

Land Commission documents including the current project area provide some insight on land use at Hō'ae'ae and Waikele. For Hō'ae'ae, in particular, it is clear that ranching was one of the main, early uses of the land in the 1800s. The Robinson family is depicted as having a ranching homestead in the makai-most portion of the ahupua'a, just inland of Pu'uloa (see Figure 11). After ranching, as discussed below, commercial sugar cane eventually was introduced to the current project area environs by the Oahu Sugar Co. around or soon after the turn of the twentieth century; the proximity of the Waiāhole Ditch (about 1.5 miles north and 0.75 northwest of the project area) is noteworthy, and was part of the reason these relatively dry plateau lands could be used for water-loving commercial sugar cane agriculture.

The Waikele portion of the project area is part of a relatively rare type of nineteenth-century land award, known as a "Mahele Award."⁸ According to Dorothy Barrère (1994), Mahele Awards were issued after the dissolution of the Land Commission (in 1855) by the Minister of the Interior to a chief or konohiki who had not yet obtained an award on land(s) recorded in the Mahele Book as quitclaimed by the King. The current project area is part Mahele Award no. 4 ('āpana 1) to Luluhiwalani, who received ½ of the 'ili of Pouhala, consisting of 2,829.2 acres (Royal Patent [R.P.] 4486). According to the Waihona 'Aina database,⁹ Simeona Luluhiwalani (male) was previously unsuccessful (starting in 1847) at obtaining a land award for Pouhala due to disputes with another claimant (Puhalahua). Land Commission records from 1847–8 provide some interesting historical and land-use information. First, the awarded land was described as having 4 house sites, although no specific location is provided for these. Second, Luluhiwalani is described as a konohiki, or caretaker/overseer, of these lands, who received the land in 1826 from Kamehameha III. And, lastly, Luluhiwalani described Ali'i Nui Victoria Kamāmalu (1839–1866), of the Kamehameha line, and the largest landowner in the Hawaiian Islands (cf. Indices of Awards 1929:60–64), as his "foster child," or hānai daughter. There are no other details as to maka'āinana (commoners) presence on this (Waikele) land, nor are there survey maps or other documents detailing land uses. The award was generally described, however, as kula land, which was broadly used to refer to relatively dry lands where irrigated agriculture was not traditionally practiced.

The Hō'ae'ae portion of the project area is part of Land Commission Award (LCA) no. 193 to Lewis Rees, totaling 3,453 acres; this award was described in the Indices of Awards (1929) as a "conditional Award." According to Waihona 'Aina, this claimant was also known as Liki. No survey map was produced for this award, but the Land Commission testimonies provide some clues as to land use and history. First, Rees claimed to have received the land "as pasturage" from Manuia in 1829. Second, like Luluhiwalani, Rees also had a conflict of ownership with another individual (Namaui, or Nāmau'u), who "has lately [in 1846] forbidden me to occupy it longer." Third, according to the testimony of one James Walker (in 1847), Rees "gave to Manuia half of the stock" he raised. Also, according to another witness, Kanui, when Rees received the land, "it was dry & without any value," but he worked and improved it. "The particular reason why [he] wished to go there, was that he might have better past[urage] and he has pastured goats, horses and cattle there, pasturing of animals being his business. Finally, another witness (Jatolo Uaka [Walker])—and there were many more given the contentious legal battle that apparently took place—stated "I did not see any natives living there [at Hō'ae'ae] at the time [referring to 1828 or 1829]. The general description of these Hō'ae'ae lands are that they were relatively dry and lacked water, and that much work by Rees had to be completed to make it useful for his purposes.

As Shideler et al. (2017:22) point out, the U.S. military had designs on Pu'uloa, which they called Pearl Harbor, as early as 1873, and linked obtaining control over it to offering the islands' burgeoning sugar cane industry free trade or reciprocity in exchange, as General Schofield's confidential report to the U.S. Secretary of War makes clear:

In case it should become the policy of the Government of the United States to obtain the possession

⁸ This is different from the more common Land Commission Award. Also, the modern Hawaiian spelling of this word is Māhele, but we use Mahele here since this is how it appears in historical documents.

⁹ <http://waihona.com>, accessed December 15, 2019

of this harbor for naval purposes, jurisdiction over all the waters of Pearl River with the adjacent shores to the distance of 4 miles from any anchorage should be ceded to the United States by the Hawaiian Government...

The cession of Pearl River could probably be obtained by the United States in consideration of the repeal of the duty of Sandwich Island sugar. Indeed, the sugar- planters are so anxious for a reciprocity treaty, or so anxious rather for free trade in sugar with the United States, that many of them openly proclaim themselves in favor of annexation of these islands of the United States. . .

Shortly thereafter, a reciprocity treaty was concluded (1876), and by 1887, the treaty was renewed and the U.S. received exclusive rights to enter and use Pearl Harbor for marine vessel repair, coaling, etc. (ibid.).

Commercial agriculture, starting first with sugar cane and then later pineapple, transformed O'ahu starting in the middle nineteenth century; other major commercial developments, such as the founding of the Oahu Railway and Land Co. (OR & L) in 1899, and artesian-well drilling for irrigation purposes, contributed to the success of the Oahu Sugar Company Co. in and around the current project area.

During the 1890s, the railroad reached from Honolulu around Pearl Harbor to the Wai'anae coast. A 1902 map (see Figure 12) shows the railroad reaching the shores of Waikele and Hō'ae'ae; this map also shows the current project area was part of a larger region of 'Ewa District dedicated to commercial sugar cane agriculture. In fact, the current project area is close to the upper (northern or mauka) limits of the sugar-cane belt stretching from the Waiawa in the east to Honouliuli in the west.

Shideler et al. (2017:28) discuss some details of the Oahu Sugar Company's size, scale and work force:

The Oahu Sugar Company was incorporated in 1897 and included lands in the foothills and central valley of O'ahu above the 'Ewa plain and Pearl Harbor. The 12,000 acres of land were leased from the estates of 'Ī'ī, Bishop, and Robinson and had over 900 field workers composed of 44 Hawaiians, 473 Japanese, 399 Chinese, and 57 Portuguese. The sprawling plantation "covered some 20 square miles . . . ranging in elevation from 10 feet at the Waipio Peninsula . . . to 700 feet at the Waiahole Ditch" (Condé and Best 1973:313). Prior to commercial sugar cultivation, the lands occupied by the Oahu Sugar Company were described as being "of near desert proportion until water was supplied from drilled artesian wells and the Waiahole Water project" (Condé and Best 1973:313). From 1890 to 1892 the Ranch Department of the OR&L desperately sought water for their herds of cattle by tapping plantation irrigation flumes and searching for alternative sources of water. Water to irrigate the *mauka* cane fields was initially pumped to elevations of 500 ft by some of the "largest steam pumps ever manufactured" (Dorrance and Morgan 2000:49). [note, this elevation level would include the center of the current project area] (brackets added)

Figure 13, a portion of 1913 USGS map, shows a fence line running through the southern (lower) portion of the current project area, cutting across it roughly from east to west. Around this time, and as a result of the high cost of pumping water upslope to the plateau lands of Waikele, Hō'ae'ae and other ahupua'a, the idea of transporting water from windward O'ahu gave rise to the famous Waiāhole Ditch system:

Sugar production at the Oahu Sugar Company, which likely included the land within the current project area, increased from 29,983 tons in 1915 to 50,005 tons in 1918. The expense of pumping water to the high elevations of the plantation led to the proposal to transport water from the windward side of the Ko'olau Mountains. The subsidiary Waiāhole Water Company was formed in 1913 to dig a tunnel through the Ko'olau range to transport runoff from the eastern side of the mountains. The Waiāhole Ditch was built . . . bringing water [to 'Ewa] via an interconnected network of irrigation flumes. (Shideler et al. 2017:38)

Figure 14, a portion of 1925 map showing the location and distribution of sugar cane fields of the Oahu Sugar Company, places the current project area in portions of field #s 22, 23 and 49.

According to the Hawaiian Sugar Planters' Association (HSPA) Plantation Archives,¹⁰ some day-to-day aspects of plantation life at the Oahu Sugar Company during these times were as follows:

The skilled employees at Oahu Sugar Co. came primarily from Germany. As typical of plantations during this time period, OSC faced a shortage of unskilled laborers with the exception of a small number of Hawaiian workers. Mostly laborers came from the Philippines, Japan, China, Portugal, and Norway.

Each employee received a house free of charge, complete with firewood, fuel, and water for domestic purposes. By the 1930s, garbage collection, street cleaning and sewage disposal were provided.

The plantation store sold produce and retail goods to employees at cost. Other store buildings were rented to tenants of various nationalities to give employees a wide choice in the selection of goods.

OSC provided clubhouses, athletic fields, and playgrounds. Baseball was a favorite past time and OSC's team maintained an outstanding record in plantation league tournaments. The Company donated labor and materials to local schools. A hospital was built in 1920 and the services of a resident physician were provided free of charge to unskilled employees. There was a moderate charge to skilled employees and "outsiders", people not employed with OSC, who sought medical assistance.

By 1925, the population of the plantation ranged between 9500-10,000 people. There were approximately 2,850 names on the payroll and it was estimated that at least ¾ of the residents of Waipahu earned a living in connection with the production of sugar.

The greatest portion of work performed at OSC was done on the "contract" or piecework system. For example, cutting and piling cane was paid for by the ton; plowing and planting was by the acre; irrigation, cultivation, and general care of the fields was based on crop yield.

Figure 15, a portion 1927 USGS map, shows plantation infrastructure within the current project area, including rail corridors labeled "Oahu Sugar Co." entering from the west and south, "cane haul" roads, and a major irrigation ditch traversing the southern (lower) portion (Waikele) of the project area. Another irrigation ditch is located just to the west and northwest. Robinson Camp 1, not shown on this portion of map, was located by this time north of the Waiāhole Ditch. A road depicted as entering the western (Hō'ae'ae) portion of the project area is SIHP # 50-80-08-7671 identified by Wong and Spear (2015) during their AIS investigation of the current project area. It is worth noting that this 1927 map shows a railroad running along parallel with the historic "cane haul" road.

Figure 16, a portion of 1935 USGS map, and Figure 17, a portion of 1938 geologic and topographic map by the U.S. Geological Survey, show more or less the same extensive build-out of plantation features as depicted in the 1927 map.

Figure 18, a portion of 1944 aerial image, shows some prominent irrigation ditches and roads in different parts of the current project area. A new, roughly north to south-oriented irrigation ditch is depicted in the western (Hō'ae'ae) portion of the project area. This new ditch is shown more clearly in Figure 19, a portion of 1953 USGS map; other new ditches are also shown in this 1953 depiction. If taken at face value, the 1953 map seems to also show that the railroad lines leading into and within the project area are no longer there.

Figure 20, a portion of 1977 aerial image, shows much the same configuration of roads and ditches as depicted on the 1953 map.

¹⁰ Source: https://www2.hawaii.edu/~speccoll/p_oahu.html, accessed April 2020

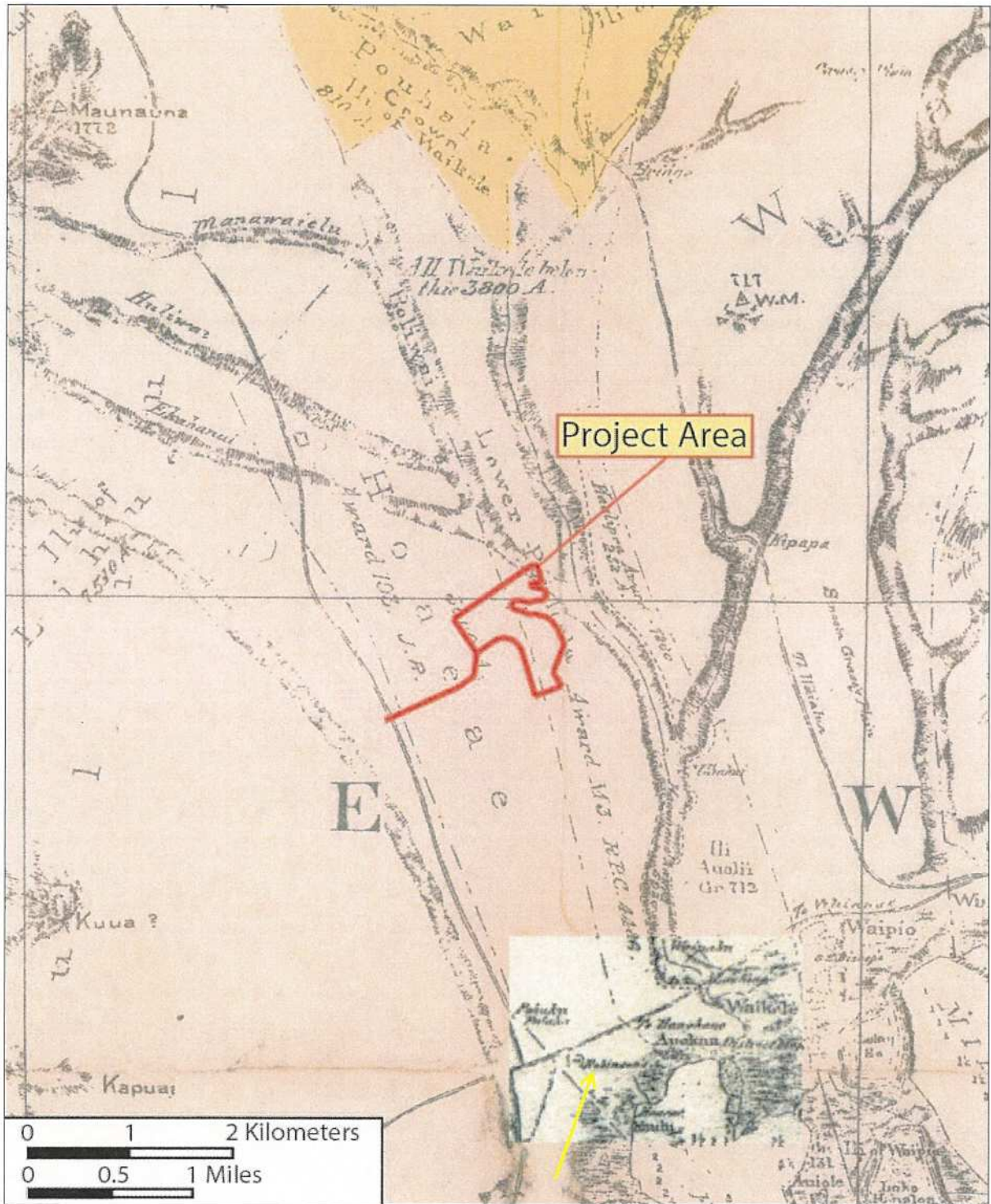


Figure 11. Detail of 1881 Registered Map #1381 showing Waialeale portion of project area as part of “Lower Pouhala”; yellow arrow in enhanced inset indicates place where the name “Robinson” is written next to small structures; see text (source: University of Hawai‘i-Mānoa’s digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

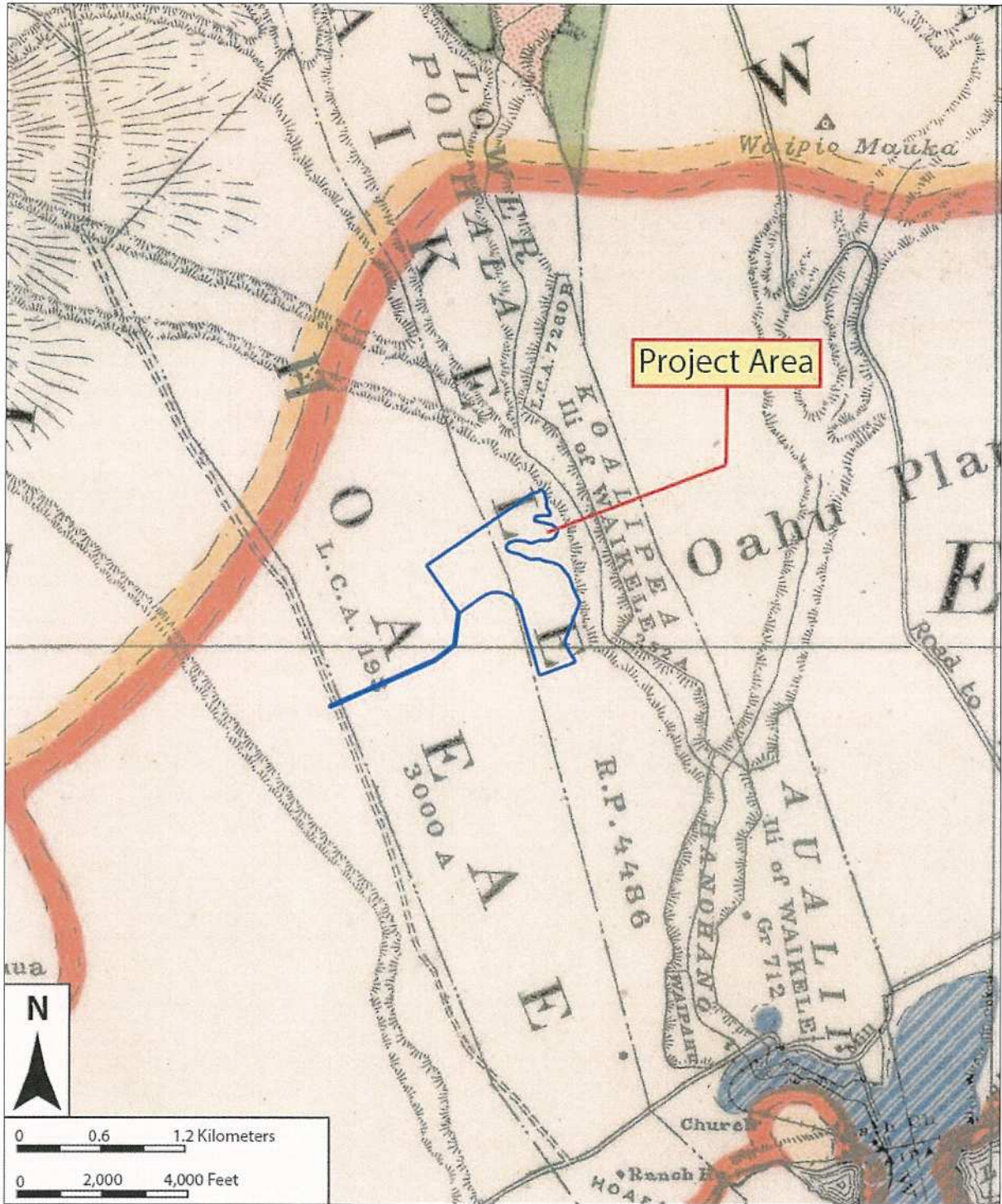


Figure 12. Portion of 1902 Donn/Wall map of O'ahu showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

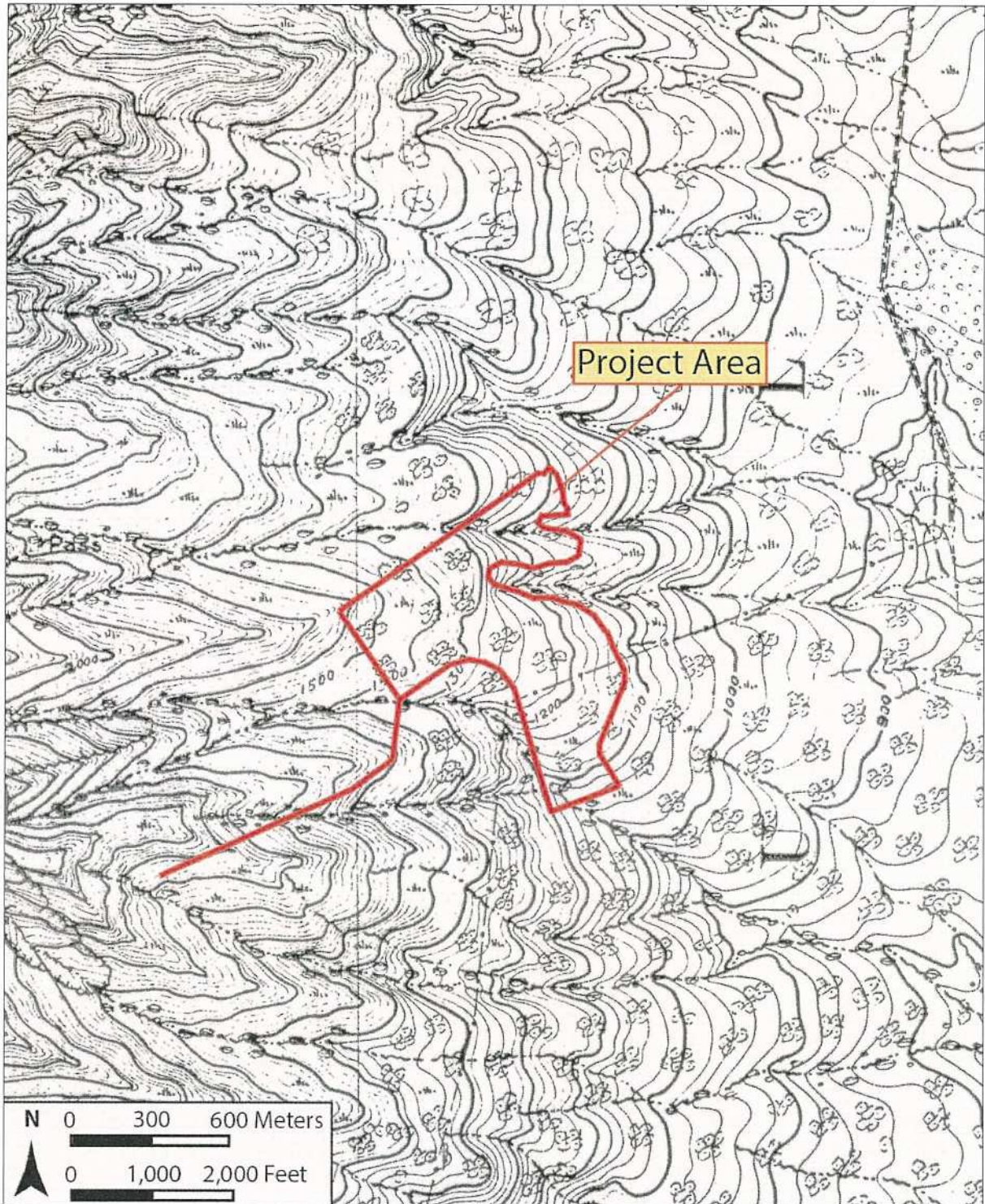


Figure 13. Portion of 1913 USGS topographic map (Schofield Barracks quadrangle) showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)



Figure 14. Portion of Condé and Best's (1973) map dated 1925 of the major commercial sugar cane fields of the Oahu Sugar Co., in relation to the current project area

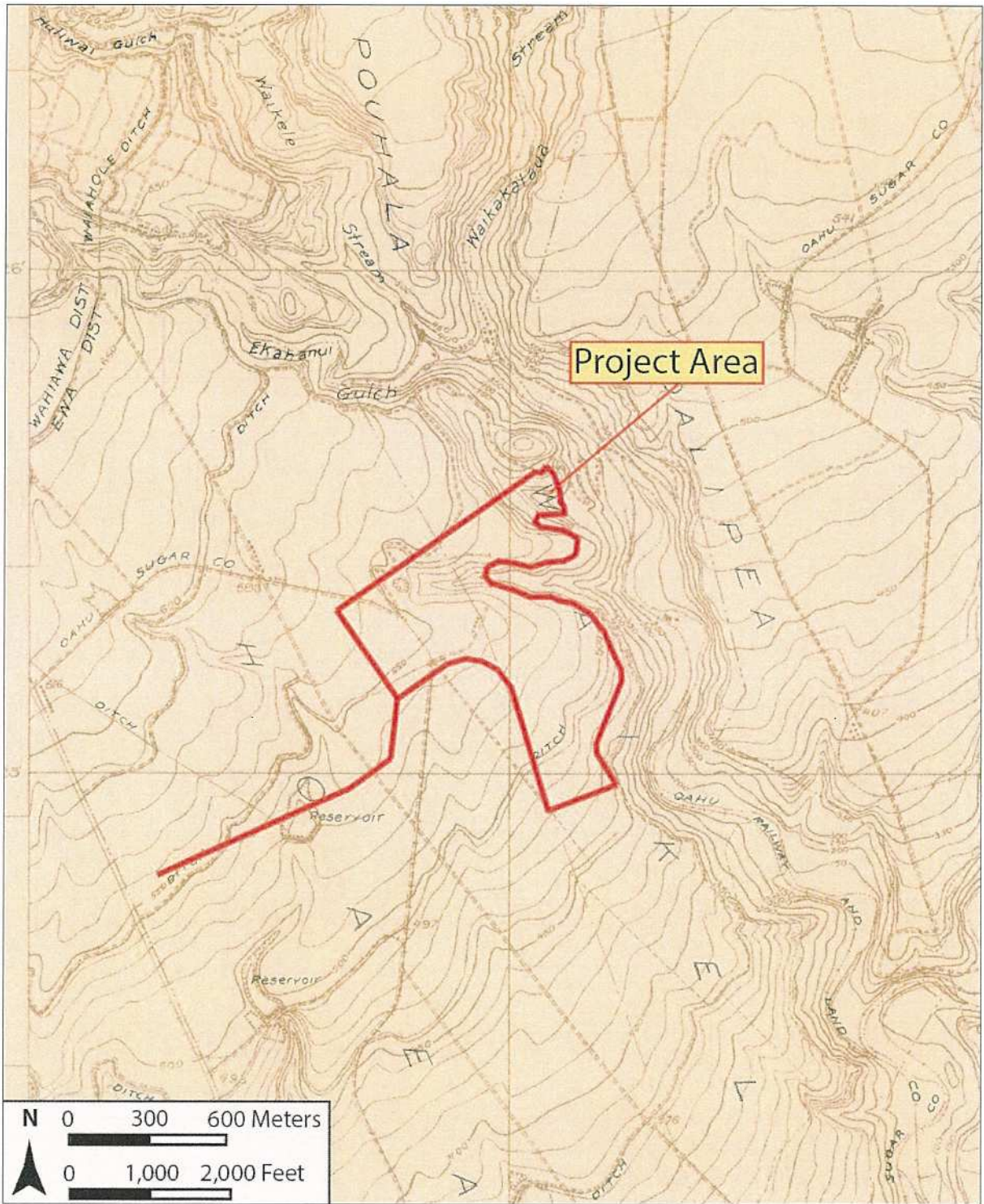


Figure 15. Portion of 1927 USGS topographic map (Waipahu quadrangle) showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

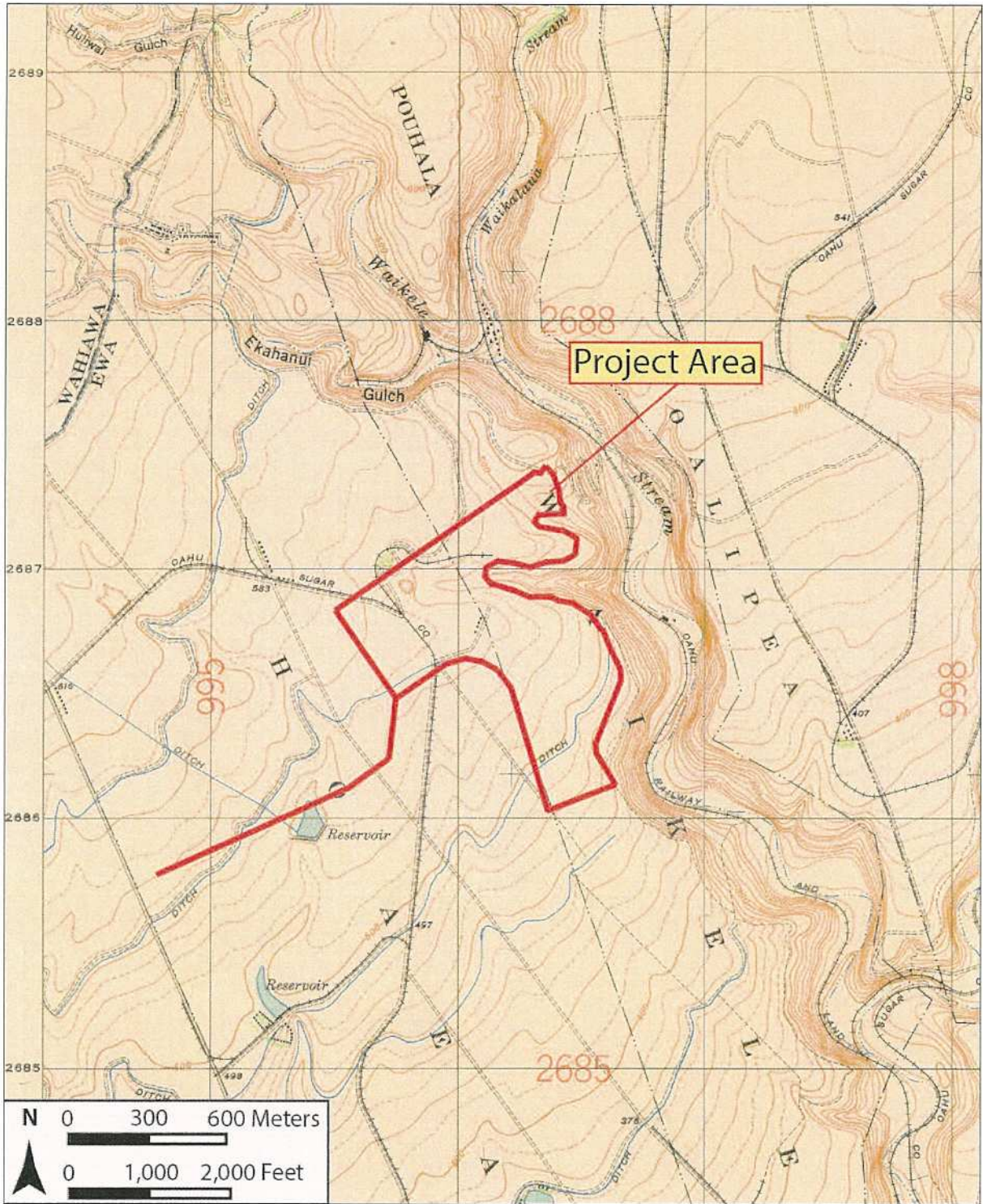


Figure 16. Portion of 1935 USGS topographic map (Waipahu quadrangle) showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

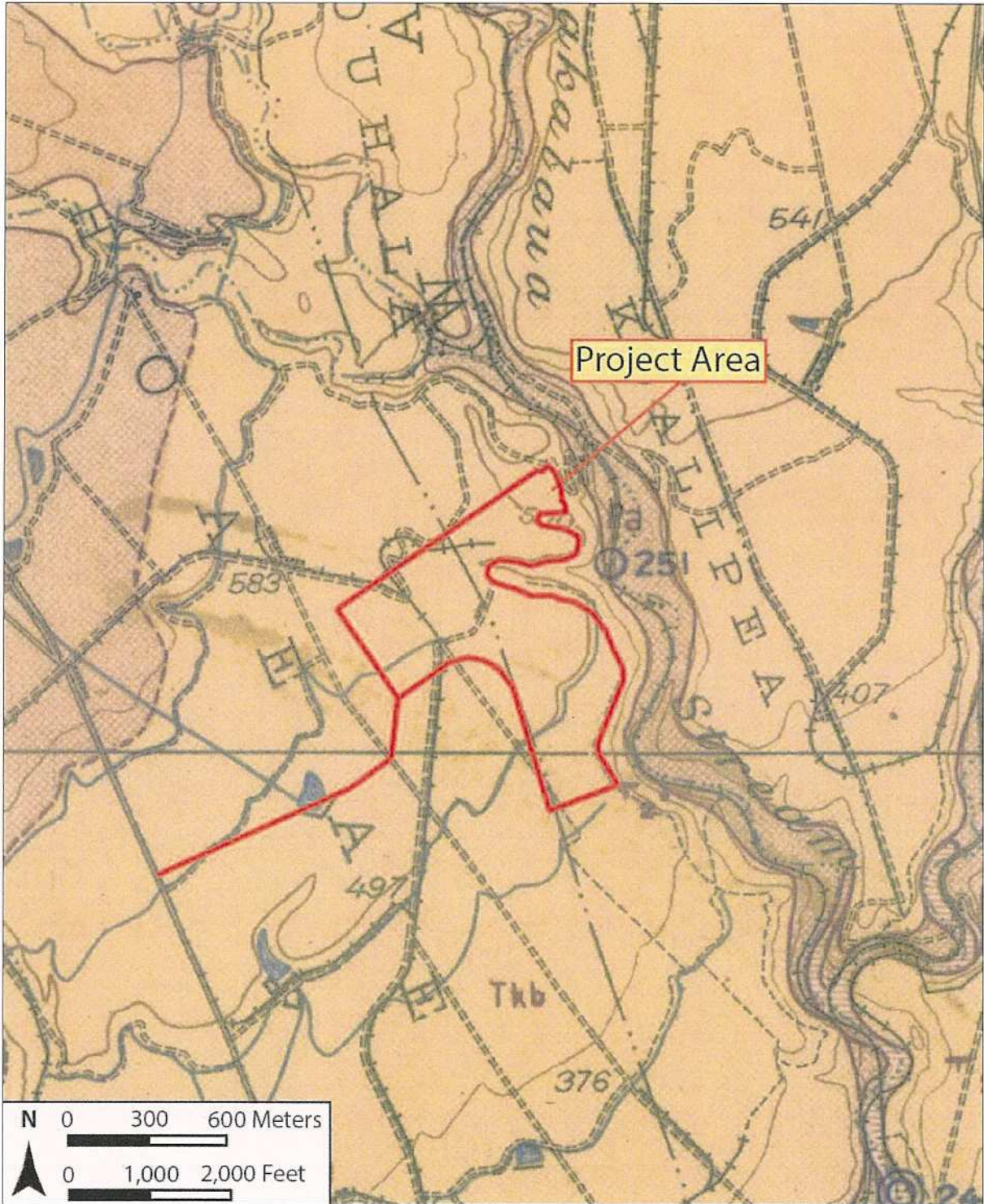


Figure 17. Portion of 1938 “Geologic and Topographic Map of the Island of Oahu, Hawaii” by the U.S. Geological Survey (source: University of Hawai‘i-Mānoa’s digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

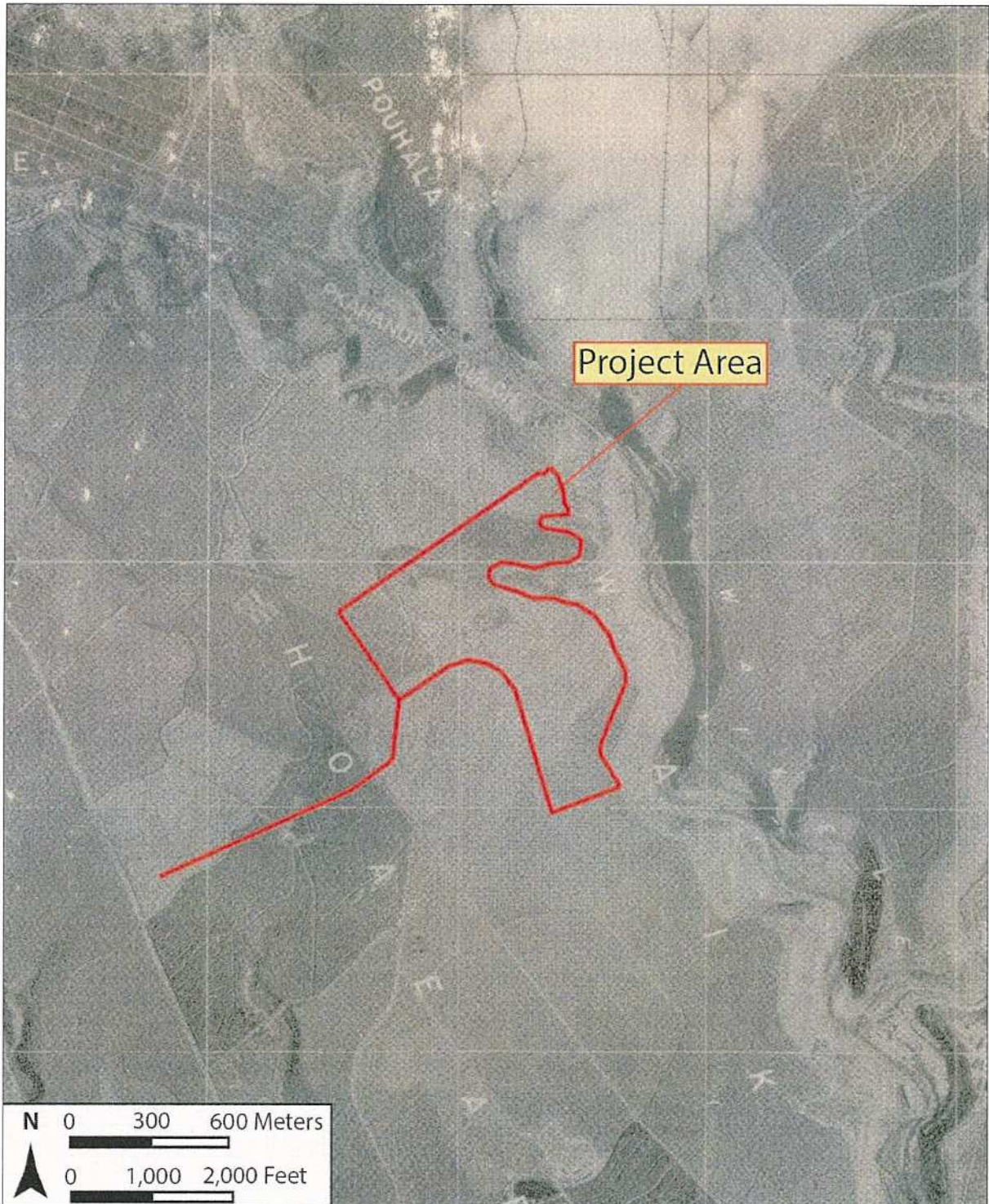


Figure 18. Portion of 1944 aerial image showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

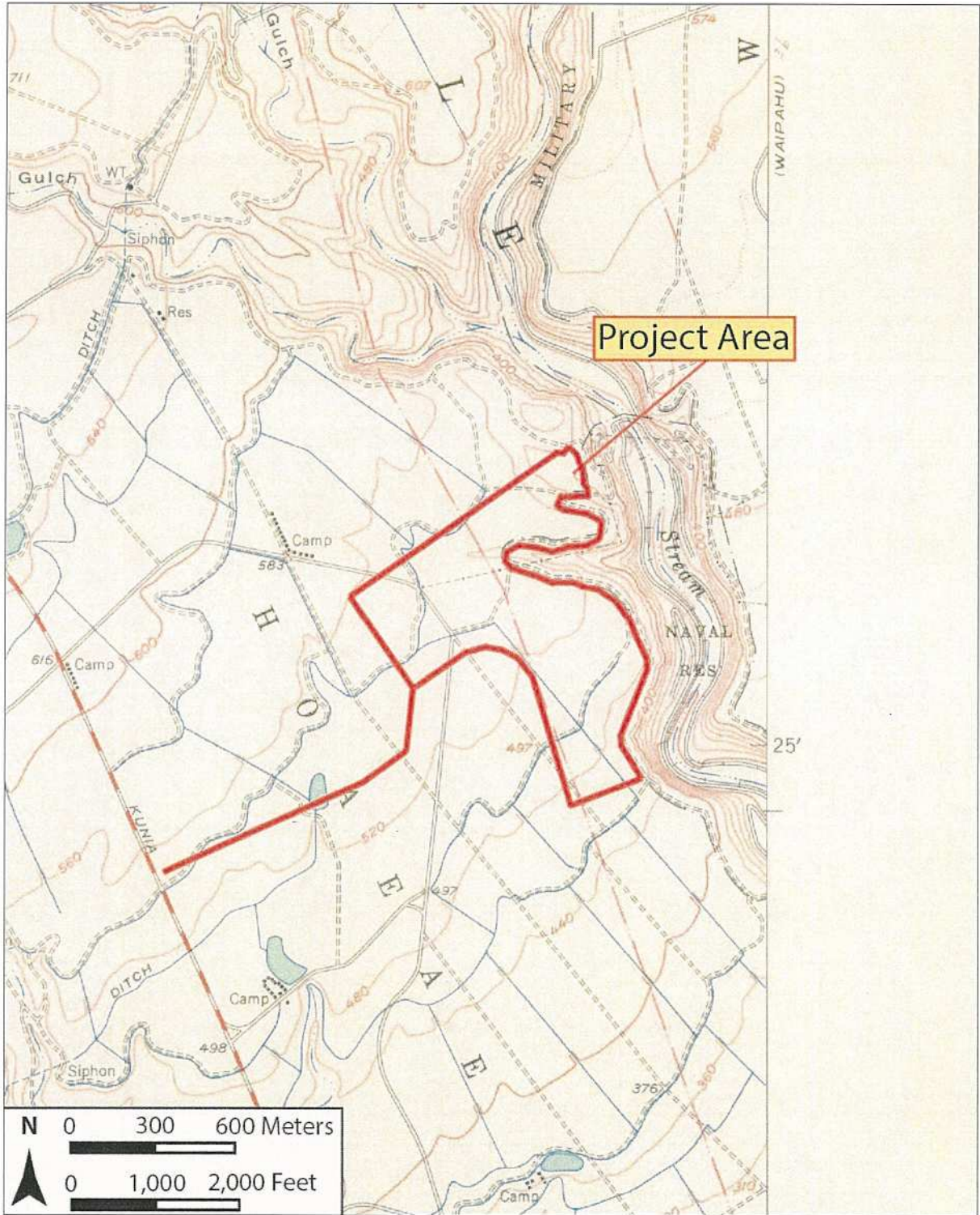


Figure 19. Portion of 1953 USGS topographic map (Schofield Barracks quadrangle) showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

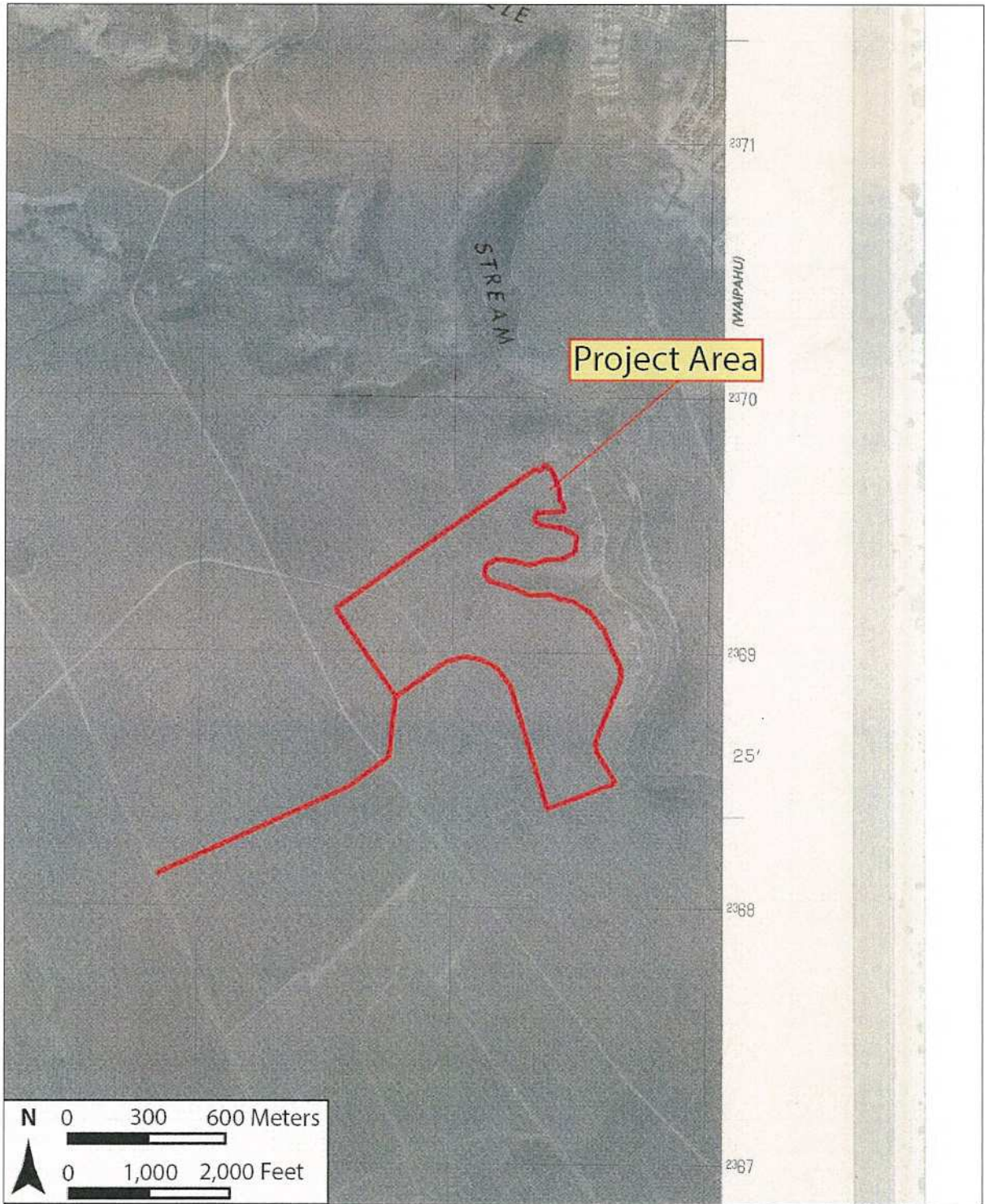


Figure 20. Portion of 1977 aerial photograph (Schofield Barracks quadrangle) showing project area location (source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

Historical-Period Newspaper Accounts about Waikele & Hō'ae'ae Ahupua'a

Newspapers and other popular accounts of Waikele and Hō'ae'ae provide insight into the land use, traditions, and lifeways of these places from the middle nineteenth century to the early twentieth. The digital newspaper archive maintained by the U.S. Library of Congress, "Chronicling America, Historic American Newspapers," is a rich resource for such information.¹¹

Shideler et al. (2017) provide an analysis for Hō'ae'ae—reproduced below verbatim. TCP Hawai'i conducted an analysis for Waikele and Pouhala (the project area's 'ili), as summarized below.

Hō'ae'ae in Historic-Period Newspapers

Shideler et al. (2017) preface their presentation of results for Hō'ae'ae by indicating they inspected 352 newspaper articles on the "Chronicling America..." digital database, spanning the time period from 1853 through 1918. They also note that the place name Hō'ae'ae (or Hoaeae) dropped out of common usage following World War I, "as it was replaced by more popular place names such as "Waipahu" (ibid.:31). Shideler et al.'s (2017:31–37) search of a dozen newspapers yielded the following information narrative, reproduced here verbatim (with minimal formatting changes and some editorial comments by TCP Hawai'i added in bold text in brackets):

Control of Access to Hō'ae'ae Lands

One of the most popular themes for Hō'ae'ae lands in newspapers is in small advertisements restricting access or "trespass." These start in September 1889 with a "Notice" promulgated by A.J. Campbell, Manager of Hoaeae Ranch, forbidding "shooting or trespass" (*Daily Bulletin* 4 September 1889 "Notice"). Some 98 trespass notices were identified in the *Daily Bulletin* (1889–1893), *Pacific Commercial Advertiser* (1892–1905), *Hawaiian Star* (1901), and *Evening Bulletin* (1901–1905). The trespassing prohibitions promulgated by Hoaeae Ranch are associated with A.J. Campbell, S.M. Damon, J.I. Dowsett, and J.M. Dowsett. M.P. Robinson is associated with trespass notices for Hō'ae'ae (1893–1905) that do not specifically reference the Hoaeae Ranch. In 1910, the Hawaiian Fibre Company, Ltd. was actively warning people not to trespass or shoot on their Hō'ae'ae lands (*Pacific Commercial Advertiser* 28 September 1910). These trespass notices reference "shooting," "shooting of game," "hunting," or "sportsmen," and it appears self-evident that unauthorized hunting on Hō'ae'ae lands was perceived as enough of a problem that it needed to be addressed repeatedly. One aspect of these trespass notices is that large landowners clearly believed they had the exclusive right to regulate public access to their lands from as early as 1889, during the [latter, or final] years of the Hawaiian Kingdom.

Hunting at Hō'ae'ae and Vicinity

The 98 identified trespass notices for Hō'ae'ae noted above all reference "shooting," "shooting of game," "hunting," or "sportsmen," indicating there was something to hunt at Hō'ae'ae. In the odd case of the shooting of Ah See in the back at Hō'ae'ae by the youths Willie Davis and Mark Robinson in August 1901, it is asserted that "[t]he boys had gone up into the mountains to hunt goats" (*Pacific Commercial Advertiser* 21 August 1901). Goats are understood to have been ubiquitous in the mountains of O'ahu ca. 1900. An article entitled "Will Stock Preserves with Pheasants Again" notes "[a] consignment of seventeen pheasants of three varieties arrived from Canada and California. These will be distributed among shooting preserves at Ahuimanu, upper Hoaeae and Sisal" (*Evening Bulletin* 5 February 1912). Therefore, it appears the prohibitions against trespass were largely focused on preventing the poaching of game birds.

¹¹ <http://chroniclingamerica.loc.gov/lccn/sn82014681/>, accessed April and May, 2020.

Diversified Agricultural Production at Hō'ae'ae

Cattle

Hoaeae Ranch is referenced in more than 50 articles between 1888 and 1901. It may be that the Ranch started earlier and lasted longer but it seems pretty clear sisal and sugar operations at Hō'ae'ae had eclipsed the Ranch as an economic and social force by the beginning of the twentieth century. Most ranches not associated with the Portuguese were typically meat cattle ranches; however, in early 1896 there were 25 advertisements for "Table Butter" from "celebrated dairies," including Hoaeae (*Pacific Commercial Advertiser* 20 February 1896 through 21 March 1896).

Horses

It was common for ranches to raise horses, particularly for horse racing. Accounts of famous O'ahu horses praised "Signal," a mare by "McClellan," imported in 1884 by Hoaeae Ranch to produce a number of stylish saddle and carriage horses (*Pacific Commercial Advertiser* 23 December 1903). In addition, injuries arising from training horses were common and are reported from Hoaeae Ranch in 1898 (*Pacific Commercial Advertiser* 13 January 1898).

Rice

Clearly rice production at Hō'ae'ae was a major enterprise, although we only have ancillary references are available:

- An article "Over the Oahu Railway Line" discussing the new OR&L railroad notes "[t]he road will reach the shores of the lagoon in Halawakai and from this point on to Hoaeae will run along the shores, passing through a continuous and unbroken rice field . . ." (*Hawaiian Gazette* 25 September 1888).
- An article on a railroad press excursion to visit the Haleiwa Hotel notes that in passing "[t]hrough the rice fields of Waipio and Hoaeae the speed was increased" (*Pacific Commercial Advertiser* 5 August 1899).
- An article on a domestic tragedy, "Suicided While Insane," notes that at the time of a Chinese woman at Hō'ae'ae taking strychnine, "her husband was out in the rice fields shooting rice birds . . ." (*Hawaiian Star* 21 November 1903).

Traditional Hawaiian Crops

The continuation of traditional Hawaiian agricultural practices at Hō'ae'ae in the 1853–1918 timeframe is uncertain. The newspaper accounts only record three references to taro. The first is in a dispute between Mataio Kekūānao'a [Governor of O'ahu, and married to Kīna'u, a daughter of Kamehameha I] and Charles Dana in 1856, which involved "a certain tract of kalo land and a fishpond adjoining situated at Hoaeae" and resulted in a "Marshal's sale" (*Polynesian* 7 and 21 June 1856). This suggests Hawaiian taro lands going out of Hawaiian ownership.

A second account is in the case of the murder of Tong Hoon Hoo at Hō'ae'ae. Hoo chased a burglar, Liung Yao, "across a taro patch" only to be shot dead (*Hawaiian Gazette* 17 October 1893; *Pacific Commercial Advertiser* 16 October 1893). In this time frame, many taro patches are believed to have been managed by Chinese, who converted them from taro production to rice production (and back) in response to market forces.

A third reference to taro is in an account of "Realty Transfers" from "M.P. Robinson et al. to Kum Sai Yuen of six taro patches" at Hō'ae'ae for 10 years at \$100 per year (*Hawaiian Star* 19 December 1903; *Pacific Commercial Advertiser* 19 December 1903). Again, this supports the

general belief that Chinese farmers were taking over former taro lands at the turn of the century for the production of taro and/or rice at Hō'ae'ae.

The only other reference to any traditional Hawaiian cultigens is in an account of "The Oahu Railroad Project," noting that the completion of the OR&L railroad to an interim terminus at Hō'ae'ae had the effect that "banana, vegetable and sugar culture have been stimulated and property has more than doubled in market value" (*Daily Bulletin* 14 July 1890). The indication is of commercial cultivation; there is no reference to the ethnicity of the cultivators.

Although a reference to a fishpond has been noted in the dispute above, between Mataio Kekūānao'a and Charles Dana in 1856, there is no other clear reference to fishponds at Hō'ae'ae in these newspaper accounts.

Sisal

Commercial sisal (rope) production was prevalent at Hō'ae'ae for a short period. The operation burst onto the scene in 1908 with the "Hawaiian Fibre Co.," when the following was reported:

Over 500 acres of new planting has recently been put out at the new plantation in upper Hoaeae and work is being vigorously pushed to cover the entire tract of some 1800 acres with sisal and the gulches with forest trees . . . The machinery of the company has been all overhauled and refitted and will immediately start up as the company now has 600 acres of matured plants ready to take off and 260 acres additional will be ready by the time the crop is harvested . . . The officers of the Hawaiian Sisal Company are Cecil Brown, president, M.P. Robinson, vice president . . . (*Pacific Commercial Advertiser* 30 May 1908)

Much of the initial transformation of lands at Hō'ae'ae may have been for sisal as documented in an article titled "Traction Plows for Hoaeae Sisal Lands":

The Directors of the Hawaiian Fibre Company decided to investigate the matter of traction plows for plowing Hoaeae lands adding 1200 to 1400 acres of sisal and forest to the six hundred acres the company has already planted there. The company has 'enough in sight to keep its machinery in operation night and day for a year. It will begin shipments by the next American-Hawaiian steamship.' (*Pacific Commercial Advertiser* 26 August 1908)

An article on "Sisal Planting" continues the bullish theme of rapid agricultural land development:

The Hawaiian Fibre Company is planning to plow with traction plows all the Hoaeae lands and plant the same in sisal and forest, adding from 1200 to 1400 acres to the 600 acres they already have planted there . . . The work of harvesting at the plantation at Sisal has begun and there is sufficient in sight to keep the decorating machine at work for a year. (*Pacific Commercial Advertiser* 30 August 1908)

A new place name, "Sisal," appears in 1910 (*Pacific Commercial Advertiser* 28 September 1910). One of the last accounts of sisal at Hō'ae'ae comes from a Maui Island source relating that control of the Hawaiian Fiber Company sisal growers passed to the Hawaiian Pineapple Company. The fiber company was said to have had about 1,800 acres at Hō'ae'ae and at Sisal, near 'Ewa:

About 1000 acres was planted to sisal, and has since the beginning of the world war enjoyed a considerable degree of prosperity . . . The prevailing high price of sisal is said to have been the reason which urged the pineapple company to take up the new industry. Plans have been made so that if there should be a decline in sisal prices after the war, the land can be planted to pineapples. (*Maui News* 7 June 1918)

Pineapple

At the end of the 1800s, pineapple cultivation showed promise in central O'ahu:

Pineapple cultivation by the Pearl City Fruit and Packing Company is a success in the uplands of Hoaeae in upper lands the company swapped for low lands. It is the intention of the company to ultimately move its cannery and packing plant to the plantation on the hills. (*Hawaiian Star* 13 January 1899)

However, there is no reason to believe a cannery was ever built in the uplands of Hō'ae'ae. A neighboring property was the holdings of "the California colony," where "pineapples, grapes, melons, strawberries, vegetables of all kinds and some fruit trees" were being cultivated (*Hawaiian Star* 13 January 1899). As noted above, in 1918, with the collapse of the sisal industry following the end of World War I, sisal lands appear to have been converted to pineapple.

The Rise of Oahu Sugar Company at Hō'ae'ae

In 1897, Benjamin Frank Dillingham promoted the Oahu Sugar Company, Inc. that leased lands from the John Papa 'Ī'Ī, Bishop, and Robinson Estates. As early as 1890, it was widely noted that the OR&L railroad had stimulated sugar cultivation on serviced lands (*Daily Bulletin* 14 July 1890). The Oahu Sugar Company was a calculated investment, and Dillingham sought expert testimony, the sharing of which undoubtedly encouraged investors in his enterprises. This included the publishing (twice) of a letter from J. Marsden, the Commissioner of Agriculture and Forestry, regarding a proposed B.F. Dillingham plantation at "Waipio, Hoaeae and Honouliuli" who noted "the land is perfectly clear from any growth except grass" and noted the proximity of limestone for liming the fields. Commissioner Marsden commented that a "veritable gold mine has been lying at Ewa and you are the first one who has had the courage to dig it" (*Pacific Commercial Advertiser* 2 January 1895).

An opinion was also sought from W.D. Alexander (and published twice), who concluded that "[b]etween Hoaeae and Waiawa there is land enough for a first-class plantation . . ." (*Pacific Commercial Advertiser* 2 January 1895). However, the development of the Hō'ae'ae fields by the Oahu Sugar Company appears to have gotten off to a slow start due to a lack of water. For example:

. . . 282 acres of long ratoon cane, above the 550 feet level in Hoaeae, depending entirely on rain and mountain water, could only with difficulty be kept alive during the hot summer months. Eighty two acres of this field had to be abandoned. (*Hawaiian Star* 23 February 1906)

The fields of Hō'ae'ae were subsequently transformed by the Waiahole Ditch:

The Waiahole aqueduct was completed as far as the boundary line of Hoaeae and Honouliuli, on May 27, 1916 and the water turned in on that date. (*Honolulu Star-Bulletin* 16 February 1917)

Of the area planted, 1374 acres is new land, taken in under the Waiahole ditch in Waipio and Hoaeae . . . the young ratoons, particularly in the Hoaeae and Honouliuli Sections, are in a very advanced condition . . ." (*Hawaiian Gazette* 16 February 1917)

Ethnicity at Hō'ae'ae

Hawaiians

Mark Prevor Robinson (1852-?) was the owner of Hoaeae Ranch and a member of Queen Lili'uokalani's cabinet (Minister of Foreign Affairs), as well as a founder of First National Bank of Hawaii and First American Savings. His father, John James Robinson (?-1876) arrived in Hawai'i in 1820 and married Rebecca Prevor, with whom he had eight children. While Rebecca

Prevor's genealogy is not altogether clear, she is understood to have been a daughter of Kamakana, a Maui chiefess ("Mysterious Mary Foster," *Honolulu Star-Bulletin* 22 September 2006); thus, Mark P. Robinson was a very prominent Hawaiian.

There are surprisingly few other references to Hawaiians at Hō'ae'ae. There is a reference to a policeman named Mahuka from Hō'ae'ae who died of natural causes in 1915; otherwise, almost all references to Hawaiians at Hō'ae'ae appear to be in the context of land transactions or disputes. The Board of Commissioners to quiet Land Titles awarded Hō'ae'ae (among many other large properties) to N. Namauu in 1853, but he was deceased by that time. The ali'i Mataio Kekūanao'a was in legal disputes regarding Hō'ae'ae lands with Samuel Thompson in 1853 and Charles Dana in 1856. Lands were conveyed by Kekūanao'a and Kapoli, widow of Namauu, to Samuel Thompson prior to 1862. In 1894, there was an argument over land at Hō'ae'ae among descendants of Kahooweliweli. In 1903, A. Kauhi and wife sold land at Hō'ae'ae to Kulapii for \$200. In 1905, it appears Mark P. Robinson sold land at Hō'ae'ae to D. Kalou, who sold it back to Robinson in a transaction that is unclear. In 1905, there were land transactions involving the estate of J.K. Kahookano'i, K.P. Kaneiahuea, and M.P. Robinson, with Robinson seemingly purchasing land for \$50 and selling it back for \$50. There was another land sale in 1905 from Lui Kaihikapu to M.P. Robinson for \$250. In 1907, Daniela Kalou bought land from the A.N. Campbell Trust for \$200 and immediately sold it to Mark P. Robinson for \$275. Also in 1907, the Dowsett Company, Ltd., filed "ejectment proceedings" against Keliikipi, Ilikole, and three Japanese as unlawfully being in possession of land at Kaulu, Hō'ae'ae. The result of these financial transactions was dispossession of Hawaiians of their lands. One other notice believed to refer to a Hawaiian was a small "personal" notice to a Mrs. Foster going to Hō'ae'ae for a vacation in 1895. This is understood to be Mary Elizabeth Mikahala Robinson Foster (1844–1930), granddaughter of Kamakana, a Maui chiefess and sister of Mark P. Robinson.

Chinese

The stories of Chinese at Hō'ae'ae are marked by violence. The first account is of the murder of Tong Hoon Hoo, otherwise known as Tong Yong and likely also as Dan Hung Hoy (as the victim was named in the United Chinese Society offering of a reward), who lived at Hō'ae'ae and was shot and killed by the burglar Liung Yao. There were at least 13 articles in five different newspapers about this case between 16 and 25 October 1893. Despite the aggregate offer of \$300—a sizable reward at that time—there is no account of the suspect being apprehended. The final article on the subject, entitled "Not Caught Yet: Liung Yao, the Chinese Murderer is a Will-o'-the-Wisp," relates that Liung Yao had been seen several times, "but all have been afraid to touch him as it is said he is armed to the teeth . . . two white men came to the police station and offered to guarantee to catch Yao if they could be allowed the privilege of shooting him on sight, which was refused . . ." (*Pacific Commercial Advertiser* 25 October 1893).

Another reference to Chinese at Hō'ae'ae comes in the context of unappreciated cooking for the overseers (luna) at Oahu Sugar Company plantation at Hoaeae:

. . . a strike of lunas on the new Oahu plantation . . . the kick of the men was the class of food served by the salaried chefs at Hoaeae . . . served by Chinese, according to Chinese ideas. Nearly everything was burned to a crisp . . . This is the first trouble Manager Ahrens has had with white men in his employ. (*Hawaiian Star* 5 May 1898)

Certainly one of the biggest stories in the history of Hō'ae'ae involves the shooting of Ah Chee in August 1901, covered by five different newspapers as follows:

- "A Waipahu Tragedy: Willie Davis Charged with Shooting Chinese," *Evening Bulletin* 20 August 1901,

- “He Was Shot in the Back: Ah Chee Attacked on the Highway,” *Hawaiian Star* 20 August 1901,
- “Inoffensive Chinese Fired Upon by Hoaeae Toughs,” *Honolulu Republican* 21 August 1901,
- “Shot in the Back: A Mysterious Gun Scrape at Ewa,” *Pacific Commercial Advertiser* 21 August 1901, and
- “A Shooting Scrape,” *Independent* 21 August 1901.

The facts of the case are consistent in the different accounts; two Chinese men were riding in a “brake” (a horse drawn carriage typically with four wheels, a high seat upon which the driver sits, and an open bed platform behind). The Chinese maintained they were accosted by two boys and told to halt. Fearing robbery, they urged their horse and drove away and then both boys began to fire at them with revolvers. The perpetrators of the attack were Willie Davis and Mark Robinson, boys about 18 years of age. Robinson was the son of Mark Robinson, owner of Hoaeae Ranch, and Davis’ father was Joseph Davis, the manager of Robinson’s ranch at Hoaeae. The deputy sheriff found young Robinson in possession of a .38 caliber revolver with four empty cartridges. No gun was found with Davis, and it was speculated he had thrown it away. Both boys were believed to be under the influence of alcohol at the time of the shooting. Ah Chee was reported to be in a very precarious condition from the gunshot wound. The Chinese companion asserted that Davis was the one who shot Ah Chee. The Robinson boy was not held by the sheriff. Four accounts relate the youths talking about shooting dogs. The fate of the merchant Ah Chee is uncertain, but it seems likely he survived as there is no account of either of the young, well-connected haole men being brought to trial.

Finally, in 1903, there is an account of the “Suicided While Insane,” in which a 31-year-old Chinese mother apparently committed suicide with strychnine poison while her husband attended his rice fields (*Hawaiian Star* 21 November 1903).

Japanese

There is only one early account specific to Japanese at Hō‘ae‘ae, summarized in an article entitled “Was Hanging to a Tree: Desperate Ending of a Jap at Hoaeae”:

A Japanese laborer at Ewa Plantation named Sagura was found hanging dead from a kiawe tree at Hō‘ae‘ae Gulch. A coroner’s jury determined suicide. There was excitement ‘that the fellow had been lynched.’ He was buried in Ewa. (*Hawaiian Star* 6 February 1899)

The speculation as to whether the Japanese worker had in fact been lynched has a certain resonance with the case of the seemingly unprovoked shooting of the Chinese Ah Chee by Caucasian youth associated with Hoaeae Ranch two years later.

Waikele and Pouhala in Historic-Period Newspapers

The same general themes as outlined above for Hō‘ae‘ae apply to the newspaper articles about Waikele, for which there are 454 entries in the digital database. In addition to these Waikele entries, we also reviewed those for Pouhala (n=143) and Lower Pouhala (n=2), which refer to the ‘ili in which the Waikele portion of the current project area are located.¹²

¹² We inspected all 145 Pouhala entries, since it is the ‘ili within which the project area is located, but only a representative sample of the Waikele entries.

The vast majority of entries for Waikele and Pouhala relate to land deals, sales, leases, foreclosures, and other such notifications; and many are related specifically to (1) makai (seaward) parcels, around or near the “old government road,” including lands of and immediately adjacent to the old Pouhala Fishpond (see Figure 17 for the location of these landmarks); these entries generally date from the early 1900s, and these areas are two or more miles away from the current project area, and (2) the late nineteenth century U.S. government’s take-over of approximately 14,400 acres in Wai’anae Uka, which borders Upper Pouhala north of the current project area, that eventually became the current Schofield Barracks; some of these lands were obtained from the estate of J.I. Dowsett (died 1898) (see, e.g., *Pacific Commercial Advertiser* September 7, 1899).

Real estate transactions of portions of Royal Patent (R.P.) 4486 (within which the current project area is located) in Lower Pouhala from members of the Robinson family (both Mark P. and Mary E. Foster) to the O.R. & L. (railroad) Co. were recorded in 1909 (*Pacific Commercial Advertiser* May 15, 1909) ; the “Hawaiian Fiber Co., Ltd.” also transferred a portion of R.P. 4486 in Lower Pouhala to the O.R. & L. in 1911.

Several entries from the 1880s and 1890s discuss legal disputes about water rights in Pouhala and Waikele, including an 1896 article in the *Pacific Commercial Advertiser* (6/29/1896) describing a state Supreme Court ruling about the placement of a dam along the stream on its Wai’anae side. The case specifics indicate Chinese individuals and a company (Tong Tai Wai) were growing rice in Pouhala. Other entries relate to Tong Tai Wai’s land leases in the early 1900s in Pouhala. An opinion piece in *The Daily Bulletin* in 1885 (December 14) describes a water-rights dispute at the mouth of Waikele Stream involving landowner Henry Poor, tenant F. Wundenburg and unnamed Chinese rice growers who were accused of building a dam that negatively impacted Wundenburg’s fish farming venture (imported “salmon trout”). One of the outcomes of the dispute was the apparent blockage of the stream mouth to the public, where previously “Many small vessels ran up and down the river with freight, while natives in canoes frequently went there to fish.”

Other notifications about prohibited behavior at or around the mouth of Waikele Stream, including shooting of guns (*Pacific Commercial Advertiser*, 11/4/1899, written by E.A. McNerny, E.I. Spalding and J.M. Dowsett), suggest this prized resource area was becoming less accessible to the public at this (turn-of-the-century) time (note, as described by Shideler et al. [2017], many of these types of notices appeared around this time) (see, e.g., *Pacific Commercial Advertiser*, 8/9/1892, written by S.M. Damon, J.I. Dowsett and J.M. Dowsett; but people could apparently apply for a shooting permit from J.M. Dowsett).

An 1895 letter (*Pacific Commercial Advertiser*, 1/2/1895) from C.H. Kluegel, Chief Engineer of the O.R. & L. Co., and an accompanying “extract” from a technical report entitled “Water Supply for Irrigation” by James D. Schuyler and G.F. Allardt, discusses plans to tap the Waipahu¹³ springs along “Waikele creek” to irrigate the (then) proposed “Oahu Sugar Plantation.” This spring, which was the crown jewel of Waikele Ahupua’a (and also was known by its other Hawaiian name, Kapukanawaiokahuku, literally “the outlet of water from Kahuku”), was the centerpiece of the plan to irrigate lands up to 650 ft. elevation (i.e., mauka, north of, the current project area) in Pouhala. The technical report describes the area around the spring in lower Waikele as “semi-swamp lands” at the foot of the low bluffs around Pearl Harbor. At this time (1895), the spring watered some 2,000 acres of rice fields and also bananas and taro, and still there was abundant fresh water that emptied into the ocean.

¹³ As stated previously in the report, according to Pukui et al. (1974:227), the original spelling may have been Waipahū. Maly and Maly (2012) use this (possibly older) spelling in their report, but we use only the modern spelling for consistency.

Modern Land Use and Landscapes in Upland Waikele and Hō'ae'ae

According to various on-line resources and contemporary (newspaper and magazine) accounts, Oahu Sugar Company finally ceased operations in 1995. A national newspaper article (*Chicago Tribune*) in 1994 (June 19), neatly summed up the situation as it relates to the current project area:

Peter Garrod, a professor of agriculture and resource economics at the University of Hawaii, estimates 177,000 acres of sugar and pineapple lands have or will come open soon, the equivalent of a strip of land two football fields wide stretching from Honolulu to San Francisco. This represents half the state's total sugar plantings from the crop's heyday 25 years ago.

"We have to find some alternative uses for the land so it's still green, so it's still pretty," Garrod said in a recent debate on "The Price of Paradise," a popular radio talk show on Hawaii issues.

In the short run, agriculture and development experts expect most of the vacant sugar lands to be used for cattle grazing.

"If everything else fails, they'll put a fence around it and put a couple of cows in it," said Ken Rohrbach, assistant director of the Hawaii Institute of Tropical Agriculture and Human Resources at the University of Hawaii.

But the long-term picture is more problematic. With the island's roads, water, sewers and other infrastructure strained and many complaining about overcrowding and the high cost of living, the fate of the sugar lands will go a long way toward determining what sort of place Hawaii will be in the next century.

"There is going to be an ongoing debate over what to do with those lands," said Yukio Kitagawa, director of the state department of agriculture. "There is no one crop that is going to be capable of replacing sugar acre-for-acre. It's going to take years."

With housing and land prices the highest in the United States-the median price of a home around Honolulu is \$360,000-some see tremendous pressure to develop homes and businesses in the old sugar fields, especially on the most populous island, Oahu.

Already, Amfac/JMB, the Chicago-based firm that owns Oahu Sugar and leases the plantation's 11,000 acres, has developed nearly 580 acres in central Oahu into a housing subdivision of medium-priced homes, complete with a golf course and a shopping center. [note, this would be the Royal Kunia area]

But judging by recent trends, only a fraction of the land will be used for development. Bruce Plasch, a prominent consultant to large landowners and developers, notes that gaining government approvals for land development is a long, arduous process in Hawaii.

"For the next 20 years, the bulk of that land still will be available for agriculture," Plasch said.

ORAL-HISTORY

Information in this section is drawn from several useful sources: (1) Maly and Maly's (2012) *He Mo'olelo 'Āina—Traditions and Storied Places in the District of 'Ewa and Moanalua (in the District of Kona), Island of O'ahu, A Traditional Cultural Property Study*, (2) the University of Hawai'i at Mānoa's Center for Oral History (specific reports are discussed below), (3) Cruz et al.'s (2011) CIA report for the Honouliuli/Waipahu/Pearl City Wastewater Facilities project that included seven ahupua'a of 'Ewa from Honouliuli in the west to Hālawā in the east, and including Waikele and Hō'ae'ae, and (4) several on-line sources containing information of the Oahu Sugar Company (specific websites individually cited below as appropriate).

Hawaiian Perspectives: Maly and Maly's (2012) TCP Study of 'Ewa District

Maly and Maly's (2012) study, running to nearly 900 pages, was compiled in support of the Honolulu Rail Transit project, and contains a wealth of cultural, historical, linguistic and late-historic to modern/contemporary information about the ahupua'a of 'Ewa District. Maly and Maly's work, in general, focuses on Hawaiian perspectives and connections between people and the land. Some of the information from this large study has been integrated into previous sections of this CIA report. Here, we reference oral-historical recollections from Kepā and Onaona Maly's 2011 interviews and other communications with kūpuna (elders) who have ancestral and/or residency ties to Waikele and Hō'ae'ae.¹⁴ In general, the interviewees and the information they shared mostly focuses on makai (seaward) areas of Waikele and Hō'ae'ae, since that is where most people originally lived, and where there are or once were valuable fresh-water springs, ocean access and fishing opportunities, as well as fishponds. There are, however, some mentions of Oahu Sugar Company and the upland areas that are more relevant to the current CIA. Here are relevant excerpts from Maly and Maly (2012):

Emma Saron indicated she has relatives buried on a property (that once belonged to the Baker/Peka 'ohana) in the Waipahu/Waikele area, “. . . right off of Farrington Highway and Waipahu Depot Road, off of Hula street, right by Catholic church, below bridge” (ibid.:729); and she wanted to ensure the grave sites would not be impacted by construction.

Arline Wainaha Ku'uleialoha Nākīhei Brede Eaton, born in Honolulu in 1927, was born and raised in the Keahi vicinity of Pu'uloa (Pearl Harbor), near its entrance. Her kūpuna had lived in the greater Pu'uloa-Honouliuli area for years, and taught her about its “. . . land, storied places, practices and the importance of respecting the akua (gods) and 'āina” (ibid.:731). Regarding place names, she noted that “. . . the area now called Waipahu was named by the plantation manager [presumably Oahu Sugar Company]. That's what my tūtū them [elders] said. That's why I keep saying, “It isn't Waipahu. It's Waikele” (ibid.). She and Kepā Maly go on to discuss the fact that the place name Waipahu refers specifically and only in Hawaiian traditions to the fresh-water spring in Waikele. They agree that it is important to call the places by their authentic Hawaiian names, for example, Pearl City is really Mānana. She also spoke of a big manō (shark) that used to swim at Waipahu spring, a legendary place long associated with supernatural sharks (including, most famously around Pu'uloa, Ka'ahupāhau).

The Malys also interviewed **Shad Kane**,¹⁵ one of the most respected kupuna in Honouliuli Ahupua'a, and in 'Ewa Moku (District), in general, who has taken on the kuleana (responsibility or calling) to mālama (take care of, or care for) the cultural and historical resources of the region. Shad Kane was born in 1945. When he was an infant, his parents lived at Mānana (“Pearl City”),

¹⁴ Some of the information from the elders cited here was not obtained in formal interviews, but from less formal communications, since not all of the participants had the time or desire to sit for formal interviews.

¹⁵ We have occasionally seen Uncle Shad's name spelled like the god Kāne, but also (more often than not) without the kahakou. Here, for consistency, we use the Kane spelling, but we are not sure which is correct.

but they were forced to move when the property was condemned by the military. He has been active in Hawaiian issues since the early 1990s. They spoke about the shark goddess, Ka'ahupāhau, and her presence on the Waipi'o Peninsula. They also spoke about how the old inhabitants of O'ahu Island and 'Ewa Moku (District), prior to the military conquests by Maui and, ultimately, Hawai'i islands, have been more or less erased from the historical records (e.g., the Māhele, or Land Commission records).

Marie Emilia Leilehua Adams McDonald, born at Waipahu, Waikele in 1926, and her daughter, **Roan Kahalewai McDonald Hufford**, “. . . have dedicated their lives to the perpetuation of Hawaiian cultural practices and education. . .” (ibid.:786).¹⁶ One of 10 children, Marie, a well-known lei maker and kapa maker¹⁷, lived in Waipahu for the first six or seven years of her life, then her family moved to Moloka'i for the next 15 years or so. Her mother was Hawaiian and her father was a haole (white man) from the eastern U.S. When her own children were older, she and her husband eventually moved to Hawai'i Island. Marie recalls living next to the Keala 'ohana (family) in her first Waikele (Waipahu) home, which she describes:

We were right . . . our house was almost right in the middle of a sugar cane field. This was a thriving community for the sugar people [note, this would have been in the early 1930s]. . . I believe it was O'ahu Sugar Company. We were surrounded by sugar cane. And when the cane was ready to harvest, they would set the fields on fire to burn all the excess leaves off, and then harvest the sugar cane. Then, we would have to leave our house or we would have to close it up because all of the soot would be flying around, and you just couldn't live in that.

Marie discussed living close enough to the ocean (the shores of Pu'uloa) to walk down to catch purple Hawaiian crabs.

Roan Hufford shared the following about place names that start with “wai” [such as Waikele], Hawaiian for fresh water (ibid.:797–8):

If you research that particular part of this island. On one hand they are very dry and arid. They are on the lee side. But underneath is where the pahu, where the wai is stored. And historically, that water was available to the Hawaiians. They knew how to get to it. And when the sugar planters came, they had to discover how to unleash it. And that made that area an important site.

. . . And now what are they [Board of Water Supply] telling us? That we have to conserve those resources. But our kūpuna recognized them [places with hidden or obscured fresh-water sources] by giving them those names.

Kumu Maly (ibid.:798) builds on Roen's mana'o:

So in those days, you had to build the heiau waihau, with the hau bush to call upon and draw the water and fishes back. And what's so interesting in the story—and you've brought up Hi'iaka—in the tradition of Kamapua'a, is that indeed Roen, all those “wai” names, Waimānalo [on the Honouliuli-Wai'anae boundary], Waikele, Waipahū, Waiawa, Waimano, Waimalu, Waiiau, all of these water-land names were actually dedicated by Kamapua'a to the Lono priests.

Thelma Genevieve Parish (with Arline Wainaha Pu'ulei Brede-Eaton) was born in 1918, and grew up in the 'ili of Pu'uloa in neighboring Honouliuli Ahupua'a. “Sister Parish,” as she was

¹⁶ Kupuna McDonald passed away in August of 2019 at the age of 92.

¹⁷ Traditional, cloth-like material made from the bark of wauke (paper mulberry) or māmaki (*Pipturus* sp.) trees. Her book, *Nā Lei Makamae, The Treasured Lei* (McDonald and Weissich 2003), is an authoritative source on traditional lei making.

known, passed away in 2004 at the age of 86. She was interviewed in 1997 by Kepā Maly. Her father's side of the family is part of the Dowsett 'ohana (her great grandfather was James Isaac Dowsett), a prominent family on O'ahu. Her mother's side of the family was from the windward side of O'ahu (Waiāhole-Hakipu'u). When they were young, they called what is today known as 'Ewa Beach by the name of Kūpaka. Referring to where the large settlements used to be in historic times, she shared (ibid.:826–7):

As I sort of surmise now, I think the large areas of habitation were Waikele and then down through the lower part of what we call Waipahū. Now Waipahū is not a proper name. It's neither an area or an ahupua'a, it's just a gushing well. . .

. . . So I would say that the main area of population circled the West Loch.

She goes on to say that traditional settlement and use of the land down on the flat lands of Honouliuli by Hawaiians in the old days was probably seasonal as it was a very dry place; but that, referring again to the shores of Waikele, “. . . the settlement was in the Waikele area. There are more legends related to that area” (ibid.:828).

More Hawaiian Perspectives: Cruz et al.'s (2011) CIA on Seven Ahupua'a of 'Ewa

Cultural Surveys Hawai'i's CIA on seven ahupua'a in 'Ewa Moku (District) has some relevant 2011 interview excerpts for the current project area.

Shad Kane's biographic information has been summarized in the previous subsection (i.e., Maly and Maly 2012). Most of Uncle Shad's place-specific comments deal with the lowlands, lo'i kalo (irrigated taro) and fishponds, and the areas all around the shore at Pu'uloa (Pearl Harbor), although he did also talk about traditional Hawaiian battlegrounds in the uplands of 'Aiea and Kalauao (Battle of Kūki'iahu)—several miles east of the current CIA project area. Much of his mana'o was focused on discussing more general Hawaiian principles and perspectives. For example, from a cultural landscape perspective, the all-important mauka-makai relationship in 'Ewa Moku, and the heightened significance of fresh-water sources in springs and marshes along the coastal areas of Pu'uloa (Cruz et al. 2011:118):

Why 'Ewa? Freshwater. What makes 'Ewa really unique is the wetlands. All 13 ahupua'a center on Pu'uloa. If you consider the geographical area of Pu'uloa, it is the only place in all the Hawaiian Islands where all 13 ahupua'a, from the mountain to the sea, have water that all comes here, Pu'uloa.

If you read the mo'olelo associated with this region, the two gods that play a big part are Kāne and Kanaloa. Why? It is the relationship and marriage between freshwater and salt water. Here, in Pu'uloa, is the mixing. If you can understand that, you can understand everything that happened on the low ground and on the high ground. It is the relationship between the mountains to the sea, and the path that the fresh water follows. Every one of these high grounds, all of that freshwater went in one direction; all ended up in Pearl Harbor.

Arline Eaton's biographic information has also been summarized in the previous subsection (i.e., Maly and Maly 2012). In addition to the 2011 interview reported in Cruz et al. (2012), Kupuna Eaton, who grew up speaking Hawaiian in a traditional household in what is now known as 'Ewa Beach, had been interviewed on two other occasions (2008 and 2009) by Cultural Surveys Hawai'i. Selections from all three interviews were included in Cruz et al.'s (2012) report. Much of her testimony deals with gathering practices, marine resources, and land use of the lowlands and shoreline around Pu'uloa, but no specific information about the uplands.

Ishmael Stagner, born in 1939 in Wahiawā, was raised in Pearl City (Mānana Ahupua'a). He was interviewed twice by Cultural Surveys Hawai'i, once in 2010 and again by Cruz et al. (2012).

In addition to stressing the single-most important resource of 'Ewa, its watershed emptying into Pu'uloa, he also had first-hand memories and experience with sugar cane plantation life (ibid.:128):

“The plantations were the fabric of life until the 1960s,” according to Dr. Stagner. In particular, he draws out a connection between the growth of American baseball and the sugar plantations on O'ahu. He states that “One of the things I don't think anybody understands is that without the plantation system in Hawai'i, we would never had American baseball as we know it today.” In 1849, Alexander Cartwright, who is credited with inventing the modern game of baseball, came to Honolulu en route to California to search for gold. Mr. Cartwright stayed on O'ahu to start several businesses and served as the fire chief on Honolulu. Significantly, he also introduced baseball to the sugar plantation communities, which gave the workers something to do so as to not fight amongst themselves. Competitive leagues quickly formed along ethnic lines, with Hawaiian, Japanese, Filipino, Chinese, Portuguese, and haole teams. Dr. Stagner did not work in the plantations himself, but he played for the Rural Redsocks in Pearl City and became envious of the workers' growing collective enthusiasm for baseball. Each plantation camp constructed its own baseball field, which became one of the central arenas for social interaction. Island-wide games were held, and several local plantation teams integrated their ethnicities to strive toward the championship game. Each plantation community, such as the 'Aiea Sugar Mill, recruited their nine best players to form a strong multiethnic team. A strong interest in baseball arose from these plantation teams, such that the best leagues today on O'ahu are descendants from the former plantation communities in the 'Ewa plain. Dr. Stagner makes another connection between the plantation baseball and the Japanese internment camps of World War II:

What makes this even more interesting is when we had World War II and we sent our island Japanese over to internment camps, one of the ways they were allowed to recreate was by playing baseball in the camps. Later on, many of them joined the military. They are still playing baseball and become forces of occupation in Japan. So there were Japanese-Americans playing baseball in Japan, and they recruit Japanese players. Now you have an entire generation of Japanese playing the American major leagues who are the direct descendants of those Japanese who went over as American soldiers whose grandparents played baseball for the Hawai'i plantations.

Tin Hu Young and Helen Kealiwahineulawenaokola He'eia Colburn, husband and wife, were interviewed at their home in Waiawa in 2011 (Cruz et al. 2012) and also in 2010 for another project by Cultural Surveys Hawai'i. Mr. Young was born in 1927, and spent his entire life in Waiawa, near the shores of Pu'uloa. His mother's ancestry was Hawaiian and Portuguese, his father was Chinese. He recounted some of his ancestors, including some prominent people and their connections to other prominent figures; some of his ancestors also had connections with the old railroad and ranchers of central O'ahu:

Mr. Young's mother was Elizabeth Kahiku Johnson. She was the daughter of Pedro Manini Johnson (born about 1871 and died May 28, 1925) and Pa'ahana (born about 1860 and died 1927). Pedro Johnson—Mr. Young's maternal grandfather—worked as a cowboy with the O'ahu Railway and Land Company for his brother—Mr. Young's granduncle—Johnny Johnson, who was a ranch foreman for the Dillingham family. Another brother, Enoka Johnson (born May 3, 1857) served as secretary to Prince Jonah Kūhiō Kalaniana'ole. Their parents were Ambrose Johnson (born about 1832) and La'amaikahiki Wahine (born about 1834), who was born in Mānoa Valley. (ibid.:131)

Mr. Young's ancestors also had connections with the powerful and influential Queen Ka'ahumanu, Kamehameha the Great, and the founding of Kawaiaha'o Church.

Regarding the cultural and natural resources of 'Ewa Moku, Mr. Young stressed the intense productivity of the marine, estuary and freshwater resources in and near Pu'uloa. "It had fish, crab, oysters, clam, it had everything. It was a rich area to live, you would never starve" (Cruz et al. 2012:134):

But, the real wealth of this place here, Pu'uloa, was because, this whole area that surrounds Pearl Harbor, they are called like Waipahu, Waikele, Waiawa, Waiuu, tells you that the source of water here is great. Everything pours into Pearl Harbor. According to old Hawaiian legends and stories, in reality Hawaiians considered waiwai [wealth], water is wealth, not oil, not gold, not silver, but water was the wealth of our place here, in Waiawa. Although Waiawa might refer to the water, the 'awa that's growing up in the mountains. And with the water source, Waipahu might be related to the pounding of the water like the drum, you know, so that's the wealth here, the water. (ibid.)

Plantation Days: Recollections of one who worked for the Oahu Sugar Company

Jack Vorfeld (1912–2004), kama'āina, born and raised on O'ahu, was a 41-year employee of O'ahu Sugar Company. Before he passed away, he recounted some of his experiences and the people he knew starting back in the 1930s:¹⁸ Mahalo to Mr. Vorfeld's wife, Judy, for memorializing these invaluable memories that bring the old plantation days to life.

Manuel Nobriga

Manuel Nobriga was a good friend. In the early 1930's, when I started working for OSCO, I was put into the Machine Shop to learn to be a machinist. Manuel was one of the top machinists in the shop, and he was very helpful to my learning.

Later, after several promotions, I became Milling Superintendent. We needed a shift Milling Engineer to fill the position that I had vacated. I chose Manuel, and it was a good choice.

He was outstanding in the job and contributed greatly to my success in my new position. He was strongly committed to the best possible operation of OSCO, and while he may have seemed hard on others, he was no harder on himself. He simply had very high standards. I'm proud that he was my friend.

John Gerard

When I began working for OSCO in November, 1931, John Gerard was a machinist in the Machine Shop. In 1932 I began training as a machinist, and John taught me a great deal that was valuable.

When Maxine and I married in 1933 the plantation didn't have any vacant houses, so they rented us a house on Pearl City Peninsula. We found ourselves close to the Gerards, and John kindly let me ride with him to and from work. We became close friends.

Shortly after the end of WWII, John was promoted to Shift Engineer. I was, by then, Night Engineer, and the two of us worked the 2-10 and 10-6 shift for a while. When Clarence Girvin, Milling Engineer who worked the 6-2 shift only, died, I was promoted to fill his position.

¹⁸ Source: <http://www.judyvorfeld.com/index.html>, a charming website full of oral-historical information including the life and times of Jack Vorfeld

John Gerard, Manuel Nobriga, and Bob Crichton worked the three shifts 6-2, 2-10, and 10-6, shifting every two weeks. About that time, John was given a house on the plantation, near the mill.

I enjoyed working with John Gerard until he retired, and missed him after he was gone. He was well-liked by everyone on the plantation, never spoke unkindly of others, and was a good friend.

Harold Crawford

Harold Crawford started working for Oahu Sugar Co. a year or two before I did. He worked in the field area, and his father, Frank, was our Machine Shop Foreman.

Later, OSCO promoted Harold to Industrial Relations Supt., a new area that he helped form. We were good friends. He helped me a great deal when OSCO became unionized and problems arose in my department.

The Crawford family lived for a time on the plantation. He was a pleasant man: tall, quiet, and very intelligent.

Raymond Moniz

One of the most outgoing, happy people I knew at Oahu Sugar Co. was Raymond Moniz. A locomotive driver, Raymond reflected good cheer to everyone on the plantation. Very large, and well over six feet tall, he'd burst into the mill, and head right for me, saying, "Hey, Boy, give me change!" I had the key for the cash box. He'd always get five Coca Cola bottles from the soda pop machine, line them up, then drink them without stopping.

People loved to play jokes on Raymond, who was a very good worker. One day some of the brakemen and firemen found a bunch of large, lush bananas. When they got back to the plant, they bet Raymond he couldn't eat a hand (about 20 bananas—whatever was on the tree in a bunch) at one time.

"No problem," laughed Raymond.

We waited for the hand to ripen, and finally the day came when Raymond had to prove his eating capacity. He didn't show up at the appointed time, but fifteen minutes later he sauntered into the room.

"Raymond, where you been?" we asked.

"I went get a bowl of saimin. You think I want eat those bananas on an empty stomach?"

With that, Raymond strode over to the table, pulled off, peeled and ate every last one of them!

Blackie Vasconcellos

Ernest (Blackie) Vasconcellos, along with his wife, Madeline, owned and operated Tropical Welding in Honolulu for many years. Their two sons were also a part of the operation. I met Blackie in the early 1960's. He had been working with a man from Hawaii Sugar Planters Association (HSPA) to develop a seed cutter for the plantation. (We referred to stalks of year-old sugar cane as seed; these stalks were about 18 long.) Blackie was a mechanical genius. He brought the seed cutter out, we put it in a field, and began cutting seed. It took a couple of months to get all the bugs worked out, but was well worth the time. It was a potent labor-saving device. One time he built a pineapple planting machine to be used on Molokai. He invited me to go along to watch the initial operation. Good fun.

Madeline worked in their office, and often came along with Blackie when we went out to lunch. One of our favorite haunts was Pearl City Tavern. Blackie was a good-natured man with a great

sense of humor. We had many good times together. He passed away some years ago, but we keep in touch with Madeline.

Cecil Whiteman

One Thanksgiving when Max and I lived in Honolulu, I had to leave for the plantation to begin working a 3 pm shift. Saturated with good food, I jumped in my car and rushed toward Waipahu. A patrolman stopped me and gave me a ticket for speeding. By the time I got to OSCO, I was grumbling about having to work on Thanksgiving.

Cecil Whiteman pulled me aside and said, "Now look here, young fellow, you came here asking for work. Now that you have it, I don't want to hear you complaining!"

Hans L'Orange

When I started working at Oahu Sugar Company in 1931, Hans was the Field Superintendent. In 1936 I was working as a machinist in the Machine Shop. Oscar Myhre, the Night Engineer, died, and our manager, E.W. Green, was in Washington D.C. Hans was Acting Manager.

L'Orange wanted to promote me to Night Engineer, but had to get the "okay" from Mr. Green. Once this was done, I started in my new position. Not long after, the Hawaii Sugar Planters Association (HSPA) took Green away from OSCO. They wanted him to be a lobbyist for them in Washington D.C.

Hans became Manager. I always said that he and I started in more responsible jobs about the same time. We became very good friends.

One day we were having quite a problem in the factory. In fact, it was shut down. A group of us, including Sugar Boiler Bromley and Factory Supt. Johnston were energetically trying to find the source of the problem: loss of vacuum in the boiling operation.

Hans came over and started complaining to me. I didn't appreciate his complaining, since we were doing our best to find and fix the problem, and I told him so. As he left the factory, I wondered if he would fire me for the way I talked to him.

After the problem was solved and everything was running smoothly, I went over to his office and apologized for speaking to him as I did. Hans smiled and said, "Oh, that's okay, Jack. It's good to blow off steam once in a while. Forget it."

Another time our kitchen stove broke down, and I decided to walk to the Plantation Store on Waipahu St. to look at new stoves. I met Hans along the way. He wanted to know what I was doing. I explained that I was thinking about buying a new stove because ours was broken, and he said, "Go ahead and buy it, Jack. You're getting a raise this month."

Hans loved throwing parties in his home. He was a great supporter of the U.S. Navy, and during WWII he often entertained Navy officers. He also occasionally invited OSCO supervisors to join them. I met Admiral Chester Nimitz and other ranking officers at some of these parties.

Shortly after the war, I was promoted to Milling Engineer. The year OSCO had its biggest crop 81,000 tons L'Orange decided to slaughter two plantation Black Angus and a pig and throw a barbeque for all the plantation employees and their families. I helped design and create three motorized spits for the beef and pork, and also supervised all the cooking Great party!

Hans loved sports, and opened an area up on the plantation so employees could have a place to participate in various athletic events.

Mrs. L'Orange (Mellie) was also a good friend. She was a lovely lady and we all loved her.

Henry Maguire

Henry was born February 28, 1912, and I was born a day later. We met when we were attending St. Louis College (high school), and graduated together in 1930. An outstanding businessman, Henry founded Maguire Bearing. He was a crack manufacturer and salesman, and did a great deal of business with OSCO.

Subsequently Oahu Sugar Company bought most of its bearings from them. In our younger years, he and I collaborated to change the factory's shredders from babbit bearings to anti-friction bearings. OSCO was the first plantation in Hawaii to have shredders with anti-friction bearings.

In later years Henry and his wife, Tita, and Maxine and I often celebrated our birthdays together. Even later, after Maxine's death and my marriage to Judy, we continued to celebrate birthdays. Henry visited Arizona a few times before his death.

Celebrating Waipahu's 100 Year Anniversary – Oral History in the Honolulu Star Bulletin

In 1997, on the occasion of the centennial of Waipahu's founding (in Waikele kai) as the centerpiece of the Oahu Sugar Company, Rod Ohira of the *Honolulu Star Bulletin* wrote a few short pieces containing oral-historical recollections of many people who used to work for the plantation (Figure 21).¹⁹

Here, below, is a verbatim facsimile of two of Rod Ohira's (1997) stories with abundant memories of plantation life:

"One sweet century, Residents remember the simple times and a legacy of caring and sharing"

A better life gleaned from the sacrifices of Waipahu sugar workers who toiled on the rocky plains of West Oahu is a legacy cherished by a community celebrating its 100th anniversary this year.

"Our parents sacrificed themselves so we could have the things they didn't have," said Joe Hamada, a city building inspector who grew up in Waipahu's nishi (west) Japanese camp. "Because everyone was broke and needed things in the camps, we learned to appreciate and share what we had."

Waipahu's story revolves around Oahu Sugar Co. and the close-knit relationship of multi-ethnic laborers living in segregated mill camps and isolated compa (Japanese for sharing) field camps.

Oahu Sugar Co. began operations in February 1897 with 943 field workers. There were 44 Hawaiians, including 10 minors; 57 Portuguese; 443 Japanese, 408 of them contract laborers; and 399 Chinese, 374 of whom were contract laborers.

The fledgling company experienced a rocky start, as noted by plantation manager August Ahrens in his 1898 annual report.

"I doubt if any plantation was ever confronted from its very inception with a more Herculean task in clearing the land than we have seen," Ahrens reported.

"Ridding ourselves of the tangled masses of lantana and mimosa were mere child's play compared to that which did not show on the surface -- stones, big stones, and close together. In fact, stones as big as houses."

But in 1899, the harvest of Oahu Sugar's first crop signaled the birth of a new plantation town.

The average monthly wage of field workers then was \$12.50. Despite the hardships, many people have fond memories of plantation life -- memories preserved through storytelling.

¹⁹ Source: <http://archives.starbulletin.com/97/06/12/news/story2.html>

The late Shigeru Serikaku, a notable personality of Waipahu's early years, was 16 years old when his family immigrated here in 1906 and opened a service station on Waipahu Street near today's Waipahu Cultural Garden Park.

According to author Thomas Taro Higa, Serikaku began assembling a flying machine in 1913, only 10 years after Wilbur and Orville Wright's historic first flight.

Serikaku borrowed money from friends to buy a 35-horsepower, four-cylinder aircraft engine and other parts. The airplane's wing span measured 28 feet; its fuselage, 25 feet. In 1916, before 20 spectators, he flew the airplane 40 feet before landing it in a park.

Hamada wonders if Serikaku's feat influenced a teen-age boy who lived nearby.

"He had to know what Serikaku was building," Hamada said of the late William A. "Pat" Patterson, son of a plantation overseer, who ran away from home in 1913 at age 14 -- and later became the first president and chief executive of United Airlines.

While Serikaku was building his flying machine, Oahu Sugar purchased water rights from Waiahole Water Co. and was building more camps.

The Japanese lived in nishi (west) and higashi (east) camps above the mill. There were also Filipino, Spanish and Puerto Rican camps. The Chinese, most of them single men, had no designated camp.

"Language and culture were the reason camps were segregated," said 82-year-old Consoria "Connie" Basan, who came to Waipahu from Kauai in 1924 and never left. "We never locked our doors, no one would steal."

Barbara Kauwenaole Oamilda, 75, a member of Waipahu High School's first graduating class in 1941, added, "Living on a plantation, everybody knew everybody so we shared what we had.

"My father used to take care of Waipahu Beach (which was near the Kahe Point power plant) and people would always give him fish," she added.

"He'd give some to one camp and on another day, he'd share with a different camp."

Youngsters learned to appreciate the simple things plantation life offered.

"All of Waipahu was our playground," said Hideo Dean Ishihara, 72, whose parents owned a candy store. "The thing I enjoyed most was crabbing. The crabs were so plentiful."

An alley separated Nobuo and Sasayo Ishihara's candy store and the original Arakawa's on Depot Street where Waipahu Bicycle and Big Way Supermarket, two other businesses with deep Waipahu roots, are now located.

The Ishiharas were known for their shave ice served with homemade ice cream and azuki (black bean) doughnuts.

"People used to line up at 5 a.m. for the doughnuts, which sold for 5 cents apiece," Ishihara recalled.

The family still produces snacks, primarily Ishiharaya tea cookies.

The original Arakawas store used to have rooms on the second floor to accommodate traveling salesmen from Honolulu, Ishihara said. "In those days, the salesmen came by horse-drawn buggies and had to stay overnight."

A theater located in the alley between Ishihara store and the original Arakawas was owned by the family of Shiro Matsuo, who gained fame for his creative saimin dishes.

Hans L'Orange Park, formerly known as Oahu Sugar Co. field, served as the community center.

Plantation life changed forever in 1946 when Hawaii sugar workers won pay increases with a six-month strike. It marked the end of the plantation's paternalistic system as employees became responsible for their own rent and medical care.

"The 1946 strike was hard for everyone," Basan said. "We had soup kitchens and ate what the men caught fishing. We ate a lot of rice and if you had an egg, you were lucky.

"Stores donated things, like old bread, to help out. That strike changed everything, I think for the better, because in the old days, Filipinos couldn't afford to buy houses. Now they could."

A post office stands today on the old hospital grounds. Waipahu Super Market has replaced Kawano Store and Hanaoka's, which were popular soda fountain hangouts, and there's Philippine Mini Mart where Horiuchi's once served the best saimin in Waipahu, according to some old-timers.

Although Kapakahi Stream on Depot Road no longer appears to be kapakahi and the rice paddies and asparagus gardens along Farrington Highway have disappeared, there's still some sugar cane. Ernest Malterre Jr., 81, a former Oahu Sugar Co. administrator, has lived in Waipahu since 1930. "I've got old Hawaiian cane stalks growing in my back yard to remember the good times," he said.

"The times were hard on early plantation"

In the early days of the plantation, each Oahu Sugar Co. employee was assigned a number, inscribed on a metal disc about the size of a silver dollar.

The numbers 1 through 899 identified a Japanese alien; 900 through 1400 were Japanese who were American citizens or Hawaii-born.

The 2000 and 2100 series were Portuguese laborers, 2200 Spanish, 2300 Hawaiian, 2400 Puerto Rican, 3000 Chinese or Korean, 4000 and 5000 Filipino aliens, and 5900 and above Filipino-Americans.

"A bango number told the story of an employee," said Ernest Malterre Jr., a former employee benefits administrator and overseer for Oahu Sugar.

Employees could buy items on credit at plantation stores by using their bango number.

"We charged everything and paid once a month," said Consoria "Connie" Basan, who was 15 when she married her late husband of 44 years in Waipahu.

"Workers always got paid once a month in currency and coins but after the war, they got paid twice a month by check.

"It was hard in those days," she added. "We used to buy only one soap and use it to take a bath, wash dishes and wash clothes."

A plantation family's diet consisted mostly of rice, fish or poultry and vegetables.

"I ate my first steak when I was a junior in high school," recalled Hideo Dean Ishihara. "But when my father took us to town, we used to eat at Yamada Restaurant, where you get two pork chops and rice for 25 cents."

Treats were reserved for special occasions.

"In the camps, the only time we had soda water or new clothes was New Year's," Ishihara said.

Sugar workers earned little money but paid no rent or medical bills in the plantation's paternalistic system.

It was difficult to get better-paying jobs.

"My husband was making \$2 a day for 10 hours of work as a blacksmith's helper," Basan said. "He wanted to go to the welding shop, but in those days everyone there was Portuguese.

"He was told no one would teach so we had to struggle for one year to save up \$365 tuition for him to go to Honolulu Technical School," added Basan, who worked in the pineapple cannery. "He became the first non-Portuguese employee in the welding shop."

Until 1932 when Oahu Sugar Co. opened a "continuation school," education didn't extend beyond August Ahrens and Waipahu Elementary School at the plantation.

"The plantation allowed a half-day off from work once a week for workers to attend continuation school, and evening courses were also available for those who couldn't attend day courses," Malterre said.

He was among the fortunate ones who attended school in town.

"I used to catch the train to attend Central Intermediate and then McKinley High School," Malterre said. "It cost \$4.75 a month to ride the train."

The old Oahu Sugar Co. field was the center of community activities, featuring band concerts, sporting events and carnivals.

In 1972, the field was renamed Hans L'Orange Park in honor of the man who developed athletic programs in the community during his 20-year tenure as Waipahu's plantation manager.

"When you talk about Waipahu, you've got to talk about L'Orange," said Zen Abe, 72, volunteer groundskeeper of the park's baseball field. "The guy bent over backward to help the community."



Figure 21. Undated photograph of men and boys in Kunia (source: <http://archives.starbulletin.com/97/06/12/news/story2.html>)