole declined to give her number at home. CSH sent the letter again on May 11, 2007. No response.</td>
</tr>
<tr>
<td>McQuivey, Jace</td>
<td>O‘ahu Island Burial Council, Chair</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24. CSH left a phone message on March 6, 2007. CSH sent an email on March 12, 2007 and a reminder email on May 21, 2007. Mr. McQuivey referred CSH to Kehaulani Kruse, who has provided a statement.</td>
</tr>
</tbody>
</table>

Cultural Impact Assessment Report for the 280 Beach Walk Retail Development
TMK [1] 2-6-003: 026, 027, 048, 049, and 058

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization, Affiliation</th>
<th>Results</th>
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<tbody>
<tr>
<td>Medeiros, Clarence A. Jr.</td>
<td>Cultural Descendant of Waikiki</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24. In a phone conversation on March 6, 2007, Mr. Medeiros shared with CSH that his primary concern is that proper SHPD procedures be followed if iwi are found in the project area. He gave CSH permission to re-publish his comments from the prior CIA: Mr. Medeiros shared that Kaliopao (wahine) was the Mahele Awardee of LCA 1436, 1.01 acres in Kālia. In Claim 1436 of Native Testimonies, Kaliopao claimed a houslot in Kālia and identified a stream at Kālia that she surrendered contentedly to Kekūanaoa. She identifies the Kahikilapu Pond Waikīkī as belonging to Kekūanaoa. The stream being a source of water for lo‘i kalo (taro ponds) and a source of food is evidence of a native, traditional, and customary gathering source. It is possible that a kapu could have been placed on the fishpond, being exclusive to the ali‘i. Because of the customary Hawaiian practice of burying family members within their pa‘au (yard), it is highly likely that Native Hawaiian burials may exist in this project site. Mr. Medeiros’s Caucasian, Chinese, Hawaiian, Portuguese and Spanish predecessors lived and owned land through Waikīkī. They were residents as well as owners of the lo‘i kalo and rice fields, employing foreigners to work the fields. Living on the land, the burials of these foreigners may also be found within the subject property. Legends of certain places and practices relating to Waikīkī can be found written in oli (chant) and mele hula (hula songs). Consultation of kumu hula (hula sources) could be another source of information.</td>
</tr>
<tr>
<td>Nobrega, Malia</td>
<td>Waikīkī Hawaiian Civic Club</td>
<td>CSH sent a letter on March 5, 2007 and follow-up emails on March 12, May 6, and May 17, 2007.</td>
</tr>
</tbody>
</table>

Cultural Impact Assessment Report for the 280 Beach Walk Retail Development
TMK [1] 2-6-003: 026, 027, 048, 049, and 058
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization, Affiliation</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rose, Charles</td>
<td>Association of Hawaiian Civic Clubs-President</td>
<td>Mr. Rose was contacted on May 10, 2007 and informed CSH that he is not interested in contributing to this assessment.</td>
</tr>
<tr>
<td>Tomczyk, Piʻikea L.</td>
<td>Waikīkī Hawaiian Civic Club-President</td>
<td>CSH sent a letter on January 22, 2007 and a letter with TMK revisions on January 24. The second letter was returned to CSH on 2/25. Several attempts were made to search for the club address and telephone number, as well as the personal number of Ms. Tomczyk. No number is listed for the club as well as for Mr. Tomczyk. No new address was found.</td>
</tr>
</tbody>
</table>
Section 5  Summaries of Kama‘āina “Talk Story” Interviews

Kama‘āina and kūpuna with knowledge of the Waikīkī Ahupua‘a and the area within the vicinity of the proposed 280 Beachwalk Retail Development project were invited to participate in “talk-story” sessions for the cultural impact assessment. The approach of Cultural Surveys Hawai‘i Inc. to cultural impact studies affords those community contacts an opportunity to review transcriptions and/or interview notes and to make any corrections, deletions or additions to the substance of their testimony. Our interview selection process usually focuses on knowledgeable older individuals (kūpuna) who are often in ill health or of a mind not to be rushed. It is often the case that the coercive demands of time that drive the contemporary development process do not fit well with those who have memories of an earlier time.

Cultural Surveys Hawai‘i Inc. employs an informed consent process and conducts semi-structured interviews with community contacts (Bernard 2005). To assist in discussion of natural and cultural resources and any traditional cultural practices specific to the project area, CSH initiates the “talk-story” session questions from five broad categories. The categories include: Burials, Trails, Native Gathering Practices of Plants, Marine and Fresh water Resources and Historic Properties. Presented below are brief backgrounds of participants’ “talk-story” sessions and their comments and concerns about the proposed project area. Excerpts from extensive interviews specifically related to Waikīkī and its environs will be presented in this section.

5.1 Kehaulani Kruse

Cultural Surveys Hawai‘i conducted a telephone interview with Ms. Kehaulani Kruse on May 6, 2007. This interview was supplemented by another on May 23, 2007. Kehaulani Kruse’s ‘ohana has a long connection to Waikīkī and Ms. Kruse, in addition to being a member of the O‘ahu Island Burial Council, has conducted extensive research in Waikīkī. Ms. Kruse shared the following information regarding the project area:

*Iwi* was discovered near the proposed development. Ms. Kruse helped in the re-internment of the *iwi*. The owner of the building promised that accommodations would be made to protect the site. The *iwi* was in the way of the electrical cable that was being installed, so it was put where there would be no disturbance.

On the Outrigger property on Beach Walk, Ms. Kruse also helped coordinate *iwi* that was found. The *iwi* was re-interned to a vault area, and the area was then landscaped in a respectful manner, with the vault in the ground. Ms. Kruse then named the area, “Nā-wai-huna-o-Kawehewehe,” or the ‘Hidden Waters of Kawehewehe.’ Whether this particular *iwi* is related to the healing pond, she is not sure. Ms. Kruse recommended that CSH refer to the SHPD report on the re-burial.

As an Outrigger employee, Ms. Kruse conducted research on the area. Ms. Kruse commented that, “All of Waikīkī is significant. Plenty of fishponds, plenty of people lived there.” In response to the question whether there are cultural sites which may be impacted by future development of the project area, Ms. Kruse commented that as far as heiaus on this particular property is concerned, she is not aware of any heiaus existing on the proposed project site. However, there was a healing pond that was close to the project area. This was “Kawehewehe.”

Ms. Kruse knows of no ongoing cultural practices, such as plant-gathering, specific to the project area, and remarked, “There is hardly anything going on, as there are no plants to gather. A lot has already been developed, and Waikīkī has been destroyed, but the mana is still there.”

5.2 Cy Harris

Cultural Surveys Hawai‘i conducted a telephone interview with Mr. Harris on May 29, 2007. Mr. Harris is a cultural descendant for Waikīkī and for over a year and a half he performed as a dancer in the Hawaiian show featured in the Hula Hut restaurant. Mr. Harris graciously shared the following information regarding the project area:

In 1974, the Hula Hut restaurant was a theme restaurant offering Japanese food and a Hawaiian show with notable artists. “I used to dance in the show at the Hula Hut. We used to have dressing rooms next door to the Hula Hut. I know when they built Hula Hut, they found burials between two buildings and burials in the parking lot. They also built over burials with the small hotel, next to the Hula Hut, on the oceanside. It’s very probable that you will run into more burials in that area. Because they used to see a lot of things.”

When asked if he had heard about anything or experienced it himself, Mr. Harris replied: “Both. I heard about it and saw it. I know in the kitchen, plates flew in the air and shattered on the floor. Things would tumble off the shelves. All the priceless plates, Japanese plates, beautiful china that was lost. It was constantly happening. We used to see stuff in the dressing rooms, in the hallway next to the dressing rooms.”

When asked what kind of phenomena he experienced, Mr. Harris said: “It’s hard to explain. Shadows disappear into the hallway. There used to be an alley way that went from Beachwalk to the parking lot of Hula Hut. There was always a lot of activity in the parking lot, and in that area, if you know what I mean. It’s like spiritual activity. There would be a ghost of a Hawaiian warrior that would appear. Also in the parking lot, in the lower structure, people used to see things. People would see things that disappeared into the wall. They had it blessed several times because the hotel was having problems.”

According to Mr. Harris, the show he was in eventually closed because of all the problems. Although the owners of the restaurant attempted other things, these did not succeed. Mr. Harris said: “They tried something else, but whatever went in there, did not make it.” Mr. Harris had no specific comments about the proposed Beachwalk development project.
Section 6 Cultural Landscape of the Project Area

Discussions of specific aspects of traditional Hawaiian culture as they may relate to the project area are presented below. The concluding discussion examines resources and practices identified within the project area in the broader context of the encompassing Waikiki Ahupua’a landscape.

Traditional cultural practices are based on an awareness of the harmony between humans and their natural resources. The Hawaiians of old depended on these cultural practices for survival. Based on their familiarity with specific places, and through much trial and error, Hawaiian communities were able to devise systems that fostered sustainable use of nature’s resources. Many of these cultural practices have been passed down from generation to generation and are still practiced in some of Hawai’i’s communities today.

This section will include discussions on different types of traditional practices, cultural resources and mo’olelo (stories) associated with Kailua. Excerpts from interviews and talk story sessions are incorporated throughout this section where applicable.

6.1 Hawaiian Agriculture

Kalo or taro, from which poi is made, was a major food staple in the traditional Hawaiian diet. Evidence from the Māhele LCA’s indicates that kalo was cultivated on kuleana land in Kailua. Luaiku (LCA #2549) indicated they maintained 4 kō‘ī (taro pond) on their land. Often, kalo was planted along the edges of streams (Handy 1940:10).

In relation to kalo there are also many associated religious and cultural beliefs. In brief, kalo is associated with the god Kāne. There are specific rituals and prayers related to the planting of kalo. Hawaiians also believe they are descendents from Hālōmakā, the first kalo plant or the elder brother, and from Hāloa – the younger brother. There is a dual relationship between the kalo plant and fish in the ocean when making ritual offerings. For example, the red-stalked kīnō‘ū fish might be substituted for the red kīnō‘ū fish. These are only a few of the many religious beliefs associated with kalo.

For the prior cultural impact evaluation (Chiogjoji et al. 2005), Mr. Clarence Medeiro Jr.’s pointed out that Caucasian, Chinese, Hawaiian, Portuguese and Spanish predecessors lived and owned land throughout Waikīkī. They were residents as well as owners of the kō‘ī kalo (taro ponds) and rice fields once commonplace in Waikīkī.

6.2 Hawaiian Aquaculture

The area known as Fort DeRussy (Kailua) contained 10 Hawaiian fishponds used for aquaculture. Hawaiian aquaculture is especially significant, as it was not practiced elsewhere in the Pacific. The majority of fishponds most likely were constructed in the sixteenth century. The prefix loko means “body of water” and the suffix describes the specific type. The four types of ponds are: loko i‘a kalo (fish and taro raised together in a pond), loko wai (inland freshwater fishpond), loko pu‘uone (isolated shore fishpond formed by a barrier sand berm creating a single elongated ridge parallel to the coast) and loko kuapī (seawall on a reef with sluice gates). In 1902, Cobb recorded the fishponds at Kailua as freshwater loko wai (Cobb 1902). Davis (1991) labeled the ten fishponds at Fort DeRussy to be koko pu‘uone with salt-water lens intrusion and fresh water entering from upland ‘a‘awa‘i. Kailua’s Py maio was this type of stream. The 10 ponds are inland, swale-based ponds constructed between beach ridges that may have formed along the coast within the last millennium. Existing depressions in the sand were chosen to make the koko pu‘uone, and brush was cleared out. During traditional times, the ponds were used to farm fish, usually for the Hawaiian ali‘i (royalty). The ‘ama‘ama (mullet) and the ana (milkfish) were the two types of fish traditionally raised. During his 1973 archaeological studies, Kikuchi categorized the ponds at Kailua as type IIIb: “A man-altered loko wai which has a dirt and stone embankment wall separating from a river or stream and which has a sluice gate” (Kikuchi 1976:229).

Kikuchi writes that fishponds evolving “from a simple technological device into a symbol of status and power is significant from the vantage point of the development of stratified societies in the Pacific” (Kikuchi 1976:296). Fishponds were a crucial component of food production as well as symbols of status. Water from (irrigation ditch or canal) would have been used for both agriculture and aquaculture, therefore requiring a cooperative system of water utilization. The types of fish that thrived in the brackish water were the Euryhaline fish mullet (Mugil cephalus) and milkfish (Chanos chanos). These fish have a natural inclination to swim against currents toward freshwater sources. Maintenance of the ponds would have been constant and necessitated a fulltime caretaker or caretakers.

Motivated by business in the late 1880s, Chinese farmers began leasing the ponds from Hawaiians to raise fish and ducks and the taro fields were converted to rice fields. Many ponds in the Kailua area were filled in when Fort DeRussy was built and when the Ala Wai Canal was dredged in the 1920s. Earl Vida, whose father supervised the construction of the Ala Wai, related that ... Project 1985:597). The filling in of the ponds (and the taro fields) had dramatic implications for future generations of Hawaiians: it forever altered the traditional landscape and it prevented Hawaiians from being able to return to this traditional way of life in Waikīkī.

LCA 1436, shared by Mr. Clarence A. Medeiro Jr. in the prior cultural impact evaluation (Chiogjoji et al. 2005), shows that Kaleiaopa (who was the Māhele Awardee of LCA 1436, 1.01 acres in Kailua. In Claim 1436 of Native Testimonies, Kaleiaopa claimed a house lot in Kailua and identified a stream at Kailua that she surrendered contestedly to Kekuni. Ms. Paulette Ka‘ano Kaleikini shared that the fresh water pond at Kailua was where her great-great-grandfather, Laha, raised mo‘i (threadfish, Polydactylus sexfilis), that was preferred by the chiefs, including Kamehameha I who was close relative to her kūpuna. Ms. Kaleikini’s o‘ahanena were kaha of the chiefs.
6.2 Loko Kaʻohai

At one time, Waikīkī was a network of thriving lo‘i (taro) fields and fishponds. Kālia was especially known for its large inland ponds (loko pu‘uone) and its abundant stock of fish. Pu‘uone ponds were close to shore ponds, loko kaua‘i, or to the seashore, and next to the mouths (nuku) of streams (Kamakau 1976:49). During traditional times, the ponds were used to farm fish—usually for the Hawaiian ali‘i (royalty). The ‘ama‘ama (mullet) and the awa (milkfish) were the two types of fish traditionally raised.

No doubt, these ponds were critical in feeding the large armies that landed in Waikīkī during times of war, and the large retinue associated with chiefly residences in nearby Helumoa. Tī mentions an incident where a particularly large catch of fish was given as tribute to Kāna‘u, Kamehameha’s son. The fish came from the nearby pond of Moehomna in Kālia (Tī 1959-49).

The ponds were also home to the kōboa (native duck) and other ocean water fowl such as the ‘akua‘u (heron), ‘ua‘u (madhen), ‘āke kau‘ūke ke‘oke‘o (coot), and the awo (stilt) (Kanahele 1995:129). As early as 1828, foreign visitors (Duhaut-Cilly; Chamberlain) commented on the state of decline and disrepair of the fishponds and taro fields in Waikīkī. The French navigator, Auguste Duhaut-Cilly, attributed this decline to the missionaries who coerced the Hawaiians to spend most of their time in school reading the bible rather than working in their fields, and to the sandalwood trade.

Hawaiian author, George Kanahele, credits the deterioration of the Waikīkī fishponds to several negative impacts, including introduced diseases which decimated not only the ponds’ caretakers, but the general laborer class who maintained the ponds, and the Māhele which altered the land tenure system and diminished the power of the konohiki (land manager) to control corvee labor (Kanahele 1995:126).

In the late 1880s, Chinese farmers began leasing the ponds from Hawaiians to raise fish and ducks and the taro fields were converted to rice fields. The interim fate of Loko Ka‘ohai is not known prior to the pond being filled in.

In 1911, Loko Ka‘ohai was filled in by realtor, Percy Pond, to create the Beach Walk Tract. Other nearby ponds in Kālia were likewise filled when Fort DeRussy was built and when the Ala Wai Canal was dredged in the 1920s. Earl Vida, whose father supervised the construction of the Ala Wai, related that Dillingham had a dual-purpose scheme, not only to build the canal, but to fill in the ponds. “We don’t need the ponds. We need the land” (Oral History Project1985:597). The filling in of the ponds (and the taro fields) had dramatic implications for future generations of Hawaiians: it forever altered the traditional landscape and it prevented Hawaiians from being able to return to this traditional way of life in Waikīkī.

6.3 Gathering of Plant Resources

Hawaiians utilized upland resources for a multitude of purposes. Forest resources were gathered not only for the basic needs of food and clothing, but for tools, weapons, canoe building, house construction, dyes, adornments, hula, medicinal, and religious purposes. However, as noted above, during traditional Hawaiian times the present project area was used for the gathering of hala, koki, and similar upland resources.

Within the project area itself, no specific documentation was found in regards to gathering of plants during traditional Hawaiian times. During this evaluation there were no ongoing practices related to traditional gathering of plant resources identified in the present project area. None of the individuals contacted or interviewed for this assessment identified any current native plant gathering practices within the project area. Ms. Kaleikini’s described how her kāpuna were healers, growing their own lā‘au (medicinal plants) on the ‘ai‘a.  

6.4 Marine and Freshwater Resources

The ocean was just as important a gathering place as the land. A study of ocean resources existed in relation to Po‘inaio Stream and the two other streams feeding into Waikīkī. It seems this resource is no longer found in Waikīkī today, because the streams no longer flow to the sea. E‘le‘ele normally grows in areas where there is freshwater intrusion, such as where freshwater streams enter the ocean (Abbott 1974:10).

Interviews from the prior cultural impact assessment (Chiogiogi et al. 2005) confirmed that the Waikīkī shoreline was abundant in many varieties of fish and limu, certain varieties of crab and lobster, as well as being good squid grounds. Talk-story with fishermen who presently use the Waikīkī coast confirms, for the most part, this is still true today.

Before the Ala Wai Canal was built and the streams diverted, the streams feeding into Waikīkī were once abundant in ‘o‘opu (species of Hawaiian endemic fish in the Goby family) and ‘opae (shrimp). Local kama‘āina attest that by the time they were born these two resources were no longer available. However, stories passed down by their elders and parents indicated the stream was once an important cultural resource for them. Sadly, these two cultural resources are
no longer found in Waikīkī today. Ms. Kaleikini’s recalled that her Sipapa gathered limu from the ocean close by in the vicinity of what is now an R & R Resting place for the military. Often her mother would take her to the beach to gather limu.

6.5 Burials

The discovery of burials in the Waikīkī area during recent construction projects has been a cause of concern over the last few years.

There are approximately 14,500 records associated with LCA claims during the Māhāle of 1847-1853. Of these records, 432 are for claims both awarded and unawarded in Waikīkī. Among these 432 claims, there is only one mention of a graveyard or burial place, Claim 613 (to Kūlualihaua) which was not awarded (www.waihona.com). Although it is uncertain where the reported burial ground is located, based on the boundaries given in the testimony (Native Register, Vol. 2: 299-300 found in www.waihona.com), it is speculated that it might be adjacent to the former location of Waikīkī Church, near Kāʻīulani Avenue.

It seems the circumstances of the burials discovered in the vicinity of the project area are much more mundane than battle deaths or human sacrifices - namely that the vast majority of the deceased were the common people of Kālīa. Withington (1953:16), probably referring to the ‘ōoku’u plague (circa 1804), wrote: “...a few years of peace settled over the Islands. Kamahānaha and other warring chiefs took this opportunity to re-establish their forces, which had been greatly reduced through war and disease. A terrible epidemic of measles had attacked the people of the islands. It is claimed that more than three hundred bodies were carried out to sea from Waikīkī in one day” (Withington: 1953:16). It is possible that some of the Kālīa burials discovered to date reflect such early depopulation by introduced diseases.

Social rank appears to have had profound influences on places available for burial sites. A king’s body, or those of his attendants, could be placed within the district of the king’s authority. Many geographical features were available. Fewer were available to lesser chiefs and their attendants, who were presumably limited to their own districts. The number of geographical features available for burial sites seems to have decreased as rank decreased. Burial sites for members of an extended family living in an ‘ili was restricted to those geographical features located within the land unit, whether broken lava flats, lava tubes, earth plains, or sand dunes (Bowen 1961:21).

According to Bowen (1961:21), most Hawaiians in the pre-contact period belonged to the maka‘āina (commoner) class and their bones were usually buried in no other area than their particular ‘ili (land division within an ahupua‘a).

Burials are commonly reported from clean, consolidated sand deposits, as this was clearly a common method of interment practiced by Hawaiians (Cleghorn 1897-42). One of the earliest references to traditional Hawaiian burial practices was made by Urey Lisiansky, who visited Hawai‘i in June 1804. He notes: “The poor are buried anywhere along the beach...” (1814: 122).

Commenting on the nature of burial areas and body positions used in burial, William Ellis (1827:361-363) wrote: “...the common people committed their dead to the earth in a most singular manner.” The body was flexed, bound with cord, wrapped in a coarse mat, and buried one or two days after death. Graves were:

…either simply pits dug in the earth, or large enclosures...Occasionally they buried their dead in sequestered places at a short distance from their habitations, but frequently in their gardens and sometimes in their houses. Their graves were not deep and the bodies were usually placed...in a sitting posture. (Ellis 1827:361)

Hawaiians placed significance on the iwi (bones), which were regarded as a lasting physical manifestation of the departed person and spirit. “The bones of the dead were guarded, respected, treasured, venerated, loved or even deified by relatives; coveted and despoiled by enemies” (Pukui et al., 1974:107).

For the prior cultural impact evaluation (Chiogioji et al. 2005), Mr. Clarence A. Medeiros Jr., a recognized cultural descendant of Waikīkī, shared that because of the customary Hawaiian practice of burying family member within their pit hale (yard), it is highly likely that native Hawaiian burials may exist in the proposed project area. His Caucasian, Chinese, Hawaiian, Portuguese predecessors lived and owned land throughout Waikīkī. They were residents as well as owners of lo‘i kalo and rice fields. Living on the land, the burials of these foreigners may also be found within the subject property.

Ms. Kehaulani Kruse shared that iwi were discovered near the proposed development and on the Outrigger property on Beach Walk Ms. Kruse helped in the re-burial and blessing of the iwi on both properties. Mr. Cy Harris, a former entertainer at the Hula Hut restaurant, commented that he was aware that, “when they built Hula Hut, they found burials between two buildings and burials in the parking lot. They also built over burials with the small hotel, next to the Hula Hut, on the oceanside. It’s very probably that you will run into more burials in that area. Because they used to see a lot of things.”

6.6 Kawehewehe – a Wahi Pana (Storied Place) of Spiritual Healing

Kawehewehe, the older Hawaiian name for the overall area where the project is situated, is associated with a healing tradition. The waters of Kawehewehe were believed to have special healing qualities. As a treatment for illness and defilement, the sick were brought here to bathe in the healing waters of the ocean. As part of the healing ritual, many might wear a lei woven from the limu kala. After bathing in the ocean, the patient ducks under the water, releasing the lei from around his neck, letting the lei kala float out to sea. Upon turning around to return to shore, the custom is to never look back, symbolizing the ‘oki (to sever or end) and putting an end to the illness. Leaving the lei in the ocean also symbolizes forgiveness (kāle) and the leaving of anything negative behind.

Kawehewehe takes its meaning from the root word, “wehe” which mean “to remove” (Pukui et al. 1974:383). Thus, as the name implies, Kawehewehe was a traditional place where people went to be cured of all types of illnesses – both physical and spiritual. It is uncertain if the tradition of Kawehewehe as a healing place originated hundreds of years ago in Hawaiian history or whether it began after the introduction of foreign diseases and epidemics that decimated thousands of Hawaiians.
As a young child, John 'Ii, was trained to be an attendant in the courts of the ali'i (chiefs). He relates the story of how his relatives arrived on O'ahu, making Kawehewehe their first home.

...John Papa Ii, first appeared amongst the chiefs when but a small child, at Kawehewehe in Waikiki, Oahu. His uncle, Papa Ii, and most of their people were there at that time, for that was their first residence when the company arrived from Lahaina at the time of the coming of Kamehameha with his great peleleu fleet of canoes intended for the invasion of Kauai. (1959:17)

Not only was Kawehewehe a healing place, but it was also a desired place to live because it was situated close to the chiefly residences (Pua'a'ali'i'i) and beloved ali'i whom 'Ii's family served.

Perhaps the original place name of Kawehewehe first took its name from a spring in Kawehewehe Pond, which might have also had healing qualities. In Hawaiian legends, many springs had healing powers. Over time, this reputation might have been expanded to include the waters facing the beach at Kawehewehe. Ms. Kehaulani Kruse paid tribute to Kawehewehe, naming the re-burial area for the iwi on the Outrigger Hotel property, “Na-wai-huna-o-Kawehewehe,” or the Hidden Waters of Kawehewehe.

6.7 Mo'o (Water Spirits)

Traditionally, mo'o (water spirits) are associated with fishponds, springs and water resource areas that they guard and protect. Mo'o are known to take on more than one form (kino lau), many times taking on the form of a part-human or human. Often, ponds were associated with a particular named mo'o who was worshiped and to whom offerings were made. Kamehameha promised one of his akua (gods), Kihawahine, that he would build her a hale puanu – a house where offerings were made with 'awa (Piper methisticum) (Kamakau 1964: 85-86). There are no known legends regarding mo'o in relation to Loko Koa'ohai or Kawehewehe Pond.

6.8 Hawaiian Trails

In Fragments of Hawaiian History John Papa 'Ii described the “Honolulu trails of about 1810” (1959: 89), including the trail from Honolulu to Waikiki:

The trail from Kawaiahao which led to lower Waikiki went along Kaananiau, into the coconut grove at Pawaa, the coconut grove of Kuakika, then down to Pinao; along the upper side of Kahanamakai’s coconut grove, along the border of Kaikikapu pond, into Kawehewehe; then through the center of Helumoa of Puaa'ilii, down to the mouth of the Apuakehau stream. ('Ii 1959: 92)

The 1881 map (Figure 5) shows Kaikikapu pond to the west of the present project area. Māhele records identify the makai portion of the present project area as Kawehewehe.

Based on 'Ii’s description, the trail from Honolulu to Waikiki in 1810 coursed through the makai side of the present Ft. DeRussy grounds and continued makai of the present project area in the vicinity of Kalia Road. It is likely that this trail was a long-established traditional route through Waikiki (Figure 14).
Cultural Surveys Hawai'i, Inc., undertook this cultural impact assessment at the request of First Round Pacific, LLC. Traditional native Hawaiian cultural practices declined with the extensive land modification and urbanization of the greater Waikīkī area. As the wetlands were drained and ponds were filled to accommodate the continuing expansion of urban Honolulu, the traditional way of life for native Hawaiians was no longer possible in Waikīkī. No on-going cultural practices were found in the vicinity of the current proposed project area.

Although the area has been graded and filled to accommodate previous development, the area was not disturbed by fill material. Cultural ascendants of Waikīkī (Ms. Kruse, Ms. Kaleikini, Mr. Medeiros, Mr. Harris) indicated that there could be iwi (human remains, bones) in the project area. Native Hawaiian burial practices were such that the potential for encountering human burials in sandy deposits is high. Remnant subsurface fishpond sediments could be encountered.

It is anticipated, based on historical research and previous archaeological projects, that evidence of pre-contact and early post-contact aquaculture, habitation, agriculture, and possibly burial practices may be found in the project area. Native Hawaiian burial practices were such that the potential for encountering human burials in sandy deposits is high. Remnant subsurface fishpond sediments could be encountered.

Based on the findings of this assessment, no further formal cultural impact mitigation measures are warranted. Cultural Surveys Hawai'i recommends that as a precautionary measure, personnel involved in future development activities in the area should be informed of the strong possibility of inadvertent cultural finds, including human remains, and should be made aware of the appropriate notification measures to follow.

Cultural Surveys Hawai'i, Inc.


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APPENDIX F
Archaeological Assessment Report for the 280 Beach Walk Retail Development
# Archaeological Assessment Report

for the 280 Beach Walk Retail Development,

Waikiki Ahupua'a, Honolulu (Kona) District, O'ahu

TMK [1] 2-6-003: 026, 027, 048, 049, and 058

Prepared for

First Round Pacific, LLC

Prepared by

Matthew J. Bell, BA

and

Matt McDermott, MA

Cultural Surveys Hawaii, Inc.

Kailua, Hawaii (Job Code: WA1KI 12)

January 2007

## Management Summary

<table>
<thead>
<tr>
<th>Reference</th>
<th>Archaeological Assessment Report for the 280 Beach Walk Retail Development, Waikiki Ahupua'a, Honolulu (Kona) District, O'ahu [1] 2-6-003: 026, 027, 048, 049, and 058 (Bell and McDermott 2006)</th>
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<tr>
<td>Date</td>
<td>January 2007</td>
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<tr>
<td>Project Number(s)</td>
<td>Cultural Surveys Hawaii, Inc. (CSH) Job Code: WA1KI 12</td>
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<tr>
<td>Investigation Permit Number</td>
<td>The archaeological assessment fieldwork was carried out under archaeological permit number 0605 issued by the Hawaii State Historic Preservation Division/Department of Land and Natural Resources (SHPD/DLNR).</td>
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<tr>
<td>Project Location</td>
<td>The project area – TMK 2-6-003: 026, 027, 048, 049, and 058 – comprises an approximately 30,000 square foot property near the north end of the elongated block bounded by Kalanianaole Avenue to the north, Kalikaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. It is shown on the 1998 USGS 7.5 Minute Series topographic map, Honolulu Quadrangle. A portion of this property was the former Hula Hut restaurant.</td>
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<tr>
<td>Project Jurisdiction and Funding</td>
<td>Private, First Round Pacific, LLC</td>
</tr>
<tr>
<td>Agencies</td>
<td>SHPD/DNLR</td>
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<td>Project Description and Related Ground Disturbance</td>
<td>The project area is proposed for development of a 17,675 square foot retail building comprising 1 floor of seven leased retail spaces on parcels 026 and 027. Ground disturbance associated with the retail project will be limited to these parcels and will include borings related to foundation pile installation and excavation related to the project area's development, to include structural footings, utility installation, and landscaping. Minor modifications to an existing parking structure on parcel 048 and surface improvements to the perpetual access easement, parcel 049, are also components of this project.</td>
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<tr>
<td>Project Acreage</td>
<td>Approximately 0.70 acres (30,376 square feet)</td>
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</table>
### Historic Preservation Regulatory Context and Document Purpose
As a privately funded project on privately owned land, the proposed 280 Beach Walk Retail Development requires compliance with and review under state of Hawai‘i historic preservation review legislation (Hawai‘i Revised Statutes (HRS) Chapter 6E-42 and Hawaii Administrative Rules (HAR) 13-284). At the request of the First Round Pacific, LLC, CSH completed an archaeological inventory survey investigation for the requirements of HAR Chapter 13-13-276, of the subject 0.7-acre parcel. Because no Historic properties were located in the 0.7-acre parcel, this investigation is termed an archaeological assessment per HAR Chapter 13-13-284-5. This archaeological assessment report was prepared to support the proposed retail development’s historic preservation review and any other project-related historic preservation consultation.

### Fieldwork Effort
Douglas Borthwick, BA; Matthew Bell, BA; Tony Bush, BA; Randy Groza, BA; Lisana Loyvac, BA; Jeff Olenciaz, BA; Michelle Parmmer; and Matt McDermott, MA (principal investigator), completed the fieldwork on November 21 and 22, 2006. The field effort required approximately 10 person-days to complete. No surface historic properties were identified during pedestrian inspection. The historic property identification effort focused on a subsurface testing program. Eleven trenches were excavated, documented, and sampled.

### Number of Historic Properties Identified
None

### Historic Properties Recommended Eligible to the Hawai‘i Register
None

### Effect Recommendation
The proposed project will not affect identified historic properties recommended eligible to the Hawai‘i Register. Nevertheless, cultural consultation results indicate a concern for human burials in the area and previous archaeological work has documented numerous burials in the vicinity and disturbed human remains in historic fill. Because of these concerns, CSH’s project-specific mitigation recommendation is for archaeological monitoring as a contingency identification measure (HAR Chapter 13-279-9).

### Mitigation Recommendation
In order to mitigate the potential damage to unidentified historic properties that may yet exist in the project area, it is recommended that project construction proceed under an archaeological monitoring program. This program will focus on identification and proper treatment if any isolated burials or disturbed remains predicted by background research are discovered. It will also gather additional information regarding the project’s non-burial archaeological deposits, should any be discovered. This monitoring program may consist of a combination of on-site and on-call monitoring of project construction.
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Section 1. Introduction

1.1 Project Background

At the request of First Round Pacific, LLC, Cultural Surveys Hawai‘i (CSH) completed this archaeological assessment of a 0.7-acre project area in Waikīkī Ahupua‘a, Honolulu (Kona) District, Island of O‘ahu (TMK 2-6-003: 026, 027, 048, 049, and 058). The project area is an approximately 30,000 square foot property located near the north end of the elongated block bounded by Kalia Road to the south, Kalākaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. Figure 1 shows this project area on a USGS topographic map, Figure 2 on a tax map key (TMK) map, and Figure 3 on an aerial photograph.

The project area is presently a largely empty lot that includes a two-level parking garage, a permanent access easement and, until recent demolition, low-rise buildings, including the site of the Hula Hut Restaurant (refer to Figure 3). There are two different conditions of ownership in the project area. Parcels 026, 027, 048 and 058 are privately owned and the proposed development is privately funded by First Round Pacific, LLC in a Joint Development Agreement. Parcel 049 is privately owned by a separate entity but is a permanent access easement to be resurfaced as part of the current project. The proposed 280 Beach Walk Retail Development will consist of a one-story retail building of a maximum height of 11.5 meters (38 feet). Ground disturbance associated with the project will include borings related to foundation pile installation and excavation related to the project area’s development, to include structural footings, utility installation, and landscaping. This ground disturbance will be occurring on Parcels 026 and 027, presently a gravel parking lot, where the retail building will stand. The project will also include minor structural modifications to the existing parking structure on Parcel 048 and surface improvements for the perpetual access easement Parcel 049. Parcel 058 is a utility easement running roughly north south through the center of the project area and is not directly part of the project’s plans.

For this archaeological assessment, the project’s area of potential effect (APE) is defined as the entire approximately 0.7-acre footprint of the proposed retail development. The project area’s surrounding built environment is urban (paved streets and low rise and high rise buildings) and the proposed construction poses no additional auditory, visual or other environmental impacts to any surrounding potential historic properties (for example historic buildings or structures). Accordingly, for the current archaeological assessment the survey area and the project APE are one and the same.

1.2 Historic Preservation Regulatory Context and Document Purpose

As a privately funded project on privately owned land, the proposed 280 Beach Walk Retail Development requires compliance with and review under state of Hawai‘i historic preservation review legislation (Hawai‘i Revised Statutes (HRS) Chapter 66-42 and Hawai‘i Administrative Rules (HAR) 13-284). At the request of the First Round Pacific, LLC, CSH completed an archaeological inventory survey investigation, per the requirements of HAR Chapter 13-13-276, of the subject 0.7-acre project area. Under Hawai‘i state historic preservation legislation, archaeological inventory surveys are designed to identify, document, and provide significance.
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Figure 2. Tax map showing the project area

Figure 3. 2005 USGS orthophoto quad showing the project area, the former Hula Hut Restaurant, the existing parking structure and the access easement from Saratoga Road.

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TMK 1: 2-603-036, 027, 048, 049, and 058
and mitigation recommendations for historic properties. Under this legislation, historic properties are defined as any “building, structure, object, district, area, or site, including heiau and underwater sites, which is over fifty years old” (HAR Chapter 13-284-2). A project’s effect and potential mitigation measures are evaluated based on the project’s potential impact to “significant” historic properties (those historic properties determined eligible, based on an established significance criteria, for inclusion in the Hawai‘i Register of Historic Places (Hawai‘i Register)). Determinations of eligibility to the Hawai‘i Register result when a state agency official’s historic property “significance assessment” is approved by SHPD, or when SHPD itself makes an eligibility determination for an historic property (HAR Chapter 13-284).

Designed to fulfill the state requirements for archaeological inventory surveys (HAR Chapter 13-278), this investigation included an extensive subsurface testing program. Because no historic properties were located in the 0.7-acre parcel, this investigation is termed an archaeological assessment per HAR Chapter 13-13-284-5. This archaeological assessment report was prepared to support the proposed retail development’s historic preservation review and any other project-related historic preservation consultation.

1.3 Scope of Work

The following archaeological inventory survey scope of work was designed to satisfy the Hawai‘i state and City and County of Honolulu requirements:

1) Research on historic and archaeological background, including a search of historic maps, written records, and Land Commission Award documents. This research focused on the specific area with general background on the ahupua‘a and district, and emphasizes settlement patterns.

2) A 100 percent pedestrian inspection of the project area to identify any potential surface historic properties.

3) Subsurface testing with a combination of hand and backhoe excavation to identify and document subsurface cultural deposits. Appropriate samples from these excavations were analyzed for cultural and chronological information.

4) Preparation of this survey report, which includes the following:
   a) A project description;
   b) A topographic map of the survey area showing all recorded historic properties;
   c) Historical and archaeological background sections summarizing prehistoric and historic land use of the project area and its vicinity;
   d) Descriptions of all historic properties, including selected photographs, scale drawings, and discussions of age, function, and significance, per the requirements of HAR 13-276;
   e) A section concerning cultural consultations (per the requirements of HAR 13-276-5(g) and HAR 13-284-8(a)(2));
   f) A summary of historic property categories, integrity, and significance based upon the Hawai‘i Register criteria;
   g) A project effect recommendation;
   h) Treatment recommendations to mitigate the project’s adverse effect on any historic properties recommended eligible to the Hawai‘i Register identified in the project area.

This scope of work included consultation with the SHPD Archaeology and Culture and History Branches.

1.4 Environmental Setting

1.4.1 Natural Environment

The project area is flat and averages 2 meters (6 feet) above mean sea level. The water table is typically 1.3 to 2.0 m below the current land surface.

The modern shoreline at present day Waikīkī Beach is 400 meters (1312 ft) to the south. The old, natural shoreline approximately follows the modern shoreline in the vicinity of the project area, though it has been altered somewhat.

The average rainfall in this coastal area of Waikīkī is between 20-30 inches per year, with temperatures ranging from 60 to 85 degrees Fahrenheit (Armstrong 1973:56). Northeastern trade winds prevail throughout the year, although their frequency varies from more than 90% during the summer months to 50% in January; the average annual wind velocity is approximately 10 miles per hour (Wilson, Okamoto 1998:2-1. At the start of the inventory survey fieldwork, vegetation within the project area was limited to a few ornamental trees and shrubs in the south corners of the project area.

The USDA Soil Survey (Foote et al. 1972) classifies the project area’s soils as “Jaucas sand” (JaC) (Figure 4). Jaucas sand is described as:

The slope range of this soil is 0 to 15 percent, but in most places the slope does not exceed 7 percent. Included in mapping were narrow strips of Beaches and areas of Pulehu, Makulea, and Keaau soils.

In a representative profile the soil is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. In many places the surface layer is dark brown as a result of accumulation of organic matter and alluvium. The soil is neutral to moderately alkaline throughout the profile.

Permeability is rapid, and runoff is very slow to slow. The hazard of water erosion is slight, but wind erosion is a severe hazard where vegetation has been removed. The available water capacity is 0.5 to 1.0 inch per foot of soil. In places roots penetrate to a depth of 5 feet or more. Workability is slightly difficult because the soil is loose and lacks stability for use of equipment. (Foote et al. 1972)

Though classified as jaucas sand, historic maps indicate that the project area is largely in the footprint a number of ponds. While jaucas sand deposits are likely present in the project area, they are probably thin or mixed with wetland sediments. There could be high sand berms, low marshy areas, and fishpond sediments (refer to the historical documentation section, below).
These lower areas would have been filled and subsequent development of Waikīkī permanently changed the area and allowed for its current, fully urbanized character.

### 1.4.2 Built Environment

The project area is located within central Honolulu and is surrounded by modern urban development including high-rise condominiums, apartments, and hotels, streets, sidewalks, and utility infrastructure. The project area is bounded by Beach Walk to the east, Saratoga Road to the west, and two-story hollow tile apartment buildings to the north and south. The central portion of the project area, within Parcels 025 and 027, contained two modern structures, one of which was the Hula Hut Restaurant (refer to Figure 3). These structures were demolished in 2004 and 2005. The southwest portion of the project area, Parcel 048, contains a two-level, partially subterranean parking garage. The northwest portion of the project area is a perpetual access easement that is paved in asphalt. Less than half a dozen ornamental shrubs and small trees are still extant in the very southern corners of the project area.
Section 2 Methods

This section details the methods used by CSH personnel during fieldwork, background research, laboratory analysis, cultural consultation, and the preparation of this report.

2.1 Document Review

Background research included: a review of previous archaeological studies on file at SHPD; 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; study of historic maps at the Survey Division of the Department of Accounting and General Services. Historic maps and photographs from the CSH library were also consulted. In addition, Māhele records were examined from the Waihona ‘Aina database (<www.waihona.com>).

This research provided the environmental, cultural, historic, and archaeological background for the project area. The sources studied were used to formulate a predictive model regarding the expected types and locations of historic properties in the project area.

2.2 Field Methods

Douglas Borthwick, BA; Matthew Bell, BA; Tony Bush, BEd; Randy Groza, BA; Utilena Loynar, BA; Jeff Olendza, BA; Michelle Pammen; and Matt McDermott, MA (principal investigator) completed the fieldwork for this project. This field effort required approximately 30 person-days to complete. CSH completed the investigation’s fieldwork under state archaeological permit number 0005 issued by SHPD, per HAR Chapter 13-282.

A brief 100 percent pedestrian inspection of the project area confirmed that all standing architecture was less than 50 years old and that there were no surface historic properties. Accordingly, the archaeological assessment focused on a program of subsurface testing to locate any buried cultural deposits, which, based on the results of background research, CSH expected to find beneath layers of historic and modern fill. For this report, historic is defined as anything older than 50 years and modern is defined as anything younger than 50 years.

The sub-surface testing program consisted of the excavation of 11 backhoe trenches. Trenches varied in length and width depending on the trench’s purpose and its associated documentation requirements. Generally, trenches excavated to assess subsurface stratigraphy and prospect for subsurface cultural deposits were one backhoe bucket width wide (c. 0.80 m) by approximately six meters long. All trenches were excavated down to the underlying coral shelf or to below the water table, which was generally between approximately 1.3 and 2.0 meters below the present land surface.

Because of the high potential for human burials in Waikīkī, hand excavation in sand deposits was specifically undertaken to identify potential burial deposits. When sandy deposits were noted during excavation of the backhoe trench and were believed to be of sufficient depth to be natural, mechanical excavation stopped and an archaeologist entered the trench. Excavation continued by hand when jaucas sand deposits were identified. Because of the thick layers of fill and thin layers of pond sediment that were nearly ubiquitous throughout the project area, this hand excavation was not extensively utilized.

The stratigraphy in each trench was drawn and photographed. The sediments were described for each of the trenches using USDA soil description observations/terminology. Sediment descriptions include Munsell color, texture, consistency, structure, plasticity, cementation, origin of sediments, descriptions of any inclusions such as cultural material and/or roots and rootlets, lower boundary distinctiveness and topography, and other general observations. No cultural features were exposed, but isolated artifacts were carefully represented on the trench profile, documentation included profiles and/or plan views, collected samples, stratigraphic descriptions, and photographs.

The locations of each of the trenches were recorded using a Trimble Pro XR backpack GPS unit with a TSCI Datalogger and real-time differential correction. This unit provides submeter horizontal accuracy in the field. GPS field data were post-processed, yielding horizontal accuracy between 0.5 and 0.3 m. GPS location information was converted into GIS shape files using Trimble’s Pathfinder Office software, version 2.80, and graphically displayed using ESRI’s ArcGIS 9.1.

2.3 Laboratory Methods

Following the completion of fieldwork, all collected materials were analyzed using current standard archaeological laboratory techniques. Historic materials collected in the field were returned to the CSH laboratory, washed, examined, and, as appropriate, photographed. Historic artifacts were identified using standard reference materials and the resources available over the internet (Elliot and Gould 1988; IMACS 1992; Lebo and Wall 1997; Leidemann 1988; Bureau of Land Management 2006). All materials collected from the identified subsurface cultural layers were sorted, identified, measured, and quantified. In general, artifact analysis focused on establishing, to the greatest extent possible, material type, formal/function type, cultural affiliation, and age of manufacture. A very limited amount of cultural material was collected from this investigation. All of the artifacts collected are discussed in Section 7.4, Subsurface Findings.
2.4 Historic Property Evaluation for Hawai‘i Register Eligibility

Under state of Hawai‘i historic preservation legislation, historic property significance is evaluated and expressed as eligibility for listing on the Hawai‘i Register of Historic Places (Hawai‘i Register). To be considered eligible for listing on the Hawai‘i Register, a historic property must possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet one or more of the following broad cultural/historic significance criteria: “A” reflects major trends or events in the history of the state or nation; “B” is associated with the lives of persons significant in our past; “C” is an excellent example of a site type/epoch of a master; “D” has yielded or may be likely to yield information important in prehistory or history; and, “E” has traditional cultural significance to an ethnic group, includes religious structures and/or burials. For this report, historic property integrity and significance were assessed based on the guidance provided in National Register Bulletin #15, “How to Apply the National Register Criteria for Evaluation.”

2.5 Consultation Effort

A Cultural Impact Evaluation was prepared by CSH for the project area in 2005 for a different project proponent, Round One Corporation, for a project that was not pursued (Chiogioji et al. 2005). Between this Cultural Impact Evaluation and the current study, the project area has not been developed or otherwise changed and the project area for these two independent projects corresponds exactly. The prior cultural impact study was designed to fulfill cultural consultation requirements pursuant to Hawai‘i Revised Statutes (HRS) Chapter 343 and the Office of Environmental Quality’s Guidelines for Assessing Cultural Impacts, as well as to support the now defunct project’s review under historic preservation review under HRS Chapter 6E-42 and HAR Chapter 13-281. Because of the short amount of time lapsed between the 2005 Cultural Impact Evaluation and the current Archaeological Assessment, and the identical project area boundaries, a project-specific Cultural Impact Evaluation would not produce significantly different results and the current study’s consultation efforts are drawn from this prior study.

Section 3 Historical Background

This section begins with a review of the available documentary evidence for the general character of the area presently identified as Waikiki as it had evolved in the years before western contact in the later eighteenth century. The development of Waikiki lands adjacent to and including the present project area during the nineteenth century and into the early twentieth century was recorded in increasingly detailed documentation – including photographs, maps, and government records. Finally, during subsequent decades of the twentieth century, abundant documentation of Waikiki allows a more precise focus on the changes within the project area itself up to the 1950s.

3.1 Traditional and Historical Background of Waikiki Ahupua‘a

3.1.1 Pre-contact to Early 1800s

Waikiki, by the time of the arrival of Europeans in the Hawaiian Islands during the late eighteenth century, had long been a center of population and political power on O‘ahu. According to Martha Beckwith (1940), by the end of the fourteenth century Waikiki had become “the ruling seat of the chiefs of Oahu.” The preeminence of Waikiki continued into the eighteenth century and is betokened by Kamehameha’s decision to reside there upon wresting control of O‘ahu by defeating the islands chief, Kalanikupule. The nineteenth-century Hawaiian historian John Papa ʻIolani himself a member of the ali‘i, described the king’s Waikiki residence:

Kamehameha’s houses were at Puaaliiii, makai of the old road, and extended as far as the west side of the sands of Apuakehau. Within it was Helumoa where Kaahumanu went to while away the time. The king built a stone house there, enclosed by a fence... (ʻIolani, 1959: 17)

ʻIolani further noted that the “place had long been a residence of chiefs. It is said that it had been Kekuapoi’s home, through her husband Kahahana, since the time of Kahekili” (ʻIolani, 1959: 17).

Chiefly residences, however, were only one element of a complex of features – sustaining a large population – that characterized Waikiki up to pre-contact times. Beginning in the fifteenth century, a vast system of irrigated taro fields was constructed, extending across the littoral plain from Waikiki to lower Mānoa and Pāliolo valleys. This field system – an impressive feat of engineering the design of which is traditionally attributed to the chief Kalamakua – took advantage of streams descending from Makiki, Mānoa and Pāliolo valleys which also provided ample fresh water for the Hawaiians living in the ahupua’a. Water was also available from springs in nearby Mā ‘ili’ili and Punahou. Closer to the Waikiki shoreline, coconut groves and fishponds dotted the landscape. A sizeable population developed amidst this Hawaiian-engineered abundance. Captain George Vancouver, arriving at “Whyteete” in 1792, captured something of this profusion in his journals:

On shores the villages appeared numerous, large, and in good repair; and the surrounding country pleasingly interspersed with deep, though not extensive
Historical Background

valleys, which, with the plains near the sea-side, presented a high degree of cultivation and fertility.

[Our] guides led us to the northward through the village, to an exceedingly well-made causeway, about twelve feet broad, with an ditch on each side.

This opened our view to a spacious plain, which, in the immediate vicinity of the village, had the appearance of the open common fields in England; but, on advancing, the major part appeared to be divided into fields of irregular shape and figure, which were separated from each other by low stone walls, and were in a very high state of cultivation. These several portions of land were planted with the eddo or taro root, in different stages of inundation; none being perfectly dry, and some from three to six or seven inches under water. The causeway led us near a mile from the beach, at the end of which we saw the water we were in quest of. It was a rivulet five or six feet wide, and about two or three feet deep, well banked up, and nearly motionless; some small rills only, finding a passage through the damps that checked the sluggish stream, by which a constant supply was afforded to the taro plantations.

We found the plain in a high state of cultivation, mostly under immediate crops of taro; and abounding with a variety of wild fowl, chiefly of the duck kind . . .

The sides of the hills, which were at some distance, seemed rocky and barren; the intermediate valleys, which were all inhabited, produced some large trees, and made a pleasing appearance. The plain, however, if we may judge from the labour bestowed on their cultivation, seemed to afford the principal proportion of the different vegetable productions on which the inhabitants depend for their subsistence (Vancouver 1798: I, 161-164).

Further details of the exuberant life that must have characterized the Hawaiians use of the lands that included the ahupua‘a of Waikīkī are given by Archibald Menzies, a naturalist accompanying Vancouver’s expedition:

The verge of the shore was planted with a large grove of cocoanut palms, affording a delightful shade to the scattered habitations of the natives. Some of those near the beach were raised a few feet from the ground upon a kind of stage, so as to admit the surf to wash underneath them. We pursued a pleasing path back to the plantation, which was nearly level and very extensive, and laid out with great readiness into little fields planted with two, yams, sweet potatoes and the clove plant. These, in many cases, were divided by little banks on which grew the sugar cane and a species of Druceerae without the aid of much cultivation, and the whole was watered in a most ingenious manner by dividing the general stream into little aqueducts leading in various directions so as to be able to supply the most distant fields at pleasure, and the soil seemed to repay the labour and industry of these people by the luxuriance of its productions. Here and there we met with ponds of considerable size, and besides being well stocked with fish, they swarmed with water fowl of various kinds such as ducks, coots, water hens, bitterns, plovers and curlews. (Menzies 1920:23-24)

However, the traditional Hawaiian focus on Waikīkī as a center of chiefly and agricultural activities on southeastern O‘ahu was soon to change, disrupted by the same Euro-American contact that produced the first documentation (including the records cited above) of that traditional life. The ahupua‘a of Honolulu - with the only sheltered harbor on O‘ahu - became the center for trade with visiting foreign vessels, drawing increasing numbers of Hawaiians away from their traditional environments. Kamehameha himself moved his residence from Waikīkī to the coast near Honolulu harbor, likely in order to maintain his control of the lucrative trade in sandalwood that had developed. By 1828, the missionary Levi Chamberlain, describing a journey into Waikīkī, would note:

Our path led us along the borders of extensive plats of marshy ground, having some from three to six or seven inches under water. The causeway led us near a mile from the beach, at the end of which we saw the water we were in quest of. It was a rivulet five or six feet wide, and about two or three feet deep, well banked up, and nearly motionless; some small rills only, finding a passage through the damps that checked the sluggish stream, by which a constant supply was afforded to the taro plantations.

The depopulation of Waikīkī was not simply a result of the attractions of Honolulu (where, by the 1820s, the population was estimated at 6,000 to 7,000) but also of the European diseases that had devastating effects upon the Hawaiian populace.

3.1.2 Mid-Nineteenth Century and the Mahele

The depopulation of Waikīkī, however, was not total and the ahupua‘a continued to sustain Hawaiians living traditionally into the mid-nineteenth century. Land Commission Award records associated with the mid-nineteenth century Mahele document awards to commoners and others who could prove residency on and use of the parcels they claimed. An 1881 Hawaiian Government survey map by S.E. Bishop – with locations of LCA parcels indicated – provides a detailed record of the physical landscape of Waikīkī before the transformations of the twentieth century. When the map was copied in 1922, additional material from subsequent government surveys was added, including locations of road corridors not present in 1881. A portion of the 1922 copy shows fishponds within and adjacent to the present project area that can be located by the routes of Kalākaua Avenue, Saratoga Road, Kilii Road, and Lewers Road (Figure 5).
The two fishponds – Loko Kapu`uki and Loko Ka`ohai – within and extending beyond the project area are among the complex of Kālia fishponds, comprising 71.70 acres, that were awarded to Māhāri Keke`aina in Land Commission Award 104-FL (Fort Lands). Keke`aina, born in Hilo on Hawai`i Island in the 1790s, was governor of O`ahu at the time of the Mahele. He was the father of Alexander Liholiho (King Kamehameha IV), Lot Kamehameha (King Kamehameha V), Princess Victoria Kamimoku, Princess Ruth Keelikolani, and Moses Kekeawa. Following his death in November 1868 his daughter, Princess Ruth, inherited his lands.

Mahele records for two Land Commission Award (LCA) parcels ma kai of the project area – LCA 1436, parcel 1, awarded to Kaleipaopao; and LCA 1513, parcel 1 awarded to Wailehua – provide insights into traditional Hawaiian utilization of this portion of Waikīkī up to the middle of the nineteenth century.

Land Commission Award 1436 was awarded to a woman named Kalaipaopao (not “Kaleipaopao” as recorded on the 1881 map). Kalaipaopao’s own testimony reveals the extent of her land holdings in Waikīkī (Native Register, vol. 3, pg.110-111):

To the Land Commissioners, Greetings:
I hereby tell of my claim for two lo`i in the `ili of Kanuku, named Aula, of the ahupua`a of Waikīkī, and some rows of taro hills from Kaahumanu I and two sections of stream gotten at the same time. Two lo`i were from Kalaweha, and a small house lot here at Kawehewehe and a stream called Kawehewehe. The length of my occupation of this house site and the sections of stream and the rows of [taro] hills in Hohe, is from Kaahumanu I, and the acquisition of a stream was after the work of Keke`aina at Kaipuni. That was when my makuakane, Ahia, acquired them. I was his kaikamahine. There were two of us by Ahia – myself, Kalaipaopao, a female, also a male; however, I inherited all of it. I also have some lands on Hawai`i at Waiman, called Pauahi, and in Kohala, called Paoo, yet, perhaps the proper procedure in the dividing of the Mo`i is yet to be done. This is my claim presented by me, in accordance with the good which you are doing, and it is the truth which has been told. I am, with thanks,

KALAIPAOPAO
Waikīkī, Oahu December 9, 1847

The parcel shown on the 1881 map is Kalaipaopao’s house lot. Her testimony identifies this area as Kawehewehe, which also names the stream shown on the west side of her house lot. The full 1881 map shows her taro lo`i parcels “in the `ili of Kanuku” were located within the bounds of the present-day Ala Wai Golf Course. Her testimony also indicates that her occupancy on these lands dates back at least to the 1820s and the regency of Kaahumanu. The mention of also having lands on Hawai`i Island at Waiman and Kohala suggests that Kalaipaopao or her family,
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while not themselves ali`i (royalty), may have had some association with chiefs who had granted them their lands.

Land Commission Award 1513 was awarded to a man named Wailehua who identifies his Waikiki land holdings (Native Register, vol. 3, pg. 140):

To the Land Commissioners: Greetings:

I hereby tell of my land claim at Pupukea, in Waikiki, island of Oahu, consisting of eight lo`i, one housesot; one kulea; that is what I tell you.

WAILEHUA
Kawehehe at Waikiki, Dec. 4, 1847

The parcel shown on the 1881 map is Wailehua's house lot. The full 1881 map shows that Wailehua's two lo`i parcels were located within the bounds of the present-day Ala Wai Golf Course. A witness for Wailehua named Nalaueha gave further details on the claimant and his claim ((Native Testimony, vol.3, pg. 397):

Wailehua's land is from Kaahumanu: he has been konohiki from the time of Kaahumanu to the present time under V. Kamamalu. One patch had been objected because there were no men doing prison detail. It had been Kino'o's patch and upon his death, it was acquired by Kama'ako'i.

Wailehua is revealed to have been the konohiki or headman of the ahupua'a who received his lands directly from Kaahumanu.

These Mahele documents – along with those for adjacent parcels – suggest that, up to the early historic period, this portion of Waikiki was the location of house lots for Hawaiians who were not ali`i but who may have had some association with chiefly figures. The Hawaiians living here typically had taro lo`i and further ma`u in areas presently known as McCully, Moli'i Lii, and Kapahulu.

3.1.3 The Waikiki Trail and Kawehewehe

In Fragments of Hawaiian History John Papa'Ili described the “Honolulu trails of about 1810” (1959: 89), including the trail from Honolulu to Waikiki:

The trail from Kawaiahao which led to lower Waikiki went along Kamamiau, into the coconut grove at Pawaia, the coconut grove of Kanaialu, then down to Piinani; along the upper side of Kahanuamakai'a' coconut grove, along the border of Kahuipaka pond, into Kawehewehe; then through the center of Heluma of Puaalii, down to the mouth of the Aupakeha stream... ([Ili 1959: 92]

The 1881 map (see Figure 5 above) shows Kaihikapu pond to the west of the present project area. In the Mahele records cited above, Kalaiapo'opo'opo identifies the ma'kai portion of the present project area as Kawehewehe.

Based on Ili's description, the trail from Honolulu to Waikiki in 1810 coursed through the ma`kai side of the present Ft. DeRussy grounds and continued ma`kai of the present project area in the vicinity of Kili Road. It is likely that this trail was a long-established traditional route through Waikiki.

The place name Kawehewehe recorded by Ili and in the Mahele records is also of note. It does not only identify a land area in Waikiki, according to Hawaiian scholars, it also names:

[The] Reef entrance and channel off Grey's Beach, just east of the Hale-kului Hotel, Waikiki, Honolulu. The sick were bathed here as treatment. The patient might wear a seaweed (imu-kalai) lei and leave it in the water as a request that his sins be forgiven, the lei being a symbol. Lit., the removal (Puku et al. 1974: 99)

3.1.4 Later Nineteenth Century

As the nineteenth century progressed, Waikiki was becoming a popular site among foreigners, mostly American, who had settled on O'ahu; an 1865 article in the Pacific Commercial Advertiser mentioned a small community that had developed along the beach. The area continued to be popular with the ali`i (the Hawaiian royalty) and several notables had residences there. A visitor to O'ahu in 1873 described Waikiki as "a hamlet of plain cottages, whither the people of Honolulu go to revel in bathing clothes, mosquitoes and solitude, at odd times of the year" (Bliss 1873).

Other developments during the second half of the nineteenth century, prefiguring the changes that would alter the landscape of Waikiki during this century, include the improvement of the road connecting Waikiki to Honolulu (the route of the present Kalakaua Ave.), the building of a tramline between the two areas, and the opening of Kapioi Park on June 11, 1877. Also in the late 1800s, the Saratoga Baths opened "at the approximate location of today's Reef Hotel...it remained in operation for most of the 1890s, and, more than likely, bestowed its name upon Saratoga Street, the main thoroughfare between the baths and the tramway stop on Waikiki Road [i.e., the present Kalakaua Avenue]" (Hibbard and Franzen 1989: 54).

As shown in the 1881 map (see Figure 5 above), there were buildings, likely houses, standing ma'kai of the present project area. Whether these were the residences of the Hawaiian land claimants of the Mahele or their families is uncertain.

It is more certain that traditional land uses in Waikiki were abandoned or modified. By the end of the nineteenth century most of the fishponds that had previously proliferated had been neglected and allowed to deteriorate. The remaining taro fields were planted in rice to supply the growing numbers of immigrant laborers imported from China and Japan, and for shipment to the west coast of the United States.

As the sugar industry throughout the Hawaiian kingdom expanded in the second half of the nineteenth century, the need for increased numbers of field laborers prompted passage of contract labor laws. In 1852 the first Chinese contract laborers arrived in the islands. Contracts...
were for five years, and pay was $3 a month plus room and board. Upon completion of their contracts, a number of the immigrants remained in the islands, many becoming merchants or rice farmers.

As was happening in other locales, in the 1880s, groups of Chinese began leasing and buying, from the Hawaiians of Waikīkī, former taro lands for conversion to rice farming. The taro lands' availability throughout the islands in the late 1800s reflected the declining demand for taro as the native Hawaiian population diminished.

The Hawaiian Islands were well-positioned for rice cultivation. A market for rice in California had developed as increasing numbers of Chinese laborers immigrated there since the mid-nineteenth century. Similarly, as Chinese immigration to the islands also accelerated, a domestic market opened.

The primary market for both husked rice and paddy raised in all parts of the Hawaiian Islands was in Honolulu. The number of Chinese in the islands created a large home demand.

In 1880 the home market was made more secure by an increase in the duty on rice imported into Hawai'i to 1½ cents on paddy and 2½ cents on hulled rice. It resulted in further checking the importation of foreign rice and giving an immense impetus to the home product. (Coulter and Chun 1937: 13)

By 1892, Waikīkī had 542 acres planted in rice, representing almost 12% of the total 4,659 acres planted in rice on O'ahu. Most of the former taro lo'i converted to rice fields were located mauka of the present Ala Wai Boulevard.

In addition to leasing and buying lands for rice farming, Chinese immigrants during the second half of the nineteenth century leased Hawaiian ponds for raising fish — including 'ama'ama (mullet), awa (milkfish), and goldfish — and ducks. In the 1890s, ponds in the Kīlia area were being leased to and managed by Chinese named Ah Kālō and Leong Fook (Kanahele 1996: 128). While they no longer operated the Kīlia fishponds, several Hawaiian fishermen were recorded as living in the Kīlia area of Waikīkī in the last decade of the nineteenth century; among those listed in the Directory of the Hawaiian Kingdom in 1890 were George Ainoa, Kahananui, Kainoa, Kalaau, Kamanoulu, Kaua, Kanoho, Liuiwaa, Paahoa, Puke, Kepa, and Nakooko (Kanahele 1996: 151).

Two historic photographs from the late nineteenth century reveal the character of the Waikīkī landscape in the vicinity of the project area. Figure 6 is a view of the Kīlia fishponds, looking toward Leahi Crater (Diamond Head). Coordinating the features shown in the photograph — including the buildings and configuration of the ponds — with those indicated on the 1881 map, it is likely that the photograph shows the southeast end of the Kīlia pond field that includes Loko Kapuuiki and Loko Kahai in the present project area. Figure 7 shows the Waikīkī coastline, apparently in the vicinity of the present Hiilani Hotel grounds. The photograph indicates that the area was occupied by closely packed wooden structures — again, likely the same ones indicated in this area on the 1881 map.

Figure 6. Circa 1890s photograph of Kīlia fishponds; view toward Diamond Head. (Bishop Museum Archives)
3.1.5 1900 to 1920

During the first decade of the twentieth century, the U.S. War Department acquired more than 70 acres in the Kālia portion of Waikīkī for the establishment of a military reservation called Fort DeRussy, named in honor of Brig. Gen. R.E. DeRussy of the Army Corps of Engineers.

On 12 November 1908, a detachment of the 1st Battalion of Engineers from Fort Mason, California, occupied the new post.

Between 1909 and 1911 the engineers were primarily occupied with mapping the island of O'ahu. At DeRussy other activities also had to be attended to, especially the filling of a portion of the fish ponds which covered most of the Fort. This task fell to the Quartermaster Corps, and they accomplished it through the use of an hydraulic dredge which pumped fill from the ocean continuously for nearly a year in order to build up an area on which permanent structures could be built. Thus the Army began the transformation of Waikīkī from wetlands to solid ground. (Hibbard and Franzen 1986:79)

All the fishponds were filled by 1928.

The U.S. military was not alone in the effort to fill in the fishponds of Kālia during the early decades of the twentieth century. The growing population of Honolulu was creating a demand for housing in the surrounding neighborhoods. The realtor Percy Pond undertook to transform Loko Ka'ohai which occupies the majority of the present project area:

Pond's involvement with Waikīkī began in 1911, when he purchased the Loko Ka'ohai fish pond, as well as a parcel on Diamond Head. He took land from the latter to fill the former, which he subdivided as the Beach Walk tract. The six-acre fishpond cost $3,250, or 1.5 cents/square foot, to acquire, and when filled the subdivision lots sold for 10 cents to 15 cents/square foot. By 1927, land in this area was valued at approximately $2/square foot. (Hibbard and Franzen 1986:104)

A fire insurance map of 1914 indicates that the present project area was outside of the five areas in Waikīkī where residential and commercial structures were concentrated in the early twentieth century (Figure 8). The five areas were located: 1) ma kai of the project area, around the intersections of Kalia Rd., Beach Walk, and Lewers Rd.; 2) near the intersection of Ena Road and Kalākaua Avenues; 3) ma kai of Kālia Road on the west side of Ft. DeRussy; 4) clustered around the Moana Hotel on Kalākaua Avenue; and 5) in Kapahulu on the 'ewa side of Makie Road (the present Kapahulu Avenue). The fire insurance map also reveals the relative isolation of Waikīkī, in the early twentieth century, from the encroaching grid of modern Honolulu streets.
3.1.6 1920s to 1930s

Not only was the present project area transformed in the twentieth century. Great changes were taking place just offshore. The reef off Fort DeRussy was dynamited to create a channel through which 14-inch guns were floated to their emplacements at DeRussy. Kīnaʻu Wilder, in her reminiscences of her family’s life in Waikīkī, recorded the devastating effects of this action:

And then the Army brought in an eighteen inch gun to Fort de Russey [sic], right next to the D Lewers place which is now the famous Halekulani Hotel. Why the gun could not have been brought in by land I will never know. They brought it by barge instead. In order to reach the emplacement, it was necessary to break through the reef just beyond the spot where our raft floated. This completely changed the pattern of the currents. The beach at Waikīkī was never the same. Instead of the reef holding the sands of the beach and preventing them from being carried out by the changing tides, the sand was swept through the hole in the reef, never to return. What had been a glorious sandy beach – which no other beach on earth could touch – was nothing. Property owners lost anywhere from ten to thirty feet of their ocean frontage. Everyone was forced to put up seawalls to keep from losing their houses as well. Instead of running from the grass right out to the ocean, we had to go down slippery steps to a miserable little strip of sand which during certain months, was non-existent. At times I could jump from our seawall right into the water. (Wilder 1978: 72)

An article in the Honolulu Star-Bulletin of September 2, 1933 (section 3, pg.1) confirms the loss of beach space:

Much of the broad beach which existed in 1913 has also disappeared. It used to be possible to dive into the breakers from the porch of the bathhouse in Merlon Emmans’ back yard, but even that is no longer being done.

An insight into life this section of Waikīkī in the 1920s and 1930s is provided by Betty Dyer Sorensen whose family lived at the corner of Kalākaua Avenue and Beach Walk. Her parents, John and Mabel Dyer, had bought a 7055-square-foot lot at 290 Beach Walk for $1500 in 1918. Mrs. Sorensen describes the house her parents built there, in which she lived following her birth in 1922 until her marriage in 1946:

The front porch was on the mauka (mountain) side, and it caught the mountain breezes. It was painted buff with white trim and was in the Twenties bungalow style. (Sorensen 1995: 30-31)

In the 1920s, Waikīkī was a small neighborhood

...with little cottages, inexpensive apartments and a few nice houses. People liked to live there because it was so close to the ocean and to transportation. The streetcars went down Kalākaua Avenue, Waikīkī’s main thoroughfare, all the way from Diamond Head to the business section of downtown Honolulu, three miles
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Mrs. Sorensen recalls that there were "lots of apartments on Beach Walk, rented by people who worked in downtown Honolulu" (Sorensen 1995: 34). However, remnants of the former Waikīkī landscape also remained near Beach Walk:

Across the street from our house, on the corner of Beach Walk and Kalakaua Avenue, was a large swampy area known as the duck ponds. It was a several block area consisting of coral with water on the surface. It was whitish from the coral. We could dig down in our own back yard and reach the water level in less than two feet. (Sorensen 1995: 54)

Mrs. Sorensen summarizes the types of Waikīkī tourists and their accommodations she remembers during her childhood:

The Waikīkī of my growing-up years in the 1920's and 30's consisted of the Moana Hotel, the Halekulani Hotel, the Royal Hawaiian Hotel, and the Niululu Hotel, plus several boarding-type hotels and many small cottages. Wealthy tourists came out from Chicago and other snowy areas to spend the entire winter. Some even brought their own car and their own driver, and maid. It was the talk of the town when one family from Chicago even brought a French maid. (Sorensen 1995: 55)

The project area and the surrounding neighborhood during the period Mrs. Sorensen recalls are shown in fire insurance maps of 1927 (Figure 9). Where in 1914 only a portion of the area had been developed structures now fill the entire landscape. Confirming Mrs. Sorensen's description, the neighborhood is shown to be an enclave of cottages and apartment buildings. While individual dwellings predominate, apartments, inns, and a boarding house are also present. At the intersection of Board Walk and Kalākaua Avenue is The Louidor, a boarding house near Mrs. Sorensen's family's home. On the Diamond Head side of Lewers Road is the Waikīkī Court apartments (on the site of the present Ohana Reef Towers).

During the 1920s Waikīkī landscape would be transformed when the construction of the Ala Wai Drainage Canal, begun in 1921 and completed in 1928, resulted in the draining and filling in of the remaining ponds and irrigated fields of Waikīkī, including the "duck ponds" recalled by Mrs. Sorensen. The canal was one element of a plan to urbanize Waikīkī and the surrounding districts:

The Honolulu city planning commission began by submitting street layout plans for a Waikīkī reclamation district. In January 1922 a Waikīkī improvement commission resubmitted these plans to the board of supervisors, which, in turn, approved them a year later. From this grew a wider plan that eventually reached the Kapahulu, Moiliili, and McCully districts, as well as lower Maikīkī and Mānāa...

The standard plan for new neighborhoods, with allowances for local terrain, was to be that of a grid, with 80-foot-wide streets crossing 70-foot-wide avenues at right angles, so as to leave blocks of house lots about 260 by 620 feet. Allowing for a 10-foot-wide sidewalk and a 10-foot-right-of-way (alley) down the center of each block, there would be twenty house lots, each about 60 by 120 feet, in each block. (Johnson 1991: 31)

During the course of the Ala Wai Canal's construction, the banana patches and ponds between the canal and the ma ʻ uka side of Kalākaua Avenue were filled and the present grid of streets was laid out. These newly created land tracts spurred a rush to development in the 1930s. An article in the Honolulu Star-Bulletin in 1938 extolled the area's progress:

The expansion of apartment and private residence construction is no secret. Examination of building permits will show that more projects have been completed during the past year, and more are now underway in this area, than in any other section of the territory.

These developments are being made by island residents who have recognized the fact that Waikīkī presents the unparalleled possibility for safe investment with excellent return. (Newton 1938: 10)

The writer speculated that the "future of Waikīkī is assured."

A U.S. Army aerial photograph of 1935 shows the agglomeration of apartment buildings and private residences that completely filled the present project area and the surrounding neighborhood (Figure 10).
Archaeological Assessment Report for the 280 Beach Walk Retail Development

Figure 9. 1927 fire insurance map with parcels comprising present project area indicated.

Figure 10. 1935 aerial photograph showing the project area and the surrounding areas of Waikīkī fully developed (US Army-Hawaii Archives)
3.1.7 1940s

The entrance of the United States into World War II following the Japanese bombing of Pearl Harbor on December 7, 1941 put on hold plans for the development of Waikiki as a tourist destination. Until the war’s end in 1945, the tourist trade was non-existent, “....since the Navy travel to and from Hawaii and did not allow pleasure trips” (Brown 1989: 143). For the duration of the war, Waikiki transformed into a recreation area for military personnel.

It was not the same Waikiki as before the war, though; barbed wire barricades now lined its sands, and there were other changes too. Fort DeRussy became a huge recreation center, with a dance hall called Maluhia that attracted thousands of men at a time. The Moana Hotel continued to function, but many other establishments and private homes in the area were taken over by the military. (Brown 1989: 141)

In August 1943, four cases of dengue fever, transmitted by the bite of infected Aedes mosquitoes, were reported in Waikiki. During the epidemic that ensued, more than 3000 people were afflicted. On August 8, 1943, the military declared “out-of-bounds” the portion of Waikiki bordered by the ocean, the Ala Wai Canal, and Ka’iulani Avenue. “Without servicemen or tourists, Waikiki district seemed a deserted village” (Hodge and Ferris 1950:55).

Nearing the war’s end concerns began arising over the future of Waikiki. An article in the Honolulu Advertiser of July 16, 1945 (sec. 1, pg.1) decried “honky-tonks” that had sprung up in Waikiki during the course of the war, and asked: “Can anyone look at present-day Kalakaua Ave. – lined with makeshift curio shops, noisy ‘recreation’ centers, eyesores that pass under the name of lunchrooms and miscellany of ‘joints’ – and hope that Waikiki can stage a comeback [as a tourist destination]?”

3.1.8 1950s

Fire insurance maps of 1951 reveal changes throughout the present project area and the surrounding properties since the neighborhood was documented on the 1927 map (Figure 11). Retail establishments now fill the parcels along Kalakaua Avenue. Rooming houses and apartments appear on parcels along Saratoga Road, Beach Walk, and Lewers Road. Many of the houses shown on the 1927 map have now been divided into duplexes and triplexes.

By the mid-1950s there were more than fifty hotels and apartments from the Kili area to the Diamond Head end of Kap’olani Park. Located within and in the vicinity of the present project area were the Reef Hotel and Edgewater Hotel on Kili Road, the Ainoa apartments at 260 Lewers Road, the Breakers apartment-hotel at 250 Beachwalk, the Coconut Grove at 205 Lewers Rd., the Hawaiiana Hotel at 233 Beachwalk, the Mālānini Hotel at 217 Saratoga Rd., the Mānoa apartment-hotel at 342 Lewers Rd., the Polynesian Hotel at 314 Beachwalk, and the Polynesian apartment-hotel at 339 Saratoga Rd.

Development of hotel properties in Waikiki during the 1950s raised concern over public rights of way for access to the Waikiki beach, which like all of Hawai‘i’s beaches is public from the ocean to the high water mark. An article in the Honolulu Star-Bulletin of January 16, 1957 (pg 10) noted that there were no public rights of way to the beach for “nearly a half mile strip in the heart of Waikiki” from “the Diamond Head side of the SurfRider Hotel to the Ewa side of the Halekulani Hotel.”

The lack of public access ways to the beach was of real concern since the population, by the mid-1950s, was not limited to transient tourists but also included 11,000 permanent residents living in 4,000 apartments in stucco or frame buildings. As the 1951 fire insurance map indicates, many of these apartment buildings were located in and around the current project area.
3.2 Summary

Historical documentation indicates that, at the mid-nineteenth century, within the present project area were two fishponds, Loko Kapu'uiki and Loko Ka'ohai, that were part of the royal fishpond complex of the Kālia area. Some high ground existed in the project area, primarily under the existing parking structure in parcel 048. A small berm or causeway shown on an 1881 map by S.E. Bishop also divided part of Loko Ka'ohai along the northern boundary of the project area.

Evidence from nineteenth-century documents (the writings of John Papa' lei, Mahele records, and an 1881 map) indicates that a trail from Honolulu to Waikīkī and beyond ran ma'ū kai of the project area. It is likely that this trail was the traditional Hawaiian route through Waikīkī.

During the second half of the nineteenth century the Kālia fishponds, including Loko Ka'ohai, were leased to and operated by Chinese immigrants. An early indication of Waikīkī's future, ma'ū kai of the project area the Saratoga Baths opened on the site of the present Outrigger Reef on the Beach. Despite these changes, the Hawaiians of the Kālia area apparently were not completely displaced in the latter 1800s since several Hawaiian fishermen were recorded as living in Kālia during the 1890s.

During the first decades of the twentieth century, the current project area would be among the first developed lands of Waikīkī. Loko Kapu'uiki would be filled for the creation of Ft. DeRussy and the two Loko Ka'ohai were filled to create the Beach Walk tract in 1911. In subsequent decades, the project area was among an enclave of individual residences – typically cottages – and apartment complexes. In the 1950s construction began on the first large hotel structures that today surround the project area.
Section 4. Previous Archaeological Research

The ahupua’a of Waikīkī, in the centuries before the arrival of Europeans, was an intensely utilized area, with abundant natural and cultivated resources, that supported a large population. In the nineteenth and early twentieth centuries, after a period of depopulation, Waikīkī was reanimated by Hawaiians and foreigners residing there, and by farmers continuing to work the irrigated field system, which had been converted from taro to rice. Farming continued up to the first decades of this century until the Ala Wai Canal drained the remaining ponds and irrigated fields. Remnants of the pre-contact and historical occupation of Waikīkī have been discovered and recorded in archaeological reports, usually in connection with construction activities related to urban development, or infrastructural improvements. These discoveries, which have occurred throughout Waikīkī, have included many human burials, traditional Hawaiian and historic, as well as pre-contact Hawaiian and historic cultural deposits. A full list of projects conducted in the Waikīkī area is presented in Table 1. A discussion of projects focusing on burials (Figure 12) follows.

N.B. Emerson reported on the uncovering of human burials during the summer of 1901 on the property of James B. Castle - site of the present Elvis Club - in Waikīkī during excavations for the laying of sewer pipes (Emerson 1902:18-20). Emerson noted:

The soil was white coral sand mixed with coarse coral debris and sea shells together with a slight admixture of red earth and perhaps an occasional trace of charcoal. The ground had been trenched to a depth of five or six feet, at which level a large number of human bones were met with, mostly placed in separate groups apart from each other, as if each group formed the bones of a single skeleton. Many of the skulls and larger bones had been removed by the workmen before my arrival, especially the more perfect ones (Emerson 1902:38).

Emerson’s report on the find describes the remains of at least four individuals, all presumed to be Hawaiian. Associated burial goods were also exposed during excavation; these included “a number of conical beads of whale’s teeth such as the Hawaiians formerly made” and “a number of round glass beads of large size”. The glass beads “can be assigned with certainty to some date subsequent to the arrival of the white man” (Emerson 1902:39). Also located with the beads was “a small sized nilo-pæaoa, such as was generally appropriated to the use of the chiefs” which had been “caved from the teeth of the sperm-whale” and which was “evidently of great age” (Emerson 1902:39).

In the 1920s and 30s the first systematic archaeological survey of O’ahu was conducted by J. G. McAllister (1933). He recorded four heiau (temples), three of which were located at the mauka reaches of Waikīkī Ahupua’a in lower Mānoa Valley. The fourth heiau - Papae'ena Heiau - is traditionally associated with Kamehameha I, who was said to have visited the heiau before setting off to battle for Ni'ihau and Kaua‘i in 1804. Five years later, according to John Papa‘i‘ōtai, Kamehameha placed at Papae'ena the remains of an adulterer - “all prepared in the customary manner of that time” (Papa‘i‘ōtai 1819:50-51).
<table>
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<td>Letter to SHPD listing human remains at IARII lab from Pacific Beach Hotel and Barracks Point Generating Station.</td>
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<td>Waikiki Hotel</td>
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<td>Assessment</td>
<td>2 parcels, TMK: 2-6-24:65-68 and 80-83, TMK: 2-6-24:40-16, 42-45</td>
<td>Formerly a corner of the 'Ala'inau estate, remainder of parcel; former 'auwai, kalo and rice fields; test excavations and specific sampling strategy recommended.</td>
</tr>
<tr>
<td>Davis 1991</td>
<td>Monitoring Report</td>
<td>Fort DeRussy</td>
<td>See also Davis 1989 for an earlier account. Subsurface features and material remains date to early post-contact times (c. 1780s to 1790s) through the mid-19th century and one human burial.</td>
</tr>
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<td>Kennedy 1991</td>
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<td>IMAX theatre location Plymouth and bulk-sediment 14C samples from ponded sediments were recovered. The three 14C dates and pollen sequence were inverted.</td>
</tr>
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<td>SHPD 1991</td>
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<tr>
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<td>Hurbett 1992</td>
<td>Monitoring Report</td>
<td>TMK: 2-6-008:001</td>
<td>Site -2870 (3 burials) found by Nelder in 1980. This report is on testing and monitoring in same area.</td>
</tr>
<tr>
<td>Pietrusewsky 1992a</td>
<td>PA Report</td>
<td>Moana Hotel</td>
<td>Right half of human mandible found by hotel guest.</td>
</tr>
<tr>
<td>Streck 1992</td>
<td>Memorandum for Record</td>
<td>Fort DeRussy</td>
<td>Human burial discovery (believed to be late prehistoric Hawaiian) during data recovery excavations, May 20, 1992.</td>
</tr>
<tr>
<td>Cleghorn 1993</td>
<td>Inadvertent Discovery</td>
<td>Waikiki Aquarium</td>
<td>Human Remains of at least one person identified, excavation recommended.</td>
</tr>
<tr>
<td>Daghler 1993</td>
<td>Inadvertent Discovery</td>
<td>Waikiki Aquarium</td>
<td>Human remains of at least one person identified, excavation recommended.</td>
</tr>
<tr>
<td>Dega &amp; Kennedy 1993</td>
<td>Inadvertent Discovery</td>
<td>Waikiki Aquarium</td>
<td>Discovery of unidentified bone fragments; all remains turned over to SHPD.</td>
</tr>
<tr>
<td>Hammatt &amp; Chiogioji 1993</td>
<td>Archaeological Assessment</td>
<td>16 Acre Portion of the Ala Wai Golf Course</td>
<td>Not associated with any known surface archaeological sites; however prehistoric and early historic occupation layers associated with lo'i system remain intact below modern fill. Specific sampling strategy and potential burial testing recommended.</td>
</tr>
<tr>
<td>Muly et al. 1994</td>
<td>Archaeological and Historical Assessment Study</td>
<td>Convention Center Project Area</td>
<td>Recommend subsurface testing to determine presence or absence of cultural deposits and features.</td>
</tr>
<tr>
<td>Hammatt &amp; Sheldon 1995</td>
<td>Sub-surface Inventory</td>
<td>Hawai'i Convention Center Site, 1777 Kalakaua Ave.</td>
<td>No further work recommended.</td>
</tr>
<tr>
<td>Jorjane 1995</td>
<td>Inadvertent Discovery</td>
<td>Paoakalani Avenue</td>
<td>Human remains discovered in planted strip between street and sidewalk fronting hotel.</td>
</tr>
<tr>
<td>Simonsewsky 1995</td>
<td>Data Recovery Excavations</td>
<td>Fort DeRussy</td>
<td>Human skeletal remains discovered in planted strip between street and sidewalk fronting hotel.</td>
</tr>
<tr>
<td>Cleghorn 1996</td>
<td>Inventory Survey</td>
<td>TMK: 2-6-036:23, 25, 26, 38, 61, 69</td>
<td>7 backhoe trenches excavated, no sites located.</td>
</tr>
<tr>
<td>Grant 1996</td>
<td>Historical Reference</td>
<td>Waikiki</td>
<td>Historical information about Waikiki prior to 1800.</td>
</tr>
<tr>
<td>Hammatt &amp; Sheldon 1996</td>
<td>Data Recovery</td>
<td>Hawai'i Convention Center Site</td>
<td>No clear evidence that Kuwili Pond sediments present in project area; no further work recommended.</td>
</tr>
</tbody>
</table>
| McDermott et al. 1996 | Inventory Survey     | 'Ainahe Estate | Buried remains of 'auwai and lo'i and human burial found. 14C dates.
<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of Investigation</th>
<th>General Location</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denham et al. 1997</td>
<td>Data Recovery Report</td>
<td>Fort DeRussy</td>
<td>Excavations conducted at fishponds, 13C dates mid-13th C.</td>
</tr>
<tr>
<td>Denham &amp; Pantaleo 1997</td>
<td>Monitoring and Excavations Report</td>
<td>Fort DeRussy</td>
<td>Final Report does not include SHPD recommendations. 10 subsurface features and 9 burial locations found. 13C dates</td>
</tr>
<tr>
<td>Beardley &amp; Kachko 1997</td>
<td>Monitoring and Data Recovery Report</td>
<td>Pacific Beach Hotel Office Annex</td>
<td>Traditional Hawaiian cultural deposits and 2 human burials. 31C dates.</td>
</tr>
<tr>
<td>Hammatt &amp; Chogieji 1998</td>
<td>Assessment</td>
<td>King Kalilikau Plaza Phase I</td>
<td>No surface archeological sites documented human burials, presence of subsurface cultural deposits (both of pre-contact Hawaiian and historic provenance).</td>
</tr>
<tr>
<td>Hammatt &amp; McDermott 1999</td>
<td>Burial Disinterment Plan and Report</td>
<td>Kalilikau Avenue</td>
<td>Two human burials found</td>
</tr>
<tr>
<td>Rosendahl 1999</td>
<td>Interim Report Inventory Survey</td>
<td>Fort DeRussy</td>
<td>This area is part of the old shoreline.</td>
</tr>
<tr>
<td>Hammatt &amp; Chogieji 2000</td>
<td>Archeological Assessment</td>
<td>Honolulu Zoo Parcel</td>
<td>Majority of zoo parcel unlikely to yield significant cultural deposits. However, strong possibility of significant subsurface cultural deposits in the SW portion. Monitoring is recommended in this area.</td>
</tr>
<tr>
<td>LeSuer et al. 2000</td>
<td>Inventory Survey</td>
<td>King Kalilikau Plaza Phase I</td>
<td>SHRP-5796 (pre-contact and Historic wetland areas) has been adversely affected by land alteration of the project area. Previously identified SHRP-5796 ('Aualii O Paul') has been adequately documented.</td>
</tr>
<tr>
<td>Perzinski et al. 2000</td>
<td>Burial Findings</td>
<td>Kalilikau Ave., between Kalu'ula &amp; Monsarrat Avenues</td>
<td>44 sets of human remains; 37 disinterred, 7 left in place believed to be Native Hawaiian, interred prior to 1820.</td>
</tr>
<tr>
<td>Cleghorn 2001</td>
<td>Mitigation</td>
<td>Burger King Construction Site</td>
<td>Concerning three incidents of uncovered human remains while locating a buried sewer- line for the ABC's store.</td>
</tr>
<tr>
<td>Corbin 2003</td>
<td>Inventory Survey</td>
<td>Hilton Waikiki Property</td>
<td>No archaeological sites were found during excavations of the area.</td>
</tr>
</tbody>
</table>

Reference (SHP numbers prefixed with 59-80-14):

- Royal Hawaiian Hotel: Human remains found during trench excavations for conduit. The in situ remains were left in place, while the disturbed remains were re-interred with the others.
- Along Lewers St., Beach Walk, Kili Rd., & Saratoga Rd.: Primary cultural concern identified as possible inadvertent burial discoveries. Cultural monitoring recommended for all subsurface work within project area.
- Kali'olani Bandstand: A charcoal layer was observed, concentrated on the SW side of the bandstand; recovered indigenous basin lamp with a handle, from the SE end of the bandstand.
- No cultural layer, artifacts, midden or human burials were encountered during the excavations.
- Outrigger Beach Walk: Assessment of previous archeology and historical literature.
- No burials were found during testing; absence of dry jaucas sand deposits indicate that burial finds are unlikely in project area.
- Encountered 4 human burials, probably pre-contact Native Hawaiian; several historic trash pits; entire pig within an imu pit (estimated date, A.D. 1643-1673); gleyed clays associated with former ponds.
<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of Investigation</th>
<th>General Location</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann &amp; Hammatt 2002</td>
<td>Monitoring Report</td>
<td>Liliuokalani Avenue and Uluniu Avenue</td>
<td>5 burial finds of 6 individuals; two historic trash pits</td>
</tr>
<tr>
<td>Winieski, Pozinski, Stribley et al. 2002</td>
<td>Monitoring Report</td>
<td>Kaliikaua Ave, between Kaukau and Monsarrat Avenues</td>
<td>44 human burials encountered, 37 disinterred; buried habitation layer identified, with traditional Hawaiian artifacts, midden, firepits, &amp; charcoal; fragment of light gauge rail, remnant of Honolulu Trolley trolley system observed; low energy alluvial sediments associated with the now channelized muli wall Kukaumoku also observed.</td>
</tr>
<tr>
<td>Winieski, Pozinski, Souza et al. 2002</td>
<td>Monitoring Report</td>
<td>Kahan Beach</td>
<td>Skeletal remains of 10 individuals, six disinterred; only 2 in situ; 4 indigenous artifacts, none in situ; Discontinuous cultural layer; historic seawall</td>
</tr>
<tr>
<td>Bush et al. 2003</td>
<td>Monitoring Report</td>
<td>International Marketplace</td>
<td>Historic trash found</td>
</tr>
<tr>
<td>Tome &amp; Dega 2003</td>
<td>Monitoring Report</td>
<td>Waikiki Marriott</td>
<td>One isolated, not in situ, possible human bone fragment found; Recommends monitoring during future work.</td>
</tr>
<tr>
<td>Tulchin &amp; Hammatt 2003</td>
<td>Archaeological &amp; Cultural Impact Assessment</td>
<td>2284 Kaliikaua Ave.</td>
<td>Notes possibility of burials in the project area; recommends an inventory survey with subsurface testing</td>
</tr>
<tr>
<td>Freeman et al. 2005</td>
<td>Archaeological Inventory Survey</td>
<td>Hobron Lane</td>
<td>Four sites identified during subsurface testing: 1 disturbed burial; 1 coffin burial with two individuals; 1 cultural deposit; and fishpond sediment</td>
</tr>
<tr>
<td>O'Hare et al. 2005</td>
<td>Archaeological Inventory Survey</td>
<td>Ka'eo Drive</td>
<td>SHP-684B, a pre-contact firepit radiocarbon dated to AD 1470-1660, was recorded</td>
</tr>
</tbody>
</table>

Figure 12. Previous Archaeological Work in Waikiki, focusing on locations of burials. Also shown are three similar investigations in the Kili area.
In 1963, two human skulls and other human remains were discovered in a construction trench at 2431 Prince Edward St. (Bishop Museum site Oa-A-4-23, cited in Neller 1984). Multiple burials were encountered in 1963 during excavation for the construction of the present Outrigger Canoe Club at the Diamond Head end of Kalakaua Avenue. As reported in a newspaper article on Jan. 24, 1963:

The Outrigger Canoe Club yesterday dedicated its new site [on land adjacent to and leased from The Elks Club], an ancient Hawaiian burial ground in Waikiki... Robert Bowen of the Bishop Museum has been working closely with Ernest Souza, Hawaiian Dredging superintendent, on the removal of skeletons unearthed on the site, between the Colony Surf and the Elks Club... Most of the bodies were buried in the traditional hoalawai position, with the legs bound tightly against the chest. One of the skeletons, Bowen said, shows evidence of a successful amputation of the lower forearm, indicating that the Hawaiians knew this kind of operation before the arrival of Europeans.

The ages of the skeletons ranged from children to 40-year-old men and women. The average life span of the Hawaiians at the time was about 32 years [Honolulu Star-Bulletin, Jan. 31, 1963: 1A].

A total of 27 burials were encountered (Yost 1971: 28). Apparently, no formal archaeological report on the burials was produced.

In 1964, sand dune burials, a traditional Hawaiian mortuary practice, were revealed as beach sand eroded fronting the Surfrider Hotel (Bernice Pauahi Bishop Museum 1984).

In 1976, during construction of the Hale Koa Hotel, adjacent to the Hilton Hawaiian Village Hotel, six burials were unearthed, five of apparent prehistoric or early historic age, and one of more recent date (Bernice Pauahi Bishop Museum 1984).

In 1983, three burials were exposed at the Hilton Hawaiian Village during construction of the hotel’s Tapa Tower. Earl Neller of the (then named) State Historic Preservation Program was called upon discovery of the burials and conducted fieldwork limited to three brief inspections of the project area. Neller’s (1980) report noted:

The bones from three Hawaiian burials were partially recovered. One belonged to a young adult male, on a young adult female, and one was represented by a single bone. An old map showed that rapid shoreline accretion had occurred in the area during the 1800s, and that the beach in the construction area was not very old. It is possible the burials date back to the smallpox epidemic of 1853. It is likely that burials will continue to be found in the area. It is also possible that early Hawaiian sites exist farther inland, beneath Mā'ili'i, adjacent to where the shoreline would have been 1000 years ago (Neller 1980:5).

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Neller also documented the presence of trash pits, including one from the 1890s which contained “a large percentage of luxury items, including porcelain tablewares imported from China, Japan, the United States, and Europe” (Neller 1980:5). He further notes:

It is suspected that other important historic archaeological sites exist in the highly developed concrete jungle of Waikiki, with discrete, datable trash deposits related to the different ethnic and social groups that occupied Waikiki over the last 200 years (Neller 1980:5).

Between December 1981 and February 1982, archaeologists from the Bishop Museum led by Bertell Davis conducted a program of excavations and monitoring during construction of the new Halekulani Hotel (Davis 1984). Six human burials were recovered along with “animal burials (and) cultural refuse from prehistoric Hawaiian firepits, and a large collection of bottles, ceramics, and other materials from trash pits and privies dating to the late 19th century” (Davis 1984:1). Age analysis of volcanic glass recovered from the site led Davis to conclude “For the first time we can now empirically date...settlement in Waikiki to no later than the mid-1600s” (Neller 1980:5). Just as significant to Davis was the collection of historic-era material at the Halekulani sites:

(The Halekulani excavations clearly demonstrate...that there is a definite need to consider historic-period archaeology as a legitimate avenue of inquiry into Hawaiian research. Furthermore, archaeology in the urban context can yield results every bit as significant as in less developed areas. Development in the 19th and early 20th centuries clearly has not destroyed all archaeological resources in Waikiki, Honolulu, or in any of the other urbanized areas of Hawai‘i (Neller 1980:5).

In 1983, at the Lili‘uokalani Gardens condominium construction site, seven traditional Hawaiian burials were recovered (Neller 1984). This had been the site of a bungalow owned by Queen Lili‘uokalani at the end of the nineteenth century. In addition to the burials, the site contained plentiful historic artifacts, and a prehistoric cultural layer pre-dating the burials.

In 1985, International Archaeological Research Institute, Inc. performed archaeological monitoring and data recovery at the Pacific Beach Hotel Office Annex (Beardsley and Kaschko 1997). Two traditional Hawaiian burials were recovered along with animal burials, cultural refuse from prehistoric Hawaiian firepits, and a large collection of bottles, ceramics, and other materials from trash pits and privies dating to the late 19th century (Davis 1984:1). Age analysis of volcanic glass recovered from the site led Davis to conclude “For the first time we can now empirically date...settlement in Waikiki to no later than the mid-1600s” (Neller 1980:5). Just as significant to Davis was the collection of historic-era material at the Halekulani sites:

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on this artifact analysis. The three partial burials reported by Neller (1980) were found within this project area (see above). No further burials were encountered during the PHRI field work (Hurbett et. al. 1992).

In 1987, a human burial was discovered and removed at the intersection of Kalakaua Avenue and Ka‘ulani Street during excavations for a gas pipeline fronting the Moana Hotel (Griffin 1987).

In 1988, the Moana Hotel Historical Rehabilitation Project (Simons et. al. 1993) encountered human remains that amounted to at least 17 individuals. Based on stratigraphic association these burials were interred over time as the landform at the site changed. The sediment surrounding these burials yielded traditional midden and artifact assemblages. The burials and human remains were found in the Banyan Court and beneath the hotel itself.

In 1989, skeletal remains were unearthed on the grounds of the Al Wai Golf Course during digging of an electrical line trench for a new sprinkler system. The trench had exposed a pit containing two burials (Bath and Kawachi 1989: 2). The report suggests that some of the burials may have been disturbed earlier during grading for the Territorial Fair Grounds. The osteological analysis included in the report concludes that both sets of remains “appear ancient.” (Bath and Kawachi 1989: 2)

Davis’ (1989, 1991) excavation and monitoring work at Fort DeRussy documented substantial subsurface archaeological deposits - prehistoric, historic, and modern. These deposits included buried fishpond sediments, ‘auwai [irrigation ditch] sediments, midden and artifact enriched sediments, structural remains such as post holes and fire pits, distinctive clay mounds of constructed ‘auwai and similar berms presumed to be fishpond walls, historic trash pits, and a human burial. Davis’ (1991) report documents human activity in the Fort DeRussy beach front area from the sixteenth century to the present.

The project at Fort DeRussy continued in 1992 when BioSystems researchers built upon Davis’ work (Simons et al. 1995). BioSystems research documents the development and expansion of the fishpond and ‘auwai system in this area. The ‘auwai system was entered on the State Inventory of Historic Properties (SIHP) as State Site 50-80-14-4970. Remains of the fishpond and ‘auwai deposits, as well as habitation deposits, were documented below modern fill deposits. Constructed berms and berms were documented, both with sediment retaining double alignments of coral boulders and mounded wetland sediments with associated pre-contact and historic artifacts. This research, along with that of Davis (1991), clearly demonstrates that historical document research can be an effective guide to locating late prehistorically historic subsurface deposits, even amidst the development of Waikīkī.

In 1992, Hurbett et al. (1992) conducted additional monitoring and testing in this same area as Neller (1980). The state site number -2870 was given to the three burials first found by Neller. Additional subsurface features, postdating 1881, were found during trenching operations. In 1992 Data Recovery excavations were undertaken at Fort DeRussy by Garcia and Associates under contract to BioSystem Analysis, Inc. (Denham and Pantele 1997). Six previously identified sites were investigated. One site (SHP #50-80-14-4570) was characterized by such features as a firepit, coral rock concentration, and postholes. An ‘auwai and bund system (50-80-14-4970) revealed two channels, three berms, and a charcoal stain. Another site (50-80-14-4579) revealed a number of features related to permanent historic occupation, and possible intermittent prehistoric use, such as five firepits, two historic middens, and a human burial. In addition, three fishponds, Loko Pae’o I (50-80-14-4570), Loko Kalihiapa (50-80-14-4575), and Loko Pae’o II (50-80-14-4576) were identified. Berms and bunds identified during the excavations were characterized by sediment retention techniques such as coral boulder alignments and repeated sequences of construction indicated by artifactual evidence of land surface use – including fire pits, bone, and dispersed marine shell midden.

The realignment of Kāilua Road at Fort DeRussy in 1993 uncovered approximately 40 human burials. A large majority of these remains were recovered in a large communal burial feature (Carlson et. al. 1994). The monitoring and excavations associated with this realignment uncovered a cultural enriched layer that contained post holes.

In 1993, during construction activities at the Waikīkī Aquarium fragmentary human remains were discovered scattered in a back dirt pile, although no burial pit was identified (Dega and Kennedy 1993).

In 1994, an inadvertent burial discovery was made during excavation for a water line at the intersection of Kalakaua Avenue and Kuame’o Street (just mauka of Fort DeRussy). These remains represented a single individual (McMahan 1994).

In 1995, the remains of one individual were discovered in situ during construction activities on Pauokalai Street, fronting the Waikīkī Sunset Hotel (Jordane 1995).

In 1996, Pacific Legacy, Inc. conducted an archaeological inventory survey of the block bounded by Kalakaua Avenue, Kūhii Avenue, ʻOlohana Street, and Kīlaumoku Street (Cleghorn 1996). The survey included excavation of seven backhoe trenches. The subsurface testing indicated that this area was extremely wet and probably marshy. This type of environment was not conducive for traditional economic practices. The current project area appears to have been unused because it was too wet and marshy. Several post deposits, containing the preserved remains of organic plant materials were discovered and sampled. These deposits have the potential to add to our knowledge of the paleoenvironment of the area (Cleghorn 1996:15).

The report concluded that no further archaeological investigations of the parcel were warranted since “no potentially significant traditional sites or deposits were found”, but cautioned of the “possibility, however remote in this instance, that human burials may be encountered during large scale excavations” (Cleghorn 1996:15).

In 1996, a traditional Hawaiian burial was discovered and left in place during test excavations on two lots at Lili‘okalani Avenue and Tsutakaw Street (McDermott et al. 1996). Indigenous Hawaiian artifacts and historic artifacts were also found within the project area.

In 1997, during archaeological monitoring by CSH for the Waikīkī Force Main Replacement project, scattered human bones were encountered on ʻO‘hua Street (Winieski and Hammatt 2000). These included the proximal end and mid-shaft of a human tibia, a patella, and the distal end and mid-shaft of a femur. These remains occurred within a coralline sand matrix that had been...
heavily disturbed by previous construction, and by the ongoing construction project. No precise location for the original burial site was identified.

In April 1998, two human burials were inadvertently encountered near the intersection of Ena Road and Kaliikaua Avenue during excavation activities for the first phase of the Waikiki Anti-Crime Street Lighting Improvement Project (Perzinski et al. 1999).

From July 1999 to October 2000, four sets of human remains were inadvertently encountered during excavation activities relating to the Waikiki Anti-Crime Street Lighting Improvement project along portions of Kaliikaua Avenue (Bush et al. 2002). The first burial was encountered on Kaliikaua Avenue just before Dukas Lane and assigned State Site 50-80-14-5864. The burial was left in place however, and the light post was repositioned. The second burial was encountered at the intersection of Kaliikaua Avenue and Kaluolani Avenue. Earlier, during archaeological monitoring for the water mains project, two burials were encountered in the immediate area of the second burial find; they were assigned state site 50-80-14-5856 features A and B. Due to the close proximity to the previously encountered burials, the second burial was assigned the same State Site 50-80-14-5856, and designated feature C. Burials 3 and 4 were recovered at the intersection of Kaliikaua Avenue and Kealohilani, near an area of concentrated burials assigned State Site 50-80-14-5860 during monitoring for the water mains project. Consequently, burials 3 and 4 were also assigned State Site 50-80-14-5860, features U and V. In addition to human remains, pre-contact deposits, historic and modern rubbish concentrations, and pond sediments were also encountered.

An April 2000 report documented a previously identified ‘auwea (‘Auwai O Pau, SHP 50-80-14-4970) and a pre-contact and newly identified historic wetland surface (SHP 50-80-14-5796) modified with four documented constructed bermis, sometimes retained with millet lumbar and some historic artifacts dating between 1800 and 1920 associated with the wetland sediment. The investigation documented major disturbances to archaeological deposits and natural strata, and though sediment samples were taken, the thin sediments and disturbance prevented the sediment samples from providing useful palynological analysis. This investigation took place immediately across Kaliikaua Avenue from the current project area.

From November, 1999 to May, 2000, 44 human burials, with associated cultural deposits, were encountered during excavation for a waterline project on Kaliikaua Avenue between the Kaluolani and ‘Ohua Avenues (Winsieki et al. 2002a). Except for previously disturbed partial burials in fill, the bulk of the burials were encountered within a coraline sand matrix. Additionally, a major cultural layer was found and documented.

From January 2000, to October 2000, 10 human burials were encountered during archaeological monitoring of the Kilihi Beach Extension/Kaliikaua Promenade project (Winsieki et al. 2002b). Six of these were located within a coraline sand matrix. The four others were partial and previously disturbed within fill. Additionally, a major cultural layer was found and documented, apparently part of the same major cultural layer associated with the waterline project between Kaluolani and ‘Ohua Avenues.

In April 2001 human remains were inadvertently disturbed during excavations associated with the construction of a spa at the Royal Hawaiian Hotel (Eilmore and Kennedy 2001). Archaelogical Consultants of the Pacific, Inc. was responsible for the documentation of the remainder of the burial and carrying out the instruction of DLNR/SHPD. The burial and place it was encountered was assigned State Site #50-80-14-5937. The burial was encountered on the north side of the hotel in the spa garden. The burial was partially disturbed through the thoracic region and anatomical left side. The disturbed remains were wrapped in muslin in cloth and placed with the in-situ remains and reburied. The burial was recorded as a post-contact burial based on artifacts associated with it. The associated artifacts included one shell button found in situ and three more shell buttons found in the disturbed material. A single drilled dog tooth was found also during excavation but could not be positively associated with the site.

On May 2nd and June 14th, 2001, two in situ and two previously disturbed human burials were encountered at the site of a new Burger King (Cleghorn 2001a) and an adjoining ABC Store (Cleghorn 2001b). The finds were located at the intersection of ‘Ohua Street and Kaliikaua Avenue (Cleghorn 2001a and 2001b). Because of their proximity to five burials encountered during the Kaliikaua 16” Water Main Installation (Winsieki et al. 2002a), they were included in the previously assigned State Site 50-80-14-5861. Three of these burials were recovered, and one was left in place. Volcanic glass fragments were found in association with one of the burials. A cultural layer was also observed which contained moderate to heavy concentrations of charcoal and fragments of volcanic glass. Historic-era artifacts, including a bottle fragment, plastic and glass buttons, a ceramic fragment, and metal fragments were also encountered within fill materials.

In 2001, and 2002, CSII (Mann and Hammatt 2002) performed archaeological monitoring for the installation of 8- and 12-inch water mains on Uluniu Avenue and Lili‘uokalani Avenue. During the course of monitoring, five burials finds, consisting of six individuals, were recorded within the project area. Four burial finds were recorded on Uluniu Avenue; three of these inadvertent finds were encountered in fill sediment. Due to the nature of the three burial finds in fill, it was concluded that no State Site number(s) be assigned to these three previously disturbed burials. The only primary in situ burial encountered on Uluniu Avenue was assigned State Site 450-80-14-6369. The fifth burial, consisting of two individuals in fill material, was recorded from Lili‘uokalani Avenue. Since three burials had been found in the immediate vicinity during a previous project (Winsieki et al. 2002b) and had been assigned to Site #50-80-14-5859, the two new individuals were recorded as Feature H of this previously recorded site.

In 2004, Cultural Surveys Hawaii conducted an archaeological inventory survey and cultural impact evaluation for the Ala Wai Gateway project site (Freeman et al. 2005). The project site comprised TMK 2-6-003:026, 027, 048, 049, and 058 which are bounded by Ala Wai and Ala Moana boulevards, Hobron Lane, and Lepelene Street. Four historic properties were documented in the survey:

- Site 50-80-14-6700: disturbed, ethnicity undetermined, human skeletal remains;
- Site 50-80-14-6701: historic coffin burial, with two individuals, ethnicity undetermined;
- Site 50-80-14-6702: culturally enriched burial A horizon in geographic association with Land Commission Award (LCA) 99 FL to Umea; and
Site 50-80-14-6703: fishpond remnant.

In 2005 Cultural Surveys Hawai‘i conducted an archaeological inventory survey of a 72,135 square foot (1.67 acre) project area on Kaio‘o Drive (TMK: [1] 2-6-022: 37, 38, 40, 41, 42, 43, 44, 55, 56, 57) (O‘Hare et al. 2005). Site 50-80-14-6848, a pre-contact fishpond radiocarbon dated to A.D. 1470-1660, was recorded.

In summary, past archaeological research, from the beginning of the twentieth century to the present, has produced evidence that traditional Hawaiian cultural deposits, historic trash deposits, and, most notably, human burials do exist throughout the breadth of the Waikiki area.

Section 5 Cultural Consultation Results

Based on the project’s location and historical and cultural setting, it is possible that the project would affect Native Hawaiian historic properties, though the project is unlikely to affect ongoing traditional cultural practices related to Native Hawaiian cultural traditions. Accordingly, this cultural consultation effort focused on the assessment of the proposed project’s impact to Native Hawaiian historic properties.

5.1 Results of the prior Cultural Impact Evaluation for the Project Area

A Cultural Impact Evaluation was prepared by CSH for the project area in 2005 for a different project proponent, Round One Corporation, for a project that was not pursued (Chiogogi et al. 2005). Between this Cultural Impact Evaluation and the current study, the project area has not been developed or otherwise changed and the project area for these two independent projects corresponds exactly. The prior cultural study was designed to fulfill cultural consultation requirements pursuant to Hawai‘i Revised Statutes (HRS) Chapter 343 and the Office of Environmental Quality’s Guidelines for Assessing Cultural Impacts, as well as to support the now defunct project’s review under historic preservation review under HRS Chapter 6E-42 and HARR Chapter 13-284. Because of the short amount of time passed between the 2005 Cultural Impact Evaluation and the current Archeological Assessment, and the identical project area boundaries, a project specific Cultural Impact Evaluation would not produce significantly different results.

This prior cultural consultation effort sought information from individuals knowledgeable about the project area’s history and past land use. The focus of this consultation was to identify ongoing traditional cultural practices and historic properties within the project area.

In the course of this evaluation, no ongoing traditional cultural practices or concerns were identified for the study area. None of the community contacts queried for this assessment identified any on-going traditional cultural practices specifically within the project area.

Based on the Chiogogi et al. (2005) investigation, the potential to disturb Native Hawaiian burials represents the project’s only potential adverse impact upon Native Hawaiian historic properties. Some community members expressed concern for burials, though others focused only on the history of the Loko Ka‘ohai. Consultant Kamehameha Clarence A. Mederos Jr. indicated that it was highly likely that burials could be found in the project area because of the customary Hawaiian practice of burying family members within their pa hale (yard). Heidi Guth from the Office of Hawaiian Affairs expressed a desire to have burials found during the inventory survey follow standard procedure with the O‘ahu Island Burial Council and recommended monitoring during construction. Van Horn Diamond, O‘ahu Island Burial Council Chair, noted that the A‘ong Family used to live in the area and were of Hawaiian descent. Consultant Kamehameha Mrs. Paulette Kakekini indicated that her great-grandfather, Ialua, raised mo‘i, a fish that was preferred by the chiefs, in a pond seen on a map provided for the cultural consultation (either Loko Ka‘ohai and Loko Kapu‘uki).
5.2 Archaeological Assessment Cultural Consultation

The 2005 Cultural Impact Evaluation (Chiogori et al.) concluded that there are “no on-going traditional cultural practices in the vicinity of the current project area ... Based on the above findings, no further formal cultural impact mitigation measures are warranted.” As there were no historic properties identified, including artifacts, in the current Archaeological Assessment, no further cultural consultation is warranted at this time.

Section 6 Background Summary and Predictive Model

The current project area is located on the leeward side of the Ko'olau Range along the Waikiki coast, mauka of the mouth of Milinau Valley. It is situated in the traditional ahu pua'a of Waikiki in the moku of Kona. Historic maps and literature as well as previous archaeological provide a clear model of the project area and its prehistoric and historic use. A large portion of the parcel consisted of fishponds during the prehistoric and early historic period.

The project area as a whole contains two ponds, Loko Ka'ohai and Loko Kapu'uiki, divided by a dryland sand berm. This sand berm is shown on historic maps to correspond to the existing, partially submerged parking structure in parcel 048 that will be utilized by the project without major modification. Loko Kapu'uiki is limited to a very small corner of the northwest project area. Loko Ka'ohai covers most of the area of parcels 026 and 027 and historic maps show a small high ground berm or causeway dividing parts of this pond along the northern edge of the project area. In the area there is a precedent for documenting these types of mounded berms in association with fire pits, midden, wooden planks, coral boulder alignments and other pre-Contact and historic artifacts, based on the results of previous archaeological investigations in near by Fort DeRussy and other areas of Waikiki (refer to Davis 1989, Simons et al. 1995, Denham and Pantaleo 1997, Lesuer et al. 2000).

Based on archaeological research at similar former pond locations at nearby Fort DeRussy, the area around the pond may have, at most, been used for temporary habitation associated with fishpond construction and maintenance. Habitation is less likely to have occurred in the area during prehistoric times, as it is thought that these ponds were closely controlled by the ali'i. Cultural deposits in the area suggest that under traditional Hawaiian forms of land management, people did not live on the sand berm between nearby Loko Paweo I and II in present day Fort DeRussy. Rather, human presence was probably intermittent and related to the harvesting and maintenance of the ponds (Denham and Pantaleo 1997). Habitation deposits encountered by Davis in the land area that separated Loko Paweo I and II included a variety of mollusk species, crab, kukui nuts, and fire-cracked basalt. Radiocarbon dates from unidentified charcoal produced dates in the seventeenth century (Davis 1989).

Around the turn of the 20th century, the fishponds and wetlands were filled due to health concerns, as well as political and economic motivations. In 1886 Act 63 of the Session Laws required landowners to fill wetlands in the interest of public health. By 1930 much of the Kailua land had been bought by the U.S. War Department for the development of Fort DeRussy and the wetlands were filled with dredged coral. This area included Loko Kapu'uiki.

By the early twentieth century the current project area and surrounding properties were sold to developers who constructed a series of small cottages on the filled land. The two ponds known as Loko Ka'ohai were filled to create the Beach Walk tract in 1911. Realtor Percy Pond undertook to transform Loko Ka'ohai by filling it with sediment from his Diamond Head property (refer to section 3.1.5). A 1927 fire insurance map shows ten buildings in the current project area, including cottages and The Louder board house. The Waikiki Redevelopment Project (1922-3928) led to the dredging of the Ala Wai Canal and the subsequent filling of Waikiki's other wetlands (refer to Figure 9). The Historic filling has protected fishponds, historic rice paddies and other archaeological deposits from the natural processes of deposition and erosion.
In subsequent decades, the project area was among an enclave of individual residences – typically cottages – and apartment complexes. In the 1950s construction began on the first large hotel structures that today surround the project area. The project area was not developed with high rise buildings as was much of the surrounding land, but larger modern concrete structures were built for restaurants and other public venues. Construction of these buildings would have had a greater chance of impacting both historic and pre-Contact archaeological deposits.

Using information from the previous archaeology of the Kiōlia area, as well as cultural and historic records, a predictive model for the project area’s stratigraphy can be formed and is as follows:

- A layer of historic fill composed of coral, sand and topsoil,
- A layer of fine to medium sand washed down from upland fills,
- A layer of microlaminated fine sands, silts and clays from fishponds that were waterlain,
- A layer of basal sand deposits of the former sand berms and bunds,
- A layer of basal sandy silt and silty clay loams from offshore lagoonal deposition,
- A layer of buried coral reef.

Based on the data, cultural layers containing prehistoric and historic artifacts and midden may be present beneath the land surface of the current project area. Though habitation deposits in the area are largely ephemeral and most of the project area was formerly a pond, previous and ongoing archaeological research has documented the presence of traditional and historic human burials in the vicinity of the project area and areas of high ground may contain such remains. Further, archaeological deposits relating to the maintenance or modification of ponds, including a constructed berm or causeway across Loko Ka'ohai may be encountered.

Section 7 Results of Fieldwork

7.1 Results of Pedestrian Inspection

As part of the current archaeological assessment investigation, a one-hundred percent pedestrian inspection was made of the project area’s surface. The only standing structures in the project area are a modern two-level parking garage and a small wooden parking attendant booth in Parcel 048. All structures in the parcels 026 and 027 were previously demolished and this land is now a crushed gravel parking lot. No surface historic properties were identified. Consequently, the archaeological assessment focused on a program of subsurface testing.

The pedestrian inspection confirmed that the ground beneath the modern standing parking structure on Parcel 048 could not be tested as part of the current investigation. In order to gain access to excavate beneath the garage, the structure which is planned for use with minor modification would have to be all but demolished. Further, because the garage is partially subterranean (see Figure 13) and this portion of the project area is documented as higher ground in historic maps (refer to Figure 9) there is an even greater chance that any subsurface deposits were heavily disturbed and/or completely removed during its construction.

Figure 13. Parcel 048, looking southwest at the existing parking structure.
Excavation for the partially subterranean first floor of the parking garage would have required excavation and removal of all sediment to a depth of 1.5 to 2.0 meters below the current land surface. This excavation likely extended into the water table. Since the structure is planned for use with only minor modifications, if any deposits remain under the structure they are not likely to be further disturbed under the current project plans.

7.2 Discussion of Subsurface Testing Sample Size

Over the last 30 years of archaeological inventory survey investigations in the Waikīkī/Kaka'ako area, a general standard for the appropriate number of trenches per acre of project area, has developed for subsurface testing programs. This general standard is 4 to 10 trenches per acre, with the number of trenches increasing or decreasing depending on observed stratigraphy and subsurface deposits. Generally, buried ka’aua sand deposits, or the perceived potential presence of buried cultural deposits, indicate the need for more trenches per acre within a given project area. Evidence of substantial fill episodes and/or the cutting away of the former land surface that predates fill deposits, may indicate that fewer inventory survey trenches are needed for a given project area. The appropriate number of trenches per project area is necessarily dependent on the types of subsurface deposits that are found within each individual project area.

Table 2 summarizes the number of trenches per acre and the overall testing sample size for the seven archaeological inventory surveys most recently completed in the current project area’s vicinity. Table 2 includes the same testing sample size summary information for the current 280 Beach Walk retail development archaeological assessment. Excluding the current investigation, the range of trenches per acre for these investigations is 1.03 to 3.19. Within the exception of the current investigation, subsurface testing sample sizes range from 0.13 to 1.5 percent of the total project area’s land surface. With the exception of the current investigation, all of these inventory survey investigations have been reviewed and approved by SHPD.

For the current archaeological assessment, 11 trenches were excavated, providing even coverage of parcels 026 and 027 that will undergo ground disturbance. The number of trenches per acre in these parcels was 22.39 and 2.44 percent of these parcels were sampled. The existing parking structure was not sampled because it is partially subterranean and the sediments beneath its footprint have likely been completely removed to the water table - or at least heavily disturbed. Additionally, no testing could be carried out in the garage without virtual demolition of the structure. If any deposits remain under the structure they are not likely to be further disturbed under the current project plans.

Based on a comparison with prior inventory survey investigations in Table 2, the current investigation has a very thorough subsurface investigation. Both parcels scheduled for construction and the project area as a whole have undergone one of the most intensive subsurface inventory surveys in Waikīkī.
7.3 Stratigraphic Summary

Test excavations in the project area were randomly spaced and designed to give testing coverage to the entire project area. A number of trenches were placed in specific locations to test areas deemed more likely to reveal high ground related to a possible constructed causeway. This higher ground also had a somewhat higher chance of containing burials. In total, the subsurface testing comprised 31 trenches. These trenches documented a project area that comprised largely intact natural pond sediments buried beneath historic/ modern fill layers. It also documented an area of higher ground where historic maps indicated a berm or causeway and three unassociated artifacts. Figure 14 shows the locations of trenches and artifacts. The artifacts are discussed in the section below titled, Subsurface Findings. Detailed stratigraphic descriptions, plan views, profiles, and summaries of the 31 test trenches are presented in Appendix A.

Most of the sediments in the project area were either disturbed by a number of episodes of late historic and modern construction, including large concrete footings and utility jackets. Even when such disturbances did not impact natural sediments, they did significantly affect the documentation of some parts of the project area. On the southern boundary of the project area, Trench 7 was aborted because of the presence of a concrete slab and repeated probing revealed another large slab adjacent to Trench 11.

Consistent with background research, an area of high ground was discovered near the north boundary of the project area. Historic maps suggested it might be a sand berm or even a constructed causeway. No evidence of construction was found in this high ground. There were no stone or coral foundations and no posts or wooden planks discovered. No artifacts of any kind were found in relation to this high ground. This is in contrast to previous archaeology in the immediate area such as Davis (1989), Simons et al. (1998), Denham and Parkaleo (1997), LeSuer et al. (2000). These investigations documented clear evidence of land use in association with nearly all berms by association with fire pits, midden, wooden planks, coral boulder alignments and other pre-Contact and historic artifacts.

The high ground documented in this investigation was limited to Trenches 1 and 2. These trenches contained thin layers of Jaucas beach sand that have been disturbed significantly by historic or modern excavation and filling. Trench 2 (Figure 19) has a natural Jaucas sand layer with subtle undecomposed organic horizon (Stratum IIIc). Overlying Stratum IIIc are two more Jaucas sand layers that are mottled (IIa and IIIb suggesting disturbance, but no evidence of intentional relocation such as charcoal or other artifacts was found. Overlying all of the Jaucas sand layers is a layer of gray sandy clay (IIa) that is a mix of pond sediment and Jaucas sand. Initially having a berm-like appearance, this layer was is most likely further evidence of disturbance. No datable artifacts or charcoal, stone or coral alignments, historic reinforcement of a berm, food remains or other artifacts were found in association with this stratum. Further, Stratum Ie in Trench 2, a tempestuous fill layer, partially underlies Stratum IIa, suggesting IIa is either a fill layer or was relocated by fill events. As a result of their subtlety, disturbance and the lack of intentional construction evident in these sediments, this high ground was not deemed eligible to the Hawai‘i State Register of Historic Places per HAR 13-284-6.
Figure 14. Locations of trenches within the project area. The existing parking structure and the access easement were not tested.
Pond sediments dominated the remaining trenches in the project area (Figure 16). They were typified by a layer of a gray or grayish-brown sandy clay loam (III, Figure 16) overlying a brown or grayish-brown sandy clay loam (IV). In approximately one-third of the trenches this sediment was only a single layer of grayish-brown sandy clay loam with a upper boundary mottled gray in color.

The upper boundary of the pond sediment was usually between 130 and 160 cmbs. The water table typically coincided with or lay below these pond sediments and ranged between 160 and 200 cmbs. This suggests that these ponds were probably quite shallow. Only a few trenches contained dense plant remains, usually in the form of peaty inclusions concentrated towards the top of the natural strata. A number of trenches also documented roots and rootlets not exceeding 0.5 cm in diameter. Freshwater snails were also found in pond sediments near the north side of the project area, near the higher ground. The observed pond sediments did not display micro-lamination or bedding of sediments, suggesting that sedimentary deposition into the pond was relatively slow and regular.

The pond sediments were approximately 30 cm thick on average. Below this pond sediment was a coarse marine deposited blue gray sand (V) that was on average 25 cm thick and sat directly on the coral shelf. This blue gray sand was probably deposited in a near shore environment in an area that became a naturally low-lying area or wetland, a majority of which was later modified by traditional native Hawaiians.

One artifact was found within the pond sediments. Artifact A, a basalt flake found 30 centimeters below the upper boundary of the pond sediment in Trench B. It is discussed in the following Section 7.4, Subsurface Findings.

Figure 15. Trench 2 west wall profile.

Figure 16. Representative profile of trenches containing pond sediments.

The pond sediments were entirely capped by terrigenous fills. This is consistent with background research suggesting that the Beach Walk area was initially filled by Percy Pond in 1911 with sediments from a property he owned near Diamond Head and subsequently with historic and modern fills. As is common, these more recent fill layers were frequently found to contain small deposits of modern trash. The fill was found to contain two artifacts: Artifact B, a green glass bottle dating between 1870 and 1900; and Artifact C, a diffuse trash deposit. Descriptions of these findings follow in Section 7.4, Subsurface Findings.
7.4 Subsurface Findings

No historic properties were identified within the project area. A very limited number of isolated artifacts were discovered and are described below. These artifacts do not meet any of the criteria for eligibility to the Hawai‘i State Register of Historic Places as defined by HAR 13-284-6. They are reported on here to document the limited distribution of artifacts in the project area.

Artifact A – Basalt Lithic

Feature A is an isolated, unmodified basalt flake found approximately 30 centimeters below the surface of pond sediments in Trench B, embedded in undisturbed pond sediment (refer to Appendix A-21). The flake was produced from a large core of medium grained basalt (Figure 17 and Figure 18). It has not been retouched, but does have one edge with an unnatural, minute, random serration that is indicative of use-wear. It is a general purpose tool that was not meticulously manufactured. It is most likely related to agriculture or aquaculture in the area and was lost or abandoned in Loko Ka‘a’ohai. No other artifacts were found near this flake, and no other artifacts of its age were found in Trench B.

This lithic does not add to the already established record of regular agricultural and aquacultural use of the area. It is a general purpose tool in an area where various types of subsistence would have been underway throughout much of pre-Contact times. Thus, it does not provide significant information about the archaeological record in the project area. As a result, it was not deemed eligible to the Hawai‘i Register under any criteria per HAR 13-284-6.
**Artifact B - Green Glass Bottle**

Artifact B consists of a single green glass bottle found in Trench B. The provenience for this bottle is not well established as it was encountered during backhoe excavation, but it clearly originated in fill, but near the bottom of the fill layer near pond sediments.

The bottle is completely unmarked and has a round bottom with no pontil mark. The finish is either a very skillfully applied finish or a tool finish. No seams are visible on the bottle and faint concentric circles suggest that this bottle either turn molded or dip molded. The extent of the concentric rings on the bottle indicates that the later technology, turn molding, is more likely. The glass generally contains many air pockets approximately 0.5 cm in diameter. It is most likely that this bottle is either a condiment bottle (such as olive oil) or possibly a barber's bottle as these are also known to have irregular shapes. Based on the lack of embossing, the finish and the molding process, this bottle most likely dates to between 1870 and 1900 (Bureau of Land Management 2006). This date conflicts somewhat with the known timeline for the filling of the Beach Walk area (1911), but could be accounted for by either an extended use of the bottle or reburial associated with a disturbance in the area.

Because there were no other artifacts found in association and little can be inferred about its specific use from either provenience or information derived from the bottle itself, it does not provide significant information about the archaeological record in the project area. As a result, it was not deemed eligible to the Hawai'i Register under any criteria per HAR 13-284-6.

**Artifact Deposit C - Diffuse Trash in Fill Deposit**

Artifact Deposit C represents diffuse trash within the historic fill deposit Stratum Ie in Trench 10. It was composed of a small amount of historic trash: rusted metal, broken glass and two intact bottles. The trash was not directly deposited in the feature over time, but rather mixed with a terrigenous sandy clay loam and then buried as part of the fill deposition process. Based on seams and corked tops, the two bottles approximately date the deposit to between 1905 and 1930 (Bureau of Land Management 2006).

Bottle A (Figure 20) is a machine made shoe polish bottle. It still has a partial cork stopper in tact in the mouth. It features raised embossing that reads: "WHITTEMORE POLISH." A black dried polish substance is still present in the bottle.

Bottle B (Figure 21) is a machine made alcohol bottle with no embossing or other markings that is made of brown glass. It lacks screw threads for sealing the bottle.

These bottles are residential in nature but their provenience and accompanying artifacts do not provide substantial information about the area. As a result of the lack of information gathered from these bottles and other refuse in this deposit, it was not deemed eligible to the Hawai'i Register under any criteria per HAR 13-284-6.

Figure 19. Artifact B, an isolated green glass bottle

Figure 20. Artifact Deposit C, Bottle A

Figure 21. Artifact Deposit C, Bottle B
Cultural Surveys Hawai'i, Inc., undertook this archaeological assessment at the request of First Round Pacific, LLC. The survey inspected the whole of the approximately 0.7-acre project area, located in the north end of the block bounded by Kalia Road to the south, Kalikaua Avenue to the north, Beach Walk to the east and Saratoga Road to the west. The project is located in Waikīkī Ahupua'a, Kona District, O'ahu Island, within TMK [1] 2-6-003: 026, 027, 048, 049, and 058.

As there were no surface historic properties in the project area, the inventory survey focused on a subsurface testing program. The results of the subsurface testing program were largely as anticipated based on background research. Eleven trenches were documented within the portion of the project area that is not currently developed and will be undergoing development. This equals a 2.44 percent subsurface testing sample of the project area’s surface area. Tests per acre of the area subjected to testing. Based on a comparison with prior inventory survey investigations in the vicinity, the current project area has had one of the most, if not the most, thorough archaeological inventory survey subsurface testing programs yet completed in Waikīkī.

The project area’s natural sediments are often capped by irregular historic and modern fill layers. These recent stratigraphic layers do not provide a significant amount of archaeological information. In terms of the cultural stratigraphy, it is most useful to discuss the types of natural land surfaces that would have existed before any historic or modern fill events took place. In this case, virtually the entire project area was formerly a relatively low lying pond.

The natural “pre-fill” sediments in the project area reflect the Holocene evolution of the Waikīkī landform. The jaucas sand deposits are the remnants of a prograding beach berm that likely developed following the mid-Holocene c. 1.5 m high stand of the sea. The ponds in the project area were naturally low lying wetlands of a type commonly modified by traditional Native Hawaiians. Underlying the jaucas sand and the low-lying areas are the remains of a former coral reef in the form of a hard impenetrable shelf.

Historic maps indicate that along the northern edge of the project area was a high sand berm or causeway. Test excavations along this boundary indicate that there was higher ground along this edge. A thin natural berm of jaucas sand was found along this edge of the project area, but no evidence of modification of this berm was found. In Trench 1 and 2 layers of gray sandy clay were found to overlie small areas of either organically enriched pond sediment or jaucas sand. No evidence was found to suggest these strata are anything more than evidence of machinery operating in the area during filling events or early historic fill events themselves. No evidence of construction common to the area was found - no coral or basalt alignments, charcoal, midden or historic modification of the berm in the form of historic trash or milled lumber shoring were discovered. The lack of clear evidence of modification does not necessarily contradict that this pond was used as a fishpond, as historic sources indicate, but no evidence of maintenance or intensive use was found. In this way, this investigation does not make a greater case for the addition of Loko Ka‘ahui into the Hawai‘i State Register of Historic Properties than existing accounts of the use of the pond in historic documentation.
In total three artifact deposits were found in the project area – a basalt lithic, a green glass bottle, and a diffuse trash deposit. None of these artifact deposits constitute a substantial deposit that is an excellent example of a site type, has the potential to yield information about the past, or was found to meet any other criteria for the Hawai‘i State Register of Historic Places as defined by HAR 13-284-6.

Section 9  Significance Assessments

No historic properties eligible to the Hawai‘i State Register of Historic Places were encountered during the current archaeological assessment. The criteria for significance evaluation are listed below for reference.

9.1 Significance Assessments

The archaeological assessment and documentation of the project area’s three artifact deposits has not provided sufficient information for significance evaluations. Significance is determined after evaluation of each historic property in light of the five broad criteria used by the Hawai‘i State Register of Historic Places (HAR 13-284-6). The criteria are the following:

A. Historic property reflects major trends or events in the history of the state or nation.
B. Historic property is associated with the lives of persons significant in our past.
C. Historic property is an excellent example of a site type.
D. Historic property has yielded or may be likely to yield information important in prehistory or history.
E. Historic property has cultural significance to an ethnic group, including, but not limited to, religious structures and burials.

Feature A, a basalt lithic, Feature B, a green glass bottle, and Feature C, a diffuse trash deposit, were not found to meet any of the above criteria. Though their presence alone contains limited information about the past, they have not provided information useful to the interpretation of the Waikiki area.
Section 10 Project Effect and Mitigation Recommendations

10.1 Project Effect

The proposed project will not affect identified historic properties recommended eligible to the Hawai‘i Register. Nevertheless, cultural consultation results indicate a concern for human burials in the area and previous archaeological work has identified numerous burials in the vicinity and disturbed human remains in historic fill. Because of these concerns, CSH’s project specific mitigation recommendation is for archaeological monitoring as a contingency identification measure (HAR Chapter 13-279-3).

10.2 Mitigation Recommendations

This archaeological assessment represents a good faith effort to identify and document the historic properties within the project area. Based on a fairly robust subsurface testing sampling strategy, CSH is confident that no historic properties exist in the project area. Due to the inherent limitations of any sampling strategy, however, it is possible that additional historic properties, potentially including human burials, may be uncovered during the project’s construction.

In order to mitigate the potential damage to unidentified historic properties that may yet exist in the project area, it is recommended that project construction proceed under an archaeological monitoring program. This monitoring program will focus on identification and proper treatment if any isolated burials or disturbed remains predicted by background research are found and will gather additional information regarding the project’s non-burial archaeological deposits, should any be discovered. This archaeological monitoring program may consist of a combination of on-site and on-call monitoring of project construction.

10.3 Disposition of Materials

The complete assemblage of artifacts associated with this archaeological assessment was collected from private lands; accordingly, this material belongs to the landowner, First Round Pacific. This collection is small, comprised of materials from the two isolated artifacts and a diffuse artifact collection not determined to be significant historic properties. The archaeological assessment collection will be temporarily housed at the CSH storage facility. CSH will make arrangements with the landowner regarding the disposition of the project’s collection. Should the landowner request archiving of material, then the archive location will be determined in consultation with SHPD.

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Appendix A Comprehensive Trench Documentation

Trench 1

Trench 1 was 7.0 meters long, 0.8 meters wide and 1.8 meters deep. It was excavated in the northwest corner of parcel 026 area to test for the presence of a sand berm or constructed causeway.

Trench 1 contained fill over disturbed natural sediments that do suggest a land surface higher than the surrounding ponds. Geographically this corresponds to Bishop’s 1881 map showing a berm across Kāōhai pond. However, no evidence of a constructed berm or causeway was found in this trench. No midden, coral or stone alignments, charcoal or clear mounding was observed. Some thin layers of pond sediment were found, but were devoid of any type of artifact usually associated with intentional mound- ing of sediments. Only one of these pond strata, Stratum II, showed organic enrichment in a thin lens, possibly as a land surface. Due to its position in relation to Stratum III (a similar sediment not showing an organic lens), removal and/or relocation of sediments during fill events is likely. Stratum IV contained rootlets and was at some time covered by the overlying II, III, IV. There is no cultural evidence for the relocation of these sediments and they are so thin that they could have been deposited by machinery spreading terrigenous fill in the ponds, or may have been relocated as part of the filling process itself.

Further limiting interpretation this trench was clear evidence of major disturbances. A large portion of the pre-fill sediments in this trench have been cut away to the coral shelf and replaced by Stratum V. At the top of Stratum I is a concentration of cobbles that is present in both sides. Some of the cobbles are fit together quite tightly suggesting a landscaping or minor foundation probably from modern times. Because of its location atop what appears to be backfill from mechanized excavation it is almost certainly not part of a constructed causeway across the pond. No diagnostic artifacts were found in association with this cobble concentration. Because of the lack of information and its likely modern age it was not considered an archaeological feature.
Figure 22. Trench 1 east profile.

Stratum Ia: 0 - 60 cmbs
Fill Horizon; 5 YR 4/2, dark reddish gray; sandy loam; structureless; loose dry consistency; slightly plastic; no cementation; abrupt smooth lower boundary. Modern land surface; overlaid by a thin layer of gray crushed construction gravel. Stratum contains modern trash.

Stratum Ib: 60 - 170 cmbs
Fill Horizon; 10 YR 4/3, brown; sandy loam; structureless; slightly hard dry consistency; slightly plastic; no cementation; clear irregular lower boundary. Utility trench backfill. Contains a metal pipe for which the trench was excavated, steel wire and coral gravel.

Stratum Ic: 60/70 - 120 cmbs
Fill Horizon; 10 YR 4/6, dark yellowish brown; loamy clay; structureless; loose dry consistency; non-plastic; no cementation; abrupt smooth lower boundary. Terrigenous Fill layer

Stratum Id: 50 - 115 cmbs
Fill Horizon; 10 YR 3/3, dark brown; loamy sand; structureless; hard dry consistency; non-plastic; no cementation; clear wavy lower boundary. Terrigenous fill.

Stratum Ie: 40 – 130/170 cmbs
Fill Horizon; 10 YR 3/2, very dark grayish brown; sandy loam; structureless; loose dry consistency; non-plastic; no cementation; abrupt irregular lower boundary. Terrigenous fill mixed with approximately 10 percent coral gravel and basalt gravel. This stratum forms a matrix between a cobble concentration near its upper boundary.

Stratum II: 120 - 140 cmbs
Fill Horizon; 10 YR 5/2, gray; clay loam; structureless; very friable moist consistency; plastic; no cementation; abrupt smooth lower boundary. This stratum appears to have been a land surface for a short period of time. The top of this stratum has a very thin (less than 1cm thick) slightly darker lens. This lens is not charcoal, but fine organic material. It is most likely that this sediment is redeposited pond sediment.

Stratum III: 70 - 145 cmbs
Fill Horizon; 10 YR 5/1, grayish brown; sandy loam; structureless; slightly wet consistency; slightly plastic; no cementation; abrupt smooth lower boundary. This stratum is most likely relocated pond sediment. It does not appear to have organic enrichment along its upper boundary like the overlying Stratum II, suggesting there may have been a disturbance to Stratum II or III.

Stratum IV: 140 - 155 cmbs
Fill Horizon; 10 YR 4/1, dark gray; sandy clay; structureless; very friable wet consistency; plastic; no cementation; abrupt smooth lower boundary. This stratum is most likely relocated pond sediment.
Stratum V: 130/180 - 180 cmbs Fill/Disturbed jaucas sand; 10 YR 7/4 very pale brown; coarse sand; structureless; loose moist consistency; non-plastic; no cementation; lower boundary is on coral shelf. This stratum appears to be local jaucas sand that has been significantly disturbed. It is approximately ten percent clay inclusions of the same color (a sediment not noted elsewhere in the project area). This jaucas sand also contains approximately five percent calcareous gravel. Stratum VII in this trench does not contain such gravel. It is believed that this sand was entirely removed to the coral shelf and replaced.

Stratum VI: 155 - 180 cmbs Pond sediment; 10 YR 5/2 grayish brown; clay sand; structureless; slightly sticky wet consistency; non-plastic; no cementation; abrupt smooth lower boundary. This sediment was at one time a land surface, though it may have been submerged. It contains rootlets approximately 2mm in diameter.

Stratum VII: 145 - 510 cmbs Jaucas sand; 10 YR 8/4 very pale brown; very coarse sand; structureless; loose moist consistency; non-plastic; no cementation; lower boundary not visible – in bottom of trench. Marine deposited jaucas beach sand. This stratum appears to be sterile and is truncated in this trench by a major disturbance that cut away Strata Ic, Id, III and VII.
Trench 2

Trench 2 was 9.0 meters long, 0.8 meters wide and 2.1 meters deep. It was excavated in the northeast corner of parcel 026 to test for the presence of a sand berm or constructed causeway.

Trench 2 contained fill over disturbed natural sediments. Figure 26 following the sediment descriptions is a photograph of the sidewall.

Trench 2 contained sediments indicative of a land surface higher than the surrounding pond. It also documented disturbance of natural sediments. Stratum IIIc which has a faint organic lens at its surface, appears to have been a land surface at some time. Overlying it are the mottled jaucas sands of Strata IIIb and IIIc. These jaucas sand layers are natural, but the mottling suggests they may have been reloacted. Overlying the jaucas sand layers is Stratum IIa, a mix of jaucas sand and pond sediment. It is underlaid by Ie, terrigenous fill, known to have been deposited in or around 1911. This is highly suggestive that Stratum Ie dates to this time, or at least was seriously disturbed at this time. The proximity of le to the Stratum IIa and IIIb may also mean the upper boundaries of these layers may have been removed or otherwise adversely affected by the deposition of Ie.

This trench does document higher ground sediments geographically corresponding to a berm dividing Loko Ka‘ohe‘e as recorded in 1881 by S.E. Bishop, but no evidence of modification was found. Because of its position and because of mixing of jaucas sand and pond sediment, Stratum IIa could initially appear to be a clay constructed berm. However, Stratum IIa does not contain any artifacts, sediment retention techniques such as coral alignments or milled lumber, charcoal or display evidence of being a former land surface – expectations set by well documented constructed berms in the immediate area of Fort DeRussy. Further, it is underlaid by historic fill Ie. Likewise, Strata IIIa and IIIb do not contain any diagnostic evidence of pre-Contact or historic human intervention.

![Figure 25. Trench 2 west wall profile.](image-url)
Stratum IIa: 90/140 – 120/150 cmbs
Fill Horizon/Pond sediment; 10 YR 5/2, grayish brown; sandy clay; structureless; loose moist consistency; non-plastic; no cementation; abrupt wavy lower boundary.

This sediment has a very high sand content compared to the otherwise similar IIb, and is a mix of Jaucas sand and pond sediment. When this relocation occurred is unclear. It fits with a mound shown in historic maps, but may also be a product of heavy equipment used to fill the area as it is partially undercut by a historic terrigenous fill (Ie).

Stratum IIb: 130/150 – 170 cmbs
Fill Horizon/Pond sediment; 10 YR 4/2, dark grayish brown; sandy clay loam; structureless; friable wet consistency; slightly plastic; no cementation; abrupt wavy lower boundary.

This stratum is most likely pond sediment that was relocated to create a higher ground. However, it also may be caused by fill events, but was a land surface for at least a short amount of time. Contains small freshwater snail shells and has a dark upper boundary.

Stratum IIIa: 120/150 – 150 cmbs
Jaucas sand; 10 YR 7/3 very pale brown; medium sand; structureless, loose moist consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Jaucas beach sand with yellow mottling. Though subtle, this may be part of a constructed high ground.

Stratum IIIb: 140/150 – 175 cmbs
Jaucas sand; 10 YR 7/6 yellow; medium and coarse sand; structureless, loose wet consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Jaucas beach sand, more yellow than either overlying or underlying strata. Slightly mottled with lighter sand. This may be a constructed high ground.

Stratum IIIc: 175- 195 cmbs
Jaucas sand; 10 YR 8/4 very pale brown; very coarse sand; structureless, loose moist consistency; non-plastic; no cementation; lower boundary not visible – in bottom of trench.

Jaucas beach sand containing some small brown organic particles at the top of the layer. This was almost certainly a former land surface.

Figure 26. Trench 2 west wall photograph. Gray sediment possibly mounded visible just in front of the photo scale is Stratum IIIa.
Trench 3

Trench 3 was 7.0 meters long, 0.8 meters wide and 2.10 meters deep. It was excavated for general coverage of the project area.

Trench 3 contained fill over heavily disturbed natural sediments. More than half of the trench length was a concrete pad that appears to be a modern basement structure. This basement area contained an large amount of charred demolition debris including concrete, relatively young lumber and modern trash. Natural sediments were extremely thin and began at 170 cmbs.

![Trench 3 profile](image)

**Figure 27. Trench 2 west wall profile.**

**Stratum Ia: 0 - 40 cmbs**
- Fill Horizon; 10 YR 4/2, dark grayish brown; sandy loam; structureless; loose dry consistency; non-plastic; no cementation; clear smooth lower boundary.
- Gravely sandy loam terrigenous fill. Modern land surface.

**Stratum Ib: 40 – 60/80 cmbs**
- Fill Horizon; 10 YR 4/3, yellowish brown; sandy clay; structureless; friable moist consistency; slightly plastic; no cementation; abrupt wavy lower boundary.
- Terrigenous fill.

**Stratum Ic: 60/80 – 100/150 cmbs**
- Fill Horizon; 10 YR 2/2, very dark brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; abrupt irregular lower boundary.
- Terrigenous fill. Directly overlying the concrete foundation the stratum is only a matrix for modern trash such as burned wood, concrete blocks and rebar.

**Stratum Id: 125/140 - 170 cmbs**
- Fill Horizon; 10 YR 4/6, dark yellowish brown; clay loam; structureless; loose dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.
- Terrigenous fill.

**Stratum II: 170 - 180 cmbs**
- Fill Horizon; Gley 4/2, greenish gray; clay loam; structureless; firm moist consistency; slightly plastic; no cementation; abrupt smooth lower boundary.
- Very bright greenish in color in some areas of the stratum. Land snail shells present in this stratum. This is the top stratum of a shallow pond.

**Stratum III: 180 - 200 cmbs**
- Pond sediment; 10 YR 3/6, dark yellowish brown; clay loam; structureless; slightly hard dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.
- Natural pond sediment. Mottled with sediment of the same description but of color 10 YR 5/2. This stratum has a relatively high organic content – it contains small roots, a few land snail shells and some small localized peaty plant remains.

**Stratum IV: 200 - 210 cmbs**
- Marine sand; 10 YR 5/1, gray; coarse sand; structureless; non-sticky wet consistency; non-plastic; no cementation; abrupt smooth lower boundary.
- Marine-deposited sand occupying a low area that became a natural pond. Sand was not observed to contain organic material.
Trench 4

Trench 4 was 5.0 meters long, 0.8 meters wide and 2.10 meters deep. It was excavated for general coverage of the project area.

Trench 4 contained fill over natural pond sediments.

Figure 29. Trench 4 west wall profile.

Stratum Ia: 0 - 10 cmbs

Fill Horizon; 10 YR 5/2; grayish brown; gravel; structureless; loose dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Modern land surface

Stratum Ib: 10 - 30 cmbs

Fill Horizon; 10 YR 2/2; very dark brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; abrupt irregular lower boundary.

Terrigenous fill.
Stratum Ic: 30 - 40 cmbs Fill Horizon; 10 YR 5/2, grayish brown; gravel; structureless; slightly hard dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.
Similar to stratum Ia but has a matrix of Ic:
Fill Horizon; 10 YR 2/2, very dark brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; abrupt irregular lower boundary.

Stratum Id: 30/40 - 50 cmbs Fill Horizon; 10 YR 2/1, black; sandy loam; structureless; friable dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.
Ash and charcoal mixed into a terrigenous fill.

Stratum Ie: 30/50 - 150 cmbs Fill Horizon; 10 YR 4/6, dark yellowish brown; clay loam; structureless; slightly hard dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.
Terrigenous fill containing 20-30% basalt gravel.

Stratum II: 150 - 185 cmbs Pond sediment; 10 YR 3/2, dark yellowish brown; clay loam; structureless; slightly hard dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.
Natural pond sediment. Mottled with sediment of the same description but of color 10 YR 5/2. This stratum has a relatively high organic content – it contains small roots, a few land snail shells and some small localized peaty plant remains.

Stratum III: 185 - 230 cmbs Marine sand; 10 YR 5/3, gray; coarse sand; structureless; non-sticky wet consistency; non-plastic; no cementation; abrupt smooth lower boundary.
Marine deposited sand occupying a low area that became a natural pond. Sand was not observed to contain organic material.

Figure 30. Trench 4 east wall, looking roughly south. Most of the natural sediments are below the water table in this photograph.
Trench 5

Trench 5 was 6.3 meters long, 0.8 meters wide and 2.10 meters deep. It was excavated to test for the southern extension of the high ground found in Trenches 1 and 2.

Trench 5 contained fill over natural pond sediments. No high ground was found in this trench, but a concrete jacket hindered the location of the transition from pond sediment to high ground.

Stratum Ia: 0 - 40 cmbs  
Fill Horizon; 5 YR 4/2, dark reddish gray; sandy loam; structureless; loose dry consistency; slightly plastic; no cementation; abrupt smooth lower boundary.

Modern land surface overlaid by a thin layer of gray crushed construction gravel. Stratum contains modern trash.

Stratum Ib: 40 - 165 cmbs  
Fill Horizon; 10 YR 4/3, brown; silt loam; structureless; weakly coherent; dry consistency; non-plastic; no cementation; clear irregular lower boundary.

Gravelly terrigenous fill.

Stratum II: 165 - 185 cmbs  
Pond sediment; 10 YR 3/2, dark yellowish brown; clay loam; structureless; slightly hard dry consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Natural pond sediment. Mottled with sediment of the same description but of color 10 YR 5/2. This stratum has a relatively high organic content – it contains small roots, a few land snail shells and some small localized peaty plant remains.

Stratum III: 185 - 210 cmbs  
Marine sand; 10 YR 4/1, gray; coarse sand; structureless; non-sticky wet consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Marine deposited sand occupying a low area that became a natural pond. Sand was not observed to contain organic material.

Figure 31. Trench 5 east wall photograph. Concrete jacket visible in photo terminated excavation of trench towards north edge of project area.
**Trench 6**

Trench 6 was 6.5 meters long, 0.8 meters wide and 2.0 meters deep. It was excavated for general project area coverage.

Trench 6 contained fill over natural pond sediments. A partial rib bone was found in the natural sediments in this trench. The bone was identified as most likely pig, with a remote possibility that it is dog. No other bones were found in the trench despite extensive probing of the back dirt and side walls with trowels.

**Stratum Ia: 0 - 20 cmbs**
- Fill Horizon; 5 YR 3/2, very dark grayish brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; clear smooth lower boundary.
- Modern land surface overlaid by a thin layer of gray crushed construction gravel. Stratum is a matrix mixed with gravel and some calcareous sand.

**Stratum Ib: 20 - 55 cmbs**
- Fill Horizon; 10 YR 4/3, brown; sandy loam; structureless; firm moist consistency; plastic; no cementation; diffuse wavy lower boundary.
- Pond sediment 2.5 YR 4/1, dark gray; sandy clay; structureless; sticky wet consistency; plastic; no cementation; clear smooth lower boundary.
- Natural pond sediment. A non-human mammal rib bone fragment believed to be either dog or pig was discovered during backhoe excavation of this stratum or Stratum IV immediately below. Manual probing of the trench uncovered no further bones.

**Stratum Ic: 55 - 90 cmbs**
- Fill Horizon; 10 YR 4/3, brown; sandy clay loam; structureless; firm moist consistency; slightly plastic; no cementation; clear wavy lower boundary.
- Marine sand; Gley 2.5/1, greenish gray; medium sand; structureless; non-sticky wet consistency; non-plastic; no cementation; lower boundary on coral shelf.
- Marine deposited sand occupying the low area that became a natural pond. No organic material observed.
Trench 7

Trench 7 was 7 meters long, 0.8 meters wide and 0.9 meters deep. It was excavated to test for general project area coverage.

Trench 7 contained fill over concrete slabs. Excavations terminated early in this trench and Trench 8 was excavated as close to the location of Trench 7 as possible in an attempt to uncover natural sediments. Trench 7 primarily documents the high degree of disturbance from modern construction in the project area.

Stratum Ia: 0 - 20 cmbs  
Fill Horizon; 10 YR 4/2, dark grayish brown; sandy loam; structureless; loose dry consistency; non-plastic; no cementation; clear smooth lower boundary. Modern land surface overlaid by a thin layer of gray crushed construction gravel. Stratum is a matrix mixed with gravel.

Stratum Ib: 20 - 30/60 cmbs  
Fill Horizon; 10 YR 5/3, brown; sandy loam; structureless; loose dry consistency; slightly plastic; no cementation; clear wavy lower boundary.

Stratum Ic: 30/60 - 90 cmbs  
Fill Horizon; 10 YR 4/4, dark yellowish brown; sandy loam; structureless; loose dry consistency; slightly plastic; no cementation; lower boundary is mostly on concrete slab and at bottom of excavation.

Trench 8

Trench 8 was 6.5 meters long, 0.8 meters wide and 2.0 meters deep. It was excavated for general project area coverage and to expose natural sediments after Trench 7 came down on a concrete foundation.

Trench 8 contained fill over natural pond sediments. It's excavation was truncated significantly by the a number of pipes and concrete jackets crossing the trench. During excavation the backhoe uncovered a single historic bottle, Feature B, from the bottom of the fill horizon Ic. A basalt lithic, Feature A, was found in the pond sediment in the sidewall of the trench and is believed to be of traditional Hawaiian origin. No other artifacts were found in this trench.

Stratum Ia: 0 - 15 cmbs  
Fill Horizon; 5 YR 3/2, very dark grayish brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; clear smooth lower boundary. Modern land surface overlaid by a thin layer of gray crushed construction gravel. Stratum is a matrix mixed with gravel and some calcareous sand.
Stratum Ib: 15 – 70/85 cmbs  
Fill Horizon; 10 YR 3/2, very dark brown; very gravelly loam; structureless; loose dry consistency; non-plastic; no cementation; abrupt wavy lower boundary.

Stratum Ic: 70/85 - 140 cmbs  
Fill Horizon; 10 YR 4/4, dark yellowish brown; clay loam; weak crumb structure; loose moist consistency; slightly plastic; no cementation; abrupt smooth lower boundary.

Stratum IIa: 140 - 160 cmbs  
Pond sediment; Gley 1 2.5/1, greenish black; clay loam; structureless; sticky wet consistency; plastic; no cementation; abrupt wavy lower boundary.  
Natural pond sediments. Contains plentiful roots and rootlets compared to the rest of the project area.

Stratum IIb: 160 - 180 cmbs  
Pond sediment; 10 YR 4/2, dark grayish brown; clay loam; structureless; sticky wet consistency; slightly plastic; no cementation; abrupt wavy lower boundary.  
Natural pond sediments, contains some roots and rootlets.

Stratum III: 180 - 200 cmbs  
Marine sand; 10 YR 5/1, gray; coarse sand; structureless; non-sticky wet consistency; non-plastic; no cementation; very abrupt smooth lower boundary.  
Marine deposited sand occupying a naturally low lying area. No organic or cultural material observed. This stratum lies directly on top of the coral shelf.

Figure 32. Trench 8 east wall photograph, southwest half. Natural sediments appear just above the water table.
Trench 9

Trench 9 was 5.3 meters long, 0.8 meters wide and 1.90 meters deep. It was excavated for general project area coverage.

Trench 9 contained fill over natural pond sediments.

Stratum Ia: 0 - 30 cmbs Fill Horizon; 5 YR 3/2, very dark grayish brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; clear smooth lower boundary.
Modern land surface overlaid by a thin layer of gray crushed construction gravel. Stratum is a matrix mixed with gravel and some calcareous sand.

Stratum Ib: 30 – 130 cmbs Fill Horizon; 10 YR 3/4, dark yellowish brown; gravelly loam; structureless; loose dry consistency; non-plastic; no cementation; clear wavy lower boundary.
This fill stratum contains an unusually high number of clay inclusions.

Stratum II: 130 - 140 cmbs Pond sediment; Gley 1 5/2, grayish green; clay loam; structureless; friable moist consistency; slightly plastic; no cementation; abrupt smooth lower boundary.

Stratum III: 140 - 160 cmbs Pond sediment; 10 YR 4/2, dark grayish brown; sandy clay loam; structureless; sticky wet consistency; plastic; no cementation; clear smooth lower boundary.
Natural pond sediments.

Stratum IV: 160 - 190 cmbs Maine sand; Gley 2 5/1, bluish gray; coarse sand; structureless; loose moist consistency; non-plastic; no cementation; abrupt wavy lower boundary.
Marine deposited sand occupying the low area that became a natural pond. No organic material observed.
Trench 10

Trench 10 was 7.5 meters long, 0.8 meters wide and 2.3 meters deep. It was excavated for general project area coverage.

Trench 10 contained fill over natural pond sediments. Trench 10 was truncated by concrete jackets and shows disturbance of natural sediments. Feature C, a diffuse trash deposit in a matrix of terrigenous fill, was found in this trench. It contained small amounts of rusted metal, broken glass and two historic bottles. See Section 7.4, Subsurface Findings, for more information about these bottles.

Stratum Ia: 0 – 0/43 cmbs Fill Horizon; 5 YR 3/2, very dark grayish brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; clear broken lower boundary.

Modern land surface; almost entirely gravel with a matrix of sandy loam as described above.

Stratum Ib: 0 – 50/80 cmbs Fill Horizon; 10 YR 3/4, dark yellowish brown; sandy loam; structureless; dry consistency; slightly plastic; no cementation; diffuse irregular and broken lower boundary.

Stratum Ic: 35/75 – 70/100 cmbs Fill Horizon; 10 YR 3/6, dark yellowish brown; clay loam; structureless; firm moist consistency; plastic; no cementation; clear irregular and broken lower boundary.

Stratum Id: 75/100 – 70/100 cmbs Fill Horizon; 10 YR 3/6, dark yellowish brown; sandy loam; structureless; dry hard consistency; non-plastic; no cementation; abrupt wavy and broken lower boundary.

Stratum Ie: 83/135 – 135/180 cmbs Fill Horizon; 7.5 YR 3/4, dark brown; sandy clay loam; structureless; sticky wet consistency; non-plastic; no cementation; clear broken lower boundary.

This stratum was created during the excavation for a trash pit. It is similar to Id and forms a matrix for trash in Feature C. Feature C is concentration of trash in Feature C. Feature C is concentration of trash including metal, glass, and two machine made bottles. See Section 7.4, Subsurface Findings, for more information on these findings.

Stratum If: 120 – 135 cmbs Fill Horizon; 5 YR 3/4, dark reddish brown; gravelly clay loam; structureless; sticky wet consistency; slightly plastic; no cementation; clear broken lower boundary.

Stratum II: 130 – 140 cmbs Pond sediment; 10 YR 3/2, very dark grayish brown; clay loam; structureless; sticky wet consistency; plastic; no cementation; abrupt wavy lower boundary. Contains some rootlets and scattered organic material.

Stratum III: 140 – 180 cmbs Pond Sediment; 10 YR 4/2, dark grayish brown; clay loam; structureless; sticky wet consistency; plastic; no cementation; abrupt wavy lower boundary.
Stratum III: 180 - 210 cmbs
Marine sand; Gley 24/1, dark bluish gray; clay coarse sand; structureless; non-sticky wet consistency; non-plastic; no cementation; very abrupt smooth lower boundary.

Marine deposited sand occupying a naturally low lying area. No organic or cultural material observed. This stratum lies directly on top of the coral shelf.

Trench 11
Trench 11 was 5.0 meters long, 0.8 meters wide and 2.1 meters deep. It was excavated for general project area coverage.

Trench 11 contained fill over natural pond sediments.

Stratum Ia: 0 – 0/43 cmbs
Fill Horizon; 5 YR 3/2, very dark grayish brown; sandy loam; structureless; firm moist consistency; non-plastic; no cementation; clear broken lower boundary.

Modern land surface almost entirely gravel with a matrix of sandy loam as described above.

Stratum Ib: 0 – 50/60 cmbs
Fill Horizon; 10 YR 3/2, very dark grayish brown; sandy loam; weak granular structure; loose dry consistency; non-plastic; no cementation; abrupt wavy lower boundary.

Stratum Ic: 50/60 – 140 cmbs
Fill Horizon; 10 YR 5/3, brown; clay loam; structureless; sticky wet consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Stratum IIa: 140 – 185 cmbs
Pond sediment; 10 YR 5/1, very dark gray; sandy clay; structureless; sticky wet consistency; slightly plastic; no cementation; abrupt smooth lower boundary.

Contains some peat like deposits.

Stratum IIb: 155 – 185 cmbs
Pond sediment; 10 YR 5/2, grayish brown; sandy clay; structureless; sticky wet consistency; slightly plastic; no cementation; abrupt smooth lower boundary.

Stratum III: 185 - 210 cmbs
Marine sand; 10 YR 4/1, dark gray; coarse sand; structureless; non-sticky wet consistency; non-plastic; no cementation; abrupt smooth lower boundary.

Marine deposited sand occupying a naturally low lying area. No organic or cultural material observed. This stratum lies directly on top of the coral shelf.
APPENDIX G

Site Development Criteria for the 280 Beach Walk Project
SITE DEVELOPMENT CRITERIA

280 BEACHWALK

SITE DEVELOPMENT CRITERIA

1.0 Project Location: Waikiki, O'ahu, Hawai'i

2.0 Tax Map Keys:
   1-2-6-003 :026
   1-2-6-003 :027
   1-2-6-003 :048
   1-2-6-003 :049 (owned by RGM Trust)
   1-2-6-003 :058

3.0 State Land Use District: Urban District (U)

4.0 City / County Zoning:
   Wakiki Special District (WSD)
   -Resort Commercial Precinct (RC)
   -Resort Mixed-Use Precinct (RMU)

5.0 City/County Development Plan: Primary Urban Center (PUC)

6.0 Flood Zone: FIRM Zone A0 (Finish Floor at +2'-0" above existing grades)

6.0 Site Area:
   1-2-6-003 :026  13,664 SF
   1-2-6-003 :027  7,730 SF
   1-2-6-003 :048  6,272 SF
   1-2-6-003 :049  4,888 SF
   1-2-6-003 :058  2,710 SF
   Total: 35,264 SF

7.0 FAR:
   Resort Mixed Use Parcels (:027 + :058 = 10,440 SF)
   1.36
   Resort Commercial Parcels (:026 + :048 + :049 = 24,824 SF)
   1.75
   Joint Development (All Parcels)
   1.63

8.0 FAR Site Area: 41,920 SF (includes 1/2 area of ROW at RC parcels)

9.0 Allowable Building Area: 68,329 SF

10.0 Setbacks:
   Front: 15'
   Side: 0'
   Rear: 0'
11.0 Required Open Space: 35% of Resort Mixed Use (RMU) Parcels = 3,654 SF

12.0 Required Landscape Area: Required front-yard area minus necessary access ways and drives
- 1,975 SF – Non ADA-compliant interpretation
- 1,000 SF – ADA-compliant interpretation

13.0 Proposed Use: Retail/Restaurant

14.0 Proposed Building Area:
- Level 01 = 17,550 SF
- Level 02 = 16,649 SF

Total = 34,199 SF

15.0 Height Limit: 300 FT

16.0 Proposed Height: 46’ – 0” Maximum to Top of Ridge

17.0 Parking Requirements:
- Level 01 Program (Exempt) = 0 Spaces
- Level 02 Program (1 Space/800SF) = 20 Spaces
- Dedicated to Parcel 49 through JDA = 26 Spaces

Total Required Parking Spaces = 46 Spaces
Total Provided Parking Spaces = 47 Spaces

18.0 Loading Requirements: 3 Loading Bays
- 2 – 12’ X 35’ Spaces
- 1 -- 9’ X 19’ Space