
Section 2 Methods

2.1 Field Methods

CSH completed the fieldwork component of this AIS under archaeological permit numbers 15-03 and 16-26, issued by the SHPD pursuant to HAR §13-13-282. Fieldwork was accomplished 6 April 2015 through 10 April 2015 and 22 April 2015 by CSH archaeologists Richard Stark, Ph.D., Gerald Ida, B.A., Tyler Turran, B.A., and Missy Kamai, B.A. and on 4 January 2016 and 8 January 2016 by CSH archaeologists Scott Belluomini, B.A., Thomas Martel, B.A., and Trevor Yucha, B.S., under the general supervision of Hallett H. Hammatt, Ph.D. This work required approximately 30 person-days to complete.

In general, fieldwork included 100% pedestrian inspection of the project area, GPS data collection, and subsurface testing.

2.1.1 Pedestrian Survey

A 100%-coverage pedestrian inspection of the project area was undertaken for the purpose of historic property identification and documentation. The pedestrian survey was accomplished through systematic sweeps spaced 5 m apart, with the exception of the gulch area on the west end of the project area. Systematic sweeps in the gulch area varied from 1 m to 5 m apart.

2.1.2 Subsurface Testing

The subsurface testing program was backhoe assisted and involved, in total, 17 test excavations. The SHPD was not consulted regarding the initial 12 testing locations for the AIS. The test excavation locations were selected to provide general coverage of the 148-acre project area in order to acquire a general character of the sediments present.

Previous land use outside the stream gulch that comprises the west side of the project area consisted of sugar plantation agriculture including Puhi Camp until KCC acquired the land. There is no evidence of pre-Contact use of these lands prior to their development for plantation agriculture. Certainly the area was used for forest resource collection by peoples of nearby communities along the Huleia river basin, but without any permanent habitation or special importance noted at or in the vicinity of the project area in the background research or identified in previous historic preservation studies.

The 12 linear test excavation trenches measuring approximately 6 m (20 ft) long and 0.6 m (2 ft) wide (the approximately width of a standard backhoe bucket) were excavated with a backhoe within the project area during the initial phase of subsurface testing. The 6-m length chosen for the test excavations provides a satisfactory area for meaningful characterization of the stratigraphic profile exposed and allows room to step into one end of the trench to allow for safe ingress and egress for recording the profile or any exposed historic properties.

After consultation with the SHPD, five additional test excavations were conducted in areas as selected by the SHPD. These five test excavations were conducted with a wider backhoe bucket, measuring approximately 1 m (3 ft) in width, and were generally from 3 m (9 ft) to 5 m (16 ft) in length.

A stratigraphic profile of each test excavation was drawn and photographed. The observed sediments were described using standard USDA soil description observations/terminology. Sediment descriptions included Munsell color; texture; consistence; structure; plasticity; cementation; origin of sediments; descriptions of any inclusions such as cultural material and/or roots; lower boundary distinctiveness and topography; and other general observations. Where stratigraphic anomalies or potential cultural deposits were exposed, these were carefully represented on test excavation profile maps.

Diagnostic (identifiable or datable) artifacts were collected from backhoe trench 11 (T-11) and analyzed as described below.

2.2 Laboratory Methods

Materials collected during AIS fieldwork were identified and catalogued at CSH's laboratory facilities on Kaua'i. Analysis of collected materials was undertaken using standard archaeological laboratory techniques. Materials were washed, sorted, measured, weighed, described, and/or photographed.

2.2.1 Artifact Analysis

In general, artifact analysis focused on establishing, to the greatest extent possible, material type, function, cultural affiliation, and age of manufacture. As applicable, artifacts were washed, sorted, measured, weighed, described, photographed, and catalogued. Diagnostic (dateable or identifiable) attributes of artifacts were researched.

Historic artifacts were identified using standard reference materials (e.g., Elliott and Gould 1988; Fike 1987; Godden 1964; Kovel and Kovel 1986; Lehner 1988; Lindsey 2014; Millar 1988; Munsey 1970; Toulouse 1971; Whitten 2009; Zumwalt 1980; and Millar 1988) as well as resources available on the internet. Analyzed materials were tabulated and are summarized in Section 5: Artifact Analysis.

2.2.2 Disposition of Materials

Materials collected during the current AIS (excluding human remains and grave goods) will remain temporarily curated at the CSH office in Līhu'e, Kaua'i. CSH will make arrangements with the landowner regarding the disposition of this material. Should the landowner request different archiving of material, an archive location will be determined in consultation with the SHPD. All data generated during the course of the AIS are stored at the CSH offices.

2.3 Research Methods

Background research included a review of previous archaeological studies on file at the SHPD; review of documents at Hamilton Library of the University of Hawai'i, the Hawai'i State Archives, the Grove Farm Museum and Office, the Kaua'i Historical Society, the Hawai'i Public Library, and the Bishop Museum Archives; study of historic photographs at the Hawai'i State Archives and the Bishop Museum Archives; and study of historic maps at the Survey Office of the Department of Land and Natural Resources. Historic maps and photographs from the CSH library were also consulted. In addition, Māhele records were examined from OHA's Papakilo Database (Office of Hawaiian Affairs 2011), the Waihona 'Aina database (Waihona 'Aina 2000), and the Ulukau Māhele Database (Soehren 2010).

This research provided the environmental, cultural, historic, and archaeological background for the project area. The sources studied were used to formulate a predictive model regarding the expected types and locations of historic properties in the project area.

2.4 Consultation Methods

A cultural impact assessment (CIA) was conducted for the proposed rezoning project (Fa'anunu et al. 2012). The following methods are adapted from the associated CIA report. The results of the CIA as well as any subsequent consultation is discussed in Section 7.

2.4.1 Sampling and Recruitment

A combination of qualitative methods, including purposive, snowball, and expert (or judgment) sampling, were used to identify and invite potential participants to the study. These methods are used for intensive case studies such as AISs or cultural impact assessments (CIA), to recruit people who are hard to identify, or are members of elite groups (Bernard 2006:190). Our purpose is not to establish a representative or random sample. It is to “identify specific groups of people who either possess characteristics or live in circumstances relevant to the social phenomenon being studied . . . This approach to sampling allows the researcher deliberately to include a wide range of types of informants and also to select key informants with access to important sources of knowledge” (Mays and Pope 1995:110).

We began with purposive sampling informed by referrals from known specialists and relevant agencies. For example, we contacted the head maintenance person for KCC, Calvin Shirai, for access to certain areas of the project, and it was Mr. Shirai who informed CSH archaeologist Gerald Ida of Rex Acosta, who was recently hired at KCC and is a former resident of Puhi Camp. Mr. Acosta was asked for his brief response/review of the project and to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and vicinity, cultural and lineal descendants, and other appropriate community representatives and members. Based on his in-depth knowledge and experiences, these key respondents then referred CSH to additional potential participants who were added to the pool of invited participants. This is snowball sampling, a chain referral method that entails asking a few key individuals (including agency and organization representatives) to provide their comments and referrals to other locally recognized experts or stakeholders who would be likely candidates for the study (Bernard 2006:192). CSH also employs expert or judgment sampling which involves assembling a group of people with recognized experience and expertise in a specific area (Bernard 2006:189–191). CSH maintains a database that draws on over two decades of established relationships with community consultants: cultural practitioners and specialists, community representatives and cultural and lineal descendants. The names of new potential contacts were also provided by colleagues at CSH and from the researchers' familiarity with people who live in or around the study area. Researchers often attend public forums (e.g., Neighborhood Board, Burial Council and Civic Club meetings) in (or near) the study area to scope for participants. Please refer to Section 7, for a list of individuals consulted for this AIS.

CSH focuses on obtaining in-depth information with a high level of validity from a targeted group of relevant stakeholders and local experts. Our qualitative methods do not aim to survey an entire population or subgroup. A depth of understanding about complex issues cannot be gained through comprehensive surveying. Our qualitative methodologies do not include quantitative

(statistical) analyses, yet they are recognized as rigorous and thorough. Bernard (2006:25) describes the qualitative methods as “a kind of measurement, an integral part of the complex whole that comprises scientific research.” Depending on the size and complexity of the project, CSH reports include in-depth contributions from about one-third of all participating respondents. Typically this means three to 12 interviews.

2.4.1 Informed Consent Protocol

An informed consent process was conducted as follows: 1) before beginning the interview the CSH researcher explained to the participant how the consent process works, the project purpose, the intent of the study and how his/her information will be used; 2) the researcher gave him/her a copy of the Authorization and Release Form to read and sign; 3) if the person agreed to participate by way of signing the consent form *or* by providing oral consent, the researcher started the interview; 4) the interviewee received a copy of the Authorization and Release Form for his/her records, while the original is stored at CSH; 5) after the interview was summarized at CSH (and possibly transcribed in full), the study participant was afforded an opportunity to review the interview notes (or transcription) and summary and to make any corrections, deletions or additions to the substance of their testimony/oral history interview; this was accomplished primarily via phone, post or email follow-up and secondarily by in-person visits; 6) participants received the final approved interview, photographs and the audio-recording and/or transcripts of their interview if it was recorded. They were also given information on how to view the draft report on the OEQC website and offered a hardcopy of the report once the report is a public document.

If an interviewee agreed to participate on the condition that his/her name be withheld, procedures were taken to protect his/her confidentiality (see Protection of Sensitive Information below).

2.4.2 Interview Techniques

To assist in discussion of natural and cultural resources and cultural practices specific to the study area, CSH initiated semi-structured interviews (as described by Bernard 2006) asking questions from the following broad categories: gathering practices and *mauka* (upland, mountain) and *makai* (lowland, ocean) resources, burials, trails, historic properties, *wahi pana* (storied place/s), and plantation life. The interview protocol is tailored to the specific historic, natural and cultural features of the landscape in the study area identified through archival research and community consultation. These interviews and oral histories supplement and provide depth to consultations from government agencies and community organizations that may provide brief responses, reviews and/or referrals gathered via phone, email and occasionally face-to-face commentary.

2.4.2.1 In-depth Interviews and Oral Histories

Interviews were conducted initially at a place of the study participant's choosing (usually at the participant's home or at a public meeting place) and/or—whenever feasible—during site visits to the project area. Generally, CSH's preference is to interview a participant individually or in small groups (two–four); occasionally participants are interviewed in focus groups (six–eight). Following the consent protocol outlined above, interviews may be recorded on tape or a digital audio device and in handwritten notes, and the participant photographed. The interview typically lasts one to four hours, and records the “who, what, when and where” of the interview. In addition

to questions outlined above, the interviewee is asked to provide biographical information (e.g., connection to the study area, genealogy, professional and volunteer affiliations, etc.).

2.4.2.2 Field Interviews

Field interviews are conducted with individuals or in focus groups comprised of *kūpuna* (elders) and *kama 'āina* (native born) who have a similar experience or background (e.g., the members of an area club, elders, fishermen, *hula* dancers) who are physically able and interested in visiting the project area. In some cases, field visits are preceded by an off-site interview to gather basic biographical, affiliation and other information about the participant. Initially, CSH researchers try to visit the project area to become familiar with the land and recognized (or potential) cultural places and historic properties in preparation for field interviews. All field activities are performed in a manner so as to minimize impact to the natural and cultural environment in the project area. Where appropriate, Hawaiian protocol may be used before going on to the study area and may include the offering of *ho 'okupu* (offering, gift), *pule*, and *oli*. All participants on field visits are asked to respect the integrity of natural and cultural features of the landscape and not remove any cultural artifacts or other resources from the area.

Building on open-ended and semi-structured approaches, field interviews included the structured methods enumerated in the above section. In some cases, participants may create a community resource map by surveying the project area with the researcher/s in order to identify significant cultural and natural features of the landscape. If the participant was comfortable sharing the location of resources, they were geo-referenced using GPS and included on the cultural resource map. If the participant preferred to keep the location private or to only identify its general location, the specific location was *not* recorded.

2.4.3 Protection of Sensitive Information

It is sometimes the case that participants in cultural studies agree to contribute their comments or be interviewed for a study on the condition that their names are withheld from the report. Their reasons for doing so vary from concern about protecting the identity of resource collectors and/or revealing the precise location of certain natural and cultural resources to opposition to the proposed project. For the interviewee who agrees to participate on the condition that his/her name is withheld from public disclosure, CSH takes all precautions to make sure his/her contribution remains confidential. The confidentiality of subjects is maintained via protected files.