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October 11, 2022

Daniel E. Orodnenker, Executive Officer  
State of Hawaii Land Use Commission  
Department of Business, Economic Development & Tourism  
P.O. Box 2359  
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c/o: [Daniel.E.Orodnenker@hawaii.gov](mailto:Daniel.E.Orodnenker@hawaii.gov)

IN REPLY REFER TO:  
Project No.: 2020PR33693  
Doc. No.: 2210IK07  
Archaeology

Dear Daniel E. Orodnenker:

SUBJECT: **Chapter 6E-42 Historic Preservation Review –  
Miki Basin Industrial Park Project – 2<sup>nd</sup> Draft Environment Assessment for the  
State Land Use District Boundary Amendment (Docket No. A19-809)  
Archaeological Data Recovery Plan  
Archaeological Data Recovery Report  
Kamoku Ahupua'a, Lāna'i City, Island of Lāna'i  
TMK: (2) 4-9-002:061 por.**

This letter provides the State Historic Preservation Division's (SHPD's) review of a draft archaeological data recovery plan (DRP) titled, *Archaeological Data Recovery Plan for Sites 50-40-98-1980 and 50-40-98-1981 Within the Miki Basin 200 Acres Industrial Development Lands of Kalulu and Kaunolū, Lahaina District, Lāna'i Island TMK: (2) 4-9-002:061* (Dye, May 2018) and a draft archaeological data recovery report (DRR) titled, *Archaeological Data Recovery Report for Sites 50-40-98-1980 and 50-40-98-1981 Within the Miki Basin 200 Acres Industrial Development Lands of Kalulu and Kaunolū, Lahaina District, Lāna'i Island TMK: (2) 4-9-002:061* (Dye, February 2019).

SHPD previously reviewed and accepted an archaeological inventory survey (AIS) report (DiVito et al., May 2018) for the proposed Miki Basin Industrial Park Project in a letter dated August 4, 2020 (Log No. 2020.01586, Doc. No. 2008AM02). SHPD concurred with the proposed mitigation recommendations of archaeological data recovery for SIHP Site 50-40-98-01980 (surface lithic scatter and exposed fire-pit) and SIHP Site 50-40-98-01981 (subsurface fire-pit). SHPD received an HRS 6E Submittal Form and SHPD's previous review letter of the subject project on December 20, 2021 (Submission No. 2020PR33693.002) and the draft DRP and draft DRR on January 7, 2022 (Submission No. 2020PR33693.003). The unsolicited DRP and DRR were developed before SHPD's review and acceptance of the AIS report.

The landowner, Pūlama Lāna'i, proposes the Miki Basin Industrial Park Project consisting of a 200-acre master-planned light and heavy industrial development on land adjoining the Lāna'i Airport, the Maui Electric Company (MECO) 5-acre power plant, and the existing 20-acre Miki Basin Industrial Condominium. There are no proposed ground disturbances and currently is considered a paper action only. According to the submittal documents, future ground-disturbing activities will require a new HRS 6E review.

T.S. Dye and Colleagues, Archaeologists, Inc. (TSD) conducted an archaeological inventory survey (DiVito et al., May 2018) of 200 acres for the subject Miki Basin Industrial Park Project. The survey included a 100 percent coverage pedestrian survey of the project area which was conducted using transects spaced at 10-meter (m) intervals. Subsurface testing of the project area included the excavation of 31 backhoe trenches. The test trenches were excavated to 145 cm below ground surface, measured 3 to 4 m in length, and were each 1 m wide. TSD identified two historic properties during the AIS testing: SIHP Site 50-40-98-01980, comprised of two features, a lithic scatter and an eroded exposed fire-pit; and SIHP Site 50-40-98-01981, a subsurface truncated fire-pit feature. During the AIS fieldwork, all the lithic artifacts were collected in the field, and both fire pits were bisected and fully excavated. TSD assessed SIHP Sites 50-40-98-01980 and 50-40-98-01981 as significant for the information on Hawaiian history and prehistory that they have yielded (Criterion “d”). The report indicates that the Miki Basin Industrial Park Project will adversely impact both historic properties and recommends that data recovery be conducted as mitigation. SHPD concurred with the significance assessments and mitigation recommendations for SIHP Sites 50-40-98-01980 and 50-40-98-01981 (Log No. 2020.01586, Doc. No. 2008AM02).

#### Data Recovery Plan (Dye, May 2018)

TSD produced the subject DRP for SIHP Sites 50-40-98-01980 and 50-40-98-01981. As indicated above, the DRP was produced prior to SHPD’s review and acceptance of the AIS report (DiVito et al., May 2018). The DRP includes a brief management summary, site descriptions, research questions, and methodology. The plan stipulates that no fieldwork will be conducted for the data recovery work. During the AIS fieldwork, all the artifacts were collected from the field, the fire pits were bisected, and charcoal samples were collected. The DRP focuses on conducting charcoal identification, accelerator mass spectrometry dating, and calibration of the laboratory results with the BCal software package for each fire-pit feature. Additionally, the collected lithic artifacts would be subjected to EDXRF at the University of Hawai‘i at Hilo to identify the source of rock with non-destructive geochemical analysis. Lastly, the DRP indicates the laboratory results would be presented in the DRR.

Research questions include 1) gathering data on the history of vegetation change on Lāna‘i in an effort to date two periods of change, the pre-Contact period and the mid-nineteenth century when sheep and goats were raised on the island; and 2) complete technological and geochemical sourcing analyses of the lithic artifacts to determine the reduction sequences for the lithic artifacts and to determine possible source locations.

#### Data Recovery Report (Dye, February 2019)

TSD produced the subject DRR before SHPD’s review and acceptance of the DRP (Dye, May 2018). The DRR includes a management summary, an overview of the DRP, laboratory results, a discussion of research objectives, and conclusions. Two pieces of wood charcoal were selected for radiocarbon dating. A piece of ‘ilima charcoal (SIHP Site 50-40-98-01981) and a piece of ‘akoko (SIHP Site 50-40-98-01980) were submitted to Beta-Analytic for AMS dating. The results indicated that both sites dated near the end of the pre-Contact period.

Dye (February 2019) compared the ages and firewood composition of the fire-pits at SIHP Sites 50-40-98-01980 and 50-40-98-01981 with ten fire-pit features on Lāna‘i Island and with 33 fire-pit features from Waimānalo, O‘ahu Island, to distinguish tempos of vegetation change following Polynesian colonization of the islands. The combination of wood charcoal identification and controlled radiocarbon dating yields indicate the choice of wood species to fuel a fire and a precise estimate of when the firing occurred. The DRR report states that the reported calibrated ages of the individual fire-pits were more helpful in asking the question of when the first fire-pit construction and use were, second occurrences, etc. Dye (February 2019) states that based on the present evidence, the first occurrence of fire-pit construction and use on Lāna‘i began in the late fifteenth century and continued into the historic period. In addition, the identification of firewood used in the fire-pits indicates the prevalence in the historical period of native forest, with relatively little replacement of native species by introduced vegetation species (canoe plants) by Polynesians. In addition, the current evidence suggests the first fire-pits were constructed 400 to 500 years after Polynesians colonized the Hawai‘i island chain, and it was unlikely that the earliest evidence for human activity on Lāna‘i has been identified. The second research question related to the technological and geochemical sourcing analyses (EDXRF) of the collected lithic artifacts concluded that Lāna‘i’s archaeological study on stone tools is in the early stages of understanding. The reduction sequence of the adze preforms consisted of large flakes from a boulder of suitable rock materials. This reduction sequence involving flakes was common in Hawai‘i and associated with producing small adzes. Dye (February 2019) indicates that the adze rejects were sourced from local rocks but cautions that imported adzes will mostly likely be identified with subsequent research.

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The DRP meets the minimum requirements of HAR §13-278-3. **It is accepted.** In addition, SHPD agrees with the conclusion that the archaeological data recovery work conducted for the current study adequately mitigates possible future adverse impacts to SIHP Sites 50-40-98-01980 and 50-40-98-01981. No further archaeological work is needed at either site. Additionally, the DRR meets the minimum requirements of HAR §13-278-4 and HAR §13-284-9(d). **It is accepted.**

Please send two hard copies of the mitigation plan and report, each clearly marked FINAL, along with a copy of this letter and a text-searchable PDF versions of the plan and report to the Kapolei SHPD office, Attn: SHPD Library. Also, submit a text-searchable PDF copy of the final plan and report to HICRIS Project No. 2020PR33693 using the Project Supplement option and a PDF copy of each to [lehua.k.soares@hawaii.gov](mailto:lehua.k.soares@hawaii.gov).

**SHPD notifies the County** that the permit issuance process may proceed.

**SHPD requests** the opportunity to review future projects involving ground disturbances within the Miki Basin Industrial Park Project.

Please contact 'Iolani Kauhane, Maui Archaeologist III, at [iolani.kauhane@hawaii.gov](mailto:iolani.kauhane@hawaii.gov) for matters regarding archaeological resources or this letter.

Aloha,

*Alan Downer*

Alan S. Downer, PhD

Administrator, State Historic Preservation Division

Deputy State Historic Preservation Officer

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