

Section 3 Archaeological Monitoring Provisions

In consultation with SHPD, it was determined that a monitoring program was warranted as an historic preservation mitigation measure for the proposed Farrington Highway Drainage Improvements Project. The results of background research indicate the potential for cultural resources as well as human skeletal remains within the Project area. The northeastern section of Mauna Lahilahi (SIHP 50-80-07-3704) is approximately 200 feet from the current Project area. Sand deposits have been identified by two previous archaeological studies at the intersection of the southeastern end of Lahilahi Street and Farrington Highway at the current Project area. This is close to the beginning of Mauna Lahilahi Beach Park, where (about 1,200 feet from the current Project area) a concentration of human remains, an isolated burial, a rock alignment, and a subsurface cultural layer have been documented. In addition, a small settlement of four houses, observed and sketched in 1826, may be located within or near the current Project area. Further, the Project area includes the former OR&L railway alignment, and a railroad berm (SIHP 50-80-07-9714) was previously located about 1,500 feet south of the current Project area.

On-site archaeological monitoring is recommended for all ground disturbance conducted below the existing ground surface to facilitate the identification and treatment of any burials that might be discovered during Project construction and to alleviate the Project's effect on non-burial archaeological deposits.

Under Hawai'i State historic preservation legislation, "Archaeological monitoring may be an identification, mitigation, or post-mitigation contingency measure. Monitoring shall entail the archaeological observation of, and possible intervention with, on-going activities which may adversely affect historic properties" (HAR Chapter 13-279-3). For this Project, the proposed monitoring program will serve as a mitigation measure that insures proper documentation should historic properties be encountered during development work.

Hawai'i State historic preservation legislation governing archaeological monitoring programs requires that each monitoring plan discuss nine specific items (HAR Chapter 13-279-4). The monitoring provisions below address those nine requirements in terms of the archaeological monitoring for the construction within the Project area.

1. Anticipated Historic Properties:

Based on background research and previous archaeological studies conducted within the current Project area, historic properties (i.e., archaeological sites) in the form of pre- and post-Contact subsurface cultural deposits may be encountered during archaeological monitoring of ground disturbance within the Project area.

Evidence of indigenous Hawaiian land use could include subsurface cultural deposits containing midden and artifacts, and human burials. Evidence of post-Contact land use could include subsurface cultural deposits in the form of trash pits, privies, building foundations, and human burials.

2. Locations of Historic Properties:

Historic properties may be encountered anywhere within the Project area.

3. Fieldwork:

On-site archaeological monitoring is recommended for the Project area. The monitoring fieldwork may encompass the documentation of subsurface archaeological deposits and will employ current standard archaeological recording techniques. This will include drawing and recording the stratigraphy of excavation profiles where cultural features or artifacts are exposed as well as representative profiles. These exposures will be photographed, located on Project area maps, and sampled. Photographs and representative profiles of excavations will be taken even if no historically-significant sites are documented. As appropriate, sampling will include the collection of representative artifacts, bulk sediment samples, and/or the on-site screening of measured volumes of feature fill to determine feature contents.

If human remains are identified, no further work will take place, including no screening of back dirt, no cleaning and/or excavation of the burial area, and no exploratory work of any kind unless specifically requested by the SHPD/DLNR. All human skeletal remains that are encountered during construction will be handled in compliance with HRS Chapter 6E-43 and HAR Chapter 13-300 and in consultation with the SHPD/DLNR.

4. Archaeologist's Role:

The on-site archaeologist will have the authority to stop work immediately in the area of any findings so that documentation can proceed and appropriate treatment can be determined. In addition, the archaeologist will have the authority to slow and/or suspend construction activities in order to insure that the necessary archaeological sampling and recording can take place.

5. Coordination Meeting:

Before work commences on the Project, the on-site archaeologist shall hold a coordination meeting to orient the construction crew to the requirements of the archaeological monitoring program. At this meeting the monitor will emphasize his or her authority to temporarily halt construction and that all historic finds, including objects such as bottles, are the property of the landowner and may not be removed from the construction site. At this time it will be made clear that the archaeologist must be on site during all ground disturbance activities that occur within the on-site monitoring program areas.

6. Laboratory work:

Laboratory work will be conducted in accordance with HAR 13-279-5(6). Laboratory analysis of non-burial related finds will be tabulated into table form and standard artifact and midden recording will be conducted as follows: artifacts will be documented as to provenience, weight, length, width, type of material, and presumed function. Photographs of representative artifacts will be taken for inclusion into the archaeological monitoring report. Bone and shell midden materials will be sorted down to species, when possible, and then tabulated by provenience.

As appropriate, collected charcoal material obtained within intact cultural deposits will be analyzed for species identification. Charcoal samples ideal for dating analyses will be sent to Beta Analytic, Inc. for radiocarbon dating. If appropriate, artifacts may

be sent to the University of Hawai'i at Hilo Geoarchaeology Lab for Energy-Dispersive X-Ray Fluorescence analysis in order to identify and possibly geographically locate the source material. All analyzed samples, provenience information, and results will be presented in table form within the archaeological monitoring report.

7. Report Preparation:

One of the primary objectives of the report will be to present a stratigraphic overview of the Project area which will allow for predictive assessments of adjacent properties, which may be the subject of future development. The report will contain a section on stratigraphy, description of archaeological findings, monitoring methods, and results of laboratory analyses. The report will address the requirements of a monitoring report (HAR section 13-279-5). Photographs of excavations will be included in the monitoring report even if no historically-significant sites are documented. Should burial treatment be completed as part of the monitoring effort, a summary of this treatment will be included in the monitoring report. Should burials and/or human remains be identified, additional letters, memos, and/or reports may be requested by the Burial Sites Program.

8. Archiving Materials:

All burial materials will be addressed as directed by the SHPD/DLNR. Materials not associated with burials will be temporarily stored at the contracted archaeologist's facilities until an appropriate curation facility is selected, in consultation with the landowner and the SHPD/DLNR.

9. Research Objectives:

The area that falls within the monitoring plan has experienced very little new ground-disturbing development in the last two decades, and therefore limited previous archaeological studies have been conducted. This monitoring program will provide an opportunity to document this area in greater detail and attain a better understanding of pre-development and post-development culture in this region of O'ahu. Research questions that may be explored during this monitoring program include the following:

- a. What were pre-Contact environmental conditions like in this region and how might they have changed through time or been impacted by human activity? This will include ground-truthing the sediments in the area for soil types and thickness of post-Contact fill layers.
- b. What cultural layers can be identified in the study area and what do they tell us about pre-Contact or post-Contact land use? This could include the discovery of cultural artifacts and empirical evidence such as pollen analysis or radiocarbon dating.
- c. Is there any evidence of the former settlement depicted and described in 1826? The current Project will provide the opportunity to gather information regarding such a settlement.