

Figure 224. Profiles of the two test bores collected from the north and south boundaries of T-099

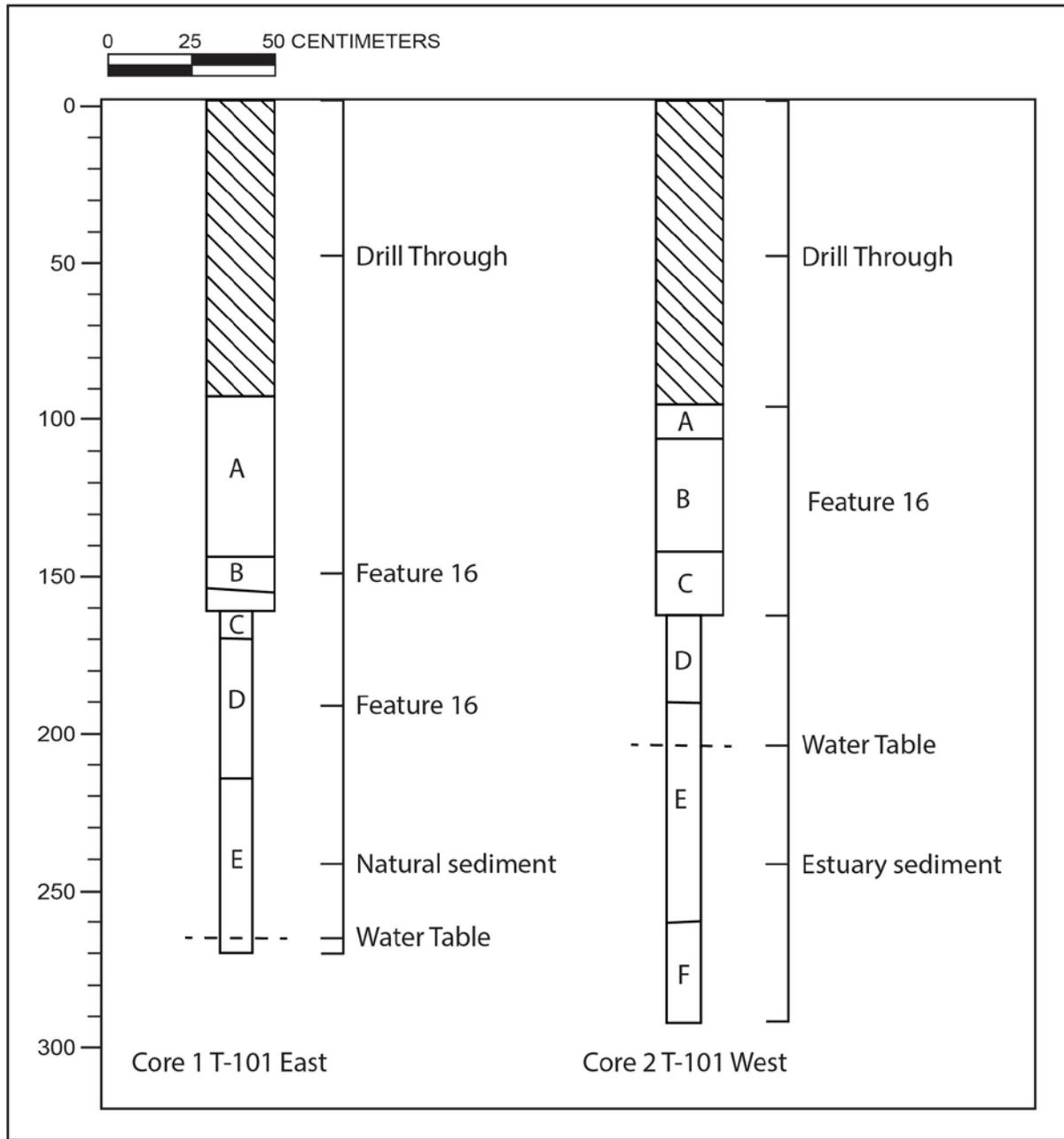


Figure 225. Profiles of the two test bores collected from the east and west boundaries of T-101

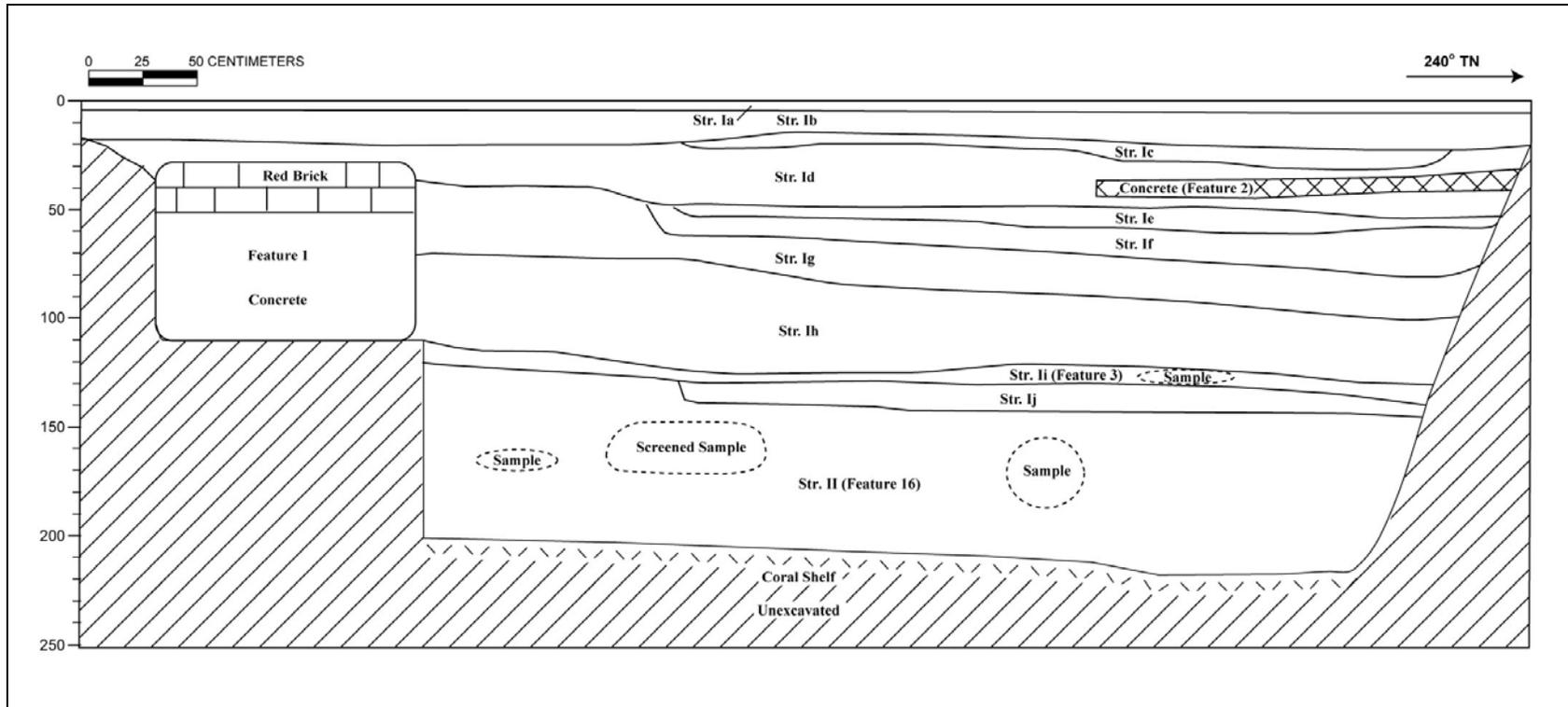


Figure 226. Profile drawing of the southeast wall in T-096 depicting archaeological Features 1, 2, 3, and 16 of SIHP # 50-80-14-7427

Table 31. Stratigraphic description of the southeast profile in T-096

Stratum	Depth (cmbs)	Description
Ia	0-3	Asphalt
Ib	3-20	Fill; 10 YR 5/1 (gray); very gravelly loam; structureless, single-grain; moist, loose consistency; non-plastic; terrigenous origin; abrupt, smooth lower boundary; gravel base course
Ic	15-30	Fill; 2.5 Y 8/1 (white); very gravelly loam; weak, medium, blocky structure; moist, friable consistency; non-plastic; mixed origin; abrupt, broken/discontinuous lower boundary; contained concrete and brick wall inclusions; crushed coral grading fill with concrete fragments
Id	20-50	Fill; 2.5 Y 4/1 (dark gray); very gravelly sandy loam; weak, fine, crumb structure; moist, loose consistency; non-plastic; mixed origin; abrupt, smooth lower boundary; contained faunal remains, red brick, basalt brick, cement brick, building foundation, pipe, nails and glass; historical layer
Ie	45-60	Fill; 5 Y 3/1 (very dark gray); gravelly sandy loam; weak, fine, crumb structure; moist, friable consistency; non-plastic; mixed; abrupt, broken/discontinuous lower boundary; crushed coral
If	60-75	Fill; 2.5 Y 4/1 (dark gray); gravelly sandy loam; weak, fine, crumb structure; moist, loose consistency; non-plastic; mixed origin; abrupt, broken/discontinuous lower boundary; contained nails, ceramic and glass fragments; contained human talus bone at 70 cmbs
Ig	40-86	Fill; 10 YR 2/2 (very dark brown); gravelly silty loam; weak, medium, blocky structure; moist, friable consistency; slightly plastic; terrigenous origin; abrupt, smooth lower boundary; contained nails, glass, ceramics and burnt inclusions
Ih	70-120	Fill; 7.5 YR 3/3 (dark brown); silty clay loam; weak, fine, crumb structure; moist, friable consistency; slightly plastic; terrigenous origin; abrupt, smooth lower boundary; had bands of stream-deposited soil—some very sandy, some more clayey
Ii	115-120	Fill; 10 YR 2/2 (very dark brown); gravelly silty clay loam; weak, medium, blocky structure; moist, friable, consistency; slightly plastic; terrigenous origin; abrupt, smooth lower boundary; contained faunal remains, rusted metal, slag inclusions, ceramic and glass
Ij	130-144	Fill; 2.5 Y 8/1 (white); very gravelly loam; weak, medium, blocky structure; moist, friable consistency; non-plastic; mixed origin; abrupt, broken/discontinuous lower boundary; crushed coral
II	121-216	Natural; 10 YR 2/2 (very dark brown); gravelly clay loam; weak, fine, crumb structure; moist, friable consistency; non-plastic; mixed origins; contained faunal bone and light shell midden; previously disturbed natural sediment. Associated with Feature 16 or SIHP # -7427



Figure 227. Photograph of historic building foundations (Feature 1) associated with SIHP # 50-80-14-7427



Figure 228. Photograph of historic building foundations (Feature 5) associated with SIHP # 50-80-14-7427



Figure 229. Photograph of historic building foundations (Feature 9) associated with SIHP # 50-80-14-7427

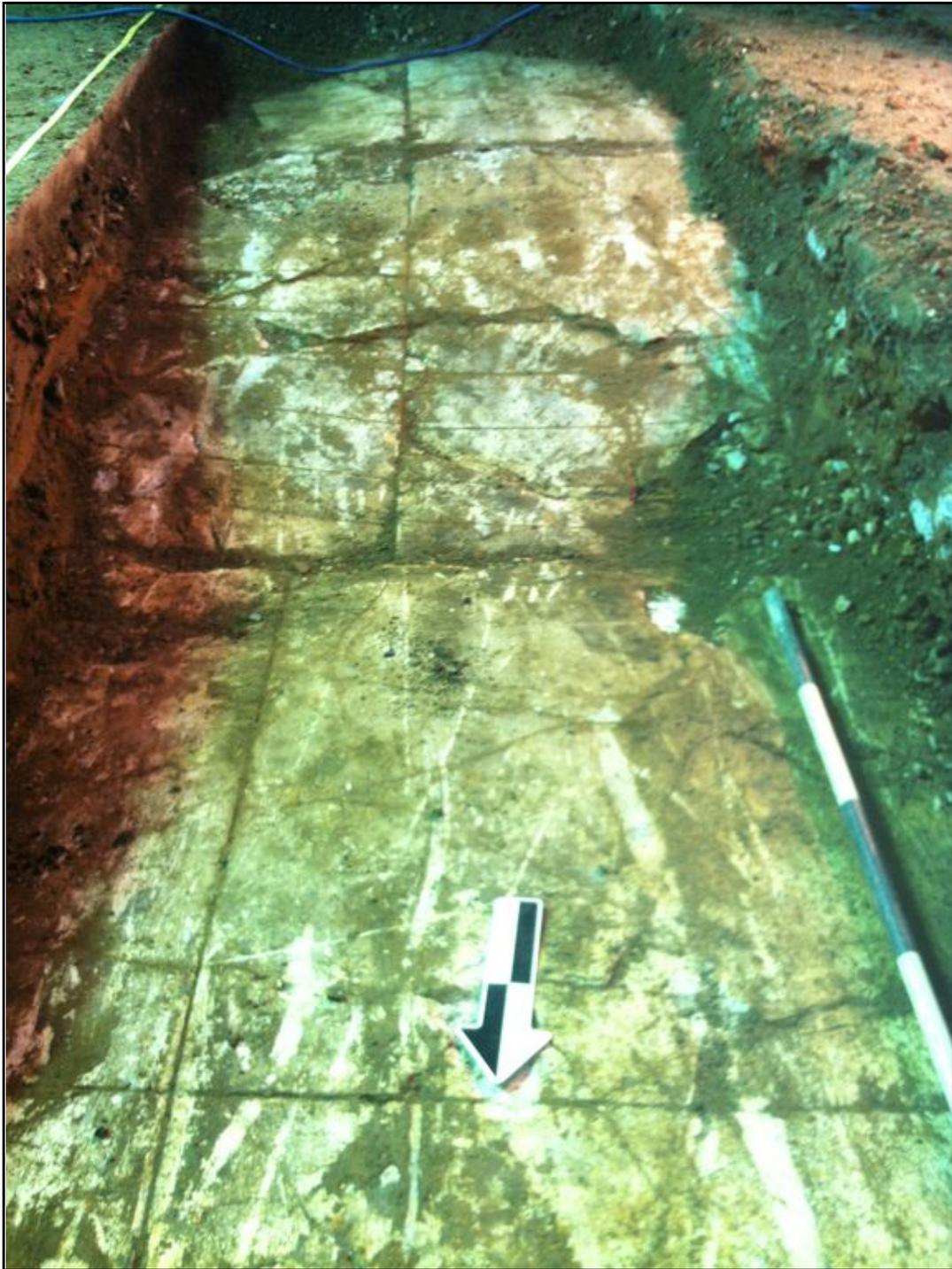


Figure 230. Photograph of historic building foundations (Feature 10) associated with SIHP # 50-80-14-7427



Figure 231. Photograph of historic building foundations (Feature 11) associated with SIHP # 50-80-14-7427



Figure 232. Photograph of historic building foundations (Feature 12) associated with SIHP # 50-80-14-7427

Following the fire, City Mill was rebuilt. The cultural resource lies within the footprint of three of City Mill's buildings in 1906 and four of their buildings in 1914 (see Figure 220 and Figure 217). Tragedy struck again in 1919, however, when a second fire burned City Mill to the ground (City Mill 2010). Burnt deposits were observed during the current AIS in three test excavations (T-096, T-097, and T-101). Two distinct burn layers were encountered in T-096 at an average depth of 0.75 to 0.88 mbs and 1.21 to 1.28 mbs. T-097 and T-101 contained burnt deposits between 0.60 and 0.70 mbs and 0.52 and 1.12 cmbs. These deposits, particular the two distinct strata in T-096, might be evidence of the early twentieth century Chinatown fires that destroyed City Mill.

Following the 1919 fire, City Mill's facilities were rebuilt along a similar configuration (see Figure 7). The start of World War II, however, forced City Mill to abandon its rice interests. In 1950 it opened its present store along Nimitz Highway, which concentrated on providing construction materials (City Mill 2010). A variety of storage facilities, presumably related to an adjacent market, took up residence in City Mill's former location. The storage facilities, as well as a gym, are depicted on the 1950 Sanborn map (see Figure 221). According to the 1950 map, Features 1, 2, and 4 are located within a cold storage facility and adjacent lot. Features 5 through 8 are located within a small storage and a poultry facility. Feature 9 is located in the footprint of a feed warehouse. Feature 10 spans portions of the footprints of the feed warehouse and an unlabeled building. Features 11 through 13 are located beside an unidentified structure, and Feature 14 is located within a gym facility.

Background research and historic maps indicate that the coastal landscape around Honolulu Harbor underwent intense urbanization from the late-nineteenth throughout the twentieth centuries. The current investigation has identified 16 archaeological features associated with this historic landscape. The majority of these archaeological features appear to be associated with former commercial storage warehouses. Feature 4 consisted of a single human talus bone. Considering the context of the feature within an imported fill deposit, it was likely previously disturbed. Feature 15 consisted of a pit containing historic refuse dated between 1860 and the 1920s. The faunal remains that were collected individually from Feature 15 consist of *Bos taurus*, *Sus scrofa* and unidentified Aves skeletal elements (Table 32). The *Bos taurus* and possible *Bos taurus* bone fragments were butchered using a metal saw blade, indicating a historic rather than traditional Hawaiian origin. The contents of Feature 15 correspond with the contents of the four previously identified pit features associated with SIHP # 50-80-14-4192. The historic refuse found in the four pits were likely deposited between the 1840s and 1920s (Landrum and Dixon 1992:25).

Although the building foundations (Features 1 through 2 and 5 through 14) within the cultural resource cannot be securely attributed to any particular building or function, they may be related to three phases of development. The first occurred during the 1890s and consisted of a Joss House and several unidentified buildings. The second phase occurred between 1899 and 1939 when City Mill opened its first rice and lumber facility on the corner of Queen and Kekaulike Streets. The final phase of development appears to have begun in the mid-twentieth century, following World War II. During this phase, City Mill closed its operations along Queen Street, and by 1950 several new warehouses and storage facilities were constructed. These buildings appear to be associated with a nearby market.

Table 32. Individually collected faunal remains from SIHP # 50-80-14-7427. The table only presents data from test excavations where more than four species were identified

Acc. #	Stratum	Depth (cmbs)	Feature	Family/ Class	Species	Element	Description	Modification
096-F-5	Ii	132-135	7427-3	Suidae (pig)	<i>Sus scrofa</i>	Incisor; Mandible; Mandible portion; Teeth; Molars	Complete/ fragments	None
096-F-6	Ii	132-135	7427-3	Canidae (dog)	<i>Canis lupus familiaris</i>	Radius; Diaphysis sections; Femur; Coracoid process; Cranial; Petrous process; Possible metatarsal	Complete/ fragments	None
096-F-7	Ii	132-135	7427-3	Mammalia	<i>Medium mammal</i>	Diaphysis sections; Irregular bones	Fragments	None
096-F-8	Ii	133	7427-3	Bovidae (cow)	<i>Bos taurus</i>	Ribs	Fragments	Butchered (cut with metal saw blade)
096-F-9	Ii	133	7427-3	Suidae (pig)	<i>Sus scrofa</i>	Femur; Left supra orbital margin; Proximal end of rib; Diaphysis section (possible pig)	Fragments	Butcher marks on femur
096-F-10	II	170	7427-16	Suidae (pig)	<i>Sus scrofa</i>	Mandibular tusk; Mandible	Fragments	None

Acc. #	Stratum	Depth (cmbs)	Feature	Family/ Class	Species	Element	Description	Modification
096-F-11	II	170	7427-16	Canidae (dog)	<i>Canis lupus familiaris</i>	Distal tibia; Rib; Metatarsal	Fragments	None
096-F-12	II	170	7427-16	Mammalia	<i>Medium mammal</i>	Diaphysis section	Fragment	Butchered (cut with metal saw blade)
097-F-4	II/III	180	7427-16	Equidae (horse)	<i>Equus ferus caballus</i>	Distal metapodial; Metatarsals (possible); Unfused diaphysis section (possible horse)	Complete/ fragments	Perimortem trauma on distal metapodial
101-F-2	Ie/II	67	7427-15	Bovidae (cow)	<i>Bos taurus (possible)</i>	Flat bone portion (Possible scapula, rib, or transverse process)	Fragment	Butchered (cut with metal saw blade)
101-F-3	Ie/II	90-110	7427-15	Bovidae (cow)	<i>Bos taurus</i>	Tooth; Diaphysis section	Fragment	Diaphysis section butchered (cut with metal saw blade)
101-F-4	Ie/II	90-110	7427-15	Suidae (pig)	<i>Sus scrofa</i>	Teeth (2) (molar and incisor); Diaphysis sections (possible <i>Sus scrofa</i>)	Fragments	None
101-F-5	Ie/II	90-110	7427-15	Aves (bird)	<i>Unidentified</i>	Metatarsus	Complete	None

Culturally enriched sediments were observed in two distinct strata. They were allotted Feature Numbers 3 and 16 (Figure 233). Feature 3 was observed during subsurface testing at a depth of 1.15 to 1.35 mbs, within T-096. Feature 3 appears to be an imported fill deposit. Historic debris was prevalent throughout the matrix and included bottle glass fragments (post-1800), ceramic fragments, burnt and rusted metal fragments, slag, and faunal bone. The faunal bone collected from Feature 3 included, *Canis lupus familiaris*, *Sus scrofa*, *Bos taurus* and medium mammal skeletal elements. For more detailed information regarding the individually collected faunal material, see Table 32. Diagnostic historic artifacts (Acc. # 096-A-1 to A-25) provide relative dates that are consistent with late-1800 to early-1900 fill events.

Feature 16 consists of culturally enriched, or potentially reworked, natural sediments that were observed during subsurface testing in T-096, T-097, T-100, and T-101 and during geotechnical boring within T-098, T-099, and T-101. Feature 16 deposits largely contained charcoal fragments, terrestrial and marine shell midden, and faunal bone. These deposits were observed at an average depth of 1.21 to 1.86 mbs. A total of ten traditional artifacts were recovered from Feature 16. Four fragments of volcanic glass debitage and one net mender fashioned from faunal bone were collected from T-096 (Acc. # 096-H-1 and H-2). EDXRF analysis indicates that the volcanic glass is from a local O'ahu provenance. In addition, one basalt adze flake and four fragments of lithic debitage (Acc. # 100-H-1 to H-5) were collected between the depths of 1.37 and 1.78 mbs in T-100. The traditional artifacts of SIHP # -7427 are evidence for pre- and/or post-Contact habitation. The culturally enriched deposits, however, also display evidence of historic disturbance.

One intact spirits bottle with an applied lip (T-100), produced between 1820 and 1890, was collected from Feature 16. The association of this bottle alongside the traditional cultural remains (i.e. volcanic glass, bone net mender, basalt adze flake, and midden) indicates that the culturally enriched surface was utilized and/or disturbed during the historic period. Several of the collected faunal remains also exhibit evidence for historic modification (see Table 32). The faunal remains collected individually from Feature 16 include *Sus scrofa*, *Canis lupus familiaris*, medium mammal skeletal elements (butchered with a metal saw blade), and *Equus ferus caballus* (with perimortem trauma on the distal metapodial). The modification of the medium mammal skeletal elements with a metal saw blade and the presence of *Equus ferus caballus* remains indicate a historic origin. Due to the fact that horses (*Equus ferus caballus*) were not introduced into Hawai'i until the early 1800s, the presence of these remains at the base of Feature 16 provides an early 19th century *terminus post quem* for this depositional event.

Faunal remains were also collected from bulk sediment samples. Figure 234 presents the total weight (g) of faunal remains recovered from deposits associated with SIHP # -7427. Total weight includes both individually collected faunal remains as well as midden material from wet-screened bulk samples. Individual collection and bulk collection represent different sampling strategies, and they cannot be directly compared by weight. However, consistent sampling strategies were used throughout the AIS, and comparison by weight allows for the identification of trends throughout of the transit corridor. In general, the faunal remains from the proposed archaeological cultural resources exhibit dominant quantities of invertebrate midden and *Bos taurus* remains, with moderate quantities of pre-contact medium mammals including *Sus scrofa* and *Canis lupus familiaris*.



Figure 233. Northwest profile of T-096 depicting Features 3 and 16 of SIHP # 50-80-14-7427

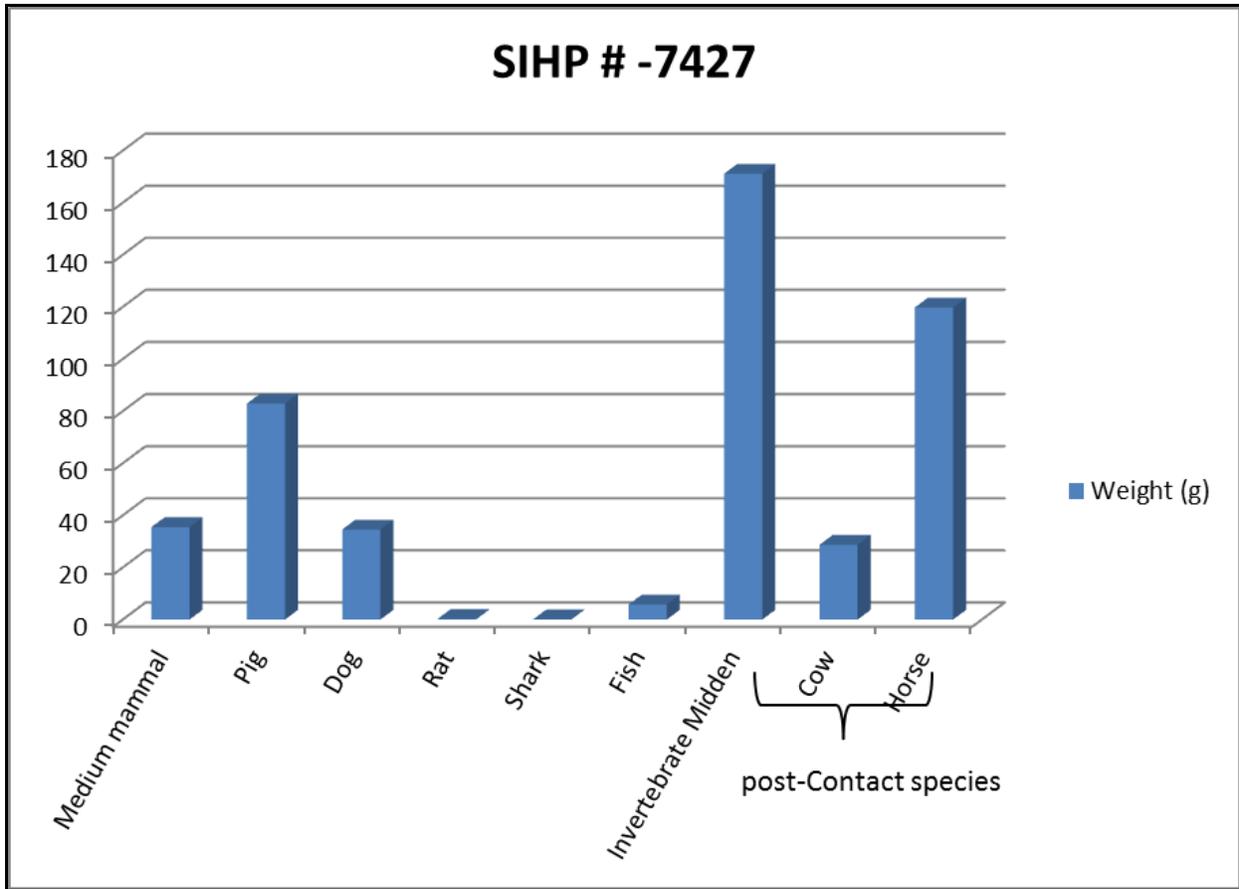


Figure 234. Graph representing the total weight (g) of faunal remains recovered from deposits associated with SIHP # 50-80-14-7427

The most prevalent vertebrate remains from SIHP # -7428 were from *Equus ferus caballus*. Significantly, large quantities of *Sus scrofa* and *Canis lupus familiaris* were also recovered. SIHP # -7427 is the only analyzed archaeological cultural resource in the AIS where more remains of both *Sus scrofa* and *Canis lupus familiaris* were recovered than *Bos taurus*. This goes against the overall trend of *Bos taurus* dominance. It must be noted that most of the *Sus scrofa* remains show evidence of butchering with a metal blade. Taken in conjunction with the remains of horse and cow, there is evidence of a strong post Contact distribution. Bulk samples contained a large aggregate weight of invertebrates, and minimal amounts of fish, shark and small mammals. A slightly higher proportion of fish remains were found in the midden material from SIHP # -7427 than was typical in the archaeological cultural resources presented in the AIS. Fish remains were approximately 3.4% of the mass of invertebrate remains, while 1-2% is typical; however, this variance is not significant.

The current investigation has identified and provided information about the pre- and post-Contact subsurface cultural deposits (SIHP # -7427) that are located within the City Center project area. The culturally enriched deposits (Feature 16) that were observed during the current AIS, contain traditional artifacts and cultural material that is indicative of pre- and/or early post-Contact habitation. Although Feature 16 appears to have been historically impacted, its culturally enriched deposits maintain the potential to offer additional insight into the pre- and post-Contact settlement of Kou. The numerous foundation features in SIHP # -7427 also have the potential to provide information about the historic landscape of the Honolulu Harbor waterfront.

Based on the guidance of the National Register Bulletin No.15, this archaeological cultural resource retains its integrity of location, materials, and workmanship. The features of this cultural resource have provided, and can potentially provide additional, information related to the geographic distribution/extent, materials, and construction methods of these pre- and post-Contact cultural deposits and foundations. The historic archaeological remnants of SIHP # -7427 are buried and their surroundings have been completely altered by modern development since their time of construction and period of use. Accordingly, these features do not maintain the integrity of setting, feeling, and association that might convey their significance under significance Criteria A, B, or C of the Hawai'i or National Register. Based on the results of this investigation, CSH recommends that this cultural resource maintains the integrity to support its historic significance under Criterion D (has yielded, or is likely to yield information important for research on prehistory or history) of the Hawai'i and the National Registers, exclusively for its information potential.

4.3.16 SIHP # 50-80-14-7428

FORMAL TYPE:	Buried culturally enriched sand A-horizon and historic warehouse foundation
FUNCTION:	Habitation and commerce
AGE:	Pre- and post-Contact
NO. FEATURES:	13
DISTRIBUTION:	0.2 acres (total area)
LOCATION:	Located in the <i>mauka</i> corner of the Halekauwila and Punchbowl Street intersections (West Kaka'ako Geographic Zone)
TAX MAP KEY:	TMK [1] 2-1-026:022 and Plat 026
LAND JURISDICTION:	State of Hawai'i and the City and County of Honolulu

SIHP # 50-80-14-7428 consists of a culturally enriched former land surface (A-horizon) and 13 subsurface features, located in the *mauka* corner of the Halekauwila and Punchbowl Street intersections (Figure 235, Figure 236, and Table 33). This archaeological cultural resource was identified during the City Center AIS. The total extent of this recommended subsurface cultural resource is largely unknown. Based on the results of the City Center AIS, SIHP # -7428 extends 0.2 acres within the City Center project area.

A culturally enriched former land surface (A-horizon) spans throughout the recommended cultural resource (T-119, T-119A, T-120, T-120A, and T-120B). T-120B appears to have been located within the outer limits of this cultural resource, and the A-horizon deposits within this test excavation were markedly disturbed. In general, the A-horizon deposits of SIHP # -7428 consisted of very dark brown loamy sand that was encountered at an average depth of 0.70 to 1.36 mbs. Evidence of cultural activity was present throughout this former land surface and included faunal bone, shell midden, ceramic fragments, metal fragments, glass bottles, red brick, slag, a toothbrush handle, and charcoal. Based on the abundance of historic material, it appears that the upper boundary of the A-horizon was impacted and disturbed in historic times. This is most evident in T-120B where the uppermost boundary of the A-horizon contained historic glass bottle fragments (21 total), dated between 1800 and 1920, and ceramics. The lower boundaries of the A-horizon appear to be intact, and contain evidence of traditional Hawaiian material. Six volcanic glass fragments, a basalt core (T-120, T-120A, and T-120B), and a single sling stone (T-119A) were discovered in the A-horizon deposits (Table 34). Radiocarbon analysis of a charcoal sample collected from beside the sling stone in T-119A, provided a calibrated date of AD 1660-1890 (Figure 237). Energy-Dispersive X-ray Fluorescence (EDXRF) analysis of the volcanic glass and basalt core indicates that these fragments are from a local O'ahu provenance (Figure 238).

Feature 1 consists of a basalt stone and mortar wall (Figure 239, Figure 240, Figure 241, Figure 242, and Table 35). Remnants of this feature were discovered during the current project in two test excavations (T-119 and T-119A). Sections of this wall were observed down to the coral shelf, at depths of 1.30-

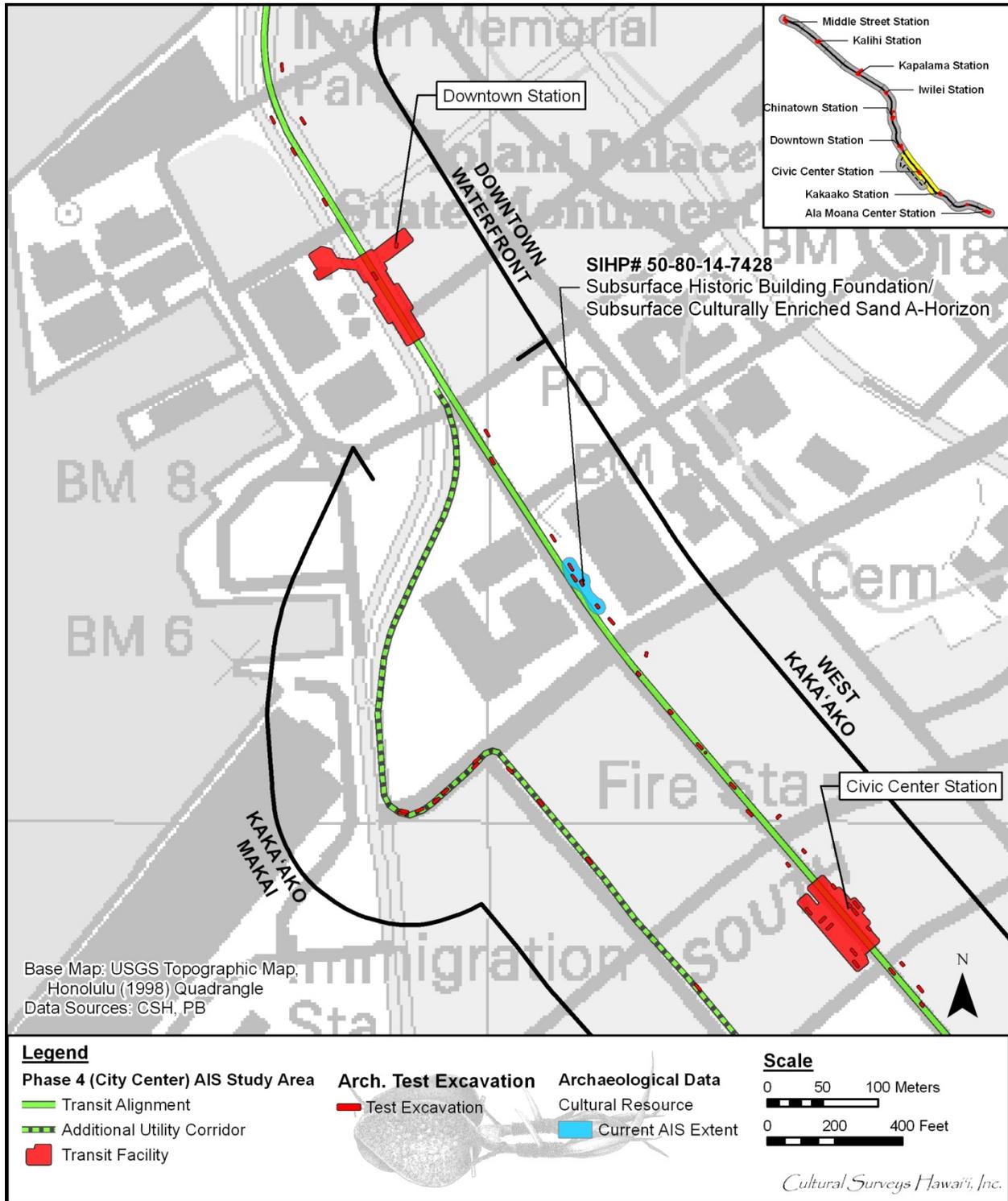


Figure 235. Location of subsurface cultural deposits (SIHP # 50-80-14-7428) in the West Kaka'ako Geographic Zone (Base Map: 1998 USGS Topographic Map of Honolulu)

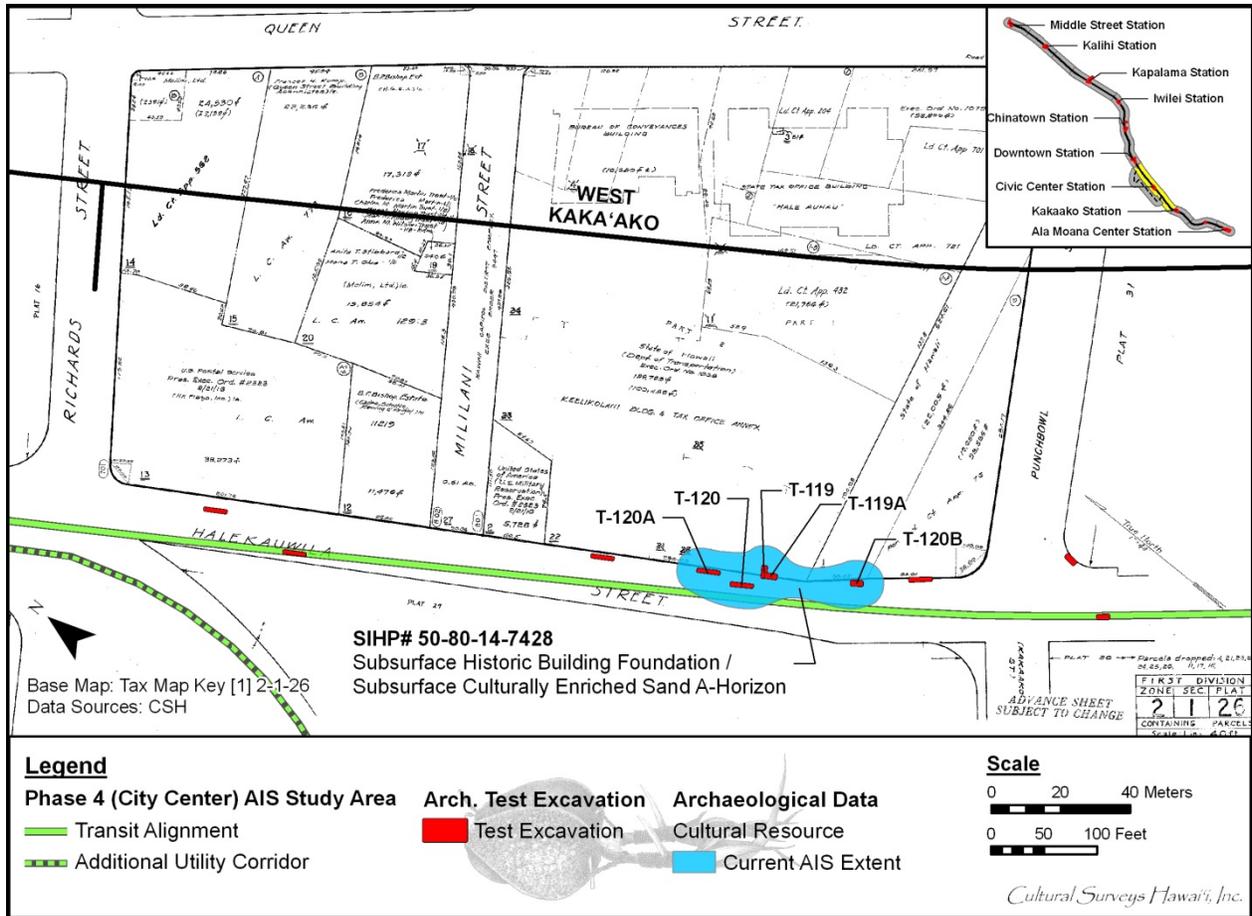


Figure 236. Location of subsurface cultural deposits (SIHP # 50-80-14-7428) in the West Kaka'ako Geographic Zone (Base Map: Tax Map Key [1] 2-1-26)

Table 33. Archaeological features of SIHP # 50-80-14-7428 documented during the current AIS

Feature	Test Excavation	Depth (cmbs)	Radiocarbon Date (C14)	Description	Contents
1	T-119, T-119A	130-190; 47-168	-	Wall	Historic wall constructed of basalt stone and mortar.
2	T-120	112-129		Post-mold	Possible post-mold.
3	T-120	112-116		Post-mold	Possible post-mold.
4	T-120	112-126	AD 1790-1940	Pit	Pit of indeterminate function with an irregular-shape. Results of wood taxa identification included <i>Aleurites moluccana</i> (<i>Kukui</i>), <i>Hibiscus tiliaceus</i> (<i>Hau</i>), cf. <i>Wikstroemia</i> sp. (<i>Ākia</i>), <i>Sida fallax</i> (<i>Ilima</i>), cf. <i>Osteomeles anthyllidifolia</i> (<i>Ūlei</i>), cf. <i>Pritchardia</i> sp. (<i>Loulu</i>), <i>Chenopodium oahuense</i> (<i>Āheahea</i> , <i>āweoweo</i>), cf. <i>Lagenaria siceraria</i> (<i>Ipu</i>), <i>Coprosma</i> sp. (<i>Pilo</i>), <i>Chamaesyce</i> sp. (<i>Akoko</i>), and cf. <i>Bobea</i> sp. (<i>Ahakea</i>).
5	T-120	110-118	AD 1810-1920	Pit	Pit of indeterminate function with an irregular-shape. Results of wood taxa identification included <i>Aleurites moluccana</i> (<i>Kukui</i>), <i>Chamaesyce</i> sp. (<i>Akoko</i>), cf. <i>Metrosideros polymorpha</i> (<i>Ōhi'a lehua</i>), <i>Hibiscus tiliaceus</i> (<i>Hau</i>), and <i>Sida fallax</i> (<i>Ilima</i>).
6	T-120	107-137		Pit	Pit containing an abundance of charcoal (107-120 cmbs). A circular sub-pit was observed below from 117 to 137 cmbs.
7	T-120	104-107	AD 1800-1930	Unknown	A stained deposit. Results of wood taxa identification included <i>Coprosma</i> sp. (<i>Pilo</i>), <i>Sida fallax</i> (<i>Ilima</i>), <i>Aleurites moluccana</i> (<i>Kukui</i>), <i>Chenopodium oahuense</i> (<i>Āheahea</i> , <i>āweoweo</i>), cf. <i>Dodonaea viscosa</i> (<i>A'ali'i</i>) and cf. <i>Pteridophyta</i> (Fern).

Feature	Test Excavation	Depth (cmbs)	Radiocarbon Date (C14)	Description	Contents
8	T-120	104		Pit	Pit of indeterminate function with heavy root disturbance. Faunal remains were observed at the upper boundary.
9	T-120A	118-136	AD 1660-1890	Pit	Pit of indeterminate function. Oval-shaped in plan and measured 0.3 m by more than 0.15 m. Bulk sample from the pit contained charcoal (0.3g), various shell midden (1.9g), and non-midden shell (0.4g) Results of wood taxa identification included cf. <i>Psychotria</i> sp. (<i>Kōpiko</i>), <i>Hibiscus tiliaceus</i> (<i>Hau</i>), cf. <i>Coprosma</i> sp. (<i>Pilo</i>).
10	T-120A	128-137	AD 1660-1890	Pit	Possible post-mold. Circular in shape and measured 0.25 m in diameter. Bulk sample from the pit contained charcoal (2.9g), various shell midden (10.5g), <i>kukui</i> nutshell (0.1g), and faunal; fish fragments (2.2g). Results of wood taxa identification included <i>Chenopodium oahuense</i> (<i>Āheahea</i> , <i>āweoweo</i>), cf. <i>Syzygium</i> sp. (<i>Ōhi'a ai</i>), <i>Aleurites moluccana</i> (<i>Kukui</i>), <i>Diospyros sandwicensis</i> (<i>Lama</i>), cf. <i>Senna</i> sp. (<i>Kolomona</i>), cf. <i>Psychotria</i> sp. (<i>Kōpiko</i>), cf. <i>Dodonaea viscosa</i> (<i>A'ali'i</i>).
11	T-120A	130-140		Pit	Pit of indeterminate function. Linear in shape and measured 0.67 m in length and 0.65 m wide. Bulk sample from the pit contained charcoal (45.1g), various shell midden (12.2g), non-midden shell (0.1g), organics (roots) (1.2g), Historics; glass (0.2g) and white ceramic fragment (14.1g), faunal; medium mammal (0.3g) and shark tooth (0.1g), and basalt water worn cobble (18.8g).

Feature	Test Excavation	Depth (cmbs)	Radiocarbon Date (C14)	Description	Contents
12	T-120A	128-132	AD 1720-1820	Pit	Pit of indeterminate function. Irregular in shape and measured 1.75 m in length and 0.4 m wide. Bulk sample from the pit contained charcoal (16.1g), various shell midden (37.7g), non-midden shell (1.8g), volcanic glass (1.8g), and fire cracked rock (17.7g). Results of wood taxa identification included <i>Chamaesyce</i> sp. ('Akoko), cf. <i>Senna</i> sp. (<i>Kolomona</i>), cf. <i>Dodonaea viscosa</i> ('A'ali'i), cf. <i>Metrosideros polymorpha</i> ('Ōhi'a lehua), cf. <i>Artocarpus altilis</i> (<i>Ulu</i>), cf. <i>Arecaceae</i> (Palm), and <i>Poaceae</i> (grass).
13	T-120A	128-132		Pit	Pit of indeterminate function. Circular in shape and measured 0.15 m in diameter. Bulk sample from the pit contained charcoal (0.1g) and various midden shell (1.0g).

Table 34. Traditional Hawaiian artifacts associated with SIHP # 50-80-14-7428

Acc. #	Trench	SIHP #50-80-14-	Stratum	Depth (cmbs)	Feature	Weight (g)	Description
119A-H-1	T-119A	-7428	II	96	-	66.6	Sling stone, vesicular basalt (fire affected)
120-H-1	T-120	-7428	II	112-126	4	0.3	Volcanic glass, possible flake
120-H-2	T-120	-7428	II	110-118	5	1.5	Volcanic glass, debitage
120-H-3	T-120	-7428	II	107-120	6	<0.1	Volcanic glass, debitage
120-H-4	T-120	-7428	II	107-120	6	3.9	Basalt flake, incomplete
120A-H-1	T-120A	-7428	II	110-118	-	0.1	Volcanic glass, debitage
120A-H-2	T-120A	-7428	II	128-132	12	0.1	Volcanic glass, debitage
120B-H-1	T-120B	-7428	II	110-130	-	51.4	Basalt flake, no indication of use
120B-H-2	T-120B	-7428	II	130-140	-	24.8	Basalt flake, primary reduction flake, no indication of use
120B-H-3	T-120B	-7428	II	130-140	-	0.1	Volcanic glass, debitage



Figure 237. Photograph of the sling stone (Acc. # 119A-H-1) discovered in T-119A



Figure 238. Photograph of the basalt flake (Acc. # 120B-H-2) discovered in T-120B



Figure 239. Photograph of a portion of the basalt stone and mortar wall (Feature 1) that was discovered in T-119



Figure 240. Photograph of a portion of the basalt stone and mortar wall (Feature 1) that was discovered in T-119A



Figure 241. Photograph of basalt stones from Feature 1 in T-119

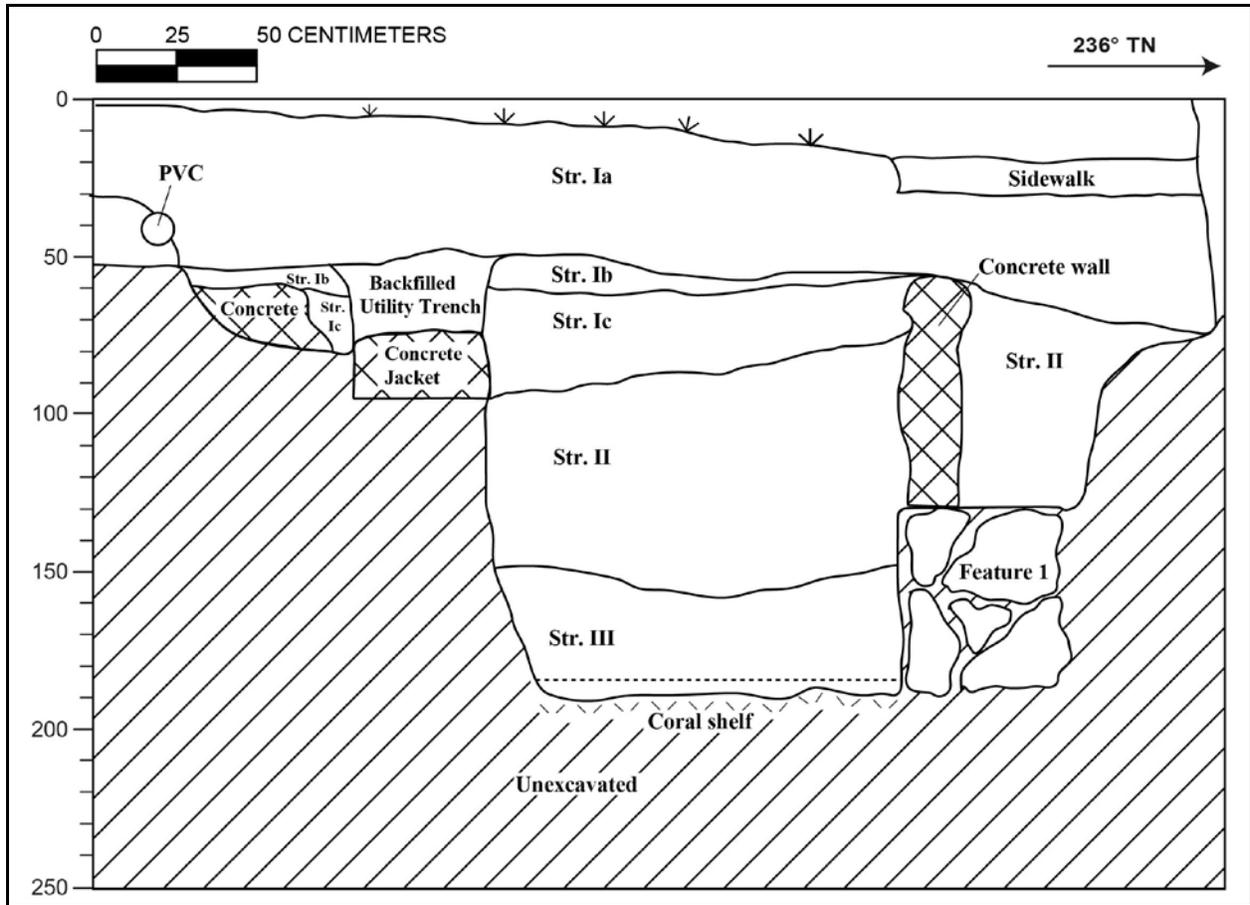


Figure 242. Profile drawing of the northwest wall in T-119 depicting the basalt stone and mortar wall (Feature 1) and the A-horizon (Stratum II)

Table 35. Stratigraphic description for the northwest profile in T-119

Stratum	Depth (cmbs)	Description
Ia	0-75	Fill; 7.5 YR 2.5/2 (very dark brown); silty clay; moderate, medium to coarse, blocky structure; moist, firm consistency; slightly plastic; terrigenous origin; abrupt, smooth lower boundary; common, fine roots; landscape, top soil
Ib	50-60	Fill; 10 YR 7/4 (very pale brown); very gravelly sandy loam; weak, fine, crumb structure; moist, loose consistency; non-plastic; abrupt, smooth lower boundary; crushed coral fill
Ic	60-95	Fill; 10 YR 6/1 (gray); gravelly sand; weak, medium crumb structure; dry, loose, strong consistency; non-plastic; mixed origin; abrupt, smooth lower boundary; red bricks; pea pebble fill, cement
II	65-157	Natural; 10 YR 2/2 (very dark brown); loamy silt; weak, fine crumb structure; moist, loose consistency; non-plastic; terrigenous origin; clear, smooth lower boundary; fire-cracked rock, charcoal staining, cane slag, shell midden; re-worked cultural layer, considered a component of SIHP #50-80-14-7428
III	145-190	Natural; 10 YR 5/4 (yellowish brown); medium sand; structureless, single-grain; moist, loose consistency; non-plastic; marine origin; lower boundary not visible; natural sand over coral shelf, water table

1.90 mbs (T-119) and 0.47-1.68 mbs (T-119A). In both test excavations, Feature 1 was observed below multiple fill layers and a culturally enriched A-horizon. The physical dimensions of the wall in T-119 are 0.6m tall, 0.5m wide, and 1 m in length. The physical dimensions of the portion of wall in T-119A are approximately 1.20 m tall and 2.60 m in length. Several red brick fragments dated to between 1807 and 1860 were collected from the fill deposits directly overlying Feature 1 in T-119 (Stratum Ic) and T-119A (Stratum Id). In addition to these red bricks, two fragments of Asian dinnerware (Acc. # 119A-A-1 and A-2) were collected from Stratum Id at depths of 0.40 and 0.90 mbs.

Twelve archaeological pit features (Features 2 through 13), most of which contained charcoal and midden, are associated with the A-horizon (see Table 33) (Figure 243, Figure 244, and Figure 245). The majority of these archaeological pit features are consistent in form and composition of traditional-type habitation. Taxa analysis on select charcoal fragments from these pits identified 19 species of trees and shrubs- 14 native species, 3 Polynesian-introduced species, and 2 native or historically-introduced species (Table 36). The preponderance of native and Polynesian-introduced species in the charcoal samples may indicate that the pit features of SIHP # -7428 predate the introduction of alien woody plants. Radiocarbon analysis of four samples from the A-horizon provided a variable date range for these culturally enriched deposits (Table 37). Feature 2, a possible post-mold, yielded the earliest date of approximately AD 1440 to 1530, while the remaining sampled pit features dated to between AD 1660 and 1930. Charcoal collected from the A-horizon in T-120A provided a calibrated date of AD 1660 to 1890. According to the radiocarbon dates, the A-horizon deposits in SIHP # -7428 may represent the pre- and post-Contact land surface along the Kaka'ako coastline. The historic artifact assemblage, collected primarily from the upper boundaries of the A-horizon, may reflect either the historic use, or the historic disturbance of this former land surface.

An older buried A-horizon, approximately 80 m southeast of the recommended cultural resource, was discovered by Stephen Clark in 1987 (SIHP # -2963). No artifacts or midden were collected from these deposits, however, charcoal provided a radiocarbon date of AD 430 to 905 for this former land surface. Of note were the 169 pieces of volcanic glass (cores, diagnostic flakes, and flake fragments) that were collected from the area (Clark 1987:85). In 1982, six pre-Contact burials were discovered 30 m east of the recommended cultural resource (Ota and Kam 1982:4-5). The proximity of these burials and the pre-Contact A-horizon discovered by Clark (1987), to Features 1 through 13 of the recommended cultural resource provides strong evidence for the pre-Contact settlement of the Kaka'ako coastline (Figure 246).

Background research indicates that coastal Kaka'ako was a low-lying littoral that was traditionally and historically used for fish aquaculture and salt production. The foundation walls (Feature 1) discovered during the current AIS, are located on the outskirts of Land Commission Award (LCA) 180. This land division was awarded to Mataio Kekūanao'a, a high *ali'i* who was a close friend to Kamehameha II and was married to Kīna'u, the daughter of Kamehameha I. Apart from its description as a single house lot, not much else is known about LCA 180.

A review of the available historic maps indicates that the area in the vicinity of the recommended cultural resource underwent intense land reclamation over the course of 15 years. In 1891, this cultural resource was located between 10 to 20 meters from the Honolulu Harbor shoreline (Figure 247). By 1906, the cultural resource was located nearly 300 meters from the



Figure 243. Photograph of the archaeological pit features (2 through 8) in T-120



Figure 244. Photograph of the A-horizon and associated archaeological pit features in T-120



Figure 245. Photograph of archaeological pit features (10 through 13) in T-120A

Table 36. Taxa identification results for SIHP # 50-80-14-7428

Test Excavation	Taxa	Common/Hawaiian Name	Origin/Habitat
T-119A, T-120, T-120A	<i>Chamaesyce</i> sp.	'Akoko	Native/Shrub
T-119A, T-120, T-120A	cf. <i>Metrosideros polymorpha</i>	'Ōhi'a lehua	Native/Tree
T-119A, T-120A	cf. <i>Psychotria</i> sp.	Kōpiko	Native/Tree
T-119A, T-120, T-120A	<i>Chenopodium oahuense</i>	'Āheahea, 'āweoweo	Native/Shrub
T-120, T-120A	cf. <i>Osteomeles anthyllidifolia</i>	'Ūlei	Native/Shrub
T-120, T-120A	cf. <i>Dodonaea viscosa</i>	'A'ali'i	Native/Shrub
T-120A	cf. <i>Rauvolfia sandwicensis</i>	Hao	Native/Shrub-Tree
T-120, T-120A	cf. <i>Coprosma</i> sp.	Pilo	Native/Shrub-Tree
T-120, T-120, T-120A	<i>Hibiscus tiliaceus</i>	Hau	Native/Shrub-Tree
T-120A	<i>Diospyros sandwicensis</i>	Lama	Native/Tree
T-120	cf. <i>Wikstroemia</i> sp.	'Ākia	Native/Shrub
T-120	<i>Sida fallax</i>	'Ilima	Native/Shrub
T-120	cf. <i>Pritchardia</i> sp.	Loulu	Native/Tree
T-120	cf. <i>Bobea</i> sp.	'Ahakea	Native/Tree
T-119A, T-120, T-120A	<i>Aleurites moluccana</i>	Kukui	Polynesian Introduction/Tree
T-120, T-119A	cf. <i>Lagenaria siceraria</i>	Ipu	Polynesian Introduction/Vine
120A	cf. <i>Artocarpus altilis</i>	'Ulu	Polynesian Introduction/Tree
T-119A, 120A	cf. <i>Syzygium</i> sp.	Mountain apple, roseapple, Java plum, 'ōhi'a 'ai	Native + Historic Introductions/ Tree
T-119A, T-120A	cf. <i>Senna</i> sp.	Kolomona	Native + Historic Introductions

Table 37. Radiocarbon dates for charcoal samples from the A-horizon in SIHP # 50-80-14-7428

Test Excavation	Sample Provenience	Depth (cmbs)	Calibrated Radiocarbon Date
T-119A	Stratum IIa	80-93	AD 1660-1890
T-119A	Stratum IIa/IIb	125-150	AD 1800-1940
T-120	Feature 4	112-126	AD 1790-1940
T-120	Feature 5	110-118	AD 1810-1920
T-120	Feature 7	104-107	AD 1800-1930
T-120A	Feature 9	128-136	AD 1660-1890
T-120A	Feature 10	128-137	AD 1660-1890
T-120A	Feature 12	128-132	AD 1720-1820
T-120A	Stratum II	110-118	AD 1660-1890

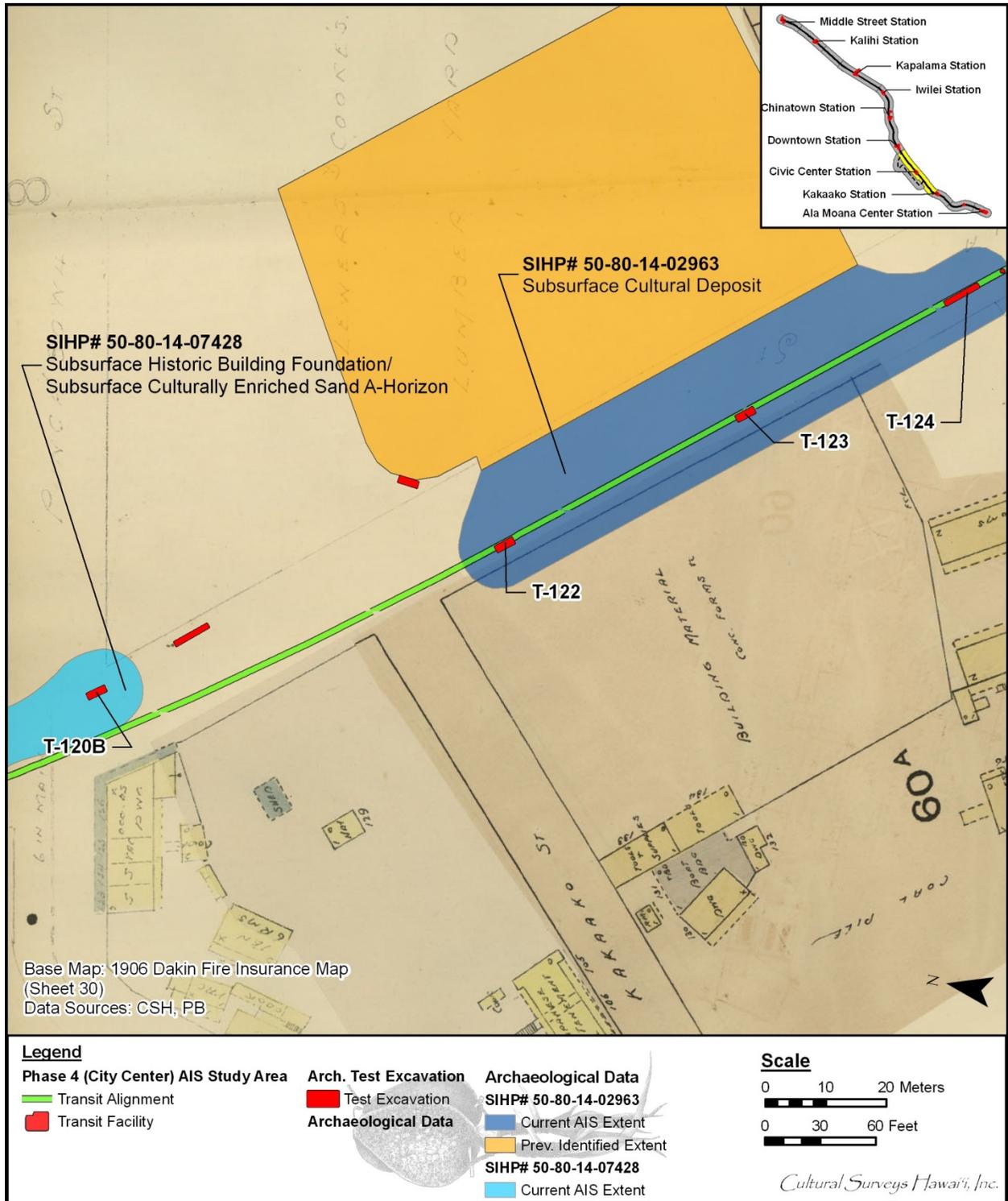


Figure 246. Location of SIHP # 50-80-14-7428 in relation to SIHP # 50-80-14-2963 (Base Map: 1906 Dakin Fire Insurance Map)

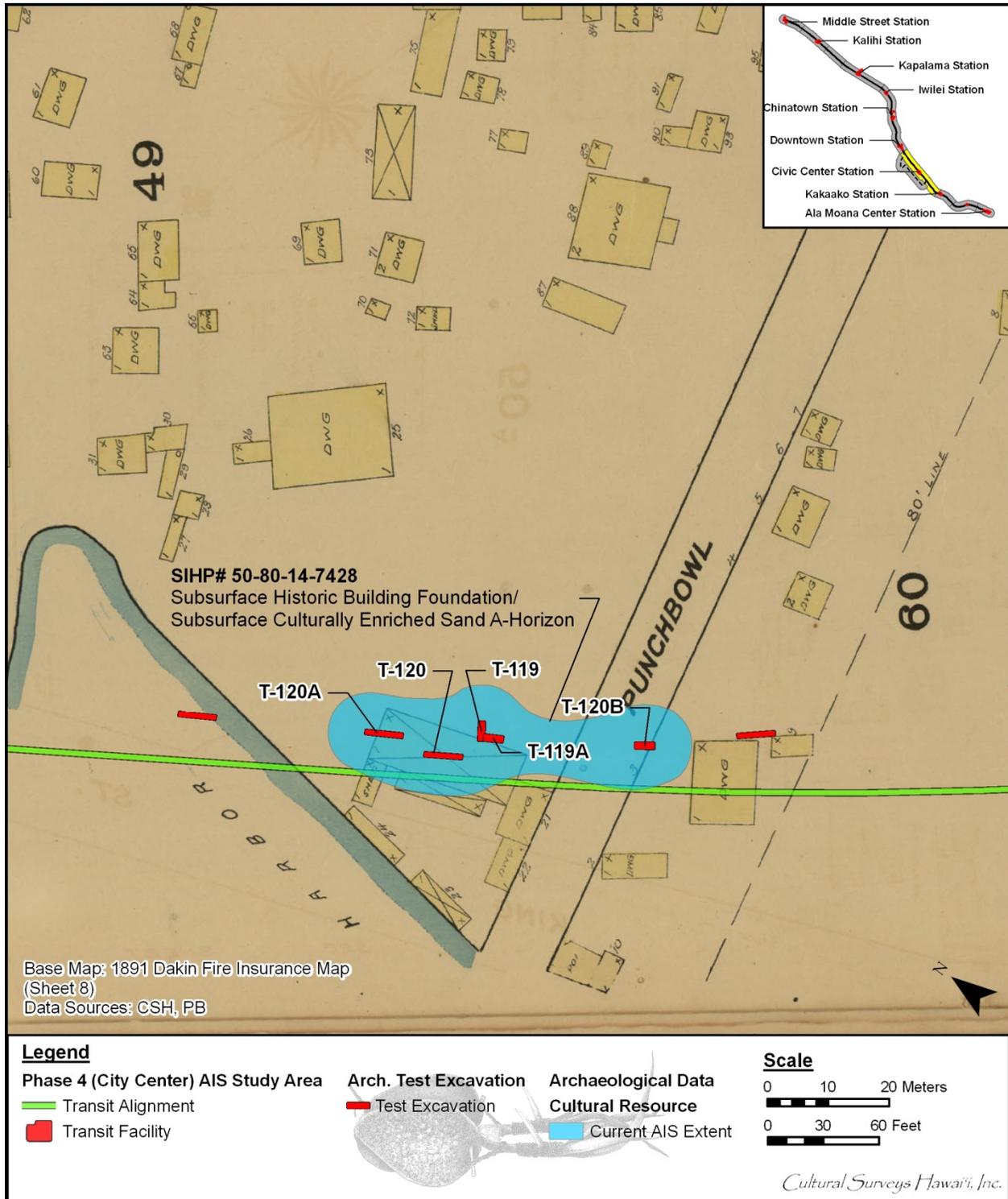


Figure 247. Portion of the 1891 Dakin Fire Insurance Map depicting subsurface cultural deposit (SIHP # 50-80-14-7428)

waterfront (Figure 248). Following 1899, a majority of the cultural resource was traversed by the newly constructed Halekauwila Street (Figure 249). Feature 1 does not correspond with any known architecture apart from a storage warehouse depicted on the 1914 Sanborn fire insurance map (Figure 250). A review of the 1914 Sanborn fire insurance map suggests that Feature 1 represents the *makai* portion of the foundation for this structure.

Analysis of the faunal remains that were collected individually from the A-horizon deposits in four test excavations (T-119A, T-120, T-120A, and T-120B) suggests that they are from a historic, rather than traditional Hawaiian context. For detailed faunal information from test excavations where more than four species were identified, refer to Table 21. The faunal remains consist of *Canis lupus familiaris*, *Bos taurus*, *Canis lupus familiaris*, *Sus scrofa*, and *Equus ferus caballus*. Several of the *Bos Taurus* and *Sus scrofa* elements display evidence of butchering with a metal saw blade. This particular butchering practice is specific to the historic time period. Due to the fact that horses (*Equus ferus caballus*) were not introduced to Hawai'i until the early 1800s, the presence of this bone at the base of the A-horizon deposits provides an early nineteenth century *terminus post quem* for this depositional event.

Faunal remains were also collected from bulk sediment samples. Figure 251 presents the total weight (g) of faunal remains recovered from deposits associated with SIHP # -7428. Total weight includes both individually collected faunal remains as well as midden material from wet-screened bulk samples. Individual collection and bulk collection represent different sampling strategies, and they cannot be directly compared by weight. However, consistent sampling strategies were used throughout the AIS, and comparison by weight allows for the identification of trends throughout of the transit corridor. In general, the faunal remains from the proposed archaeological cultural resources exhibit dominant quantities of invertebrate midden and *Bos taurus* remains, with moderate quantities of pre-Contact medium mammals including *Sus scrofa* and *Canis lupus familiaris*.

The most prevalent vertebrate remains from SIHP # -7428 were from *Equus ferus caballus* and *Bos taurus*, emphasizing the significant post-Contact component. Moderate quantities of *Sus scrofa* and *Canis lupus familiaris* were also recovered. Bulk samples contained a large aggregate weight of invertebrate midden, and minimal amounts of fish, shark, bird and small mammals. The *Gallus gallus* and bird remains were insignificant by comparative weight, but their presence is important. *Gallus gallus* was only identified at one of the other proposed archaeological cultural resources, SIHP # -5280 in Zone 7, West Kaka'ako. The aggregate weight of fish remains was the highest recovered, but it was only 1% of the total weight of invertebrate remains. The higher raw weight was due to the large quantity of samples collected.

Based on the guidance of the National Register Bulletin No.15, this archaeological cultural resource retains its integrity of location, design, materials, and workmanship. The components of this cultural resource have provided, and can potentially provide additional, information related to the geographic distribution/extent, materials, and construction methods of these pre- and post-Contact cultural deposits and foundation. These subsurface cultural deposits have also yielded insight into the pre- and post-Contact settlement of coastal Kaka'ako. The archaeological remnants of SIHP # -7428 are buried and their surroundings have been completely altered by modern development since their time of construction and period of use. Accordingly, these features do not maintain the integrity of setting, feeling, and association that might convey their

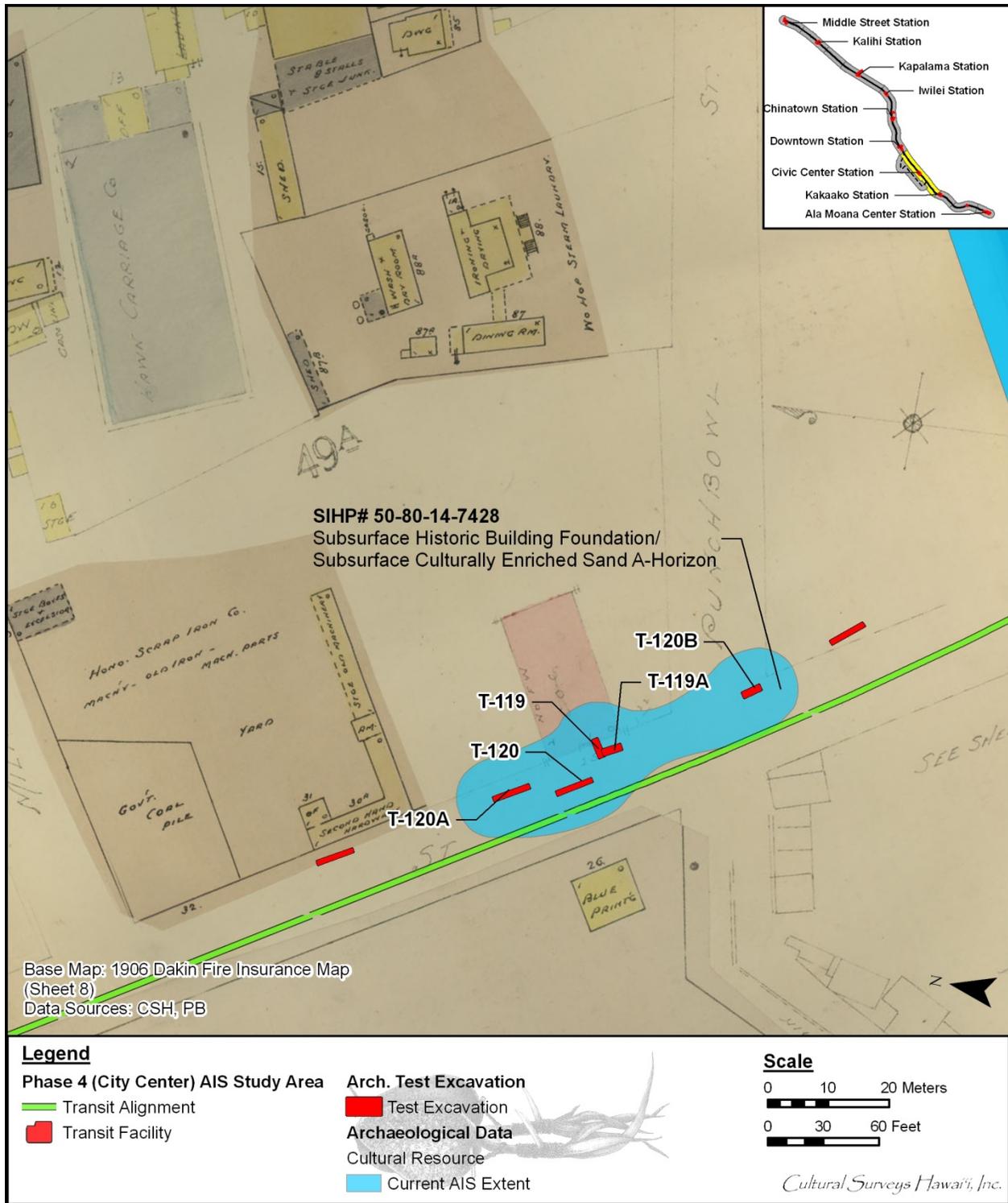


Figure 248. Portion of the 1906 Dakin Fire Insurance Map depicting subsurface cultural deposit (SIHP # 50-80-14-7428)

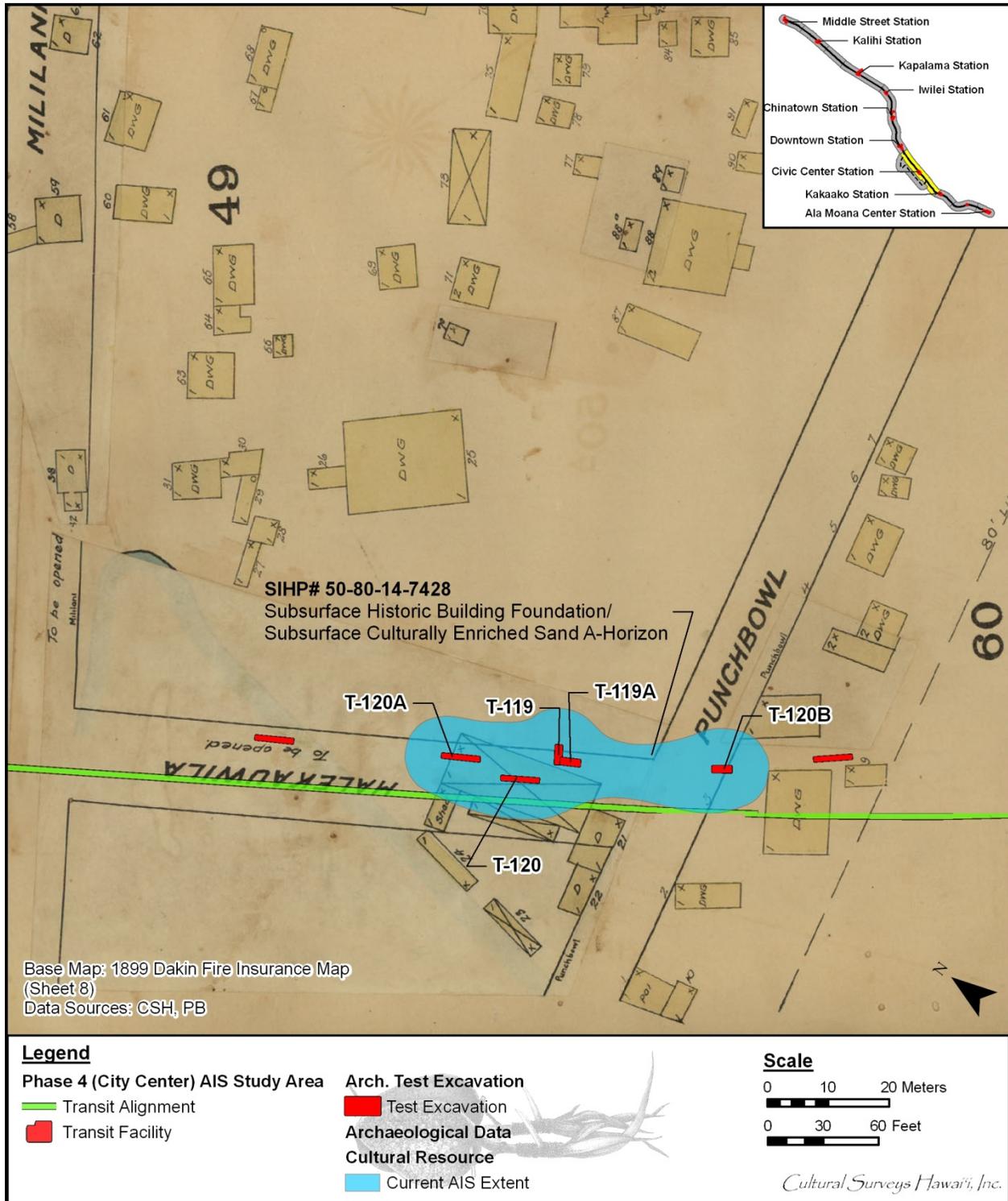


Figure 249. Portion of the 1899 Dakin Fire Insurance Map depicting subsurface cultural deposit (SIHP # 50-80-14-7428)

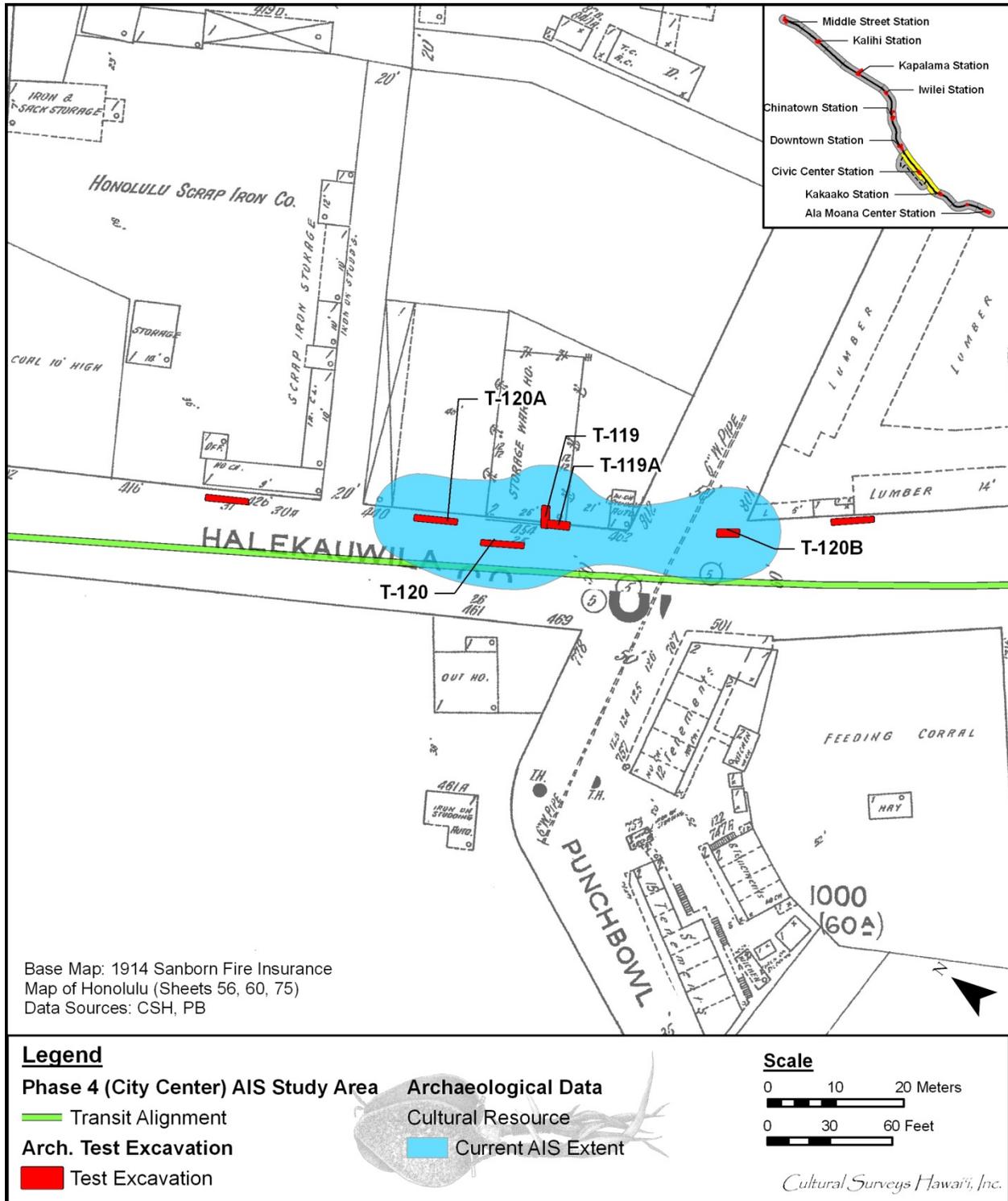


Figure 250. Portion of the 1914 Sanborn Fire Insurance Map depicting subsurface cultural deposit (SIHP # 50-80-14-7428)

Table 38. Individually collected faunal remains from SIHP # 50-80-14-7428. The table only presents data from test excavations where more than four species were identified

Acc. #	Stratum	Depth(cmbs)	Feature	Family/Class	Species	Element	Description	Modification
120A-F-1	II	110-118	7428-2	Equidae (horse)	<i>Equus ferus caballus</i>	Scapula; Distal portion metacarpus; Mandibular molar	Fragments	None
120A-F-2	II	110-118	7428-2	Bovidae (cow)	<i>Bos taurus</i>	Scapula; Right proximal metatarsal; Rib; Spinous process (pieces mend); Astragalus	Fragments	None
120A-F-3	II	110-118	7428-2	Suidae (pig)	<i>Sus scrofa</i>	Ulna; Distal end metatarsal	Fragments	Ulna butchered (cut with metal blade)
120A-F-4	II	110-118	7428-2	Mammalia	Medium mammal	Irregular bones; Diaphysis sections	Fragments	Burned diaphysis sections
120B-F-5	II	100-110	7428-2	Bovidae (cow)	<i>Bos taurus</i>	Ribs; Diaphysis sections	Fragments	None
120B-F-6	II	100-110	7428-2	Canidae (dog)	<i>Canis lupus familiaris</i>	Femoral epiphysis	Fragment	None
120B-F-7	II	100-110	7428-2	Mammalia	Medium mammal	Irregular bones; Diaphysis section	Fragments	None
120B-F-10	II	110-130	7428-2	Equidae	<i>Equus ferus caballus</i>	Vertebra	Fragment	None

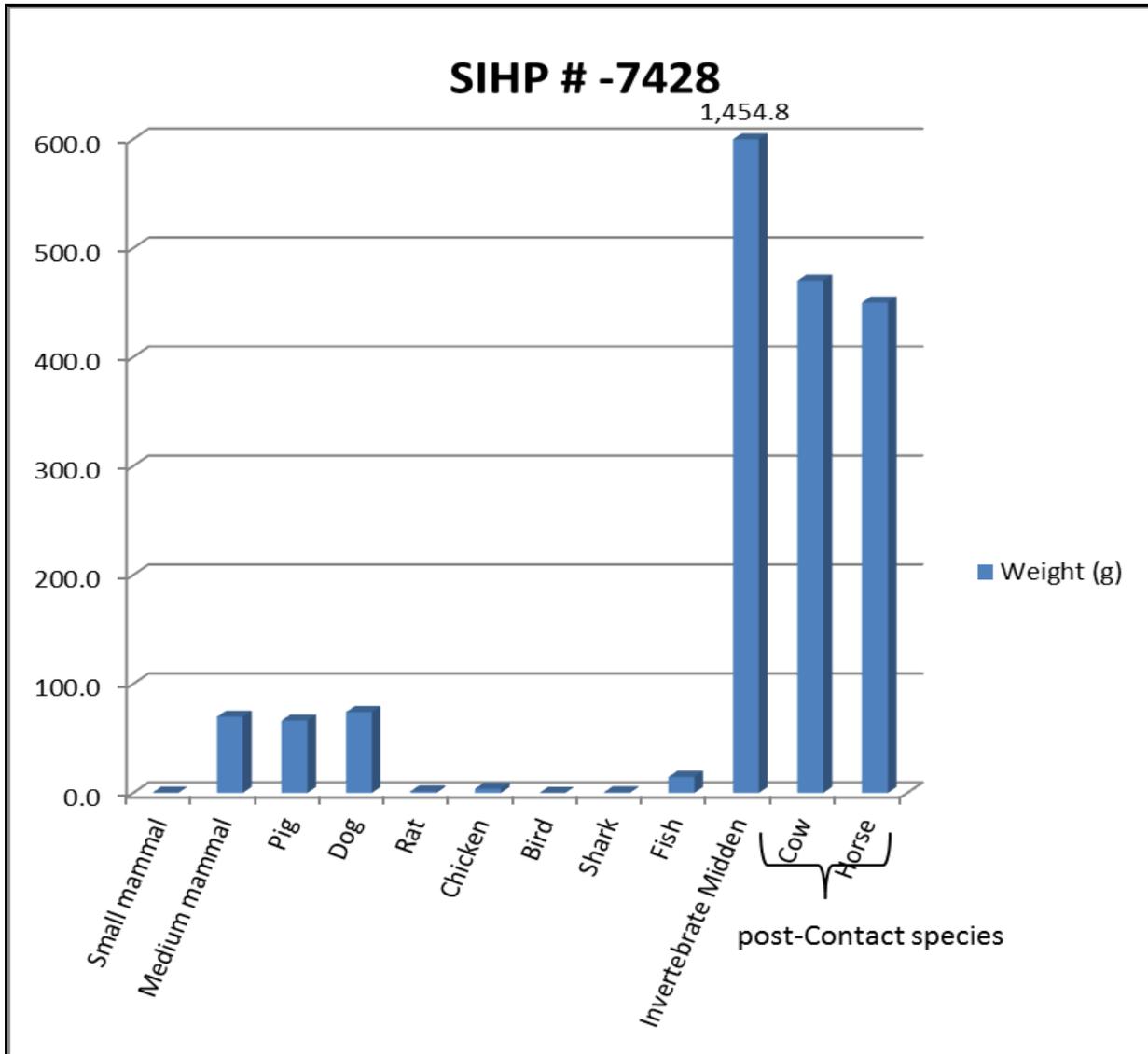


Figure 251. Graph representing the total weight (g) of faunal remains recovered from deposits associated with SIHP # 50-80-14-7428

significance under significance Criteria A, B, or C of the Hawai'i or National Register of Historic Places. Based on the results of this investigation, CSH recommends that this cultural resource maintains the integrity to support its historic significance under Criterion D (has yielded, or is likely to yield information important for research on prehistory or history) of the Hawai'i and the National Register, exclusively for its information potential.

4.3.17 SIHP # 50-80-14-7429

FORMAL TYPE:	Buried culturally enriched sand A-horizon and a single human cranial fragment
FUNCTION:	Habitation
AGE:	Pre- and post-Contact
NO. FEATURES:	7
DISTRIBUTION:	0.05 acres (total area)
LOCATION:	Located in the Ross parking lot on the corner of Ward and Queen Streets (Kewalo Geographic Zone)
TAX MAP KEY:	TMK [1] 2-3-002:059 and 001
LAND JURISDICTION:	Victoria Ward Ltd

SIHP # 50-80-14-7429 consists of a former land surface (buried A-horizon) that extends throughout a portion of the Ross parking lot, located at the intersection of Ward and Queen Streets (Figure 252 and Figure 253). This archaeological cultural resource was identified during the City Center AIS. The recommended cultural resource extends approximately 0.05 acres within the City Center project area.

Subsurface deposits of this former land surface were encountered in seven City Center test excavations (T-167, T-168, T-168A, T-168B, T-169, T-170, and T-170A). In general, these deposits consisted of very dark silty/loamy sand that was encountered at an average depth of 1.39 to 1.56 mbs (Figure 254). Cultural material was present in four of the seven observed deposits (T-167, T-168B, T-169, and T-170A). Charcoal and shell midden was observed intermixed with historic material, including bottle glass, metal fragments, ceramic fragments, marbles, and cut faunal bone. Faunal remains were individually collected from the A-horizon deposits during excavation. For detailed faunal information from test excavations where more than four species were identified, refer to Table 39. The faunal remains include *Sus scrofa*, *Bos taurus*, *Canis lupus familiaris*, medium mammal (possible *Felis catus* or *Canis lupus familiaris*, and possible *Ovis aries*) and *Rattus sp.* Several of the *Bos taurus* and medium mammal skeletal elements exhibited evidence of historical butchering (i.e. metal saw blade). The other faunal bones did not contain evidence of cultural modification. The presence of historically modified faunal bones and possible *Felis catus*, reflects the disturbed and/or reworked nature of the A-horizon deposits.

Seven archaeological features are associated with the buried A-horizon (Table 40). They include 3 pits of indeterminate function, 2 possible post-molds, 1 charcoal deposit, and an isolated human cranial fragment. In general, the features contained a mix of traditional and historic cultural materials (Figure 255 through Figure 258, and Table 41). A single drilled canine dog (*Canis lupus familiaris*) tooth (Acc. # 167-H-1) was the only traditional artifact recovered from SIHP # -7429 (Figure 259). The tooth may have been part of a dog-tooth necklace (*lei 'ilio*) or part of a dog-tooth leg ornament (*kupe'e niho 'ilio*). It was discovered in Feature 3, an archaeological pit feature. A single glass insulator was also recovered from Feature 3. It contained the mark of an insulator company that was in operation from 1864 to 1921. The drilled dog tooth and the glass insulator reflect the disturbed and/or reworked nature of the buried A-horizon and its associated archaeological features.

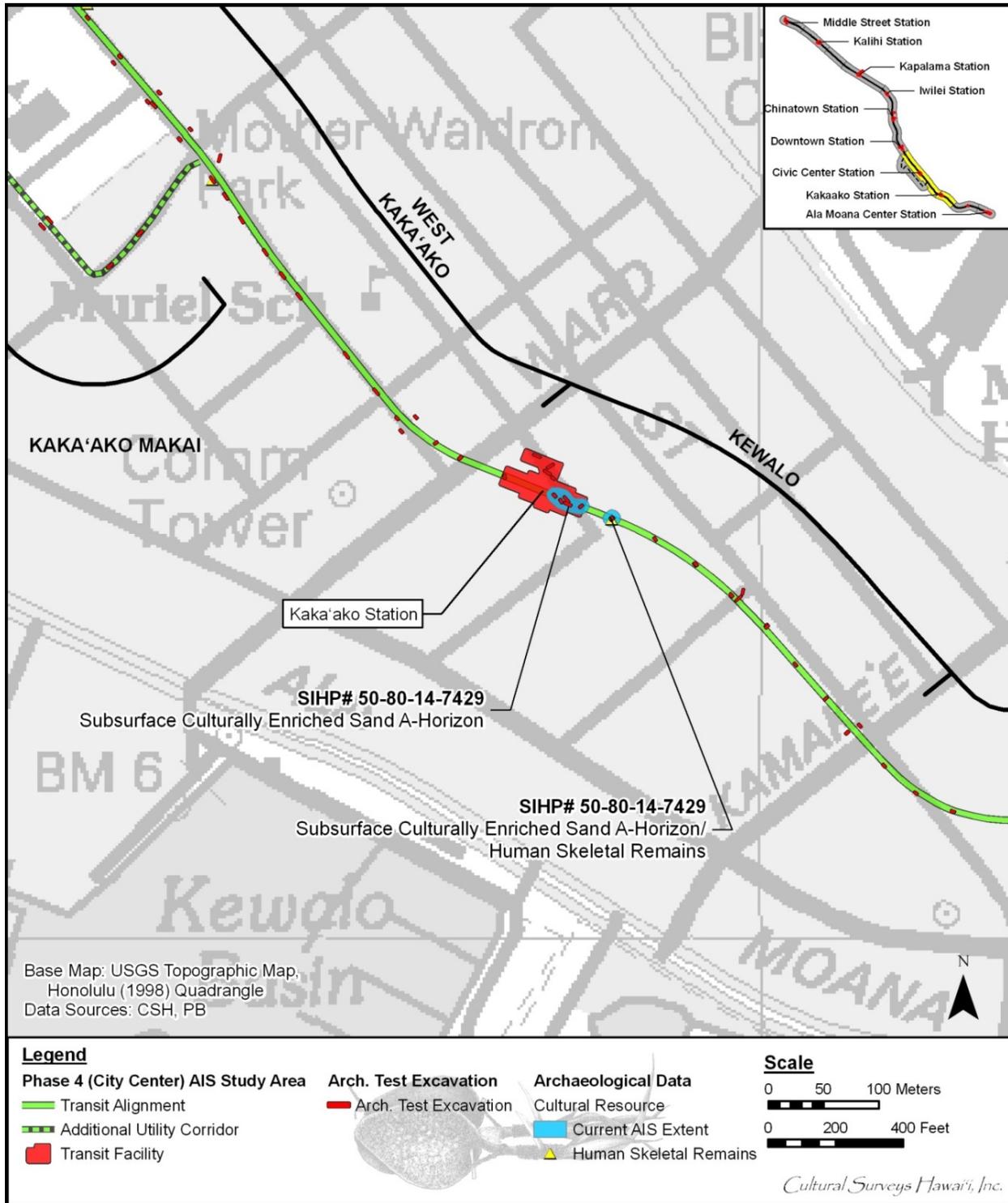


Figure 252. Location of the subsurface cultural deposits (SIHP # 50-80-14-7429) in the Kewalo Geographic Zone (Base Map: 1998 USGS Topographic Map of Honolulu)

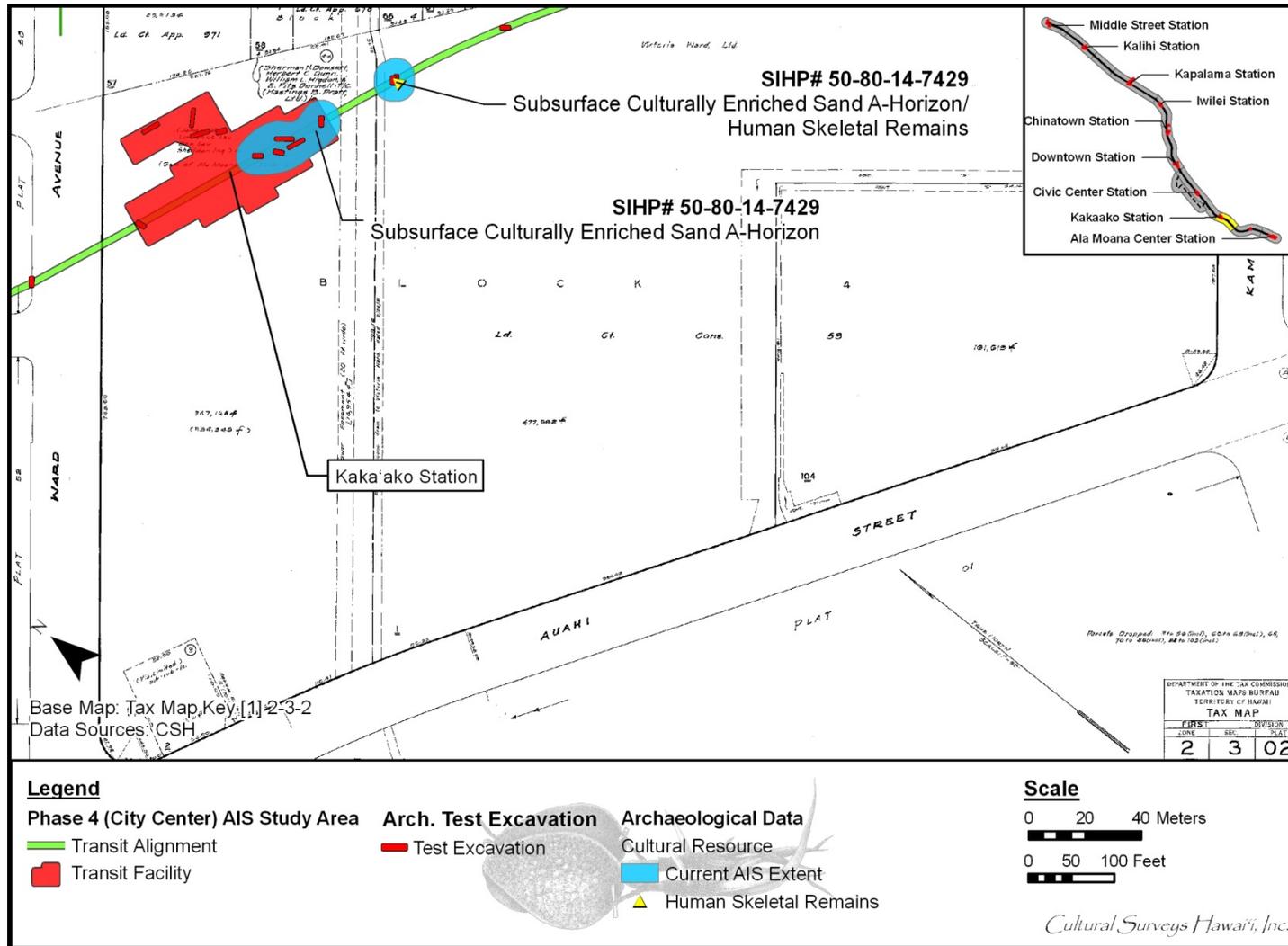


Figure 253. Location of the subsurface cultural deposits (SIHP # 50-80-14-7429) in the Kewalo Geographic Zone (Base Map: Tax Map Key [1] 2-3-2)

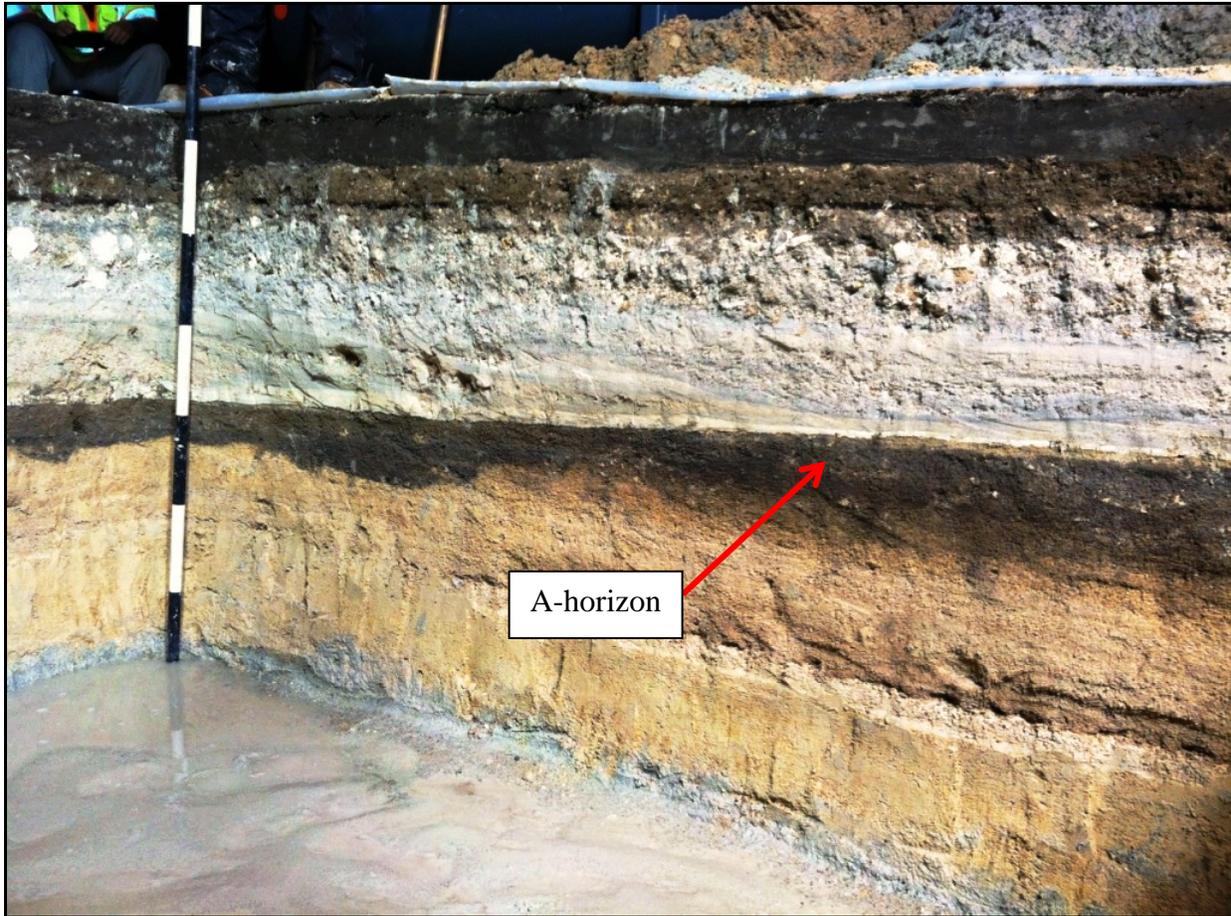


Figure 254. Photograph of the northeast sidewall in T-167 depicting the culturally enriched sand A-horizon (SIHP # 50-80-14-7429)

Table 39. Individually collected faunal remains from SIHP # 50-80-14-7429. The table only presents data from test excavations where more than four species were identified

Acc. #	Stratum	Depth (cmbs)	Feature	Family/Class	Species	Element	Description	Modification
167-F-1	IIa	140-145	7429-3	Suidae (pig)	<i>Sus scrofa</i>	Rib; Irregular bones	Fragments	Rib butchered (cut with metal)
167-F-2	IIa	140-145	7429-3	Mammalia	Medium mammal	Diaphysis section; Irregular bones	Fragments	Diaphysis section burned
167-F-3	IIa	141-145	7429-1	Mammalia	Medium mammal	Diaphysis section	Fragment	None
167-F-4	IIa	141-149	7429-2	Mammalia	Medium mammal	Irregular bones (pieces mend)	Fragments	Burned
169-F-1	II	144	-	Bovidae	<i>Bos taurus</i>	Tibia diaphysis section	Fragment	Butchered (cut with metal saw blade)
169-F-2	II	144	-	Mammalia	Medium mammal (possible <i>Ovis aries</i>)	Vertebra; Tibia (distal portion); Epiphysis; Irregular bone fragments	Fragments	None
169-F-3	II	144	-	Canidae (dog)	<i>Canis lupus familiaris</i>	Vertebra	Fragment	None
169-F-4	II	144-154	-	Mammalia	Medium mammal (possible <i>Felis catus</i> or <i>Canis lupus familiaris</i>)	Metatarsus (possible, pieces mend)	Fragment	None
169-F-5	II	144-145	-	Canidae (dog)	<i>Canis lupus familiaris</i>	Cervical vertebra; Ulna; Irregular bones	Fragments	None

Table 40. Archaeological features of SIHP # 50-80-14-7429 that were identified during the City Center AIS

Feature	Test Excavation	Depth (cmbs)	Radiocarbon Date (C14)	Type	Description
1	T-167	140-145	-	Pit	Pit of indeterminate function that is irregular in shape and extended beyond the excavation boundaries. Measured 0.94 m in length and 0.87 m in width. Contained shell midden Nertidae: <i>Nerita picea</i> 1.9 g and fire affected crustacean (0.7 g), naturally deposited shell (non-midden) (0.8), and a metal fragment (0.4 g).
2	T-167	141-149	-	Pit	Possible post-mold. Measured 0.32 m in length and 0.15 m in width. Contained various naturally occurring shell (2.8g), rusted metal fragments (4.1 g), and fish bone (0.1 g).
3	T-167	140-148	-	Pit	Pit of indeterminate function that is irregular in shape. Measured 2.13m in length and 0.94 m in width. Contained shell midden (see midden analysis table), metal fragments (rusted) (4.1g), fish bone (0.1 g), and a glass insulator produced between 1864 and 1921). Charcoal collected from this sample was submitted for wood taxa analysis which was found to contain Conifer (Pine, fir, etc.).
4	T-167	154-166	-	Pit	Possible post-mold that is oblong in shape. Measured 0.3 m long by 0.23 m wide.

Feature	Test Excavation	Depth (cmts)	Radiocarbon Date (C14)	Type	Description
5	T-168B	160-165	-	Deposit	A charcoal deposit that is oblong in shape. Measured 0.6 m in length and 0.3 m in width. Contained charcoal (43.2g), various shell midden (5.4g), various naturally occurring shell (2.5g), rusted metal (3.0g), faunal (<i>Rattus</i> sp.) (0.1g), and fire affected rock (43.1g). Charcoal collected from this sample (4.2 g) was submitted for wood taxa analysis which was found to contain cf. <i>Metrosideros polymorpha</i> (' <i>Ōhi'a lehua</i>) and Conifer (Pine, fir, etc.).
6	T-170	65-75	-	Human Remains	Isolated human cranial fragment. Possible female or young adult. Ancestry was not determined.
7	T-170A	56-60	Historic	Pit	Pit of indeterminate function that is rectangular in shape. Measured 35 cm in length and 25 cm in width. Contained shell midden (13.5 g), bottle glass fragments (0.3 g), a fish spine (0.1 g), fire-cracked rock (25.8 g), and faunal (<i>Canis lupus familiaris</i> , <i>Rattus</i> sp., and unknown medium mammal).



Figure 255. Photograph of archaeological Features 1 and 2 within T-167



Figure 256. Photograph of archaeological Feature 3 in T-167

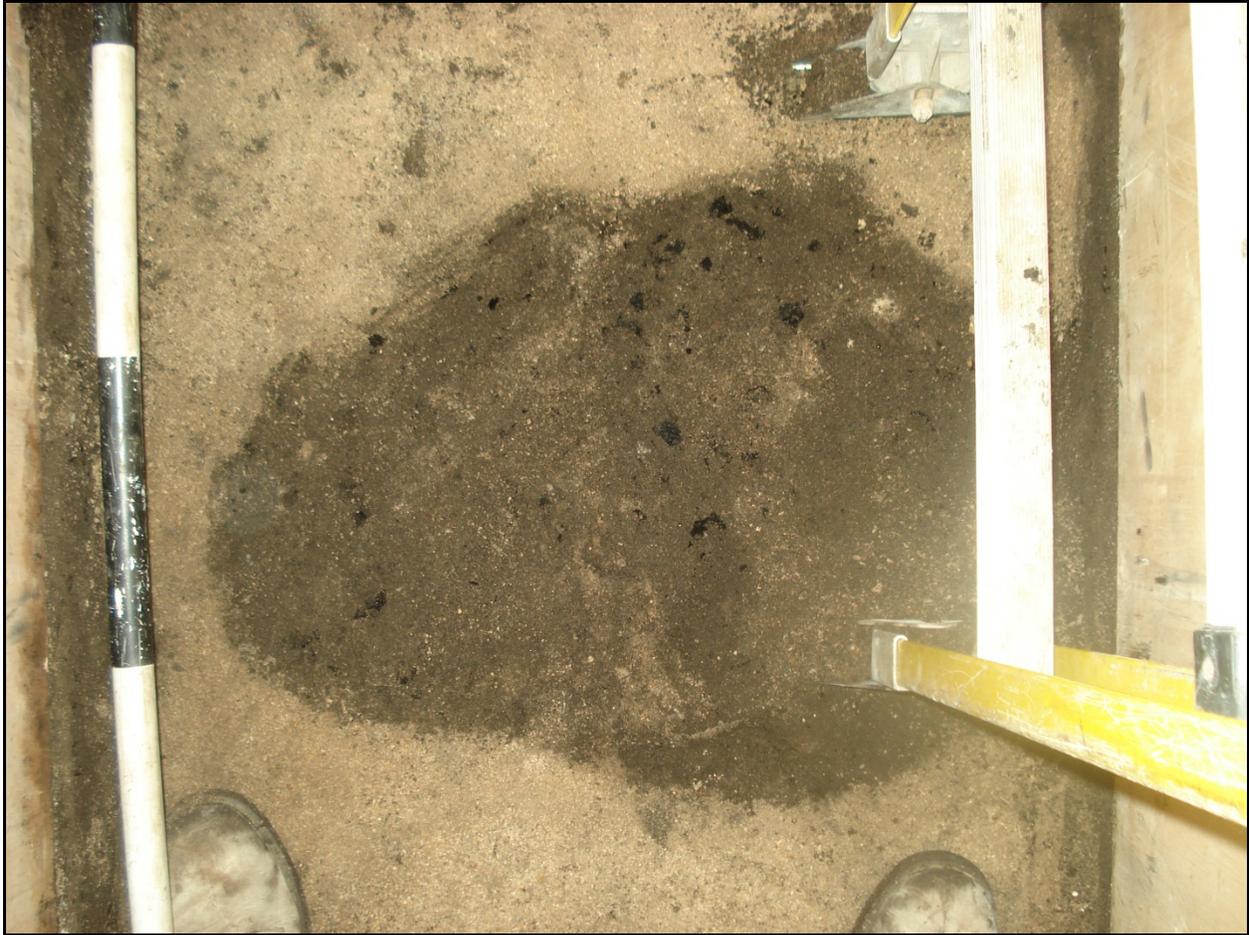


Figure 257. Photograph of archaeological Feature 5 in T-168B

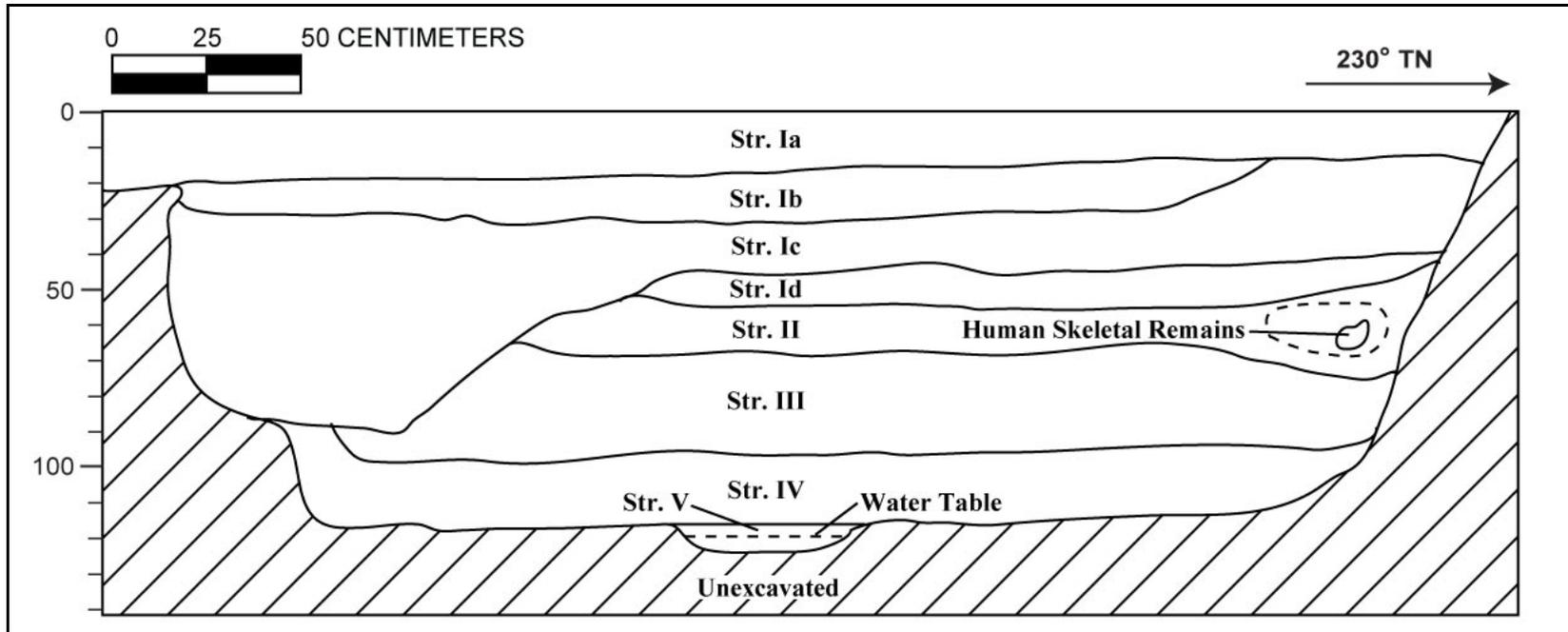


Figure 258. Profile drawing of the southeast wall in T-170 depicting the location of the human skeletal remains (Feature 6)

Table 41. Stratigraphic description for the southeast profile in T-170

Stratum	Depth (cmbs)	Description
Ia	0-16	Asphalt
Ib	16-28	Fill; 10 YR 3/2 (very dark grayish brown); very gravelly sandy loam; weak, fine, crumb structure; very friable, weak consistency; non-plastic; terrigenous origin; abrupt, discontinuous lower boundary; basalt base course
Ic	28-84	Fill; 10 YR 8/2 (very pale brown); extremely gravelly sand; structureless, single-grain; moist, loose consistency; non-plastic; marine origin; abrupt, irregular lower boundary; crushed coral fill
Id	41-54	Fill; 10 YR 7/2 (light gray); very fine sand; structureless, single-grain; moist, loose consistency; non-plastic; marine origin; abrupt, discontinuous lower boundary
II	41-75	Natural; Buried A-horizon; 10 YR 3/2 (very dark grayish brown); coarse silty sand; structureless, single-grain; moist, loose consistency; non-plastic; mixed origins; diffuse, discontinuous lower boundary; SIHP# 50-80-14-7429; contained human left temporal bone portion;
III	61-95	Natural; 10 YR 7/4 (very pale brown); medium to coarse grain sand; structureless, single-grain; moist, loose consistency; non-plastic; marine origin; diffuse, discontinuous lower boundary; natural Jaucas sand
IV	80-110	Natural; 10 YR 6/4 (light yellowish brown); loamy sand; structureless single-grain; moist, loose consistency; non-plastic; marine origin; clear, discontinuous lower boundary; natural Jaucas san
V	110-116	Natural; GLEY 1 5GY 7/1 (light greenish gray); coarse sand; structureless, single-grain; moist, loose consistency; non-plastic; marine origin; lower boundary not visible; natural marine sand



Figure 259. Photographs of the drilled dog tooth (Acc. # 167-H-1) that may have been part of a dog-tooth necklace (*lei 'ilio*) or part of a dog-tooth leg ornament (*kupe'e niho 'ilio*)

Three charcoal samples from Features 3 and 5 were positively identified as 'ōhi'a lehua (cf. *Metrosideros polymorpha*) and pine or fir (Conifer). 'Ohi'a lehua is a native species and conifers are historically introduced trees. All three samples were collected from depth ranges of 1.45 to 1.48 mbs and 1.60 to 1.65 mbs. Faunal remains that were individually collected during excavation from Features 1, 2, and 3 consist of *Sus scrofa* and medium mammal skeletal elements. Two of the medium mammal fragments were burned and one *Sus scrofa* fragment was butchered with a metal saw blade, indicating a historic origin.

Faunal remains were also collected from bulk sediment samples. Figure 260 presents the total weight (g) of faunal remains recovered from deposits associated with SIHP # -7429. Total weight includes both individually collected faunal remains as well as midden material from wet-screened bulk samples. Individual collection and bulk collection represent different sampling strategies, and they cannot be directly compared by weight. However, consistent sampling strategies were used throughout the AIS, and comparison by weight allows for the identification of trends throughout of the transit corridor. In general, the faunal remains from the proposed archaeological cultural resources exhibit dominant quantities of invertebrate midden and *Bos taurus* remains, with moderate quantities of pre-Contact medium mammals including *Sus scrofa* and *Canis lupus familiaris*.

The most prevalent vertebrate remains from SIHP # -7429 were from *Bos taurus*. Small quantities of *Sus scrofa* and *Canis lupus familiaris* were also recovered. Both *Bos taurus* and *Sus scrofa* remains were butchered, emphasizing a significant post-Contact component. Bulk samples contained a moderate aggregate weight of invertebrate midden, and minimal amounts of fish, bird and rat. The distribution of faunal remains by weight within SIHP # -7429 was typical of distribution patterns within the proposed historic properties.

Isolated human remains (Feature 6) were discovered in this former land surface at a depth of 0.65 to 0.75 mbs. The human remains were identified as a fragmented left temporal portion including the mastoid process and the root of the zygomatic arch. The mastoid process was noted as appearing relatively small and gracile, possibly indicating a female or young adult individual. No estimation of age or ancestry was determined and no artifacts were observed in association with the human remains. The eastern portion of the recommended cultural resource, where the human bone was discovered, appears to be an area of higher elevation.

Background research indicates that the coastal lands of Kewalo were sparsely populated during the pre- and early-post Contact time periods. This coastal area largely consisted of wetlands that were utilized for aquaculture, salt pans, occasional taro *lo'i*, and habitation. With the decline of the salt business in the late nineteenth century, many of the Kewalo wetlands were reclaimed for urban development. The subsurface cultural resource (SIHP # -7429) that was identified during the City Center AIS appears to be a historically impacted pre- and/or early post-Contact land surface. The subsurface deposits contain (and have the potential to contain) traditional artifacts and cultural material that is indicative of pre- and/or early post-Contact habitation in the Kewalo area.

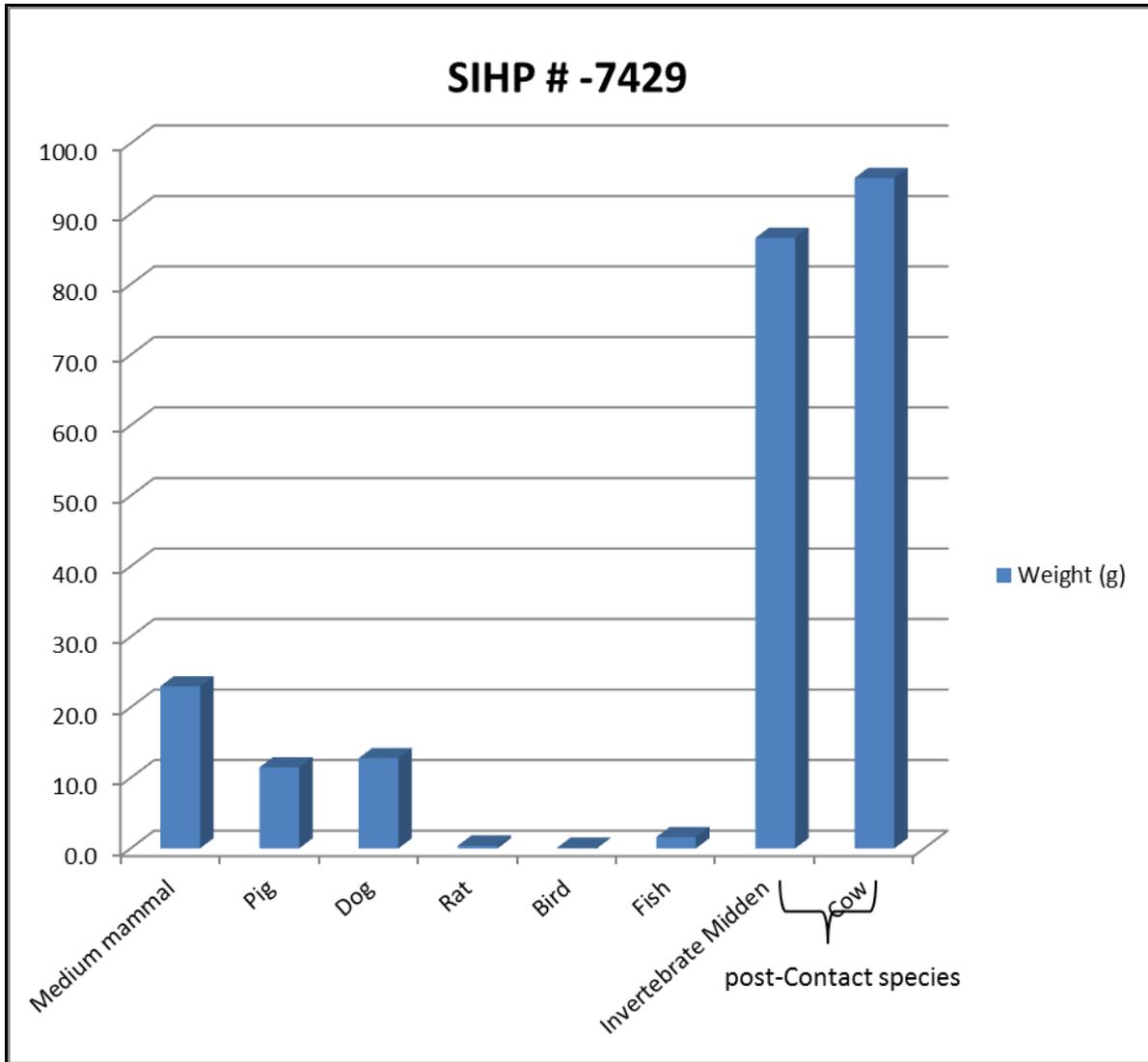


Figure 260. Graph representing the total weight (g) of faunal remains recovered from deposits associated with SIHP # 50-80-14-7429

Based on the guidance of the National Register Bulletin No.15, this archaeological cultural resource retains its integrity of location, design, and materials. The components of this cultural resource have provided, and can potentially provide, additional information related to the geographic distribution/extent, materials, and construction methods of these pre- and post-Contact cultural deposits. The archaeological remnants of SIHP # -7429 are buried and their surroundings have been completely altered by modern development since their time of construction and period of use. Accordingly, these features do not maintain the integrity of setting, feeling, and association that might convey their significance under significance Criteria A, B, or C of the Hawai'i or National Register. Based on the results of this investigation, CSH recommends that this cultural resource maintains the integrity to support its historic significance under Criterion D (has yielded, or is likely to yield information important for research on prehistory or history) of the Hawai'i and the National Registers, exclusively for its information potential.

4.3.18 SIHP # 50-80-14-7430

FORMAL TYPE:	Buried remnant of a historic privy
FUNCTION:	Toilet
AGE:	Post-Contact
DISTRIBUTION:	Point feature in T-202
LOCATION:	Located in the eastbound lane of Kona Street, <i>mauka</i> of Ala Moana Shopping Center (Kālia Geographic Zone)
TAX MAP KEY:	TMK [1] 2-3-038:006
LAND JURISDICTION:	General Growth Properties

SIHP # 50-80-14-7430 consists of a historic privy located in the eastbound lane of Kona Street, *mauka* of Ala Moana Shopping Center (Figure 261 and Figure 262). This archaeological cultural resource was identified during the City Center AIS.

Subsurface remnants of the privy were encountered in Test Excavation 202 at a depth of 1.30 to 2.10 mbs, within the former Kewalo wetland sediments (SIHP # 50-80-14-6636). The structure appears to be rectangular in plan, and is constructed out of milled wood and metal fasteners (Figure 263 and Figure 264). A total of two boards and two posts were recovered from the privy structure (Figure 265, Figure 266, and Figure 267). The two boards both measured 1 x 10 x 50 inches, while the two posts measured 2 x 4 x 58 inches. A concreted ferrous bar or spike was also collected from the privy (Figure 268). The function of this object is uncertain, however, it may have supported one of the corners of the structure. The form and composition of the remnant structure is consistent with a historic-era privy.

Although severely concreted, the metal fasteners appear to be machine-headed cut nails, dated to between ca. 1835 and 1890 (Figure 269). The total extent of the structure was not determined, as the majority of it continued into the north sidewall. The structure's shallow depth of about 65 cm (2.1 ft) was probably, in part, due to the waterlogged conditions of the coastal wetlands, but also a response to the underlying coral shelf. It appears that the coral shelf was deliberately carved out to provide an adequate depth for the facility (Figure 270 and Table 42). Stratum If is largely comprised of the coral backfill that was deposited around the privy during its initial construction.

Deposits from within the privy were sampled and contained small fragments of charcoal, non-midden shell typical of the wetland environment, faunal bone (fish and *Canis lupus familiaris*), and historic refuse. Diagnostic artifacts from the privy sediment included four ceramic fragments (Asian and English types) dated to between 1840 and 1910, as well as 11 mold-blown bottles and/or bottle fragments. The glass bottle assemblage was dated to between the 1870s and 1920s (Figure 271). The dates from the artifact assemblage are consistent with the dates of the metal fasteners from the privy. Together they provide a relative date for the privy between the mid- to late-nineteenth centuries.

LCA records indicate that Kālia consisted of fishponds, taro patches, house lots, and pasture land. By the end of the nineteenth century, the fishponds were largely abandoned and taro was

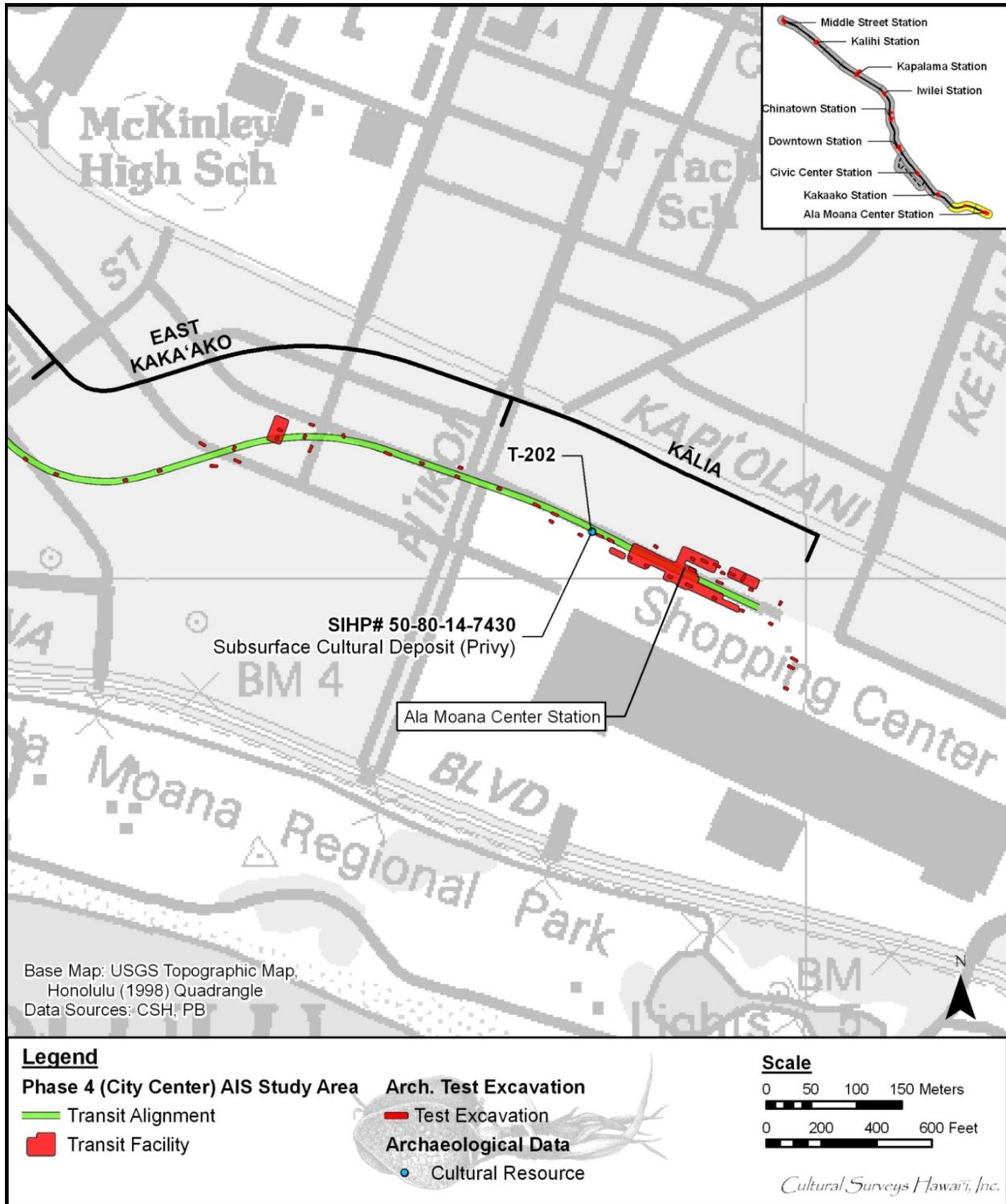


Figure 261. Location of the privy (SIHP # 50-80-14-7430) in the Kālia Geographic Zone (Base Map: USGS 1998 Topographic Map of Honolulu Quadrangle)

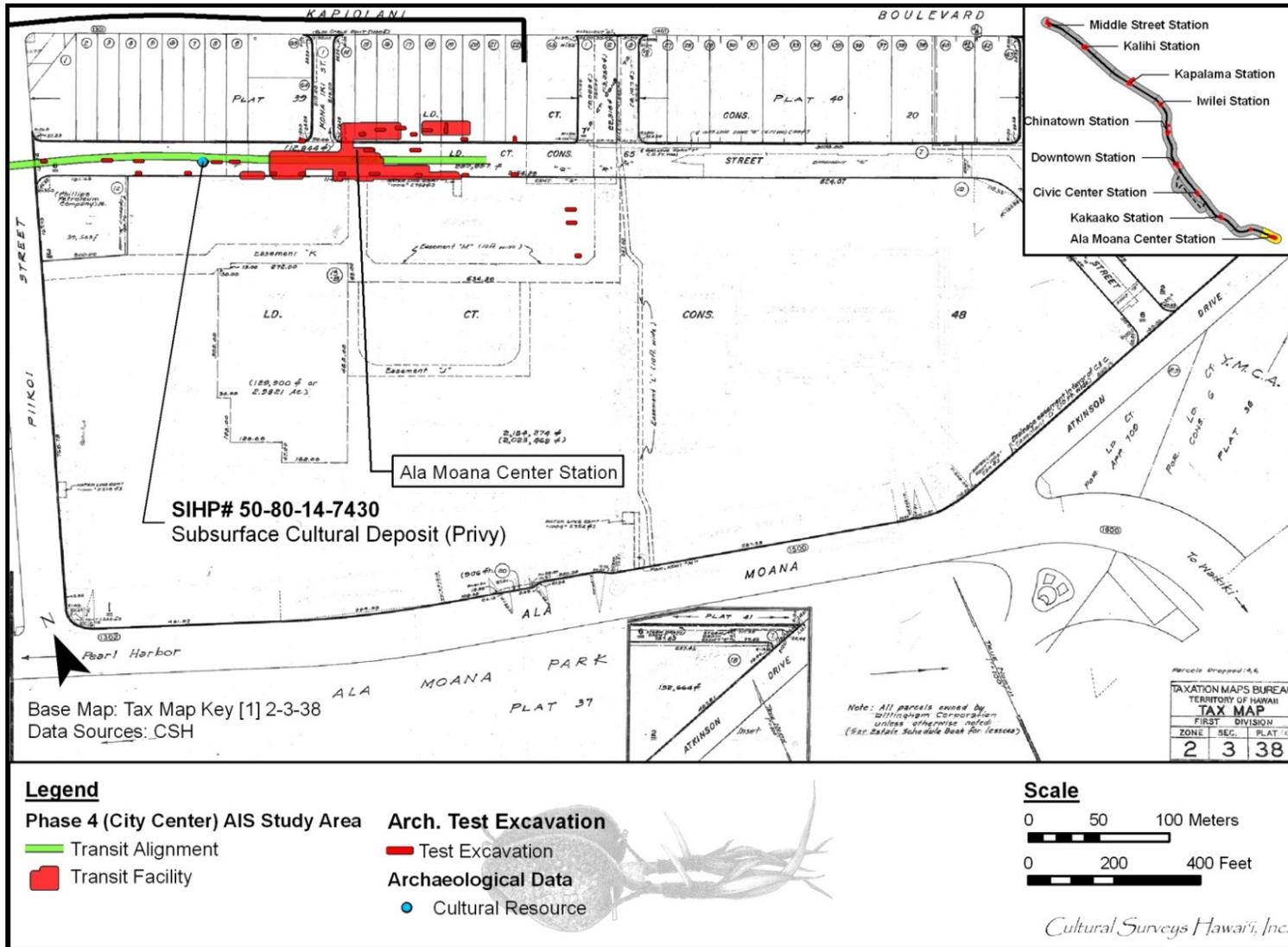


Figure 262. Location of the privy (SIHP # 50-80-14-7430) in the Kālia Geographic Zone (Base Map: Tax Map Key [1] 2-3-38)

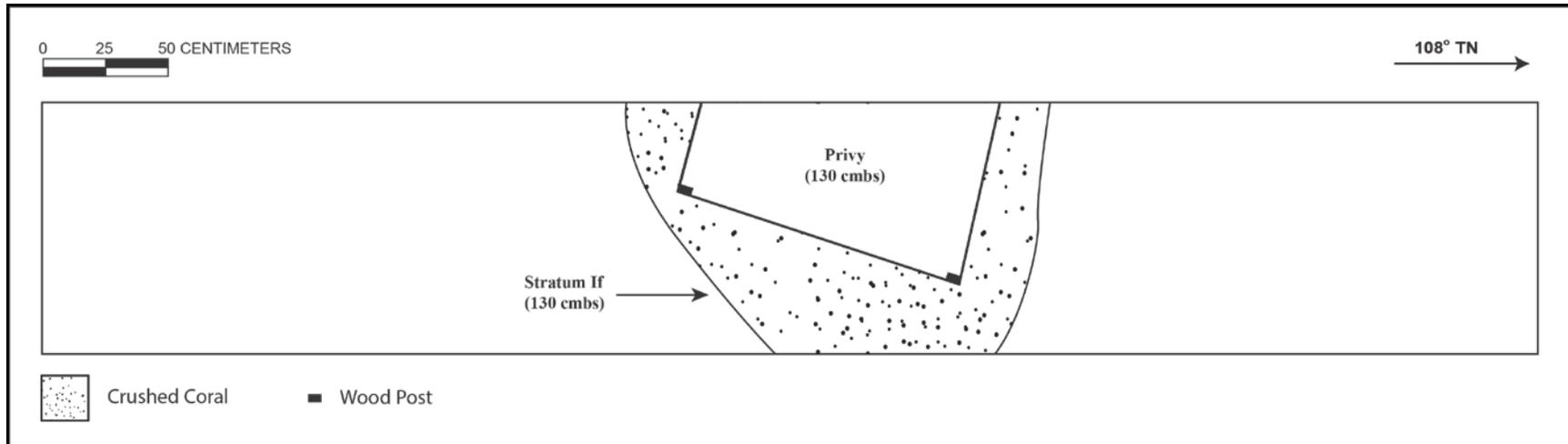


Figure 263. Plan view of the privy (SIHP # 50-80-14-7430)



Figure 264. Plan view of the privy (SIHP # 50-80-14-7430) outline and coral gravel fill along its edges (Stratum If)



Figure 265. Two (2 x 4 inch) posts that were part of the privy structure (SIHP # 50-80-14-7430)



Figure 266. One of the boards that was part of the privy structure (SIHP # 50-80-14-7430)



Figure 267. Remnants of a board that was part of the privy structure (SIHP # 50-80-14-7430)



Figure 268. Ferrous object collected from the privy (SIHP # 50-80-14-7430)



Figure 269. Machine-headed cut nail (ca. 1835-1890) collected from the privy wood

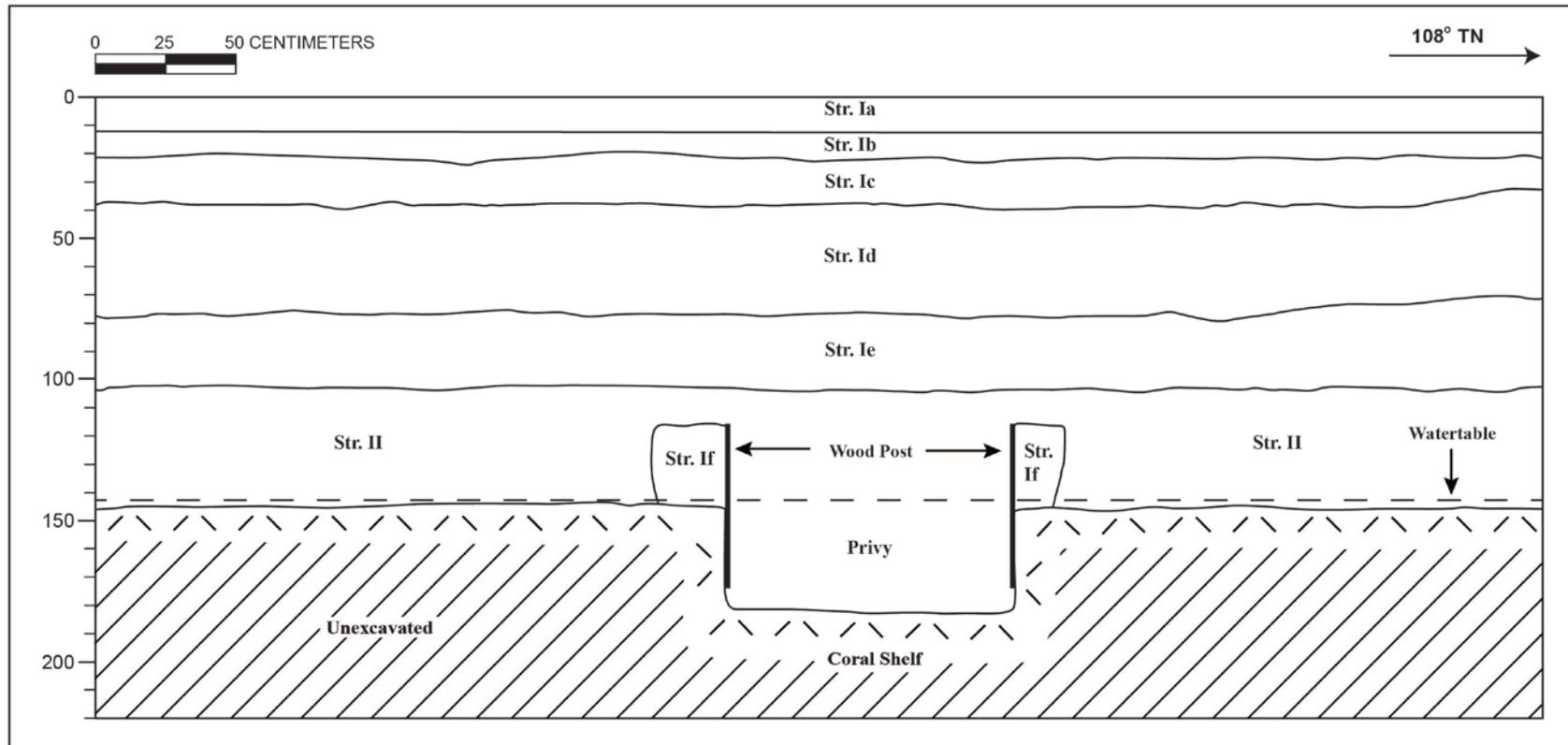


Figure 270. Profile drawing of the north wall in T-202 depicting the remnant privy (SIHP # 50-80-14-7430)

Table 42. Stratigraphic description of north profile in T-202

Stratum	Depth (cmbs)	Description
Ia	0 –15	Concrete curb and gutter
Ib	15–25	Fill; 10 YR 4/4 (dark yellowish brown) with 20%, fine to coarse mottles of 10YR 8/1 (white); gravelly sandy clay loam; weak, fine, crumb structure; moist, friable consistency; slightly plastic; mixed origin; abrupt, smooth lower boundary; few, fine roots; gravelly fill material deposited during curb and gutter installation
Ic	25–45	Fill; 10 YR 8/2 (very pale brown); extremely gravelly silty sand; structureless, single-grain; moist, loose consistency; non-plastic; marine origin; abrupt, smooth lower boundary; crushed coral fill material
Id	45–90	Fill; extremely gravelly silty sand; structureless, single-grain; loose consistency; non-plastic; marine origin; very abrupt, smooth lower boundary; crushed coral fill material
Ie	90–120	Fill; 10 YR 5/4 (yellow brown); sandy clay; weak, medium, blocky structure; moist, friable consistency; plastic; mixed origin; abrupt, smooth lower boundary;
If	135–177	Fill; 10 YR 5/1 (gray); extremely gravelly clay; structureless, single-grain; wet, sticky consistency; plastic; mixed origin; lower boundary not visible; coral fill related to privy construction
II	120-210	Natural; 10 YR 5/1 (gray); silty clay; weak, medium, blocky structure; wet, very sticky consistency; plastic; mixed origin; lower boundary not visible; natural remnant marsh sediment that contained the remnant privy (SIHP # -7430)



Figure 271. Representative sample of historic bottles (Acc. # 202-A-6, -7, and -10) collected from within the remnant privy (SIHP # 50-80-14-7430)

replaced with rice. Kālia's agricultural role came to an end as Honolulu expanded. The wetlands were drained and filled during the 1920s and 1930s, making way for urbanization in the 1940 and 1950s. Historic aerial photographs indicate that the recommended cultural resource was located in the footprint of a former building in 1927 (Figure 272). Potential salt pans and/or agricultural fields are visible in the surrounding landscape. By 1952, however, the area had been reclaimed and covered with crushed coral fill for the initial construction of the Ala Moana Shopping Center (Figure 273).

Based on the guidance of the National Register Bulletin No.15, this archaeological cultural resource retains its integrity of location, design, materials, and workmanship. The components of this cultural resource have provided, and can potentially provide additional, information related to the design and use of nineteenth century privies. The contents of the privy have yielded insight into the lives of the individuals who utilized it during the mid- to late-nineteenth century. The remnant privy is buried and its surroundings have been completely altered by modern development since its time of construction and period of use. Portions of SIHP # -7430 were partially removed during subsurface testing for the current AIS. Accordingly, the remnant privy does not maintain the integrity of setting, feeling, and association that might convey its significance under significance Criteria A, B, or C of the Hawai'i or National Register. Based on the results of this investigation, CSH recommends that this cultural resource maintains the integrity to support its historic significance under Criterion D (has yielded, or is likely to yield information important for research on prehistory or history) of the Hawai'i and the National Registers, exclusively for its information potential.

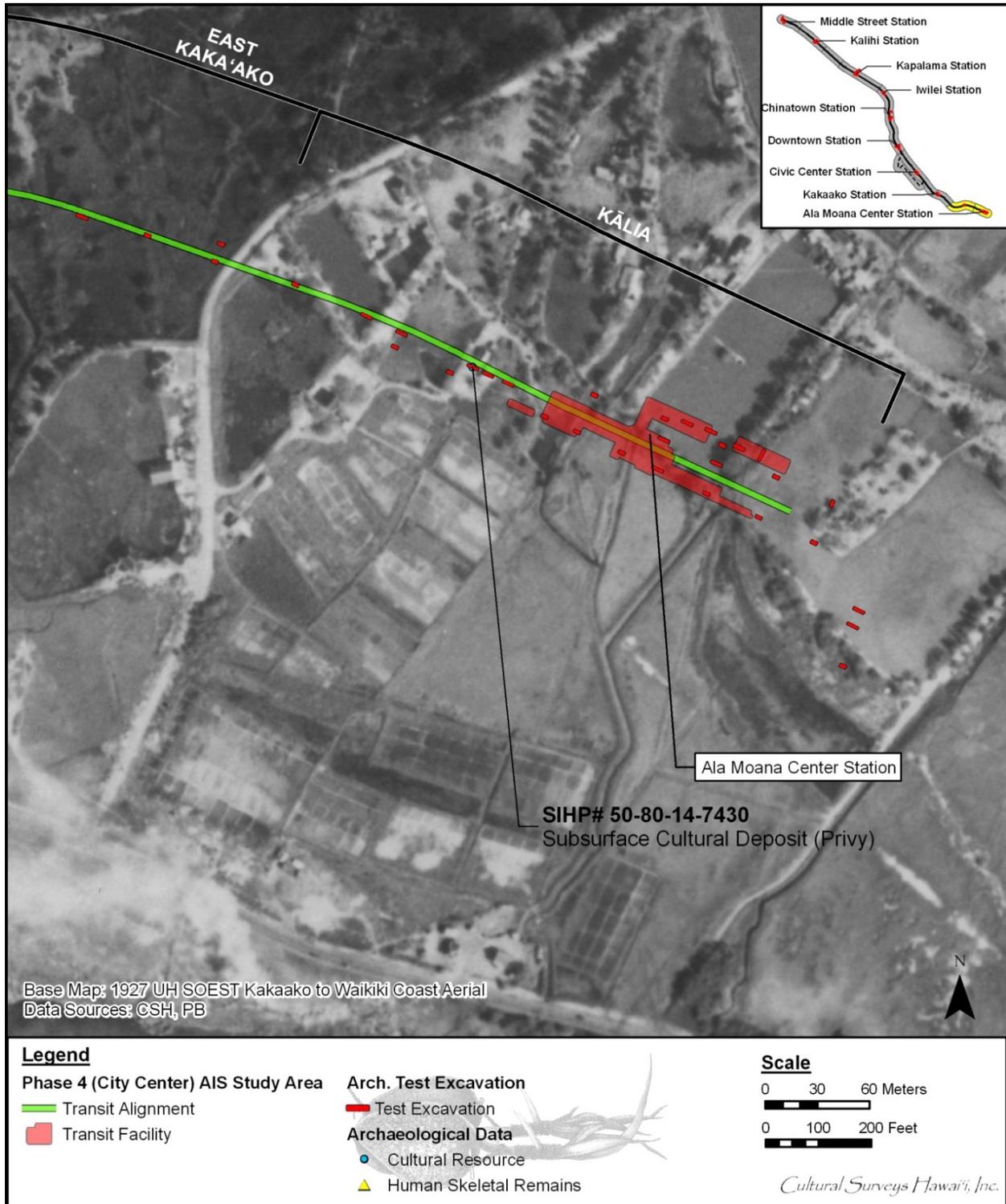


Figure 272. Portion of the 1927 UH SOEST aerial of the Kaka'ako coast showing the location of the privy (SIHP # 50-80-14-7430)

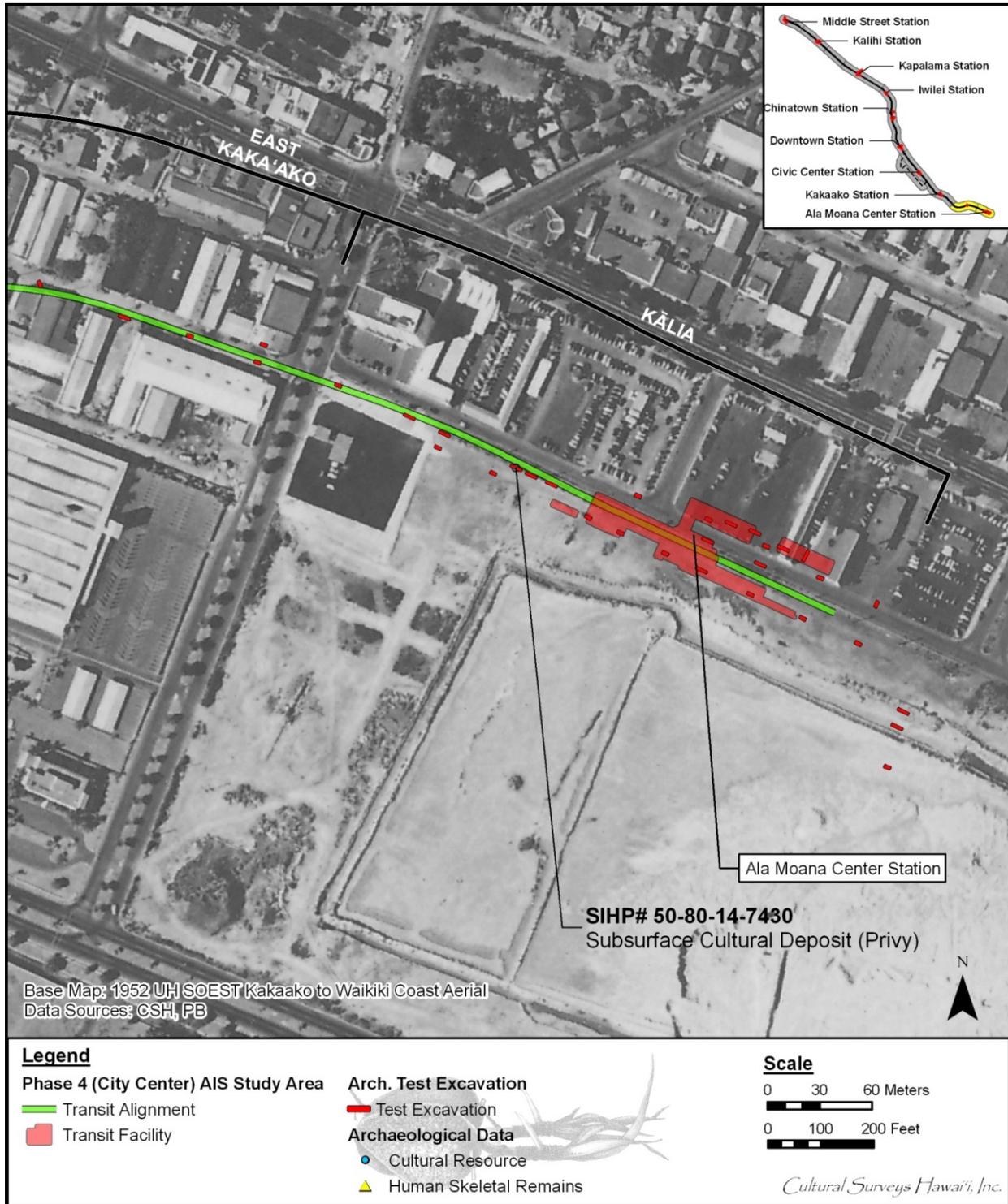


Figure 273. Portion of the 1952 UH SOEST aerial of the Kaka'ako coast showing the location of the privy (SIHP # 50-80-14-7430)

4.4 Place Names, *Wahi Pana*, and Traditional Cultural Properties

4.4.1 Introduction to a Further Review of Place Names, *Wahi Pana*, and TCPs

The Archaeological Inventory Survey Plan Section 7 AIS Research Design and Methods asserts the following:

The City is currently working with the SRI Foundation and Kumu Pono Associates to produce a comprehensive ethnographic and ethnohistoric investigation of the HHCTCP project corridor and its environs. These investigations, including historic research with Hawaiian language sources, place name and oral tradition research, and ethnographic interviews, will support and be incorporated into the project's TCP study. Additionally the City is working with Mason Architects to produce historic context studies and cultural landscape reports for the HHCTCP corridor. As information is generated from these ongoing TCP and historic context and landscape studies, it will be utilized to augment and inform the interpretations and recommendations of the ongoing City Center AIS research. This additional background will further augment the archaeological/cultural context that is required to appropriately evaluate the significance of the archaeological cultural resources that are identified during the City Center AIS. (Hammatt et al. 2011:173)

In order to further inform the archaeological inventory survey, CSH was supplied with a working draft of *He Mo'olelo 'Āina—Traditions and Storied Places in the District of Kona—Honolulu Region (Lands of Kalihi to Waikīkī), Island of O'ahu: A Traditional Cultural Properties Study—Technical Report* (Maly and Maly January 28, 2013) along with three draft Appendices

- Appendix A: *Historical Accounts of the Honolulu Region—A Hawaiian Community and Kingdom in Transition*,
- Appendix B: *The Māhele 'Āina, Royal Patent Grants & Overview of Land Use and Tenure*, and
- Appendix C: *Boundary Commission Proceedings and Survey Records*.

The Maly and Maly (January 28, 2013) working draft is a very large and very rich compendium of data and the reader is referred directly to that study (as well as Volume II of the present study) for details regarding the cultural history of the HHCTCP route as a whole. The purpose of the present discussion is to integrate that immense research into the archaeological findings of the archaeological inventory survey.

There were significant archaeological finds that merited further research into cultural traditions in three discrete geographic areas: 1). Kaluaopalena, Kalihi, 2). Pu'ukolo (Chinatown), and 3). Pu'unui, (Kaka'ako) Honolulu. A greater than expected occurrence of identified breadfruit ('*ulu*) in the project area called for a review of cultural associations with that tree in the project vicinity. Following a summary of these four traditions a discussion of the archaeological evidence pertinent to posited possible traditional cultural properties is discussed.

4.4.2 Kaluaopalena, Kalihi

A subsurface cultural deposit relating to a Hawaiian earth oven (*imu*) was identified in T-020 within the east-bound, right lane of Kamehameha Highway, northeast of the O'ahu Community Correctional Center. Radiocarbon dating analysis yielded two calibrated 2-sigma (95.4 percent probability) dates in a range of 1480 AD to 1650 AD. While this is not a particularly early date for Hawaiian archaeological sites this was the oldest date range recovered in the archaeological inventory survey. The *imu* was given the designation SIHP #50-80-14-0725. Clearly this location was part of a rich cultural landscape in pre-Contact Hawai'i with a wealth of place names indicated in the immediate vicinity (Figure 274). The specific traditional place name appears to be "Kaluaopalena" (Figure 274 and Figure 275). It had been noted (see Volume II) that this immediate area has been much associated with religious places and religious professionals.

During Thrum's description of Kalihi Ahupua'a in the early twentieth century, he noted two *heiau* in Kalihi Kai: "Kaaleo" and "Haunapo" (Thrum 1908:41). Unfortunately, no details about these *heiau* were collected. Of note is 'Umi Street, roughly 300 m north of the study area, which traverses a former land division (Māhele Award 50) known as 'Umi (see Figure 274). Pukui et al. (1974:215) relates that "[t]he name is probably derived from the strangling of a victim used as a human sacrifice at the *heiau* Hāuna-pō which stood in the vicinity of the present street." Various, it may be the case that the indicated temple of human sacrifice named Hāunapō (lit., "night striking") was actually on one of the land sections called "Hāuna-pō" that are traversed in the central portion of the West Kalihi Zone. It may not be a coincidence that the direct descendants of Hewahewa (the *kahuna nui* or highest priest in the archipelago under Kamehameha I) claimed lands between 'Umi and the Hāunapō parcels. Another very high priest associated with the Kamehameha dynasty, named Nahinu, also claimed lands in this immediate area (see Volume III land documents).

Thus it was of interest whether subsequent research on traditions and storied places developed any additional information on this area associated with the place names: Kaluaopalena, Hāunapō and 'Umi. Indeed Maly and Maly (2013:31, 52) offer more data in their discussion of place names of Kalihi.

Hāunapō (Strike in the dark)	Kalihi-Kalihi Kai. A land area, and <i>heiau</i> (Thrum, 1916). (Cited in Māhele Claims 50 and 3237; historical surveys; and Register Map No.'s 1039 and 2284.) (Cited in Maly and Maly 2013:29.)
Ka'aleo (Speak loudly) (also written as Kaoleo)	Kalihi. A land area in the vicinity of Hāunapō, Kaluaopulu, and Kaluaopalena. [Cited by Thrum as being a <i>heiau</i> of unknown function (1909:41).] (Cited in historical accounts and surveys; Thrum, 1909; and Register Map No. 2284.) (Cited in Maly and Maly 2013:31.)
Kaluaopalena (The pit of Palena)	Kalihi. An <i>'ili</i> land section bounded by Hāunapō, Kawaiholo, and Apili. (Cited in Māhele Claim 10498; historical surveys; and Register Map No.'s 1039, 1511, and 2284.) (Cited in Maly and Maly 2013:34.) Also "'The ending hole.' Land in Kalihi, Oahu." (Cited in Maly and Maly 2013:52.)

It may be of note that Maly and Maly relate the information regarding the other Kalihi *heiau* mentioned by Thrum, “Ka‘aleo,” that ties it into this immediate area as well.

Land records for holdings in the vicinity reported by Maly and Maly (2013 Appendix B and Appendix C) including those of Hewahewa, Nahinu, Laumaka and Alexander Adams, for a Public Works Grant No. 73 for an Animal Quarantine Lot at Kaluaopalea and for the conveyance of a portion of Hāunapō ‘Ili were reviewed but no further insight was gleaned regarding traditional Hawaiian use in the immediate vicinity.

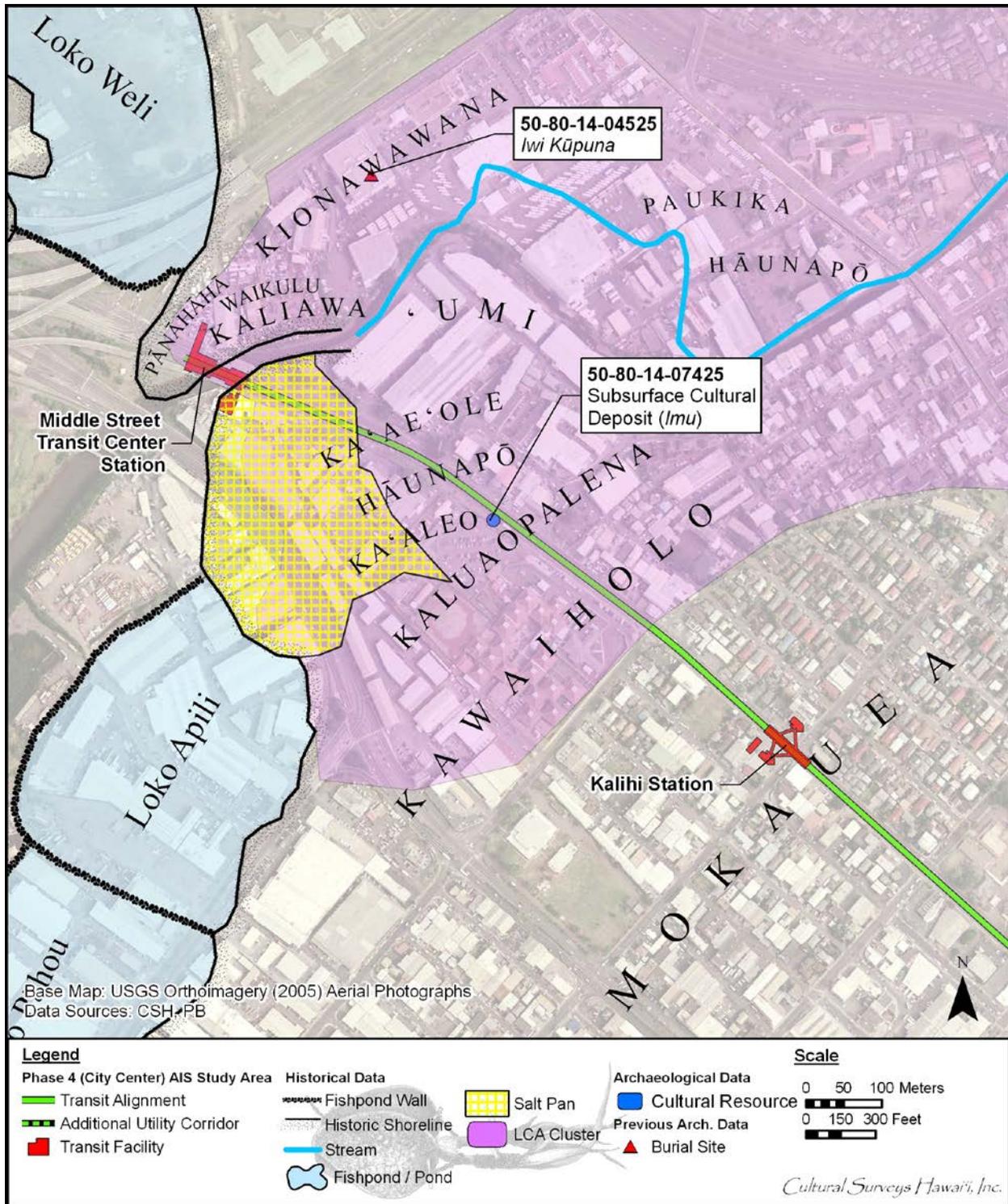


Figure 274. Cultural landscape of Hāunapō in the vicinity of SIHP #50-80-14-07425

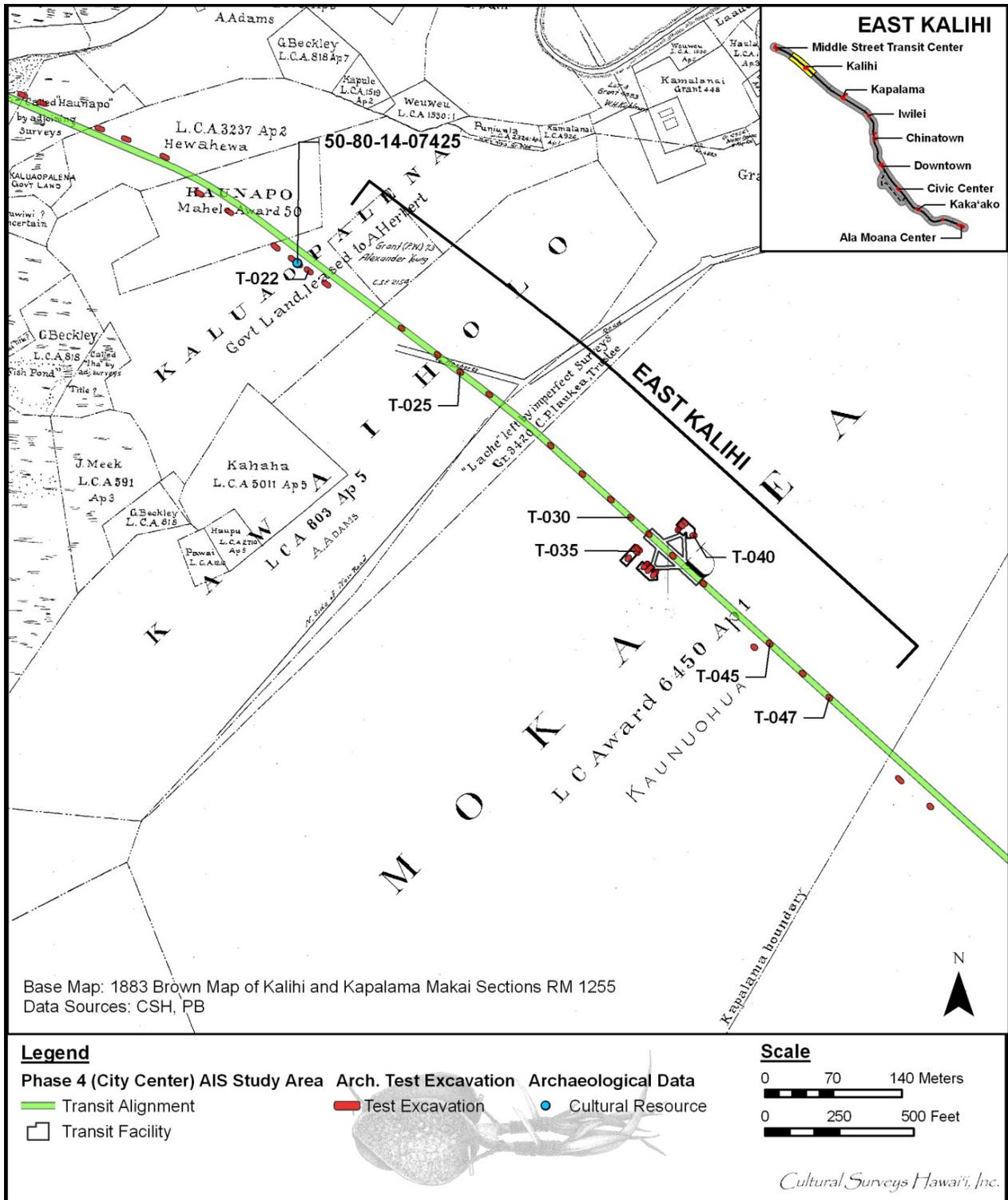


Figure 275. Portion of the 1883 Brown Map (RM 1255) depicting the LCAs near the West Kalihi Zone AIS test excavations including the vicinity of SIHP #50-80-14-07425

4.4.3 Human Bones in Chinatown

The most westerly find of human skeletal remains in the course of the archaeological Inventory Survey was at T-096 in what is now SIHP #50-80-14-07427. (See Figure 276 and Figure 277.) Historic records indicate that this immediate area was part of a rich Native Hawaiian cultural landscape. This specific area was known as Pu'ukolo (Kapu'ukolo, Kapukolo) Maly and Maly (2013:47) offer the following information on the place name:

Pu'ukolo Honolulu. During the time of Kamehameha I's residency in Honolulu, many fishermen and their families lived at Kapu'ukolo (J. P. 'Ī'ī 1959). In
Kapu'ukolo one account of Kū'ula (Beckwith 1970), Kapu'ukolo is the residence of
 (Creeping hill) the chief Kipapala(u)ulu, who stole the sacred fishhook of Kū'ula. The hook was later restored to Kū'ula. (Cited in Māhele Claims 22, 30 57, 66, 256, and 2065; P. Rockwood Map 1957; and Register Map No. 900.)

Land records associated with Mataio Kekuaanoa's *ali'i* land claim number 170 at Kapukolo (Kapu'ukolo) reported by Maly and Maly (2013: Appendix B) were reviewed but nothing further was learned regarding traditional Native Hawaiian land use on the property from these land records.

This immediate area was also part of a rich Chinese cultural landscape. It is generally well-known that for nearly a century there was a common practice of Chinese compatriots disinterring their countrymen's bones and preparing them for shipment back to China. In a general sense it is logical to assume that many of these bones passed through Honolulu's Chinatown, but the details are generally not well-known. Maly and Maly (2013:155) provide the following account.

Preparing Bones for Shipment to China from Honolulu's Chinatown (1896)

Hawaiian Gazette

February 14, 1896 (page 4)

A Strange Occupation.

A House in Nuuanu Stream Where This Is Done—

A Gruesome Trade Carried On.

Situated just at the foot of Hotel street and a little back of the buildings fronting on the land now being built up by the dredger mud, silt and sand, is a very rough 8 x 12 structure of most unpromising appearance. It stands on four posts about four feet from the ground and looks for all the world like a top-heavy pigeon coop. To look at its exterior would mean nothing to the observer, but to know of its inside workings would make everything about it interesting at once.

It is known as the Chinese club house. Whenever a Chinaman has a bag of human bones to prepare for transportation to China it is inside the very narrow limits of this structure that the work of scraping away dried-up skin fragments and other unnecessary matter is done.

A peep in at the window close on to the hour of midnight in the dark of the moon is perhaps the best mode of receiving a lasting impression on seeing a couple of

Chinamen seated on the floor, each with a pile of bones in front of him and working by the dim rays of a peanut oil lamp. A broken sickle in the hands of one serves to cut away the unnecessary dried skin and ligaments, while a cocoanut grater in the hands of the other, does good work toward removing what the sickle has failed to do. A couple of black oil cloth valises constitute the receptacles for the bones which are done up, some in cloth and others in brown paper. Such portions as the skull are always wrapped in cloth while the legs and arms suffer the indignity of brown paper. A pile of scrapings here and there furnish the only decorations that the room affords. Cracks in the walls serve, on a windy night, to make peculiar noises, which seem a fitting accompaniment for the work of the industrious ones inside.

Ever since the Chinese first came into the country has this custom been observed, and as long as they remain here will the same thing go on. No matter if the law says they shall not dig up the dead from places of burial, they will continue to do it some way or other. If the present club house is removed they will have recourse to another place.

The former position of the club house was where the dredger pipes are now emptying their mud. It will be remembered that Nuuanu stream was in a very decidedly marshy condition at that point before the introduction of improvements.

Then, as now, Chinamen made nightly visits to the place and scraped the bones of their relatives preparatory to transportation, but instead of carrying all waste material as they have to do now, they simply dumped this into the stream to be carried out to sea or to settle among the bulrushes. (Maly and Maly 2013:155–156)

While the precise location is not altogether clear, this place of Chinese processing of human bones is described as an 8 x 12 structure “known as the Chinese club house.” The structure is said to be a house “in Nuuanu Stream...on the land now [1896] being built up by the dredger mud, silt and sand” There is an indication of a “former position of the club house” in this same vicinity. This reference is probably one to the “Chinese Club House” that had a grand opening in 1886 and was swept away by the Chinatown fire that same year (see Maly and Maly 2013: Appendix A:130). These locations were almost certainly very close to the location of the isolated bone find in T-096 and it is certainly possible one of these locations was the Chinese Joss House shown on fire insurance maps (see Figure 277).

The reference in the 1896 account that “waste material” from the processing of human bones was “simply dumped” locally suggests that the process could have involved the scattering of small bones in the vicinity.

A passing reference in the account above is that: “black oil cloth valises constitute the receptacles for the bones.” Maly and Maly offer another account of how Chinese bones ended up in odd locations in Chinatown.

Human Bones Found in Chinatown (1896)

Hawaiian Gazette

January 24, 1896 (page 5)

It Wasn't Dynamite

Lieut. Needham Makes a Find. Dynamite and Human Bones.

"I was walking along on Fort street and had just come to Chaplain lane," said Lieutenant Needham last night, "when I saw what appeared to be a large black dog curled up on the sidewalk. As I got closer I found that the object was not a dog but a black valise."

The valise which Lieutenant Needham found evidently has a history. The officer thought nothing wrong upon finding it and carried it toward the police station, thinking some drunken person had left the valise on the sidewalk.

Researching a Chinese store on Fort street, Lieutenant Needham noticed something peculiar about the valise and stopped to investigate. He became suddenly aware of the fact that the word "Dynamite" was printed in white paint across one side of the valise. He stood paralyzed not knowing whether to run the risk of putting it down or throwing it from him. But calm judgment suggested that there was a joke somewhere.

Carrying the valise to the police station he opened it and found the contents to be human bones with a decidedly earthy smell. Two skulls wrapped in white cloth and tied with strings to match, were found on the top of the pile. The other bones were wrapped in brown paper and tied with various kinds of strings.

There were some Chinese cards, chop sticks, and messages written on Chinese paper found in the satchel.

The bones were in a very good state of preservation, and showed recent removal from the grave. The supposition is that they had been prepared for shipment to China—a custom much practiced by the Chinese—but had been purloined by some practical joker who had nothing better to do.

A "Joss House" is clearly shown on fire insurance maps (like the Dakin fire insurance map of 1899) (Figure 277) within about 5 m of the bone find in T-096 (SIHP #50-80-14-07427). This building may have been the "Chinese club house" referred to in the 1896 Hawaiian Gazette account of "A Strange Occupation." Regardless, it seems probable that this Joss House had some role in the preparation of human bones for shipment back to China.

It also may be noted in passing that we know that Chinese died in the conflagration that swept away Chinatown in 1886 and that some bodies were never recovered (Maly and Maly 2013: Appendix A:139).

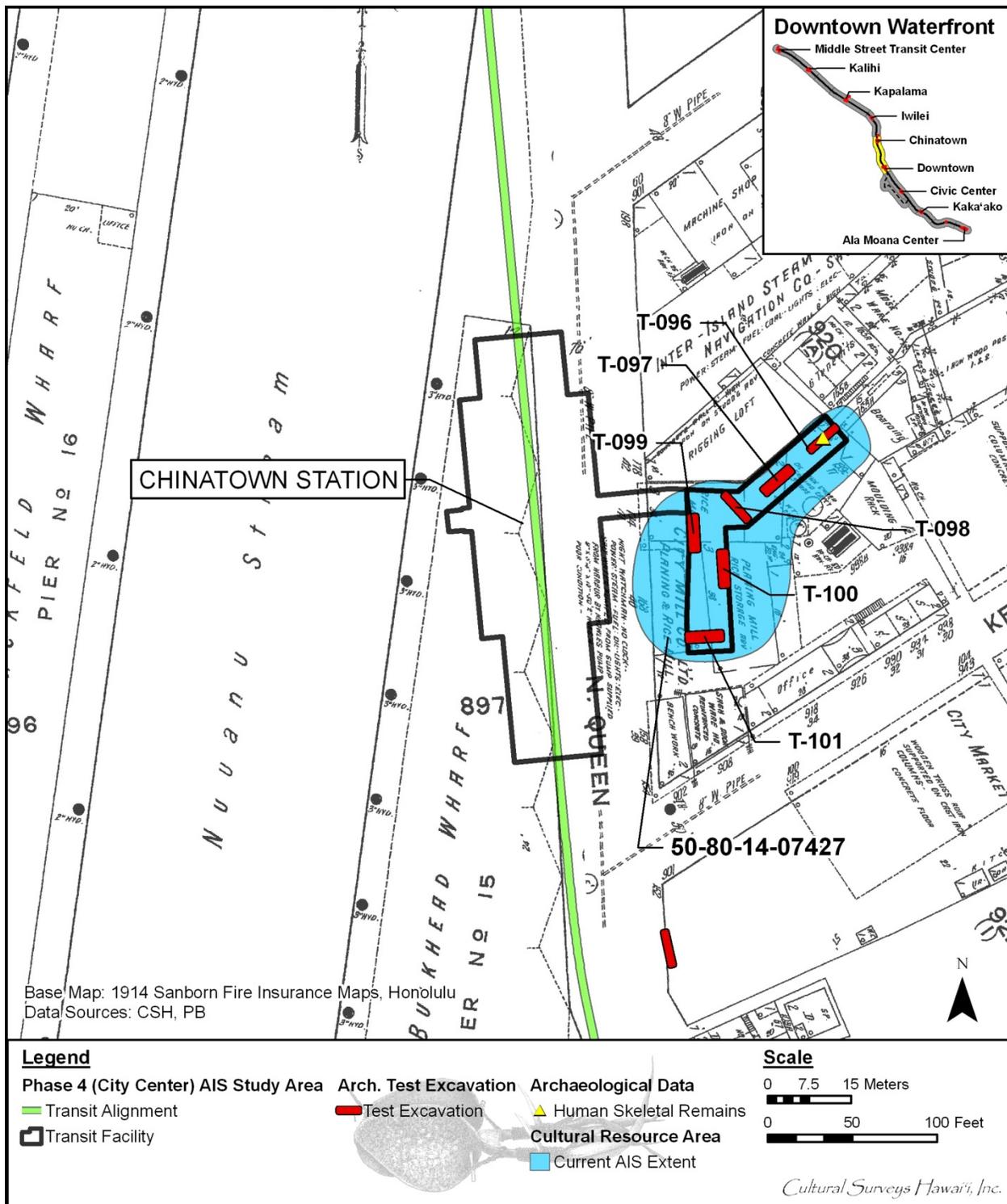


Figure 276. Portion of a 1914 Sanborn fire insurance map showing the location of the bone find in T-096 (SIHP #50-80-14-07427) relative to Nu‘uanu Stream

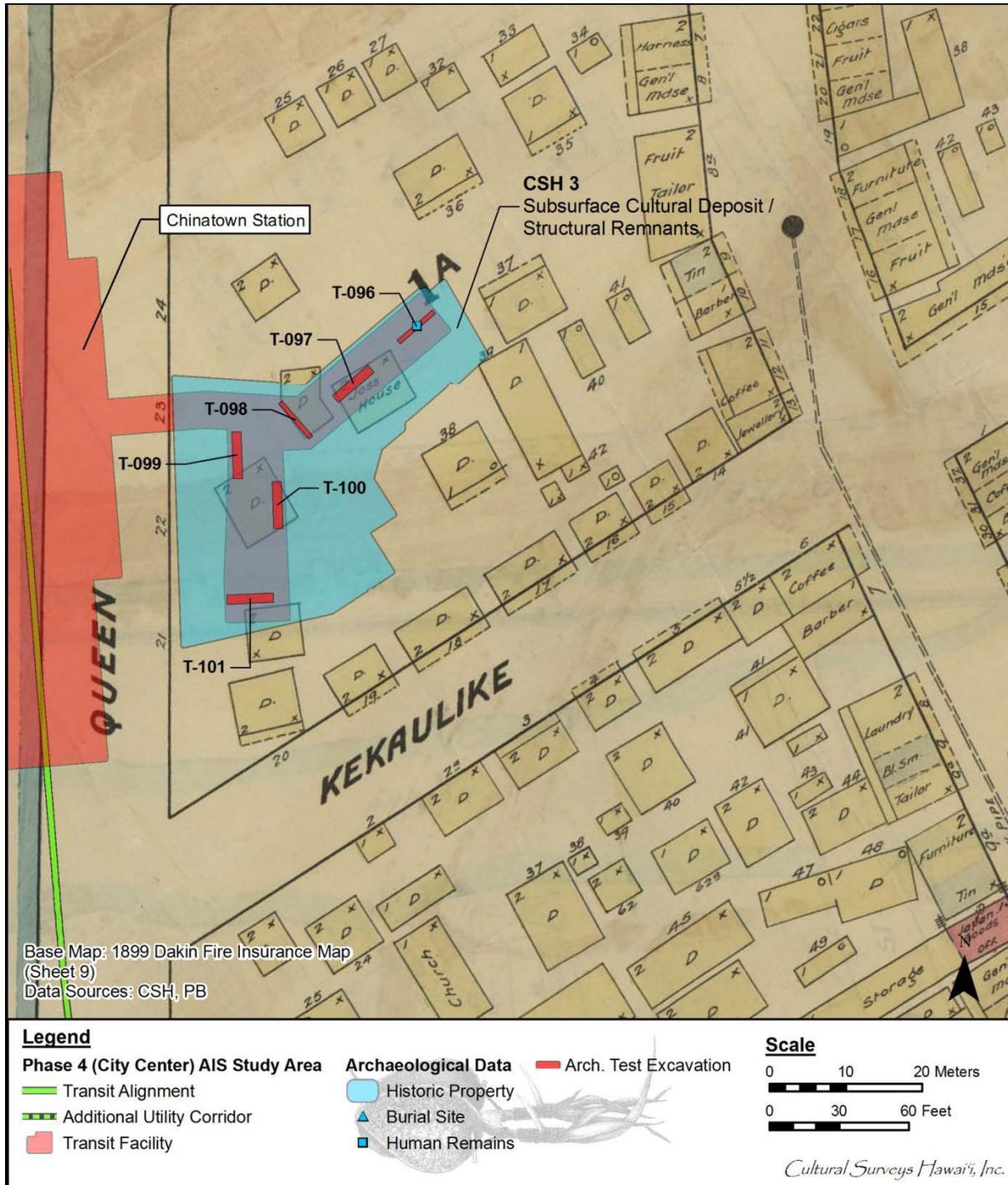


Figure 277. This Dakin fire insurance map of 1899 clearly shows a “Joss House” within about 5 m to the southwest of the bone find in T-096 (SIHP #50-80-14-07427), which may have been the “Chinese club house” referred to in the 1896 *Hawaiian Gazette* account of “A Strange Occupation.”

4.4.4 Pu'unui, (Kaka'ako) Honolulu

A consideration of the radiocarbon dates from the project indicated relatively early activity clustered in an area of greater Kaka'ako called "Pu'unui." It should be noted that this is discrete from a much better known area of the same name in upper Nu'uano. Maly and Maly (2013:47) relate the following.

Pu'unui (Large hill or mound) Honolulu. A detached *'ili* land in several locations. The coastal section of Pu'unui was noted for its salt making ponds, in the vicinity extending from Queen Street, across Hale Kauwila Street to Ka'ākaukukui. Situated between South and Coral Streets. (Cited in Māhele Claims 2045, 7712 and 10605; and historical surveys; and Register Map No.'s 111, 611, and 1090.)

Maly and Maly also discuss two other little-remembered place names in the Pu'unui vicinity: "Ahuaiiki" and "Ka'ala'a."

Ahuaiiki (Little mound/hillock) Honolulu. A fish pond/salt pond area situated in
Also Ahukai Kukuluaē'o, bounded on east side by the 'Auwai o
(Shoreward cairn) Pākī. (Cited in Māhele Claim 982.) (Cited in Maly and Maly 2013:27.)

Ka'ala'a (Vigorous) Honolulu. A *lele* land of Honuakaha, between 'Auwai
Also Ka'ala'a lalo and o Limu and Queen Street. (Cited in historical accounts
Ka'ala'a luna and surveys; Māhele Claim 7712; and Register Map No.'s
611 and 1090.) (Cited in Maly and Maly 2013:31.)

The Maly and Maly report details a number of land claims associated with Pu'unui.

- LCA 2045 by Kauwahi for Puniai (Puniwai) notes the presence of a ditch (*'auwai*) and a little pond (*loko li'ili'i*). (Maly and Maly 2013: Appendix B:143)
- LCA 7712 *'āpana* 1 to Mataio Kekuanaoa for lands at Ka'ākaukukui indicate the parcel which included ditches and walls) as partly bounded by Pu'unui (Maly and Maly 2013: Appendix B:143)
- LCA 10605 to Iona and Kamake'e Pi'ikoi for a land known as Pualoalo mentions Pu'unui as bounding a portion of the property and indicates fishponds in the immediate area (Maly and Maly 2013: Appendix B:176)
- Kamake'e Pi'ikoi's large Parcel 7 claim of 270.84 acres is partly bound by Pu'unui and notes *'auwai* and ponds (Maly and Maly 2013: Appendix B:176)
- LCA 1082 to Kekuanui mentions *kai pa'akai* or salt beds and a *loko* (fish pond) at Pu'unui (Maly and Maly 2013: Appendix B:238)
- LCA 8844 to Kekuanui mentions several *loko i'a* (fish ponds); several *kio pua* (fry ponds), and several *kaheka pa'akai* (salt making ponds) (Maly and Maly 2013: Appendix B:241)
- LCA 9534 to Kaehuokalani mentions two ponds at Pu'unui (Maly and Maly 2013: Appendix B:241)

In 1874, the Boundary Commission recorded testimony for Pu'unui that included passing reference to one or more house sites (*pāhale*), fishponds (*loko i'a*), and salt lands (*'āina pa'akai*) (Maly and Maly 2013: Appendix C:148). In 1880, there was a dispute over Pu'unui lands but few additional details of land use are provided (Maly and Maly 2013: Appendix B:243).

These LCA accounts emphasize the fishpond and salt works resources associated with Pu'unui. Literature of this entire area other than in the LCA testimony remains very meager.

One of the very few, detailed, early accounts of the large area just east of Honolulu (cited by Maly and Maly 2013: Appendix A:77–80) is from an article in the Hawaiian language newspaper *Kuokoa* from August 8, 1868 chronicling a little trip (*wahi huaka'i māka'ika'i*) west from Pālolo. The eloquent author is showing us the sights (*māka'ika'i*) calling out notable of famous (*kaulana*) places of note. The author relates being at the place with the distinguished name (*inoa hanohano*) of Mō'ili'ili and reaching a famous low area of land (*he wahi hā'alu kaulana*) called Kaluaohau and crossing a stone bridge over Mānoa/Pālolo Streams near the old Church and then mentions the coral plain of Kapa'akea. This plain (in the general vicinity of Husten Street) would have had a certain novelty because of the exposure of raised reef limestone [*"kapa'akea"* meaning "the coral or limestone surface" (Pukui et al. 1974:86)] so far inland. The raconteur then relates his impressions of the place.

You then meet with the eastern side of the famous plain [*kula kaulana o Kahua*] of Kahua, this is a fine kula land; wide and long, there are depressions and boggy areas in places, particularly in times of great rain. Some two miles beyond, you arrive at the chiefly city [*ke kulanakauhale Ali'i*].

There is little between Kapa'akea and the "Chiefly City" to draw his attention on the *makai* side. The author sees fit to comment on a number of *mauka* attractions including the following:

- the beautiful open valley of Mānoa (*ke awawa nani o Mānoa*)
- the distinguished high school of Kapunahou (*hanohano nui ka hale kula ki'eki'e o Kapunahou*)
- the fine meeting house of Makiki (*hale halawai maika'i*)
- the majestic house of the Rev. P. J. Gulick (*a me kēkahi hale ki'eki'e nani e a'e, no Rev. P. J. Kulike*)
- the famous girl's school of Makiki (*ka hale kula kaikamahine kaulana o Makiki*)
- the famous hill Puowaina (*ka pu'u kaulana o Puowaina*)

However, on the *makai* side the only things of note were the following:

- a new thing of beauty...a large wooden wall of Mr. McCully (*he nani a he mea hou...he pā la'au nui a hanohano no Makale*)
- a large grinding wheel [or windmill] (*he huilawai nui*) there
- [a] growth of 'e'a bananas of the wild (*ka 'e-'a mai'a o ka wao*)
- A large hay lot for horse feed (*he pā mau'u nui 'ai a ka lio*) [where there were] several hundred men working (*he mau haneri kanaka paha e hana*) [and] many large houses in which the hay is kept and the salt stored so that it will not go bad (*a he mau hale nui*)

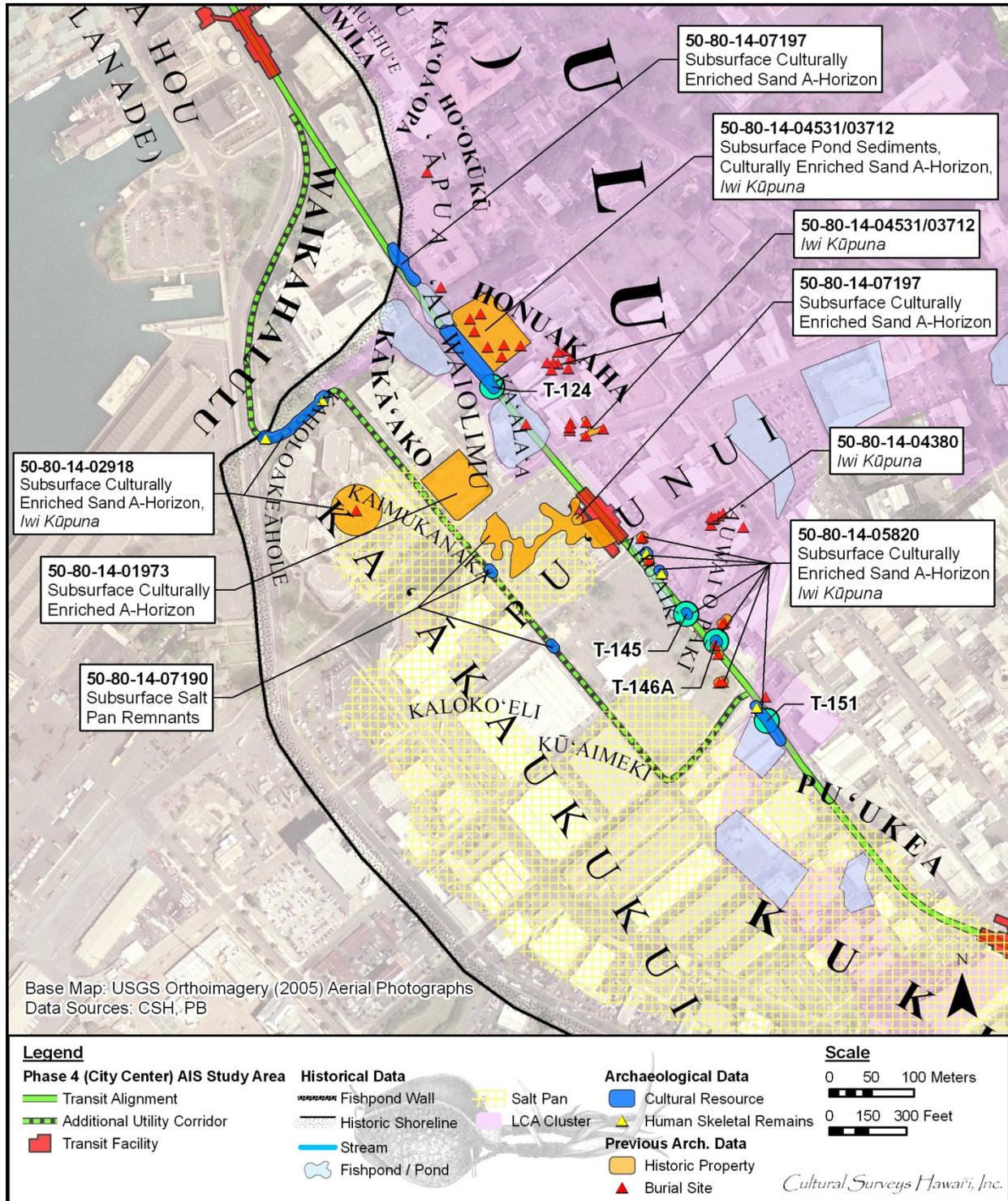


Figure 278. That the vicinity of Pu'unui was a focus of Hawaiian activity is indicated by four relatively early (95% probability ranges within AD 1450–1670) carbon dates from excavations T-124, T-145, T-146A, and T-151

- *e waiho ai na mau'u i ho'onoho papa ia, a he mau kaledesona pa'akai ke ho'opau ia ma ia hana)*
- [then there is] Pawaa, and we then go between the kula land, where above is the horse track, and makai is Kewalo. Now we come near the entry of the city (*hele aku nei kākou iwaena pono o ke kula, aia mauka kahi heihei lio, a makai mai o Kewalo, a kokoke komo i ke kūlanakauhale*)

West of the enterprises of McCully and the seemingly Scottish or Caledonian (*kaledesona*)-run salt works only a horse race track bears mention before reaching the city.

4.4.5 'Ulu or Breadfruit

The taxa identifications of charcoal samples from the archaeological inventory survey yielded five identifications of 'ulu or breadfruit wood from three test excavations (T-120A, two proveniences; 226A two proveniences and 226 B). This finding suggests that breadfruit trees may have been more common in the areas near the HHCTCP City Center section than is generally understood. The work of Maly and Maly appeared to be a favorable opportunity to review references to 'ulu in the history of the City Center corridor.

Maly and Maly (2013:10) relate the story (see Handy et al. 1972:449) of how the goddess Papa (also called Haumea) learned that her husband Wākea was being taken to Pākākā Heiau to be offered in sacrifice.

Papa ran to Wakea and embraced him. She then took the form of an 'ulu (breadfruit) tree, enclosing Wakea within the tree and thus rescued him. The place at which this occurred is at Waikahalulu, near the present day Lili'uokalani Botanical Park on School Street, a short distance above the lands of Kou.

A related account is given sourced to Kamakau (cited in Maly and Maly 2013:16).

On the east bank of the Nuuanu stream at Puehuehu, the old name for the stream where it is crossed by the Nuuanu Street bridge, stood a very famous breadfruit tree, regarding which Kamakau (49) writes: [page 82]

On my going to see the place where the breadfruit stood, whereby Kamehaikana became a goddess, I found it at Nini, a short distance above Waikahalulu. This breadfruit became a deity, known as Kamehaikana, a goddess famous from Hawaii to Kauai, for its power and ability to overthrow governments. It was one of the deities of Oahu, and was taken by the chiefs of Maui at Hana, and became a deity of Kamehameha when he ruled the land.

Maly and Maly (2013:41) note a place name in Kapālama called "Kumu'ulu" (Breadfruit Tree).

A sojourn in Honolulu in 1825 by officers with Lord Byron notes healthy breadfruit trees in Kalihi (Maly and Maly 2013: Appendix A:13).

An account of Honolulu by W. Laird MacGreggor in the Hawaiian Gazette in 1876 (Maly and Maly 2013: Appendix A:85) notes the presence of breadfruit among other shade trees.

The frequency of references to 'ulu in the Maly and Maly (2013) study does not appear to support a large role for this cultigen in the traditional Hawaiian society of Kona District O'ahu and the apparent relative abundance in charcoal analyzed may be an artifact of the relatively small sample size.

4.4.6 Archaeological Finds Relating to *Wahi Pana* and Possible Traditional Cultural Properties

The HHCTCP City Center corridor traverses a wide swath of western Kona District O'ahu that is rich in tradition and history. Many places along the route have been regarded as "*wahi pana*" (*wahi* meaning "place," *pana* meaning "celebrated, noted, or legendary place"). Kumu Pono Associates, LLC (2013) is actively as of March 2013, preparing a Traditional Cultural Properties Study Technical Report and has assembled a draft listing of possibly particularly prominent *wahi pana* (see Table 43). This project is a work-in-progress at this time, and the oral history portion is on-going. Thus this draft listing is subject to potential significant change. *Wahi Pana*, or Hawaiian "storied places" may or may not constitute "Traditional Cultural Properties" under National Park Service criteria. (See *National Register Bulletin Guidelines for Evaluating and Documenting Traditional Cultural Properties*, Parker and King, revised 1998; www.nps.gov/nr/publications/bulletins/nrb38/.)

The draft listing supplied in Table 43 evaluates traditional Hawaiian places as particularly celebrated, noted, or legendary in terms of five general categories:

1. Places where the gods and demigods walked the land
2. Places of ceremonial importance, tribute sites, places associated with the dead and spirit world
3. Notable events and individuals in Hawaiian history
4. Places of traditional resource management
5. Trails and boundary markers

The archaeological data compiled in the course of this archaeological inventory survey offers little or nothing new directly relating to these criteria other than the identification of two burials and inferential evidence of the probable proximity of burials in the identification of disarticulated human skeletal remains in a disturbed context.

Archaeological finds that suggested the possibility of inferences for wider cultural patterns focused on three discrete geographic areas: 1). Kaluaopalena, Kalihi, 2). Pu'ukolo (Chinatown), and 3). Pu'unui, (Kaka'ako) Honolulu.

In the case of Kaluaopalena, Kalihi the find(s) of note (SIHP #50-80-14-0725) were simply relatively early dates in a range of 1480 AD to 1650 AD. While this is not a particularly early date for Hawaiian archaeological sites, this was the oldest date range recovered in the archaeological inventory survey. The cultural feature actually identified (an *imu* or earth oven)

Table 43. *Wahi Pana* along the HHCTCP City Center Segment (adapted from Maly and Maly 2013 [Draft])

Wahi Pana	Ahupua'a	Description	Theme*
Hale Hui (gathering house)	Honolulu	Kamehameha's compound at Kou (Cited in J. P. 'I'i 1959; P. Rockwood map 1957; and W. Judd 1975) Also described like a <i>heiau</i> for lesser gods by J. P. 'I'i in his personal story of life in the Kamehameha household (See Technical Report page 8).	2, 3
Hale Kauwila (house made of Kauwila wood) (See also Kauila .)	Honolulu	Historical name given to area adjoining Pākākā and the old Fort, and the street which bears the name Hale Kauwila (Kuloloia shoreline section). The name was given to one of the large thatched structures built in the 1820s by the Chiefs, and was the place where the King, his Council, Governor/Judge Kekua'oa, the Legislature, Board of Land Commissioners and many other offices of the Kingdom met. It was at this place that many of the major decisions of the Hawaiian Government were made (cf. J. P. 'I'i 1959 and S. M. Kamakau 1961). It was this structure that gave rise to naming Hale Kauwila Street (Cited in traditional and historical accounts and narratives; and Register Map No.'s 241, 242, 864, 1910, 1955, and 2609). For example, Brigham (1908:111) recounts an 1837 meeting that took place at Hale Kauwila ("council chamber"). The meeting involved the King, Kauikeaouli (Kamehameha III), his sister Nāhi'ena'ena, his wife Kalama, Boki, and other chiefs and representatives of France, England, and the United States. Hale Kauwila was a thatched house built of <i>kauwila</i> wood. The rafters were taken from the sacred house of Līloa at Waipi'o, Hawai'i, a burial place of chiefs (Pukui et al 1974.) <i>Kauila</i> wood is associated with the <i>akua</i> Kū (Valeri 1985) thus imbuing the Hale Kauwila with sacred qualities associated with the god.	2, 3
Hale o Lono (House of Lono)	Honolulu	A <i>heiau</i> , and for a time, the residence of Liholiho (Kamehameha II), once situated at the area marked by the corner of Fort and Queen Streets (Cited in J. P. 'I'i 1959 and map by P. Rockwood 1957).	2, 3
Honoka'upu (Albatross Bay) (See also Kauanono'ula .)	Honolulu	A coastal land situated west of Kuloloia. Named for a chief and husband of Kauanono'ula. The Hale Hui and Hale Kā'ili (houses of the gods) were situated here in the area between what is now Queen and Merchant Streets. The ancient trail from Waikīkī, joined the trail of Honuakaha and continued to Honoka'upu, where a noted fresh water spring was situated, and continued on the Ai'ēnui. (Cited in J. P. 'I'i 1959, map by P. Rockwood 1957; traditional and historical accounts and narratives; and Register Map No. 900)	3, 4, 5

Wahi Pana	Ahupua'a	Description	Theme*
Honuakaha (Marked earth or coastal land)	Honolulu	A land area bounded by Queen and Punchbowl Streets, once the site of an important coconut grove; former residence of Kīna'u (<i>k.</i>) father of Chiefess M. Kekau'ōnohi. (Cited in J. P. 'Ī'ī 1959; map by P. Rockwood 1957; Māhele Claims 677, 680, 683, and 729; and Register Map No.'s 241, 611, and 900). Property described in association with trails in the Kona District. "Let us return to where the trail from Waikiki met the trail from Honuakaha, <i>mauka</i> of the Honokaupu spring." (See Technical Report page 102). Kekau'ōnohi was a noted historical figure, granddaughter of Kamehameha I, married to Liholiho. (See Technical Report page 238.)	3, 5
Ho'okūkū (to compete)	Honolulu	Area between Honuakaha and Honoka'upu, now covered by Queen Street. A healing <i>heiau</i> and a residence of Liholiho were situated here (Cited in J. P. 'Ī'ī 1959 and map by P. Rockwood 1957). Property is associated with Liholiho (his residence), the trail between Kālia and Kukuluaē'o, and the Papa <i>heiau</i> along the trail. (See Technical Report page 101.)	2, 3, 5
Ka'aloa (long roll)	Honolulu	Area below Kapu'ukolo (between Mauna kea and Nu'uuanu Streets), where chief Kuihelani kept his wealth (storage) houses; reportedly named for his father (Cited in Māhele claims; S. M. Kamakau 1868; and P. Rockwood map 1957). Kuihelani is described, "Kuihelani was an important person there, for he was of high station. He had many people to serve him, his wives were many, and his household was large." (See Technical Report page 104.)	3
Kākā'ako (strike and gather)	Honolulu	A land area, ancient fishing village and historic community, situated between Honuakaha and Kaholoakeāhole. In the historic period a section of the land was used as a quarantine for plague victims (Cited in J. P. 'Ī'ī 1959; map by P. Rockwood 1957; Māhele Claims 3455 and 4457; and Register Map No. 900). Property is named in the tradition of 'Ai'ai, Son of Ku'ula (fish god). (See Technical Report page 56.)	1
Kalanikahua (the royal contest arena) (See also Kīkīhale .)	Honolulu	The <i>'ulu maika</i> field and warrior training ground during the time of Kamehameha I at Kīkīhale. Adjoining Kalanikahua was a number of houses of the sacred high chiefs. The area is now generally under the alignment of King Street (Cited in J. P. 'Ī'ī 1959 and P. Rockwood Map 1957). Also named in association with trails in the Kona district. (See Technical Report page 103.)	2, 5

Wahi Pana	Ahupua'a	Description	Theme*
Kalāwahine , (the day of women)	Honolulu	A land section reportedly named for a <i>mo'ō</i> deity who guarded the water sources (Pukui et al. 1974) (Cited in historical accounts; Māhele Claims 1034/8400 and 2938; historical surveys; Register Map No.'s 111 and 395; and Pukui et al., 1974).	1, 4
Kālia (waited for)	Waikīkī	An <i>'ili</i> land of the coastal region of Waikīkī, noted for its numerous salt works and fishponds. "The trail from Kalia led to Kukuluaeo" (Cited in J. P. 'Ī'ī 1959; Pukui et al. 1974; traditional and historical accounts and narratives; Māhele Claims 97 F.L., 100 F.L., 101 F.L., and 387; historical surveys; and Register Map No.'s 111 and 1090). Property is associated with chief Hua a Kamapau (Technical Report page 78) and Kamehameha I (Technical Report page 99).	3, 4, 5
Kali'u (salted) (Also written Kali'u lalo and Kali'u luna .)	Honolulu	A land named for a man of the same name, who lived in the area during the time that the goddess Papa prepared to rescue her husband from being sacrificed at the <i>heiau</i> of Pākākā. The area was once without water except when it rained. Because of his good nature, Papa created the spring, Pūehuehu to relieve the people of their need to gather water from afar (J. Poepoe, " <i>Ka Moolelo Hawaii Kahiko</i> " May 8–15, 1906) (Cited in Māhele Claim No.'s 6236 and 11225; historical surveys; and Register Map No.'s 241 and 242).	1, 4
Kalua-pakohana (the open/exposed grave)	Honolulu	A land area situated in the Ka'aloa-'Ai'ēnui vicinity where the chief Kuihelani lived, and where he was buried (Cited in Māhele Claims and Register Map No. 900). Kuihelani is described by J. P. 'Ī'ī as an important person who managed the King's property. (See Technical Report page 104.) In other accounts (Simpson 1938:54) Kuihelani is described as the governor of O'ahu appointed by Kamehameha I.	2, 3
Ka'oa'opa [No translation provided.]	Honolulu	Coastal section of land between Moku'aikaua and Honuakaha. Area crossed by the trail from Honolulu to Kākā'ako and beyond, where attendants of Liholiho resided in the time of Kamehameha I (Cited in J. P. 'Ī'ī 1959; map by P. Rockwood 1957; and Māhele Claims 19 and 129). (See Technical Report page 102.)	5
Kauanono'ula (the red glowing rain) (See also Honoka'upu .)	Honolulu	Named for an ancient chiefess, and wife of Honoka'upu. Early historic buildings once stood here, among which was the former Sailors Home (Cited in S. M. Kamakau 1961; traditional and historical accounts and narratives; and Register Map No. 1390). The story of the beautiful chiefess Kauanono'ula is recounted in an article published in <i>Nupepa Kuokoa</i> of Jan. 24, 1919. (See Technical Report page 125.)	3

Wahi Pana	Ahupua'a	Description	Theme*
Kewalo (the calling)	Honolulu	A <i>kula</i> land and coastal region, noted for its fish and salt ponds. There was once a famous spring at Kewalo near the ponds, where victims of sacrifice at Kānelā'au Heiau on the slopes of Pū'owaina were first drowned. "The priest when holding the victims head under water would say to her or him on any signs of struggling, ' <i>Moe malie i ke kai o ko haku.</i> ' 'Lie still in the waters of your superior.' From this it was called 'Kawailumalumai,' 'Drowning waters'" (<i>Saturday Press</i> , Oct. 6, 1883). The law under which the sacrifices were made, was called Kekaihehe'e. (Cited in traditional and historical accounts and narratives; Māhele Claims 97 F.L., 100 F.L., 101 F.L., 387, 1503, 1504, and 10605; and Register Map No.'s 111, 611, and 1090)	2, 4
Kīkīhale (mended house) (See also Kalanikahua .)	Honolulu	An <i>'ili</i> bounded by the modern-day King, Maunakea and Beretania Streets, and Nu'uaniu Stream. Reported to have been named for a daughter of the chief, Kou (Aiai 1902). In the time of Kamehameha I, Kīkīhale was the site of major <i>'ulu maika</i> and training warrior fields in Honolulu; and also the residence of a number of high chiefly families (J. P. 'Ī'ī 1959) (Cited in P. Rockwood Map 1959; traditional and historical accounts and narratives, and Register Map No.'s 241 and 900). Kīkīhale, as daughter of Kou, is named in the story about 'Ai'ai, son of fish god Ku'ula. (See Technical Report page 57.)	1, 2, 3
Kolowalu (an ancient law)	Honolulu	A section of land in Kukuluāe'o, and adjoining Kālia. During the reign of Kūali'i, the "Royal Kolowalu Statute" was declared for the "preservation of life," making it safe for people to travel the trails, and to be respectfully treated (Cited in Fornander 1917; Māhele Claim 3142; historical surveys and narratives; and Register Map No.'s 111 and 1090). Kolowalu is connected by trails that cross Waikīkī and the Honolulu Region. (See Technical Report page 88.)	3, 5
Kou (the Cordia tree)	Honolulu	Said to be the ancient name of what is now called Honolulu. (Various features and named localities cited in historical narratives; Māhele Claims; and various Register Maps.) Kou was noted for <i>kōnane</i> (Hawaiian checkers) and for <i>'ulu maika</i> (an ancient game likened to lawn bowling) and said to be named for the executive officer (<i>Ilamuku</i>) of Chief Kākūhihewa (King) of O'ahu. (See Technical Report page 4.)	2, 3

Wahi Pana	Ahupua'a	Description	Theme*
Kō'ula (red sugar cane)	Honolulu-Kewalo	Kō'ula and Kewalo were lands which the ancient chief Hua, caused to be cultivated. Hua was known as a chief who cared for his people (S. M. Kamakau 1865). Land section covering the Catholic burying ground and the Ward family's, "Old Plantation" (<i>Saturday Press</i> , Oct. 6, 1883) (Cited in traditional and historical accounts and narratives). (See Technical Report page 78.)	3
Kukuluāe'o (the Hawaiian stilt)	Honolulu	A near shore land area in the Kākā'ako vicinity, traditionally a detached parcel belonging to Punahou of Waikīkī. "This was a famous place in ancient times, and the heiau was Puukea" (S. M. Kamakau 1865). Noted for its fish and salt ponds. (Cited in historical narratives; Māhele Claims 97 F.L., 387, 982, 1503, 7712, 10463, and 10605; historical surveys; and Register Map No.'s 111, 611, 1090, and 1471. Property is also linked with Hua a Kamapau, the chief of Honolulu/Waikīkī, through reference to the Puukea heiau. (See Technical Report page 78.)	2, 3, 4
Kuloloia (Also written Kuloloio .)	Honolulu	Once a beautiful sandy beach on the shore of Kou, and a favored residence of the high chiefess Nāmahana (wife of Ke'eaumoku, and mother of Ka'ahumanu and other significant figures in the Hawaiian Kingdom). There were a number of chiefly houses and heiau spread across the shoreline of Kuloloia, between Pākākā and Honuakaha. Nāmahana died at her home on the shore of Kuloloia, and "A younger cousin of Namahana's children, who was present at her death, was named Kuloloia for the place in which Namahana died" (J. P. 'Ī'ī 1959) (Cited in P. Rockwood Map, 1957; Māhele Claims outside of project area; and traditional and historical accounts and narratives). Also named in tradition of 'Ai'ai, son of the fishing god Kū-'ula. (See Technical Report page 11.)	1, 2, 3
Leleo (carrying voice)	Honolulu	Land and stream area. In the time of Kamehameha I the trail from Kīkīhale to 'Ewa passed over Leleo. The land was an open plain with few houses (J. P. 'Ī'ī 1959) (Cited in Māhele Claim 4747 and Register Map No.'s 241 and 900).	5
Mauna Kilika (silk mountain)	Honolulu	Named for the mounds of silk cloth traded by foreigners in exchange for Hawaiian products. Area of the former residence of chief Kekuana'oa, Governor of Oahu under Kamehameha III; and situated along the shore of Kuloloia. Area was later called Hale Kauwila, and is the source of the street with the same name (Cited in traditional and historical accounts and narratives and Register Map No. 900).	3

Wahi Pana	Ahupua'a	Description	Theme*
Nihoa (notched or imbedded)	Honolulu	Name given to an area of the Honolulu shore by Ka'ahumanu following a trip made to the island of that name, made by her, Kaumuali'i, and others. Situated <i>mauka</i> of Pākākā. Between Ka'ahumanu, Merchant, Fort, and Queen Streets; adjoining Pūlaholaho (Cited in J. P. 'Ī'ī 1959 and P. Rockwood Map 1957; and Register Map No. 900). (See Technical Report page 245.)	3
Niuheluwai (coconut going on water)	Kapālama	Identified as a place of residence of the goddess Haumea and considered by her to be sacred. The site of a battle between Haumea and Kaulu (Fornander 1917). Also the site of a later battle in which the forces of O'ahu and Maui fought; the waters of the stream were turned back, and the stream became damned by the corpses of men (<i>ibid.</i>) (Cited in Māhele Claim 1053 and traditional and historical accounts and narratives).	1, 3
Pākākā (to skim, as stones over water)	Honolulu	Site of an ancient <i>heiau</i> of human sacrifice, dedicated to the god Kūho'one'enu'u (Westervelt 1915). Later the site of the Fort of Honolulu, and residence of chiefs. In the historic period, the site was developed into "Robinson" wharf on the western side of Hale Kauwila Street; and later filled in (Cited in J. P. 'Ī'ī 1959; P. Rockwood Map 1957; and Register Map No.'s 241, 242, and 900).	1, 2
Pūhuehu (scattered spray)	Honolulu-Nu'uano	A stream and spring site (said to be an old name for Nu'uano Stream). The spring was made by the goddess, Papa, while visiting with the man named Kali'u (see Kali'u), who agreed to help her in the rescue of Wākea from being sacrificed at Pākākā Heiau (Cited in Boundary Commission proceedings and J. Poepoe in " <i>Ka Moolelo Hawaii Kahiko</i> ," 1906).	1, 4
Pūlaholaho ("Little Scrotum") (Charlton Square)	Honolulu	For a time, Kamehameha I lived at Pūlaholaho, later high chief Boki, built a store through which to sell/trade sandalwood near Pākākā, where Liholiho also built a larger wooden building. Boki's being smaller, it came to be known as "Little Scrotum" (S. M. Kamakau 1961). The great debt of the chiefs from operating their businesses with foreigners led to the neighboring land being named Ai'ēnui. A portion of Polelewa was later converted into use for the Bethel Church (Cited in Māhele Claim 626 and Register Map No. 900). A storied place of historical importance that is associated with Kamehameha I and III, Boki, Kaahumanu, and British consul, Richard Charlton. (See Technical Report page 119.)	3

Wahi Pana	Ahupua'a	Description	Theme*
Pu'ukea (white hill) (See also Kukuluāe'o .)	Honolulu-Kukulu-āe'o	An ancient <i>heiau</i> built for or by, Huanuikalāla'ila'i, a hereditary chief of O'ahu, who was born at Kewalo (Cited S. M. Kamakau <i>Iulai</i> 22, 1865 and M. K. Pukui 1991). Also associated with the ancient Chief Luanu'u who was taken there when he was dying. (See Technical Report page 79.)	2, 3
Pu'ukolo (creeping hill) (See also Kapu'ukolo .)	Honolulu	During the time of Kamehameha I's Kapu'ukolo residency in Honolulu, many fishermen and their families lived at Kapu'ukolo (J. P. 'I'i 1959) (Cited in Māhele Claims 22, 30 57, 66, 256, and 2065; P. Rockwood Map 1957; and Register Map No. 900). Named by J. P. 'I'i in his description of old Honolulu. (See Technical Report page 112.) Beckwith (1940:220) provides the following traditional account, "On Oahu the name Kipapala(u)ulu is given to the ruling chief of Honolulu living at Kapu'ukolo by the sea, who steals the magic fishhook of Kuula, god of fishing. Kuula wins it again through the marriage to the chief's daughter of a child fished up out of the water, who turns out to be the child (or grand-child) of Kuula, and who sends his wife to ask the hook from his father-in-law for a fishing expedition and thus returns it to his own parent."	1, 3
Waikahalulu (roaring water)	Honolulu-Nu'uaniu	An <i>'ili</i> land, the upper section being where the goddess, Papa, embraced her husband Wākea, who was being taken to be sacrificed at Pākākā Heiau, and changed into the form of an <i>'ulu</i> (breadfruit tree). This <i>'ulu</i> , became known as the deity, Kāmeha'ikana, who had the power to overthrow governments. Kāmeha'ikana was one of the gods called upon by Kamehameha I in his conquest of the islands (S. M. Kamakau 1991). The land area includes the section between Nu'uaniu and Pauoa streams, and a section on the shore, below Hale Kauwila Street, where it joins the sea at 'Āina Hou, and adjoining Kuloloia and Ka'ākaukukui (Cited in S. M. Kamakau 1961; Māhele Claim of H. Kalama, wife of Kamehameha III; traditional and historical accounts and narratives; Māhele Claim No.'s 7712, 11219, and 11225; historical surveys; and Register Map No.'s 242, 244, 305, 611, 861, 900, 1090, and 1471).	1

*Identified themes include 1) Places where the gods and demigods walked the land, 2) Places of ceremonial importance, tribute sites, places associated with the dead and spirit world, 3) Notable events and individuals in Hawaiian history, 4) Places of traditional resource management, and 5) Trails and boundary markers.

would have been ubiquitous on the traditional Hawaiian landscape. While data supports the proximity of two *heiau* (Hāunapō and Ka‘aleo) the exact location of these temples is not known and there is no reason to believe the *imu* was associated with either of these temples. The preliminary listing of 32 *wahi pana* in Table 43 does not suggest any particularly storied places specific to this area.

In the case of the finds in Pu‘ukolo (Kapu‘ukolo, Kapukolo), the archaeological finds relate more to the area’s subsequent history as a core portion of Chinatown (already a designated Traditional Cultural Property). Kumu Pono Associates, LLC does list Pu‘ukolo as a possible *wahi pana* on the basis of its having been a focus of the residence of fishermen and the association of the place with an account of a god of fishermen “Kū‘ula.” The archaeological data lends little further insight into these associations with the traditional Hawaiian place.

In the case of “Pu‘unui” the place name was noted as the most prominent named locale in the vicinity of a cluster of relatively early radiocarbon dates that indicated relatively early Native Hawaiian activity focused in the vicinity. “Pu‘unui” is not listed in the posited possible *wahi pana* in Table 43. Larger land sections in the immediate vicinity are called out as possible *wahi pana* including Kākā‘ako, Kukuluāe‘o, Kewalo, Pu‘u kea, Kolowalu, and Kālia.

By way of summary it is concluded that, in this case, the Traditional Cultural Properties Study Technical Report (Maly and Maly 2013 [Draft]) and this Archaeological Inventory Survey offer only modest overlap in elucidating our understanding of the traditional Native Hawaiian landscape. One reason for this is that so much of the traditional Hawaiian cultural focus along the City Center route was on the area that would become the core of modern downtown Honolulu located inland from the HHCTCP City Center section, which largely runs over what traditionally were coastal shallows. By our count approximately 22 of the 32 posited particularly notable *wahi pana* were in the core of modern urban Honolulu. This finding does indeed appear to be supported in all accounts that overwhelmingly the remembered places were in the “Chiefly city” (“*kūlanakauhale Ali‘i*” as the raconteur of 1868 cited calls it).

In what is now the core of urban Honolulu (largely inland of the HHCTCP route) famous *wahi pana* tended to have relatively-defined geographic specificity and specific cultural associations. As one moves away from core urban Honolulu the suggested storied places, such as Kewalo, Kukuluāe‘o, and Kālia, tend to be much larger land sections and the traditions less easily defined geographically. In some cases, such as Kolowalu (associated with an important ancient *kanawai* or edict) the reason for the fame would appear unlikely to be reflected by an archaeological reality. In other cases, such as Niuhelewai, where there certainly could be an archaeological reality associated (for example burials or sling stones associated with the battle), there have been no such finds to date.