

Figure 19. 1925 Oahu Sugar Company plantation map showing project area (red) as largely within former Field 30 (Condé and Best 1973:317)

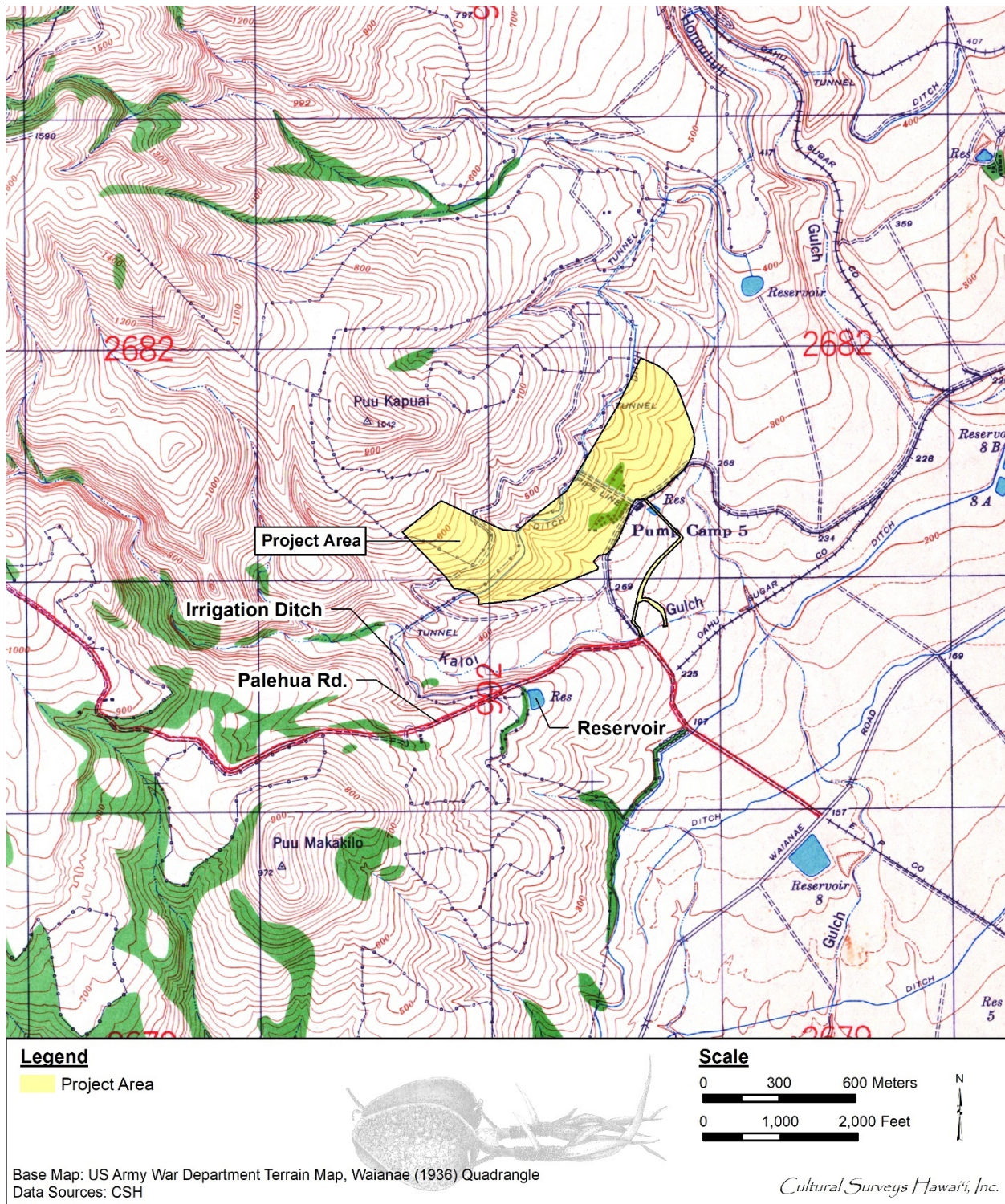


Figure 20. Portion of the 1936 U.S. Army War Department terrain map, Waianae quadrangle showing the location of the project area

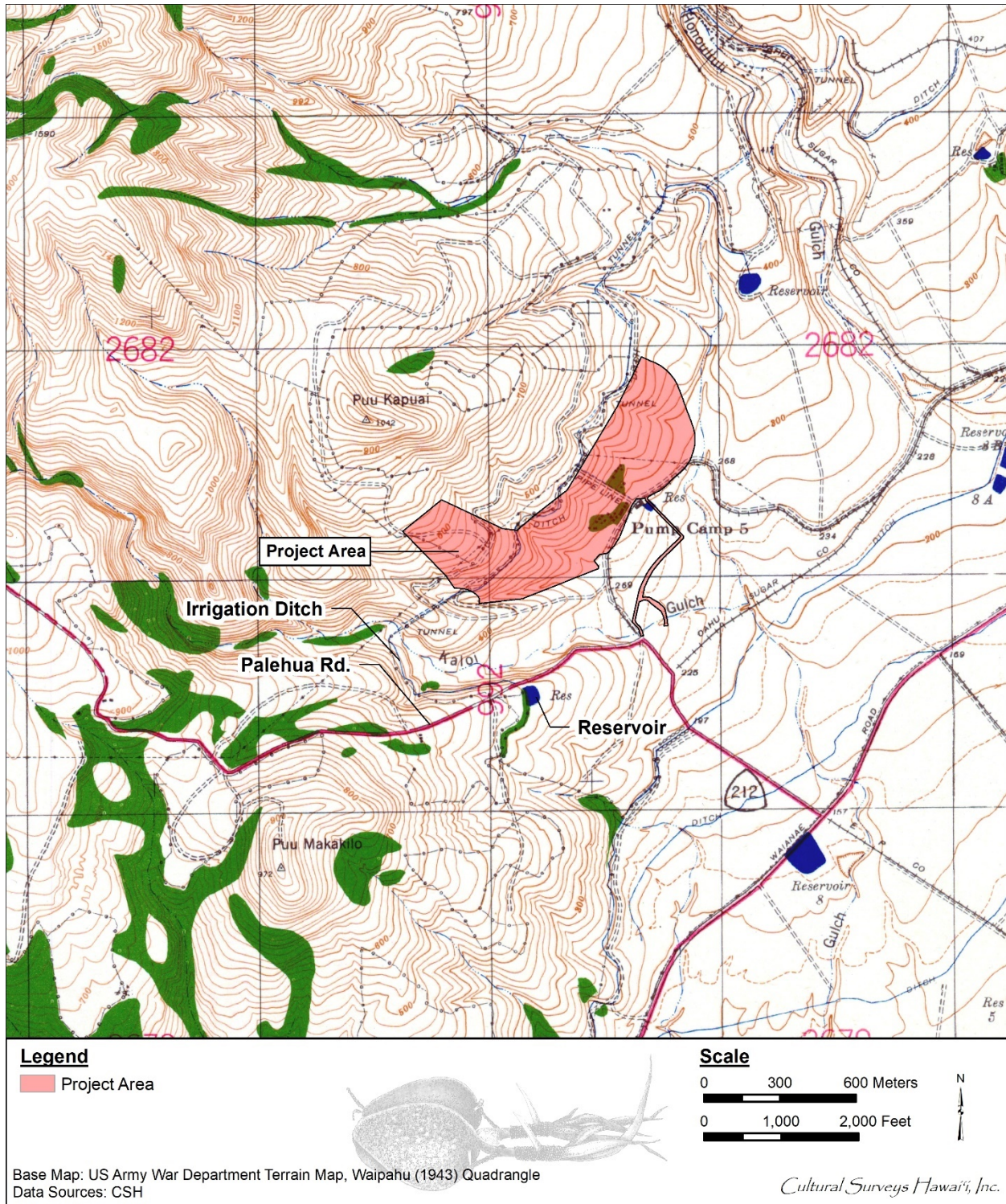


Figure 21. Portion of the 1943 U.S. Army War Department terrain map, Waipahu quadrangle showing the project area

The 1951 aerial photograph (Figure 22) clearly shows the two neighboring housing areas of Pump Camp 5 within the central portion of the project area (just northwest and southwest of the pump house building or pumping station which remains just outside the project area). While the majority of the project area was under sugarcane cultivation, it appears the southwest portion of the project area, west or upslope of the Waiahole Ditch, was not under cultivation at that time, instead used as grazing lands. The west portion of the project area appears to have been previously cultivated but appears fallow. Extensive areas north of Pu'u Kapua'i appear to be under pineapple cultivation.

The 1953 USGS map (Figure 23) shows much the same landscape as the 1943 map (see Figure 21) except the railroads have now all disappeared—quickly replaced by trucking after World War II. A naval reservation is shown on the southeast base of Pu'u Makakilo. An access road is now depicted running up the mouth of Kalo'i Gulch, parallel to and just north of the Kalo'i Stream channel, understood to have been developed to service the present quarry. The initial date of construction of an industrial quarry within Kalo'i Gulch—depicted to the south (outside) of the current project area—is uncertain, though historic maps indicate a construction window between 1943 and 1952. In 2004, CSH conducted an archaeological inventory survey whereby the quarry was documented and designated an historic property: SIHP # 50-80-12-6680.

The 1968/1969 USGS map (Figure 24) no longer shows Pump Camp 5, which had been prominent at least as early as 1936 (see Figure 20) and lasted until at least 1953 (see Figure 23). The “Pumping Station” immediately southeast of the project area is still labeled and in general the plantation infrastructure (other than the train lines) appears active. The road up Kalo'i Gulch, depicted as improved in 1953, is now shown as unimproved suggesting abandonment of some quarrying operations.

4.5 Contemporary Land Use

Modern maps of the Makakilo area indicate vast changes to the project area and surrounding lands, including the retreat of the sugarcane fields, the construction of the H-1 Freeway, and the partial construction of the Pu'u Makakilo Golf Course and Grace Pacific Makakilo Quarry.

The 1968 aerial photograph (Figure 25) shows virtually the entire project area still utilized for sugarcane, though there is no trace of the former Pump Camp 5 residential areas that appear to now be entirely covered with cane. Many of these plantation homes are understood to have been slightly raised on “tofu-block” foundations that allowed for relatively complete demolition leaving only the remnants of privies and trash pits. The 1968 USGS aerial photograph also shows new fields to the northwest (Figure 25).

In 1969 and 1970, Pacific Concrete and Rock Company, Ltd. began subsurface drilling on the southward facing slopes of Pu'u Makakilo for a new quarry location. The company's previous quarry in Pu'u Pala'ila'i that had been in operation for the past 22 years was nearly exhausted. The newly proposed Makakilo Quarry would “encompass 72 acres of actual total quarry area and 188 acres of green belt buffer. Of the 72 acres of actual quarry area, only a maximum of 18 acres will be under active quarrying at any given time” (Cerny 1972:1).

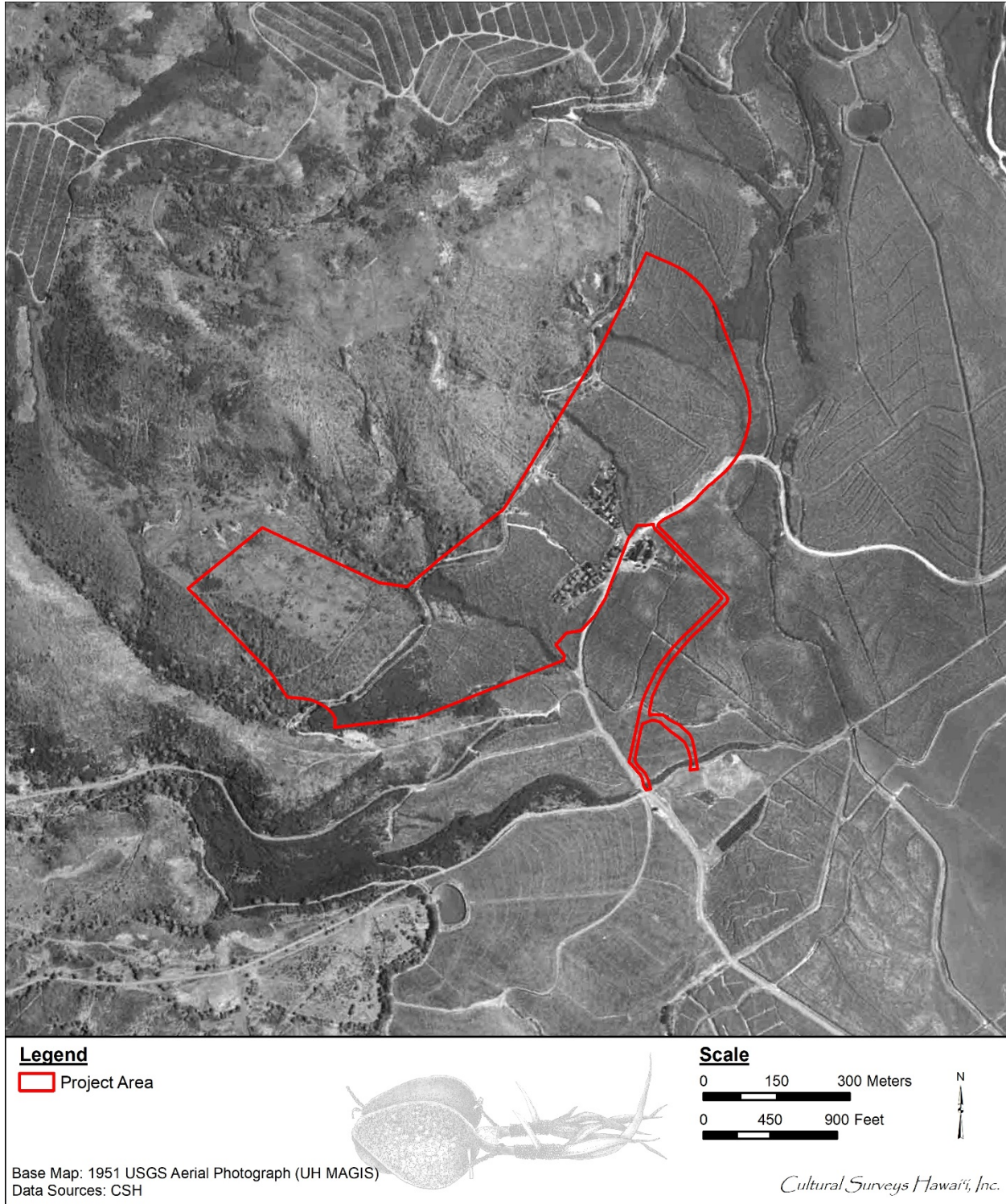


Figure 22. 1951 USGS aerial photograph (UH MAGIS) showing the project area

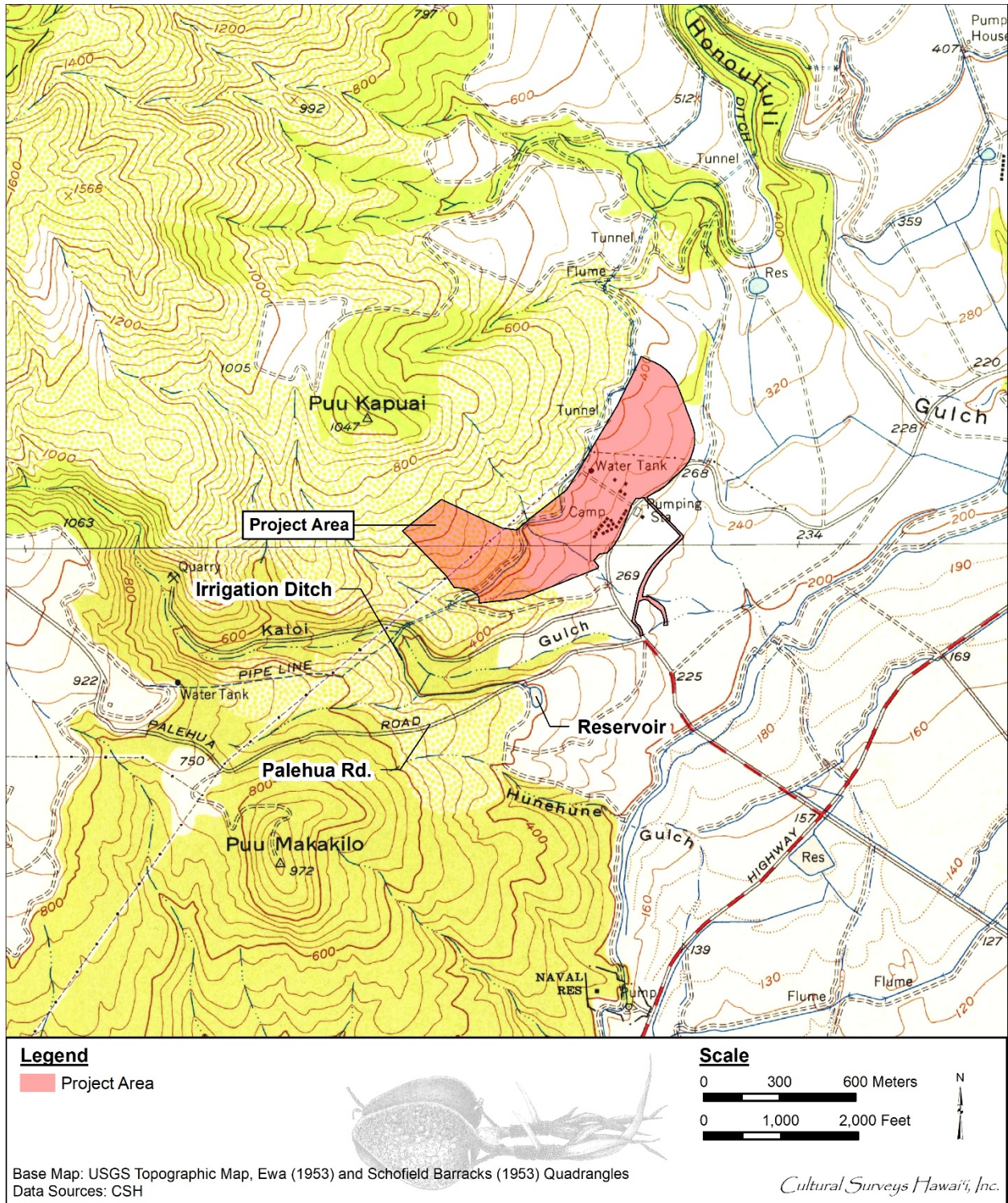


Figure 23. Portion of the 1953 Ewa and Schofield Barracks USGS topographic quadrangles showing the project area

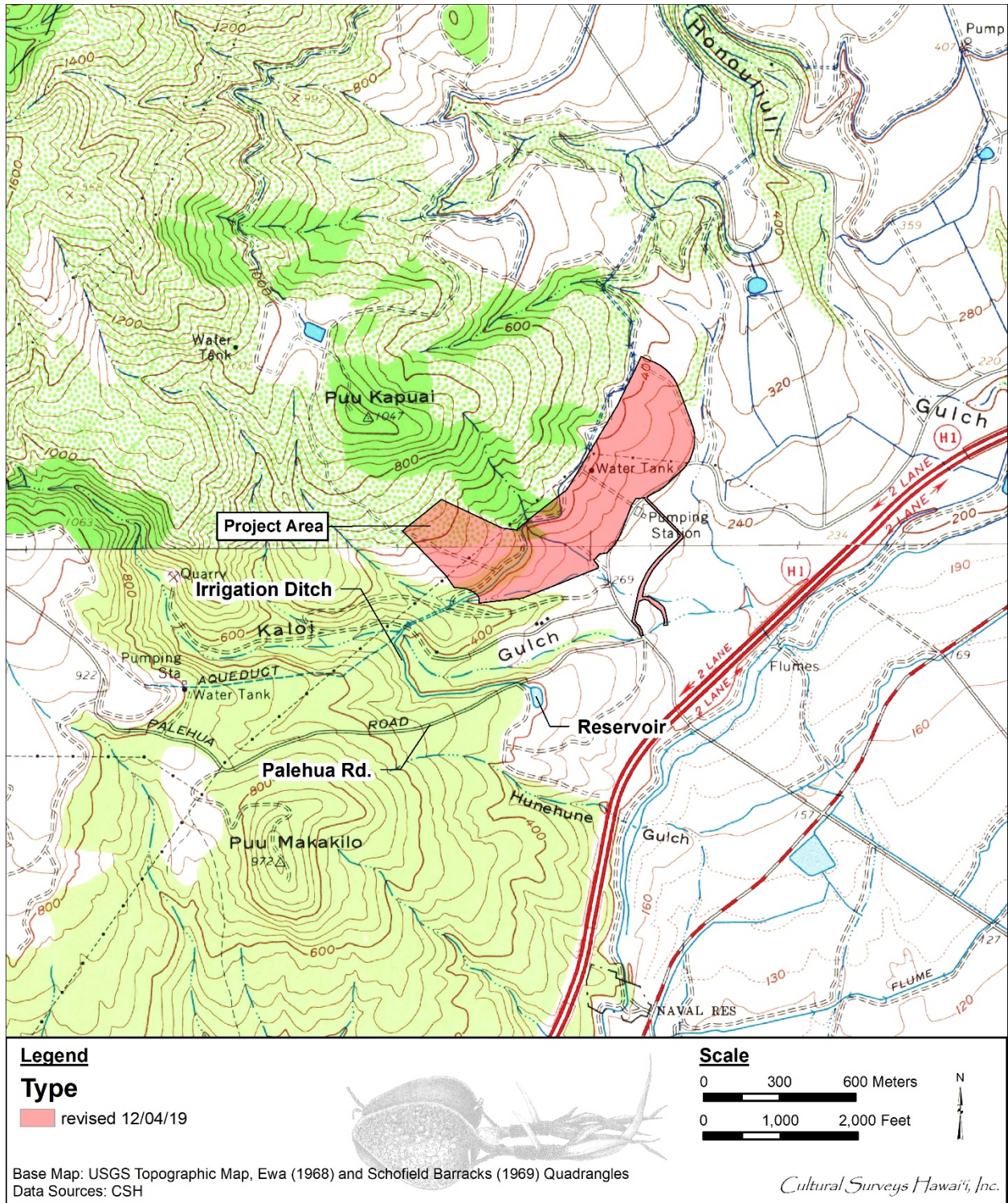


Figure 24. Portion of the 1968 Ewa and 1969 Schofield Barracks USGS topographic quadrangles showing the project area

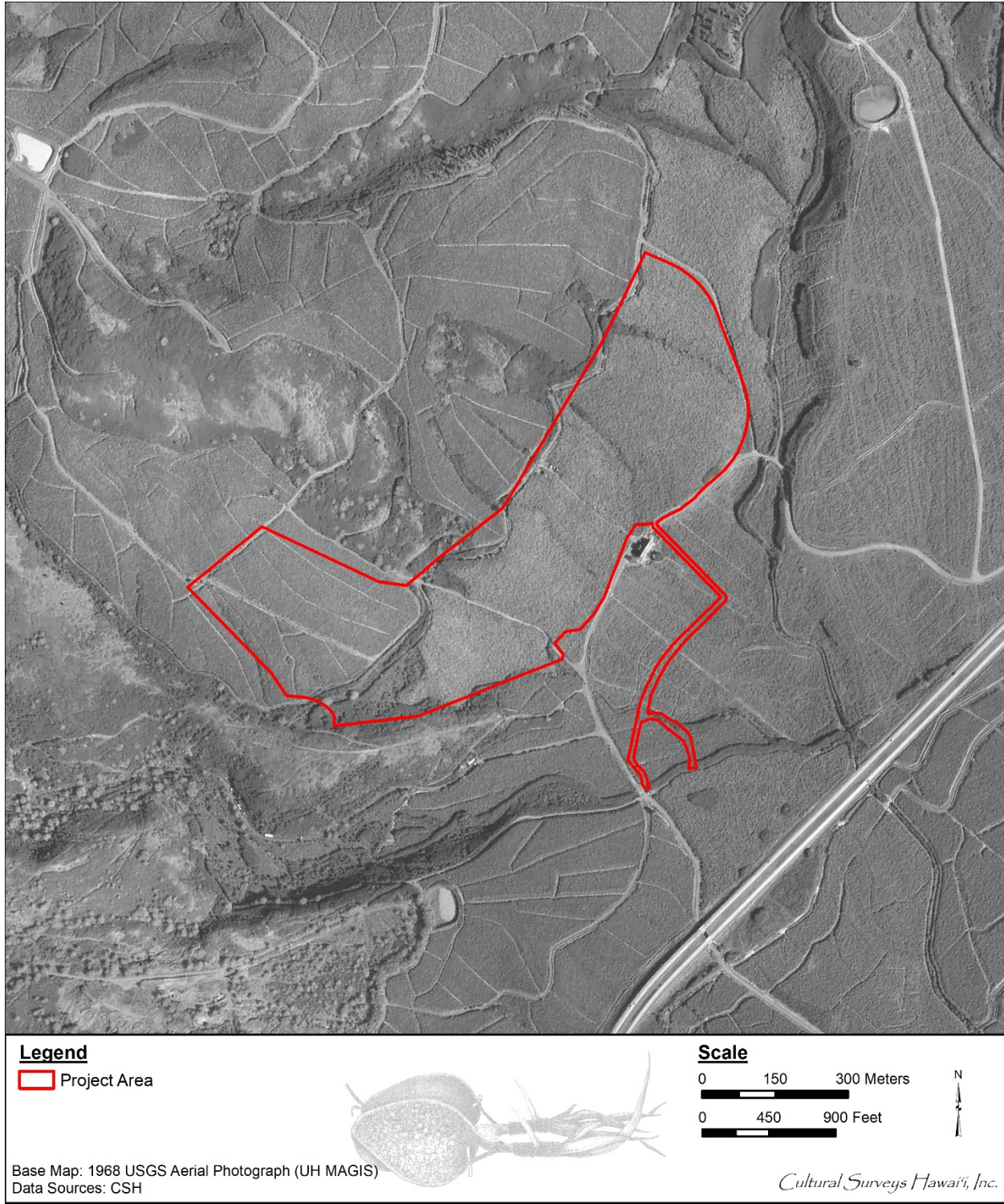


Figure 25. 1968 USGS aerial photograph (UH MAGIS) showing the project area

A 1977 USGS aerial photograph (Figure 26) appears to display decreased sugarcane cultivation in the Wai‘anae foothills. It is not clear if the project area is in active cultivation or not. Clearly by 1993 (Figure 27) sugarcane cultivation within the project area is finished, although it remains active immediately southeast of the project area.

Sometime in the early 1990s, a group of Japanese investors poured \$70 million into the development of the Pu‘u Makakilo Golf Course. The golf course’s exact date of construction is unclear; however, the proposed area was surveyed by Sinoto in 1988 (Sinoto 1988). The golf course was situated on the slopes of Pu‘u Makakilo just north of the rock quarry. During a burst bubble in the Japanese investment market the project foundered, and the course and buildings were purchased by Grace Pacific in 1994 (*Honolulu Advertiser*, May 2004:31). Construction of the golf course resulted in grading and terracing of a large area just south of the present project area for fairway construction.