

HAWAII COMMUNITY DEVELOPMENT AUTHORITY



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Web site www.hcdaweb.org Ref. No.: KAK 13-091

October 20, 2015

Alan Downer, Ph.D., Administrator State Historic Preservation Division Department of Land and Natural Resources State of Hawaii Kakuhihewa Building 601 Kamokila Boulevard, Suite 555 Kapolei, Hawaii 96707

Dear Dr. Downer:

Re: Hawaii Revised Statutes ("HRS") Section 6E-42 and Hawaii Administrative Rules ("HAR") Chapter 13-284 Historic Preservation Review for Development at 803 Waimanu Street (Tax Map Keys: (1) 2-1-049: 050, 070, and 072)

The Hawaii Community Development Authority ("HCDA") is transmitting material for historic preservation review, including an Archaeological Inventory Survey Plan as well as identification and inventory of existing structures, on each of the parcel lots for the 803 Waimanu Street development project at Tax Map Keys: (1) 2-1-049: 050, 070, and 072. We invite your review, comments, and recommendations regarding historic property and archaeological issues.

Please note that while this project has already been approved for a Development Permit by the HCDA, there was previous consultation and correspondence seeking comment from your agency and attempting to coordinate meetings on the proposed project prior to consideration and approval of the Development Permit. The subject letters are attached for your reference.

The State Historic Preservation Division ("SHPD") did not attend the meetings on this proposed project, and the HCDA has yet to receive comments or a determination of effect from the SHPD. In accordance with HAR §13-284-3(e), "if the SHPD fails to send written comments within the set time, or by a mutually agreed upon date, then the SHPD is presumed to concur with the agency's submittal". Additionally, in accordance with HAR §13-284-5(b), "the SHPD shall supply a response in writing within thirty days of the receipt of the initiating request at the SHPD office." Consequently, after 30 days of having requested

Alan Downer, Ph.D., Administrator Page Two October 20, 2015

comments from the SHPD, the HCDA proceeded with review of the Development Permit Application in reasonable order to render a decision prior to automatic approval, in accordance with §15-217-86 of the Mauka Area Rules. The HCDA issued a Certificate of Completeness on the proposed project on September 23, 2013 and the Development Permit Application would have been considered to be automatically approved by April 4, 2014. The Development Permit for the 803 Waimanu Street project was ultimately approved by the Authority on January 8, 2014.

At this time, to the best of my knowledge, the approved development has not proceeded with any impact on the existing structures on site or disturbance of land.

Should you have any questions or concerns regarding this project, please contact Mr. Daniel Simonich at 594-0333.

Sincerely,

Executive Dir

AJHC/DN/DS:ak

Encs.

c: Ms. Suzanne Case, Chairperson (Board of Land and Natural Resources)





Neil Abercrombie Governor

> Brian Lee Chairperson

Anthony J. H. Ching Executive Director

461 Cooke Street Honolulu, Hawaii 96813

Telephone (808) 594-0300

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E-Mail contact@hcdaweb.org

Web site www.hcdaweb.org March 25, 2013

Ref. No.: KAK 13-019

Pua Aiu, Ph.D., Administrator State Historic Preservation Division Department of Land and Natural Resources State of Hawaii Kakuhihewa Building 601 Kamokila Boulevard, Suite 555 Kapolei, Hawaii 96707

Dear Dr. Aiu:

Re: Development Permit Application for the Waimanu Development Project

We have received a Development Permit Application for the above-stated Project at 803 Waimanu Street (TMKs: 2-1-49: 050, 070, and 072).

Enclosed is one set of the proposed development plans for your review, comments, and recommendations regarding historic property and archaeological issues.

The HCDA is scheduling a meeting on Monday, April 22, 2013, at 10:00 a.m., with the applicant to review development plans. We are inviting you to attend the meeting and provide feedback on the development plans in addition to any written comments you may provide. The meeting will be held at the HCDA office at 461 Cooke Street, Honolulu, Hawaii 96813. There is public parking available at the Kauhale Kakaako and the HCDA will validate the parking (see attached direction Map for Location of Kauhale Kakaako and HCDA office).

Two separate public hearings will be conducted before the HCDA makes a determination on the Development Permit Application. The first public hearing is for informational and public comment purposes and will be held on Wednesday, May 1, 2013, at 9:00 a.m. The second public hearing is a HCDA decision-making hearing and is scheduled on Wednesday, June 5, 2013, at 9:00 a.m. Both public hearings will be held at the HCDA office.

If you or a representative from your office is unable to attend any of the above-referenced meetings, we would appreciate receiving written comments on the development plans by Thursday, April 25, 2013.

Pua Aiu, Ph.D., Administrator Page Two March 25, 2013

Should you have any questions or concerns regarding this Project, please contact Mr. Daniel Simonich of our Planning and Development Section at 594-0300.

Sincerely,

Anthony J. H. Chin Executive Director

AJHC/DN/DS:ak

Encs. c:

Mr. William J. Aila, Jr., Chairperson (Department of Land and Natural Resources)





HCDA GUEST PARKING:

Parking is available at Kauhale Kaka'ako parking lot. Please bring your parking ticket to our office for validation.

Maximum height limit is 6'9".





Neil Abercrombie Governor

> Brian Lee Chairperson

Anthony J. H. Ching Executive Director

461 Cooke Street Honolulu, Hawaii 96813

Telephone (808) 594-0300

Facsimile (808) 594-0299

E-Mail contact@hcdaweb.org

Web site www.hcdaweb.org September 24, 2013

Ref. No.: KAK 13-091

Ms. Nicki Thompson Interim Administrator State Historic Preservation Division Department of Land and Natural Resources State of Hawaii Kakuhihewa Building 601 Kamokila Boulevard, Suite 555 Kapolei, Hawaii 96707

Dear Ms. Thompson:

Re: Development Permit Application for 803 Waimanu Street, (2nd Application)

We have received a Development Permit Application for the above-stated Project at 803 Waimanu Street (Tax Map Keys: 2-1-049: 050, 070, and 072). Please note that this Project is a revised application and differs substantially from plans that were previously submitted and shared with your agency. Please find enclosed a set of the proposed development plans.

We invite your review, comments, and recommendations regarding historic property and archaeological issues.

An opportunity for you or a representative from your office to meet with the developer and offer comments on the Project is being planned for Thursday, October 24, 2013, at 1:00 p.m. The meeting will be held at the office for the Hawaii Community Development Authority ("HCDA"), at 461 Cooke Street.

Additionally, two separate public hearings will be conducted before the HCDA makes a determination on the Development Permit Application. The first public hearing is for informational and public comment purposes and is scheduled on Wednesday, November 6, 2013, at 9:00 a.m. The second public hearing is a HCDA decision-making hearing and is scheduled for Wednesday, January 8, 2014, at 9:00 a.m. Both public hearings will be held at the HCDA office.

If you or a representative from your office plan on attending any of the above-referenced meetings, please email Mr. Daniel Simonich of our Planning and

Ms. Nicki Thompson Page Two September 24, 2013

Development Section at: daniel.p.simonich@hcdaweb.org no later than Monday, October 14, 2013. If you're unable to attend, we would appreciate receiving written comments on the development plans by Tuesday, October 22, 2013.

In the meantime, please review and offer any comments and/or recommendations as to the proposed development. Should you have any questions or concerns regarding this Project, please contact Mr. Daniel Simonich at 594-0333.

Sincerely,

Anthony J. H. Ch **Executive Direc**

AJHC/DN/DS:ak Enc.

c:

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Mr. William J. Aila, Jr., Chairperson (Department of Land and Natural Resources) Ms. Susan Lebo

(State Historic Preservation Division)

SCS-Project Number 1808-AISP-1

ARCHAEOLOGICAL INVENTORY SURVEY PLAN FOR THE 803 WAIMANU STREET PROJECT `ILI OF KAKA`AKO, HONOLULU AHUPUA`A HONOLULU (KONA) DISTRICT ISLAND OF O`AHU, HAWAI`I [TMK: (1) 2-1-049: 050, 70, AND 072]

Prepared by: Cathleen A. Dagher, B.A. and Robert L. Spear, Ph.D. October 2015 DRAFT

Prepared for: Zen Sawyer Zen Sawyer Consulting, Inc. 8 Grove Street Mill Valley, California 94941

Scientific Consultant Services Inc.

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INTRODUCTION

Scientific Consultant Services, Inc. (SCS) has prepared this Archaeological Inventory Survey Plan (AISP) in advance of ground-altering activities within three parcels of land comprising a total of 0.4865 acres of land located on three properties within the *`ili* of Kaka`ako, Honolulu Ahupua`a, Honolulu District (formerly Kona District), Island of O`ahu, Hawai`i [TMK: (1) 2-1-049: 050, 070, and 072] (Figures 1 through 3). Tax Map Key (TMK): (1) 2-1-049:050 consists of 0.231 (10, 062 square feet), TMK: (1) 2-1-049:070 consists of 0.1192 acres (5, 191 square feet, and TMK: (1) 2-1-049: 072 consists of 0.1263 acres (5,939 square feet). All three properties are owned by Eight Zero Three Waimanu LLC.

The subject property is currently occupied by a by a warehouse with light industrial tenants and an auto repair shop. The project area is located between Waimanu Street and Kawaiahao Street. The proposed undertaking involves the demolition of the existing structure and the construction of a seven-story condominium containing 153 studios, one- and two-bedroom apartments and ninety-one parking stalls. A total of 101 units will be priced as "affordable" the remaining fifty-two units will be at market rate. The undertaking will be financed through a loan from the Hawaii Housing Finance and Development Corporation. No federal funding will be involved.

PROJECT BACKGROUND AND PROPOSED LANDSCAPE ALTERATIONS

This AISP has been prepared as the project area is situated entirely within an historic building located in Kaka`ako. Until the end of the 19th century, Kaka`ako was considered to be something of a wasteland, or empty space, between the better-known locations of Kou (modern-day Honolulu) and Waikīkī. Recent archaeological projects, associated with development and construction in the area, have documented several large cemeteries dating from the earlier historic period and perhaps late pre-Contact times. Otherwise, the place was known for its low-lying marshes, fishponds and salt making near the coast, and for the barren, uncultivated plain that lay behind the marches and ponds. In the second half of the nineteenth century this changed; population pressure in Honolulu led to urban expansion, with the infilling of marshes and pond lands and subsequent development into the Kakaʿako area. From the end of the 1800s until the 1940s, Kakaʿako developed into a large residential and industrial mixed use area, with Hawaiian, Portuguese, Japanese, Chinese, and Filipino enclaves. In 1941, the area was rezoned from mixed use residential to a predominantly industrial focus, and many of the residents moved away



Figure 1: USGS Quadrangle (Honolulu 1998; 1:24,000) Map Showing Project Area Location.



Figure 2: Tax Map Key [TMK: (1) 2-1-049] Map Showing Project Area Location.



Figure 3: Google Earth Satellite Photograph (Imagery Date 2/16/2013) Showing Project Area Location.

(O'Hare *et a*l. 2007:21). Many of the industrial users have closed or moved to Central or West O`ahu, and current development is focused upon bringing back residential, mercantile, and commercial activities into Kaka`ako.

Thus, there is a heightened probability for encountering pre- and post-Contact archaeological sites on the ground surface and within subsurface contexts. This AISP has been prepared in accordance with Hawaii Administrative Rules (HAR) 13-284-5 (c) (1) and (2) and Hawaii Administrative Rules (HAR) 13-276.

ENVIRONMENTAL SETTING

PROJECT AREA LOCATION

The project area is located on the nearly-level coastal plain of Kaka'ako, in southern O'ahu in an urban area comprised of residences and small businesses. Waimanu Street forms the northern boundary, Kawaiahao Street forms the southern boundary, and residential condominiums and commercial structures form the eastern and western boundaries. The subject property is currently occupied by a by a warehouse with light industrial tenants and an auto repair shop.

PROJECT AREA SOILS

According to Foote *et al.* (1972: Sheet Number 62; Figure 4), the project area is situated within the matrix described as mixed fill land (FL). Mixed Fill Land is described as land used for urban development, filled with "materials dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources" (Foote *et al.* 1972:31). This filling and subsequent development of the low-lying marshes and fish ponds of the Kaka`ako area gradually changed it into its present fully urbanized character. The project area receives approximately 600 mm (24 in.) of annual rainfall (Giambelluca *et al.* 1986). The project area is entirely built up, and the surrounding area is urban, with a mix of industrial warehouses, low-rise commercial buildings, and high-rise residential buildings.

CLIMATE

The area in which the project area lies is the dry region of O'ahu's southern area. Rainfall indicators, according to Price (1983:62), relayed that the project area usually receives about five inches a year during December and January. Higher elevations within the Honolulu Ahupua`a and further northeast in other ahupua`a (*i.e.*, Pauoa and Makiki Ahupua`a) are prone to receive more precipitation due to cloud descent and lower temperature climates. Currently, the project area does not receive large amounts of upland wash as no natural water sources exist within the project area confines or in the surrounding area.

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Figure 4: USDA Soils Survey Map (Foote et al. 1972: Sheet Map 62) Showing Soil Type within the Project Area.

SETTLEMENT PATTERN AND LAND USE PERIOD

The presentation of general *ahupua*`a settlement patterns is varied given that many theories suggested in Hawaiian archaeology have geographic and topographic aspects taken into consideration when determining *ahupua*`a settlement patterns. *Ahupua*`a land divisions vary in size but generally encompass land from the mountain to the sea, thereby allowing access to marine and mountain resources. For more discussions regarding general *ahupua*`a settlement patterns, please consult Kirch (1985) and Cordy (1974; 2002:8). In lieu of a presenting a general *ahupua*`a settlement pattern, a settlement pattern—one that utilizes historical (*i.e.*, post-1778 Western Contact) and oral documentation with archaeological documentation—is compiled in this report with regards to the *ahupua*`a of Honolulu within which the project area is situated.

The settlement pattern, and timing of land utilization, may be conveniently (and arbitrarily) divided into several general periods: pre-Contact settlement, the early Historic period/early post-Contact, the recent Historic, and present land use. Together, these periods create a synthesis of land use in and near the project area as well as provide a basis on which archaeological researchers explored succinct research questions during reconnaissance and sampling work.

TRADITIONAL AND HISTORIC SETTING

This section relies heavily on information from Cultural Surveys Hawai`i, Inc. who has conducted numerous studies in and around the project area, and much of this background section is based on two comprehensive summaries of historical and archaeological background information (*i.e.*, Chiogioji and Hammatt 2003; O'Hare *et al.* 2004).

TRADITIONAL SETTING

According to Chiogioji and Hammatt (2003), the project area, currently known as Kaka`ako, is located in a region called Kewalo on early historic maps. This area is between the traditional population centers of Honolulu (traditionally known as *Kou*) and Waikiki. There are no specific references to Kewalo among the writings of early travelers; however, both Kou (Honolulu) and Waikiki were described as having extensive irrigated *lo`i* (taro fields), fishponds, and permanent habitation sites in traditional times. Waikiki, in particular, has been an extremely important population center for centuries. It served as a royal center from as early as the late 14th century up until the early historic era. Vancouver's (1798:463) first impressions of Waikiki illustrate its character at the dawn of the historic era.

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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....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 rills only, finding a passage through the dams that checked the sluggish stream, by which a constant supply was afforded to the *taro* plantations.

West of the current project area, Kou (Honolulu) was also highly cultivated and settled at the time of the earliest historical descriptions. Handy and Handy (1972:479) describe it as follows.

...Westervelt...wrote that "Honolulu" was probably a name given to a very rich district of farm land near what is now...the junction of Liliha and School Streets, because its chief was Honolulu, one of the high chiefs of the time of Kakuhihewa....' It is probable that the chief referred to by Westervelt took his name from the harbor and adjoining land. The original name of the land where the town grew when the harbor became a haven for foreign ships was Kou....The number of *heiau* in this area indicates that it was a place of first importance before the era of foreign contact.

In sharp contrast with Waikiki and Kou (Honolulu), Kewalo seems to have been a less attractive place to live and farm, probably because it was dominated by marshes and prone to flooding, including tidal surges. In traditional times, Kewalo was apparently an important location for fishponds and for other marsh resources (e.g., birds). But, prior to its wholesale transformation into an urban area in historic times, this area would not have been a practical location for settlement.

HISTORIC SETTING

In 1820, Hiram Bingham (Bingham 1981:93) described the greater Kewalo area as "the plain of Honolulu" with "fishponds and salt making pools along the seashore." Jacobus Boelen (Boelen 1988:62), in the 1820s, described the Kewalo area as "not greatly cultivated." In the early 1840s, the Kewalo area was described by Gorman Gilman (Gilman 1903:97) as a "barren and dusty plain."

Since there are no Land Commission Awards (LCAs) that exist in the project area, a sample of LCAs within a quarter-mile (approximately 400 meters) radius of the current project area will be briefly mentioned in this paragraph. This sample of LCAs within that area surrounding the project area should provide sufficient examples of LCA utilization. Several LCA [LCA 569 and 706; TMK: (1) 2-1-044] located approximately 250 meters northeast of the current project area, were documented as having been utilized as places of residence (Anderson 1995:3 and 5). Located near LCA 706 is LCA 200:1 [TMK: (1) 2-1-044] which partially lies directly on land occupied by a Historic Catholic Cemetery (now called the King Street Cemetery). Anderson (1995:15) relays that "The earliest dated headstone located at the cemetery is marked 1841, however, it is possible that the cemetery either predates or postdates 1841." Given that LCA 200:1 was awarded in 1847 (Anderson 1995:5), it is likely that burials were interred there prior to the awarding of Land Commission Awards during the Mahele of 1848. LCA 2, located some 1/5 of a mile (approximately 330 meters) northwest of the current project area, relayed that the land was utilized as a house lot with accompanying taro lo`i (Perzinski et al. 2005:15). LCA 3169 to the southeast of the current project area was described as containing kalo (taro) patches and fishponds (Borthwick and Hammatt (2001:9). Excluding the mass of burials in the area of LCA 200:1, LCAs in the area surrounding of the current project area displayed that most LCAs were utilized as primarily as house lots and at times, accompanied by other features such as lo'i. At other times, LCAs were utilized for primarily for subsistence (i.e., *lo*`*i* and fishponds).

By the late 19th century, several streets in downtown Honolulu were extended into the Kewalo/Kaka`ako area, much of which was still described on historic maps as either rice fields or marshlands. In the early to middle 20th century, these lands were filled in as the beginnings of full-scale urbanization reached Kewalo/Kaka`ako. Queen Street, located several blocks *makai* of the current project area, was shown as a traditional trail from Kou (Honolulu) to Waikiki, as late as the early 20th century. This trail apparently traversed a sand berm, raised just above the wet marshland and coral flats natural to this area.

Filling the low-lying Kewalo/Kaka`ako area began systematically in the 1920s and 1930s, and was completed by the late 1940s. A 1949 aerial photograph (see Chiogioji and Hammatt 2003:15, Figure 5) shows the current project area as part of a mixed residential and commercial district.

PREVIOUS ARCHAEOLOGY

No previous archaeological studies have been conducted in the current project area. However, the following is a sample of archaeological studies conducted within the *ahupua*`a of Honolulu in the vicinity of the project area. At least twenty-two previous archaeological studies have been conducted within 500 meters of the project area. These are depicted on Figure 5 and briefly summarized in Table 1.

Schiltz (1991) evaluated the archaeological resources at the proposed Queen Emmalani Tower project, based on a study conducted by ERC Environmental and Energy Services Company in February 1991. This report included a summary of archival references and previous archaeology of the general Kaka'ako area. Based on background information searches and subsurface testing related to environmental remediation within the parcel the report concluded that no additional archaeological work other than archaeological monitoring of constructionrelated subsurface excavations would be necessary.

In June of 1991, Carol Kawachi, staff archaeologist at SHPD, monitored construction at the Queen Emmalani Tower following the discovery of a human cranium in a backdirt pile. In addition to the fragmented cranium, a single left humerus, midden, and fragments of Historic artifacts were also recovered from the backdirt piles. The skeletal remains were designated as Site 50-80-14-1604. Due to their discovery in backdirt piles, the subsurface provenience of the human skeletal remains could not be determined.

Douglas (1991) documented eight human burials identified during the construction of the Pohulani Elderly Housing Project at the corner of Queen and Coral Streets. The burial area was designated as Site 50-80-14-4380. Five of the eight burials were disinterred and relocated. These individuals were concluded to be of Hawaiian ancestry. Additional burials encountered during waterline trenching between Coral and Queen Streets were considered to be associated with Site 4380.



Figure 5: USGS Quadrangle (Honolulu 1998; 1:24,000) Map Showing Previously Conducted Archaeological Projects Conducted in the Vicinity of Current Project Area.

During an Archaeological Inventory Survey (AIS) on Queen Street, at the site of the former American Brewery, Hammatt and Pfeffer (1993) excavated 21 test trenches in an effort to define the boundary of the Honuakaha Cemetery (Site 50-80-14-3712). Three refuse pits associated with the brewery and twenty-nine burial pits were located. Eleven of the burials were disinterred to preserve the structural integrity of the proposed Honuakaha Affordable Housing building.

Anderson (1995a, b, c) conducted historical background research, archaeological inventory survey, and subsurface testing in support of construction at the corner of South King Street and Ward Avenue. Anderson documented 1 Historic habitation site (50-80-14-5373) consisting of rubbish pit features and one outhouse pit. Collected artifacts (including glass bottles, ceramic fragments, butchered bone, and metal fragments) dated between 1815 and 1929.

During construction monitoring for the Honuakaha Affordable Housing project, Winieski *et al.* (1996) identified a total of 16 sets of human skeletal remains associated with the 1853 Honuakaha small pox cemetery, along with Historic artifacts dated from the 1880s to early 1900s. The majority of the burials were reinterred within a specially constructed crypt beneath an open garden area of the property (Site 50-80-14-3712).

Anderson and Aronson (1997) recorded 30 inadvertent burial discoveries during construction monitoring at One Archer Lane. These burials were associated with the Catholic Cemetery located immediately adjacent to the western edge of the study parcel.

Allen (1997) monitored geotechnical borings at the northern corner of a parcel at the corner of Kapiolani Boulevard and Ward Avenue, and developed a stratigraphic sequence for the parcel. No human remains or cultural materials were observed from the bore locations.

Winieski *et al.* (2001) monitored 10 geotechnical borings in the proposed Honolulu Fire Department (HFD) Headquarters parcel at the corner of Queen and South Streets. No human remains or cultural materials were observed from the bore locations. The borings revealed the presence of intact native sand and cinder below layers of fill material.

Perzinski *et al.* (2004) excavated 12 backhoe trenches during an AIS in the area of the proposed HFD Headquarters building at the corner of Queen and South Streets. No burials or other cultural remains were encountered.

Monahan (2005) excavated 9 backhoe trenches during an AIS in a parcel at the corner of Ward Avenue and Kapiolani Boulevard. No burials or other cultural remains were encountered. Most of the trench excavations were confined to layers of fill material. Because the trenches did not reach undisturbed natural sediments, archaeological monitoring was recommended for any future excavations in the study parcel.

During an AIS for the proposed Keola Lai project at the corner of Queen and South Streets (the same parcel previously studied by Schiltz [1991] and Kawachi [1991]), Perzinski et al. (2005) discovered isolated human skeletal fragments (a mandible fragment and a fragment of femur shaft), historic refuse features, and some structural remnants (a concrete slab and associated wall). A total of 13 backhoe test trenches were excavated based on historic maps that showed the location of former structures in the study parcel. Two sites were documented; the isolated human skeletal remains were designated to be additional features of Site 50-80-14-1604, previously documented by Kawachi) and remnants of the historic occupation of the area (Site 50-80-14-6766). The three features of Site 6766 consisted of a historic refuse pit, a remnant concrete slab and an associated wall structure, and an in-filled posthole. Based on the extant remnant features encountered during the fieldwork, archaeological monitoring was recommended during construction. The report also recommended the preparation of a burial treatment plan for the extant, as well as any additional human remains potentially discovered during future construction monitoring. The authors concluded that the historic occupation likely represented the earliest intensive utilization of the parcel and area, starting with the infilling of wetlands and followed by compounded episodes of development and redevelopment. The stratigraphic data indicated five to seven historic and modern fill layers overlying the natural marshy sediments.

Stein *et al.* (2007) monitored construction of the HFD Headquarters building between 2004 and 2006, and, like Winieski *et al.* (2001), documented imported fill layers above undisturbed sand deposits and pockets of volcanic cinder. No intact cultural deposits or human remains were encountered.

O'Hare *et al.* (2007) documented 3 burials discovered during an AIS conducted in support of the construction of the Alapai Transit Center, located near the corner of South King Street and Alapai Street. Twenty-eight backhoe trenches were excavated during subsurface testing;. In addition to the 3 burials, 7 trash pits were discovered during testing and were designated as features of Site 50-80-14-6901. Test excavations also identified a "blacker-colored disturbed clay loam alluvium (Makiki clay loam) that contained cultural materials such as pottery, glass, and burned and rusted metal" (O'Hare *et al.* 2007:24).

O'Hare *et al.* (2008) prepared a burial treatment plan was prepared for the three burials discovered during the AIS testing documented in O'Hare *et al.* 2007. The burials were reinterred in a burial preserve (Site 50-80-14-6902) within a landscaped area along Ke Ala Makai Street.

Hazlett *et al.* (2008) monitored archaeological monitoring during construction of the Keola Lai project. Particular emphasis was placed on monitoring in the vicinity of the five features identified during the preceding AIS and the potential presence of additional skeletal remains. Finds within the fill layers included two additional isolated skeletal remains, as well as historic refuse and midden. No additional intact cultural deposits were encountered.

Tome and Spear (2008) conducted an archaeological study, including subsurface testing, on 0.2296-acres of land in the ili of Kaka`ako, O`ahu [TMK: (1) 2-1-049: 076]. No intact subsurface archaeological deposits, or features, were identified. The Tome and Spear (2008) project area is located immediately adjacent and abuts the west side of the current project area (see Figure 5).

Sroat *et al.* (2013) monitored construction of the Alapai Transit Center in 2010-2011. Three additional trash pits were recorded and designated as features of previously documented State Site 50-80-14-6901 but no additional human remains were encountered.

Dagher and Spear (2013) prepared a burial treatment plan was prepared for a single burial discovered during manual excavations of postholes associated with the construction of an aboveground transformer box at the intersection of Halekauwila and Cooke Streets. The newly identified archaeological site was subsequently designated State Site 50-80-14-7260. This site consisted of a partial (approximately 30 percent recovered and approximately 70 percent dislocated) set of displaced human skeletal remains and Pre- or Early Post-Contact and Historic-artifacts recovered from the excavated sediments. The burial was reinterred in a burial preserve on the property.

Mintmier *et al.* (2013) excavated 13 backhoe trenches during an AIS for the Symphony Honolulu project at the corner of Ward Avenue and Kapiolani Boulevard. Five Historic subsurface features were documented, including 3 utility trenches, 1 concrete foundation, and 1 deposit of metal slag. Pestana and Spear (in preparation) monitored excavations associated with the Kapiolani Boulevard Reconstruction project along Kapiolani Boulevard from South Street to Ward Avenue. One new site (State Site 50-80-14-7685) was documented. The site consisted of the foundation of a brick wall as well as two Historic rubbish pits. In addition, two new undocumented portions of State Site 50-80-14-6636, the 'Kewalo Wetland' site, were also identified and recorded.

EXPECTED FINDINGS IN THE PROJECT AREA

Based on the historical development of Kaka`ako as well as the results of 22 previous archaeological studies in the vicinity of the current project area, excavations in the project area may discover Pre- or Post-Contact human burials even though the project area is completely built up. In addition to burials, excavation in the project area is highly likely to reveal buried remnants of previous buildings, remnants of historic utility trenches, historic rubbish deposits, or pond sediments associated with previously documented State Site 50-80-14-6636, the Kewalo Wetland.'

Prior to the archaeological survey on a property located immediately adjacent to the west of the current project area, a "foundation investigation" for the proposed RMY Construction Building was conducted by Hirata & Associates, Inc. (2007; W.O. 07-4453; see Tome and Spear 2008) utilizing three vertical bore samples of matrices through an existing concrete pad which covered the RMY Construction Building). The results of that subterranean investigation revealed the presence of fill matrices to varying depths between 3.5 to 5 feet (approximately 107 to 152 centimeters) below current ground surface. Groundwater in these three boring holes was encountered between 5.6 and 5.8 feet (approximately 171 and 177 cm) below the current ground surface. The matrix information (type and depth below current ground surface) provided by the three vertical bore samples was utilized to supplement the archaeological study conducted on the project area.

As such, the RMR Construction Building project area was expected to be dominated by imported fill layers as indicated by Foote *et al.* (1972:62), especially in the upper portions of the stratigraphy as shown by Hirata & Associates, Inc. (2007). Via several archaeological studies, it is also known that this general area in which the project area is situated was extensively filled in during the early to middle 20th century. Historic Period house structure subsurface remnants (e.g., brick constructed walls and foundations) might be encountered. Traditional-type and

more-so Historic-type artifacts and food midden from those periods and earlier (*i.e.*, pre-1778; prior to Western Contact) might be found in association with the fill.

Below these fill layers, however, the intact (natural) deposits could be either swampy marshland sediments or pond bottom deposits (*i.e.*, clays), or they could consist of coral reef. Furthermore, as demonstrated by previous archaeological studies in the vicinity (*e.g.*, Winieski and Hammatt 2000a, 2001; Hammatt and Pfeffer 1993 Rev.; Tome *et al.* 2007 Rev.), it was also possible that remnant portions of beach sand deposits, having escaped the ravages of filling and construction, were located in the project area. Beach sands are always potential sites for Native Hawaiian burials, and this possibility, along with early Historic Period burials, was one of the main reasons for conducting archaeological survey on these parcels. Excluding the mass of burials in the area of LCA 200:1, LCAs in the area surrounding of the current project area suggested that most LCAs were utilized as primarily as house lots and at times, accompanied by other features such as lo`i. At other times, LCAs were utilized for primarily for subsistence (i.e., lo`i and fishponds).

FIELDWORK EXPECTATIONS

This AISP was developed in order to ensure that all identified archaeological sites are properly documented; to gather sufficient information on the sites; to evaluate the significance of the sites, and to compile the information (pursuant to HAR §13-284-5 (c) (1) and (2) and HAR §13-276). Should additional human burials be encountered during the Archaeological Inventory Survey, all work will cease in the immediate vicinity of the find and the State Historic Preservation Division will be notified. All burials identified during inventory survey will be considered "previously identified" and treatment will be in accordance with Hawai`i Revised Statutes (HRS) Chapter 6E-43.

CONSULTATION

Consultation with SHPD for the current AISP was conducted at a March 25, 2015, meeting between Lia Powers, Coastal Rim Properties, Inc.; Franco Mola, Coastal Rim Properties, Inc.; Guerin Tome, B.A, SCS Senior Archaeologist; and Susan Lebo, State Historic Preservation Division O`ahu Archaeologist, at the SHPD Office, Kapolei. The meeting was conducted to discuss the proposed project as well as the level of testing that would be recommended for the approximately 0.49 acres -acre property. It was determined at this meeting that an AISP be completed for the project (the current document), that trenching would include three trenches per quadrant, the approximate placement of the trenches, and the trench dimensions will be determined by the placement of existing infrastructure, personal property, and existing utility lines.

RESEARCH DESIGN

RESEARCH QUESTIONS

While Archaeological Inventory Survey is somewhat adverse to conducting protracted research and archaeological problem solving, measures can be taken to form basic research questions. These questions would initially seek to assess the relationship between discovered archaeological materials and the stratigraphy encountered (context) during Inventory Survey. At first, this is essentially a descriptive exercise, but methodologically, could be expanded to more advanced, specific questions.

The first level of research question development involves the pre-fieldwork evaluation of what types of cultural deposits could be identified in the project area and the context of such deposits. This is typically covered in the section titled "FIELDWORK EXPECTATIONS." The second level of research question development occurs during Inventory Survey activities and evaluates the presence/absence of cultural deposits. A major component of this level is determining the nature of the surface features, the subsurface deposits and the extent or boundaries of the subsurface cultural deposits. The third level of research question development is to evaluate the in-field discovery in regards to site significance and potential to address larger research questions (settlement patterns, change through time in artifact typology, etc.). Questions pertaining to the different levels of field research and evaluation are presented below:

- 1) What is the depositional history of the project area?
- 2) What are the depths, extents, age, and nature of identified cultural deposit(s)?
- 3) What is the temporal relationship between the artifact, cultural deposit, or burial and the stratigraphy?
- 4) What is the ascribed significance of the cultural deposit, based on State of Hawaii significance criteria?

Archaeological Inventory Survey could aid in the identification of the boundaries of the pre- and post-Contact sites and to assess intra-site subsurface feature/cultural deposit distributions. Through radiocarbon dating (if available), stratigraphic context, and possible

identification of additional archaeological subsurface features (hearths, firepits, food midden deposits), an understanding of intra-site patterns of use through time could be discerned.

METHODS

FIELD METHODS

As the current project area is comprised of approximately 0.40 acres which have been divided into quadrants, with three stratigraphic trenches per quadrant, twelve locations within the project area were selected for mechanical testing. The locations have been plotted on a plan view map (Figure 6). The twelve trench locations provide a systematic sampling of the project area. Excavation will initially proceed mechanically to sterile soil or to the water table, whichever is encountered first. The size of these trenches will be 3 to 10 feet long (1 to 3 meters), as dictated by the placement of existing infrastructure, personal property, and existing utility lines. Trench widths will be approximately 18 to 24 inches (46 to 60 centimeters) wide, dependent on size of mini-excavator blade. Trench excavations will terminate when sterile soil is encountered or at water table, whichever is encountered first. Excavation strategies were made in accordance to SHPD recommendations during consultation with SHPD at a March 25, 2015, meeting between Lia Powers, Coastal Rim Properties, Inc.; Franco Mola, Coastal Rim Properties, Inc.; Guerin Tome, B.A, SCS Senior Archaeologist; and Susan Lebo, State Historic Preservation Division O`ahu Archaeologist, at the SHPD Office, Kapolei.

Should archaeological features be identified in subsurface context, in plan view, during inventory survey, manual excavation, in the form of excavation in 10 centimeter increments following the natural stratigraphic layers, will be conducted to determine feature function. All newly identified features will be documented according to standard archaeological procedures in accordance with HAR §13-276-5 (a) and (b) and HAR §284-5 (c) 1 and 2. Should human burials be encountered during the Archaeological Inventory Survey, all work will cease in the vicinity of the find and the State Historic Preservation Division will be notified. All burials identified during inventory survey will be considered "previously identified" and treatment will be in accordance with Hawai`i Revised Statutes (HRS) Chapter 6E-43.

As part of the archaeological inventory, SCS will conduct archaeological monitoring during the demolition of the existing concrete pad which forms the base of the to-be demolished structure.



Figure 6: Plan View Drawing of the Project Area and the Proposed Placement of Stratigraphic Trenches 1 through 12.

EXCAVATION SAMPLING STRATEGY

Excavation strategies were made in accordance to SHPD recommendations during the SHPD consultation meeting, conducted on March 25, 2015, with Dr. Susan Lebo, O`ahu Archaeologist, Lia Powers, Coastal Rim Properties, Inc.; Franco Mola, Coastal Rim Properties, Inc.; Guerin Tome, B.A, SCS Senior Archaeologist, at the SHPD Office, Kapolei. Based on this meeting, the systematic distribution of the stratigraphic trenches were placed, as indicated in Figure 6, mindful of the existing infrastructure, including, personal property, existing utility lines, etc. Twelve locations, consisting of three stratigraphic trenches per quadrant, were selected for testing throughout the project area. The twelve trench locations will be systematically placed across the project area. Should archaeological features be identified in subsurface context, in plan view, during inventory survey, manual excavation, in the form of excavation in 10 centimeter increments following the natural stratigraphic layers, will be conducted to determine feature function.

PERSONNEL

The testing will be mechanically conducted via mini-excavator. Two qualified SCS employees will be present during all excavations. Robert L. Spear, Ph.D. will serve as the project Principle Investigator.

EXCAVATION METHODS

As indicated above, all excavations will proceed mechanically, via backhoe, to sterile soil or to the water table, whichever is encountered first. Standard excavation and recording procedures will be used during the project. Once fill layers are removed, mechanical excavation will proceed in 30-centimeter vertical increments in order to ensure limited disturbance to any subsurface features, including human burial features, which may be present in subsurface contexts. Should archaeological features be identified in subsurface context, in plan view, during inventory survey, manual excavation will be conducted, in the form of excavation in 10 centimeter increments following the natural stratigraphic layers, to determine function.

LABORATORY METHODOLOGY

All samples collected during the project, except human skeletal remains, will undergo analysis at the SCS laboratory, in accordance with SHPD rules (HAR §13-279). In the event that human skeletal remains are identified and the SHPD and the appropriate Island Burial Council (O`ahu Island Burial Council) authorize their removal, they will be curated on-site in a secure area or at an acceptable location, and analyzed by SCS during laboratory work. All retrieved artifacts and midden samples will be cleaned, sorted, and analyzed by SCS during laboratory work. Significant artifacts will be photographed, sketched, and classified (qualitative analysis).

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All metric measurements and weights will be recorded (quantitative analysis). These data will be presented in tabular form within the AIS report. Midden samples will be minimally identified to major 'class' (e.g., bivalve, gastropod mollusk, echinoderm, fish, bird, and mammal). All data will be clearly recorded on standard laboratory forms which also include number and weight (as appropriate) of each constituent category. These counts will also be included in the AIS report.

Should any charcoal samples amenable to dating be collected from a significant cultural deposit, they will be prepared in the SCS, Honolulu, laboratory and submitted to Beta Analytic, Inc., for radiocarbon dating analysis. Prior to submittal to Beta Analytic, Inc., the radiocarbon sample will be submitted to Gail M. Murakami, International Archaeological Research Institute, Inc., for taxon identification.

All stratigraphic profiles will be drafted for presentation in the AIS report. Representative plan view sketches showing the location and morphology of identified sites/features/deposits will be compiled and illustrated.

ARCHAEOLOGICAL INVENTORY SURVEY REPORTING

Upon completion of the testing and laboratory work, SCS will prepare an Archaeological Inventory Survey Report, documenting the findings of the survey, for submittal to the SHPD for review.

CURATION

Scientific Consultant Services, Inc. will curate all recovered materials, with the exception of human skeletal remains, until the AIS work has been completed, reviewed, and accepted by the SHPD. All materials gathered during this project (including documentation) are ultimately the property of the client, who may request their transfer subsequent to the acceptance of the final AIS report.

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