RC-0391

A Preservation Plan for Seven Archaeological Sites Located within the NELHA Host Park

(TMK:3-7-3-009:023)

ʻOʻoma 2nd Ahupuaʻa
North Kona District
Island of Hawaiʻi

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ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES

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RECHTMAN CONSULTING

CONTENTS

FIGURES

TABLES

INTRODUCTION

At the request of Mr. Jeff Nichols of the Natural Energy Laboratories of Hawai‘i Authority (NELHA), Rechtman Consulting, LLC has prepared this preservation plan for seven archaeological sites located within the NELHA Host Park (TMK:3-7-3-009:023) in ‘O‘oma 2nd Ahupua‘a, North Kona District, Island of Hawai‘i (Figure 1). These sites are officially referred to as SIHP Sites 50-10-27-1913, 1914, 1915, 16132, 18025, 18026, and 18027; and were originally recorded by Reinecke (1930) and later documented during the State Inventory of Historic Places conducted by DLNR-SHPD in 1972. However, it was not until a 1987 archaeological survey and testing project conducted by PHRI (Donham 1987) that these sites were comprehensively recorded. As will be specified in this plan, all of these sites will be preserved within a single large preservation easement located in the southwestern corner of the subject parcel. This preservation plan has been prepared in compliance with the process described in the applicable sections of HRS Chapter 6E (Historic Preservation), and with the current Administrative Rules (HAR 13§13-277) for the preservation of archaeological sites approved and adopted by the State of Hawai‘i.

The parcel on which the archaeological sites are located consists of approximately 82 acres (TMK:3-7-3-009:023) within the NELHA Host Park, ‘O‘oma 2nd Ahupua‘a, North Kona District, Island of Hawai‘i (Figures 2 and 3). The parcel is intended for the expansion of the existing NELHA facilities. Although portions of the parcel have been developed, no development has occurred in the vicinity of these sites, however a jeep road does run north/south along the shoreline impacting portions of two of the preservation sites.

Donham (1987) describes the subject parcel as situated at the coast on the lower southwestern slope of Hualālai Volcano, within the region of Kekaha. The principle environmental features of Kekaha are its hot, dry climate, and its extensive lava fields with little to no soil accumulation. This region receives roughly 10 inches of rain per year and has a mean annual temperature of 70 to 76 degrees Fahrenheit (Donham 1987). Terrain within the project area consists of weathered *pāhoehoe* and *‘a‘ā* lava flows that originated from Hualālai Volcano 3,000 to 5,000 year before present (Wolfe and Morris 1996). With the exception of a narrow strip of coral beach deposit, no soil is present within the subject parcel. Smooth *pāhoehoe* forms most of the rocky points along the shoreline that extend beyond the coral beach wash (Donham 1987). Coastal vegetation includes tree heliotrope (*Messerschmidia argentea*) *naupaka* (*Scaevola sericea*), Christmas-berry (*Schinus terebithifolius*), and beach morning glory (*Ipomea pescaprae*), along with stands of *‘ilima* (*Sida fallax*), *noni* (*Morinda citrifolia*), with a blanket of fountain grass (*Pennisetum setaceum*) slightly further inland (Figure 4).

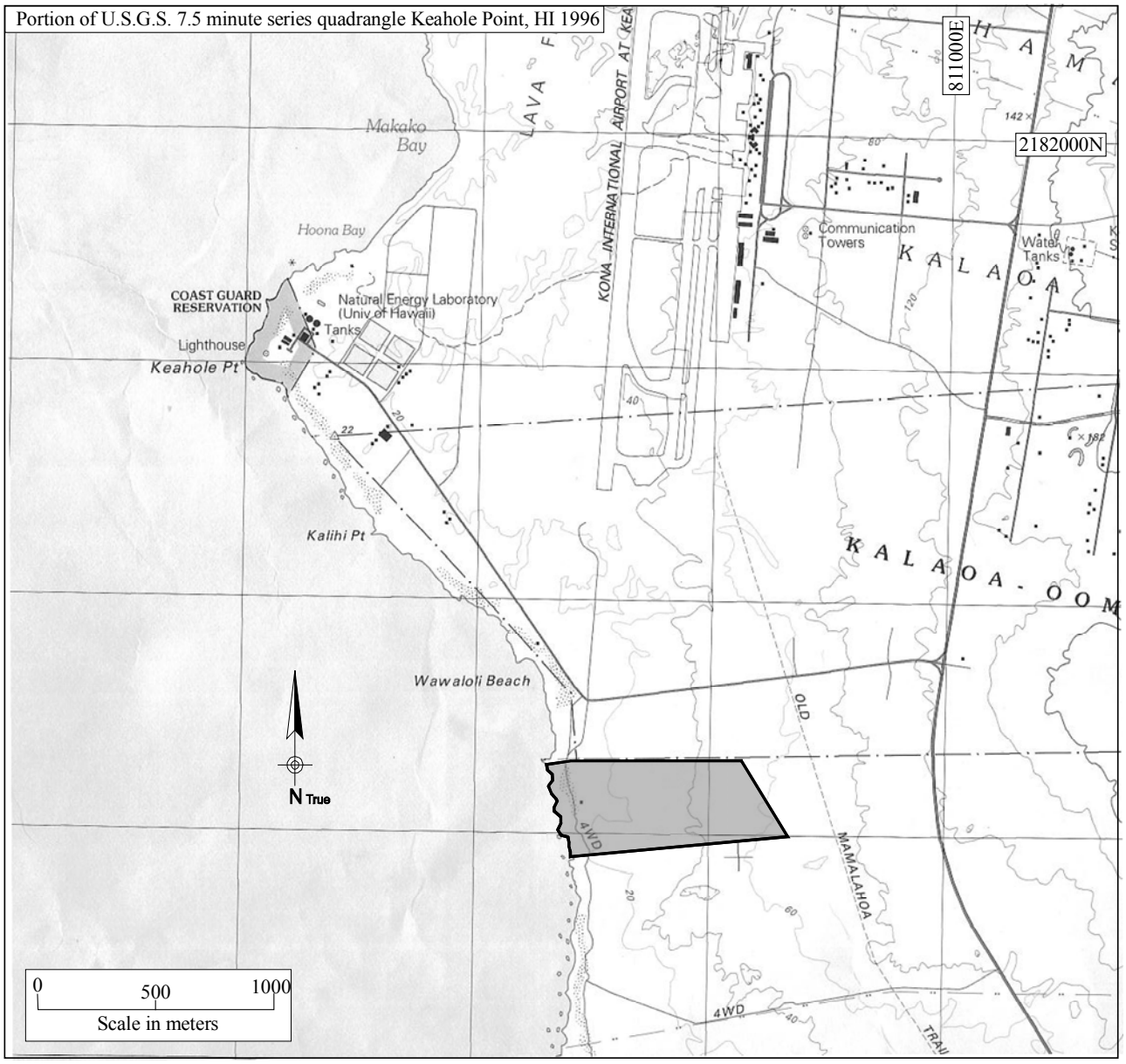

Figure 1. Project area location.

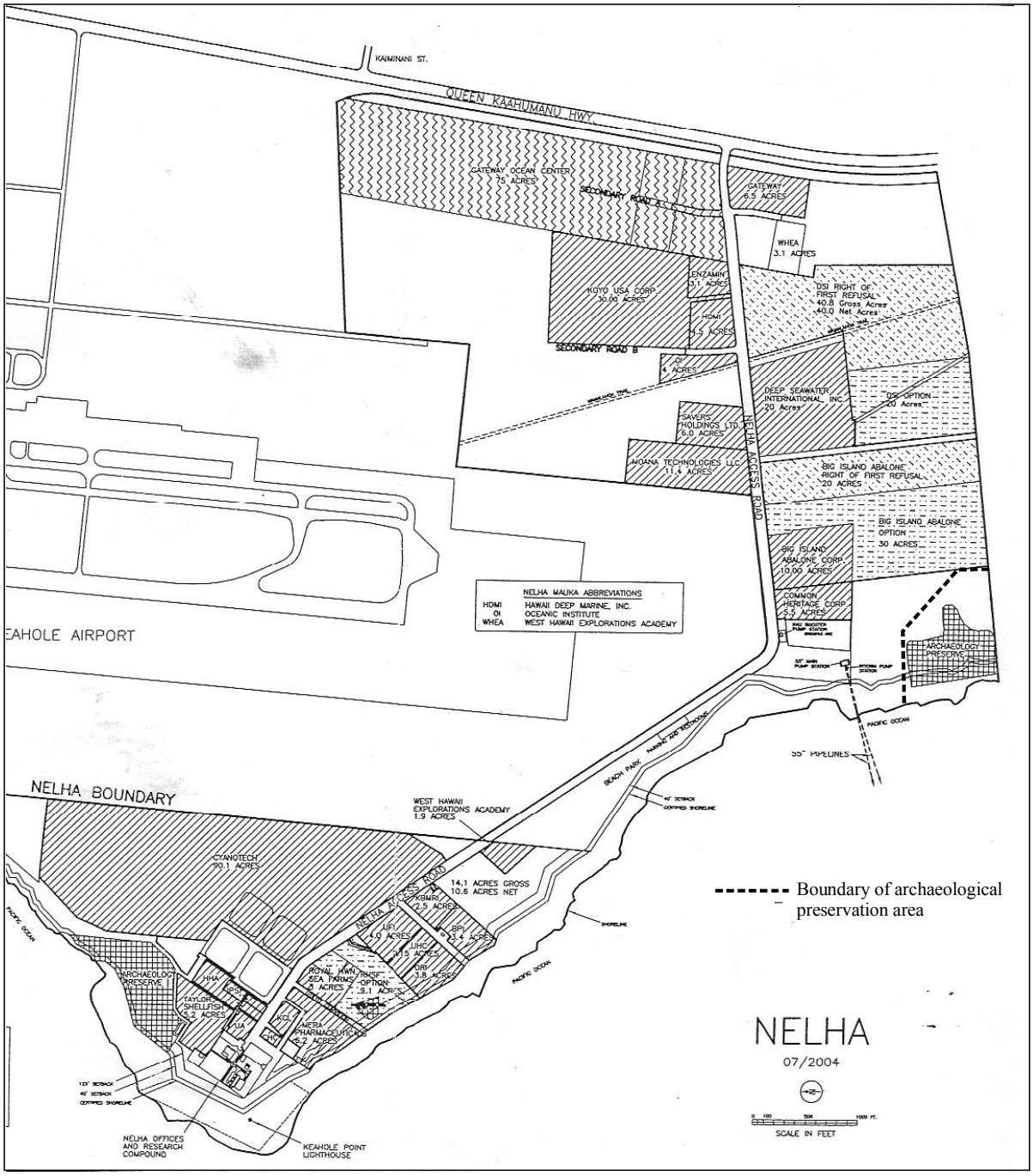

Figure 2. Map of Natural Energy Laboratory of Hawai‘i Authority (NELHA).

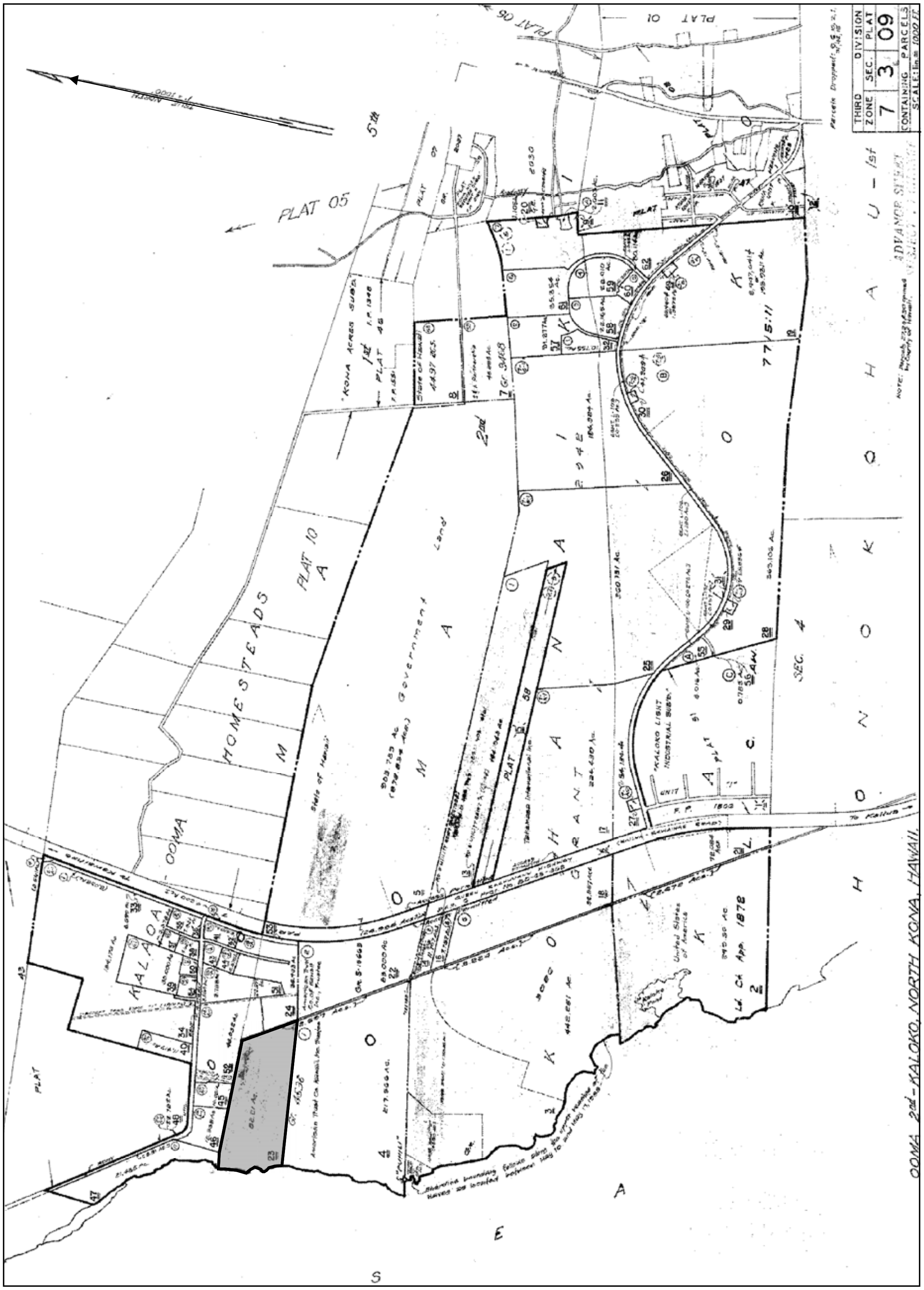

Figure 3. Tax Map Key (TMK):3-7-3-09 showing study parcel (023).

Figure 4. View to south of the subject parcel, showing the coastal jeep road, typical terrain, and vegetation.

SUMMARY OF THE PRESERVATION SITES

As stated above, SIHP Sites 1913, 1914, 1915, 16132, 18025, 18026, and 18027 were identified and recorded as part of earlier archaeological survey work. Excerpts of the site descriptions provided in the most recent of the previous studies (Donham 1987) are presented here along with updated remarks where appropriate to reflect current existing conditions. Each of the seven sites was inspected as part of the current preservation planning project; and in addition to any updated descriptions, where necessary, sites and features were also remapped to document current existing conditions. Additionally, as part of the current preservation planning project an extensive series of photographs were taken to document existing conditions. These photographs will be archived with the NELHA planning office and will serve as the baseline for monitoring any future impacts to these sites. Site locations are shown on Figure 5 and each of the sites is described below.

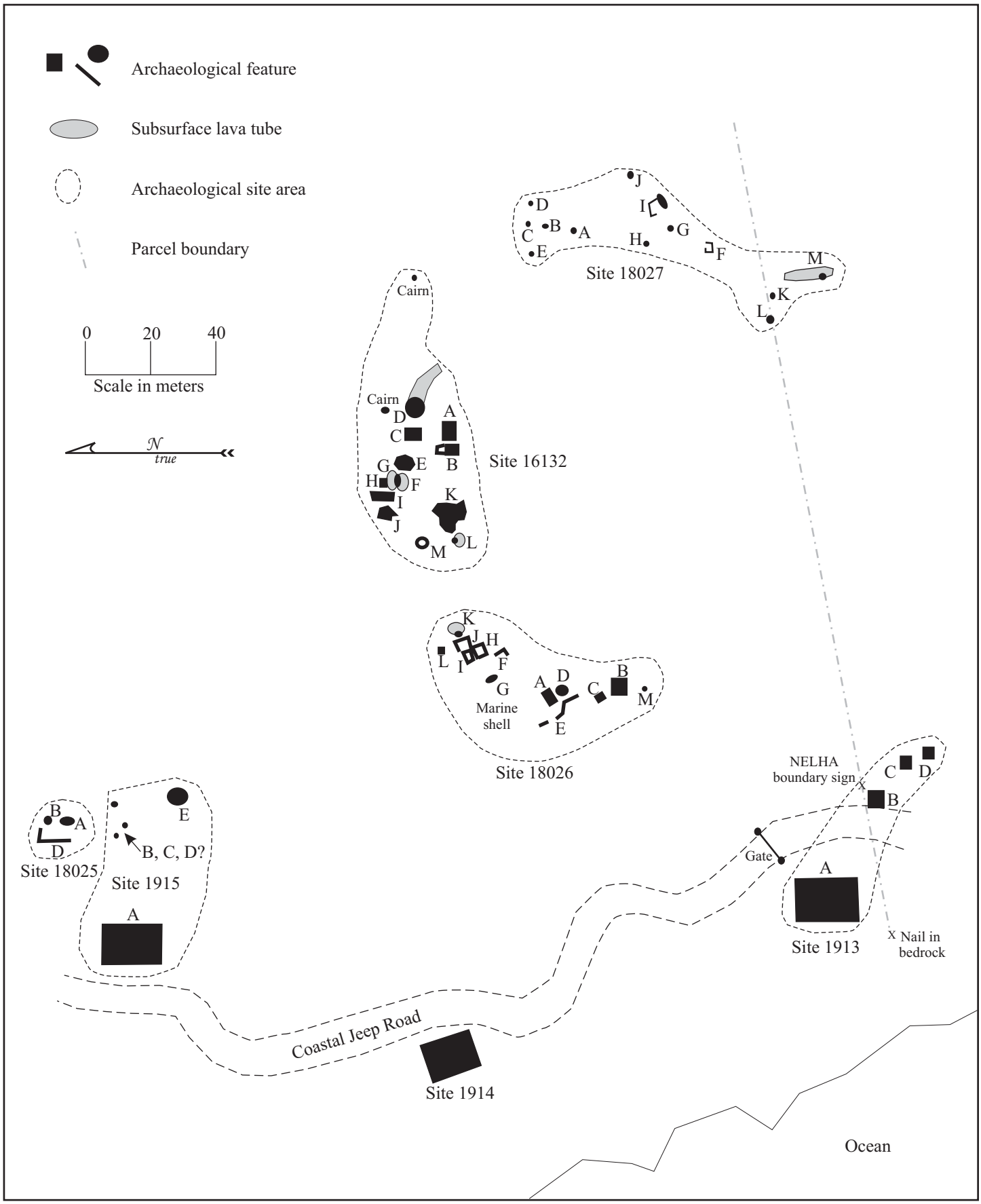

Figure 5. Site location map.

SIHP Site 1913

SIHP Site 1913 was first recorded by Reinecke (1930) during a coastal survey of West Hawai‘i conducted for the B.P. Bishop Museum. Reinecke described only Feature A of Site 1913 (as Site 70), labeling it a walled platform that was rather unusual in appearance. During the 1971-1972 Hawai‘i Island portion of the State Inventory of Historic Places conducted by DLNR-SHPD, Martin recorded the walled platform and three associated smaller platforms, which were assigned the State Site Number 50-10-27-1913. Feature A of Site 1913 was then reexamined by Cordy (1985), who assigned it the Bishop Museum Site number D15-18. Both Martin and Cordy describe Feature A as a *heiau*. Feature A is the only feature of Site 1913 located within the current study parcel, the three other platforms that were first described by Martin are located on the adjacent parcel to the south (see Figure 5). Donham (1987) summarized the previous work conducted at Site 1913 and described it—using the Bishop Museum designation (Site D15-18)—thusly:

> This site was first recorded as Site 70 by Reinecke, who described it as follows:
>
> > Walled platform, S.E. corner terraced, badly broken down. Platform amuka (mauka). Walls of this and of site 73 are built of thin plates of surface lava, rather unusual in appearance (Reinecke 1930:15).
>
> Reinecke's description of the building material refers to the fact that waterworn basalt boulders were not used in the construction of the main platform; rather, the building stones are flat-surfaced pieces of rather porous pahoehoe . . .
>
> Martin, who located the main platform and identified it as a heiau, recorded this site as 50-10-27-1913. He also located three, associated platforms to the east. Cordy recorded the heiau only and does not indicate additional platforms. This is surprising, since he was specifically looking for platforms of this type during his survey, and Martin described them as "house platforms." Barrera did not record the major feature, since it was located west of the coastal jeep road. He did record the largest platform to the west as Site T-35. This feature is described as containing a slab-lined central firepit, which Martin also identified in the largest associated platform.
>
> Four features were identified as part of this complex during the PHRI investigation. These features are spatially patterned, as shown on Martin's site plan map, and include the main heiau (Feature A) in addition to three platforms of variable sizes. The platforms are currently located directly across the jeep road, 22.0 m west [sic east] of the heiau. The largest platform (Feature B) is visible on the project area aerial photograph, as is the heiau. Features C and D are located south of Feature B.
>
> Feature A, a large rectangular, walled platform, is situated on a large pahoehoe bedrock finger which is elevated above the adjacent coral beach. This location has undoubtedly contributed to the preservation of the site, which is unusually good for a high, walled structure so close to the shoreline.
>
> Overall length of the structure is 19.5 m, and overall width is 15.25 m. The walls are double-faced and core-filled along the west side. The platform has been filled up to within 0.5 to 0.7 m of the top of the wall. Fill material is pahoehoe and aa rubble, with weathered basalt and coral pebbles used as paving material. Larger coral cobbles also occur on the platform surface. Two smaller platforms occur along the north and eastern walls of the platform; these are raised 0.4 m above the surface.
>
> Feature B is nearly square, with a length of 5.5 m and a width of 5.0 m. It is defined by perimeter large boulders and is filled with various-sized rubble. The surface is leveled, waterworn pebbles and coral. The feature is storm-washed, and it is difficult to determine whether the corral deposit is totally natural. A rectangular, slab-lined depression occurs in the

> center of the platform; it is 0.53 m long and 0.34 m wide. The depression has been partially filled with beach wash, and it is impossible to determine actual depth without excavation.
>
> Features C and D are smaller in size, but are constructed with techniques and materials similar to those used for Feature A [sic Feature B]. Feature D is located 10 m southwest [sic southeast] of Feature C. It is square in plan (2.6 by 2.6 m) and is outlined with large boulders and filled with small pieces of pahoehoe. (Donham 1987:102-103)

SIHP Site 1913 Feature A (Figure 6), the only feature of this site that is located on the NELHA property, has been impacted by both vehicular and pedestrian traffic. Feature A, which was redrawn during the current study (Figure 7), exhibits the least amount of modern disturbance, Features B, C, and D have been significantly impacted.

Figure 6. SIHP Site 1913 Feature A view to the northwest.

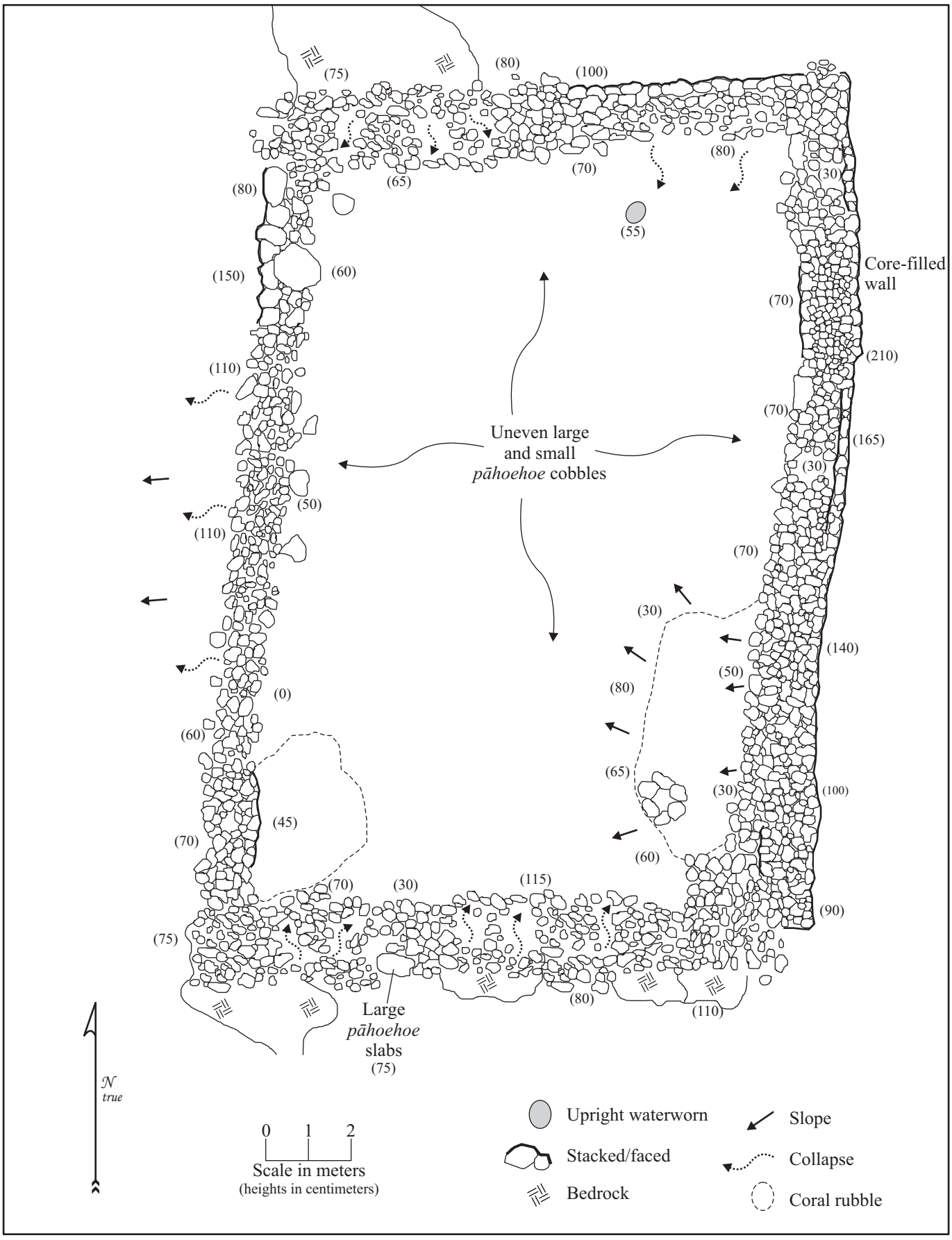

Figure 7. SIHP Site 1913 Feature A plan view.

SIHP Site 1914

SIHP Site 1914 was first recorded by Reinecke (1930) as Site 72 and described as the ruins of a pen. This site was later separately documented by Martin and by Cordy (1986) (Figure 8). As Donham (1987) relates:

> This site was originally recorded by Reinecke as Site 72. "Ruins of a pen" (1930:16). It may have been identified by Martin as a feature of Site 1916, which was recorded as an extensive complex of over 25 features. Martin identified an enclosure makai of the jeep road in the vicinity of Site D15-7. Unfortunately the complex identified as Site 1916 was not mapped, and no tie-in distances were recorded.
>
> Cordy identified four enclosure segments within the overall enclosure, in addition to an earlier wall base and a possible platform. His plan map is given in the field check report (1986a:24). Two building phases are suggested by Cordy.
>
> No additional work was conducted at the site during this recent study, since the structural remains observed correlated with the map compiled by Cordy in 1975. No additional features were located.
>
> Site D15-5 is the only site west of the jeep road that has been dated. . . There were apparently a number of sites close to the current shoreline, indicated now by badly eroded wall bases and mounds of remnants, some of which were described in 1930 by Reinecke as house platforms. It is therefore possible that the earlier habitation sites were generally located closer to the present shoreline than were the later prehistoric and historic house sites. (Donham 1987:92-93)

Presently, SIHP Site 1914 appears significantly degraded (Figure 9) and continues to be impacted by road and wave action.

Figure 9. SIHP Site 1914 view to the northwest.

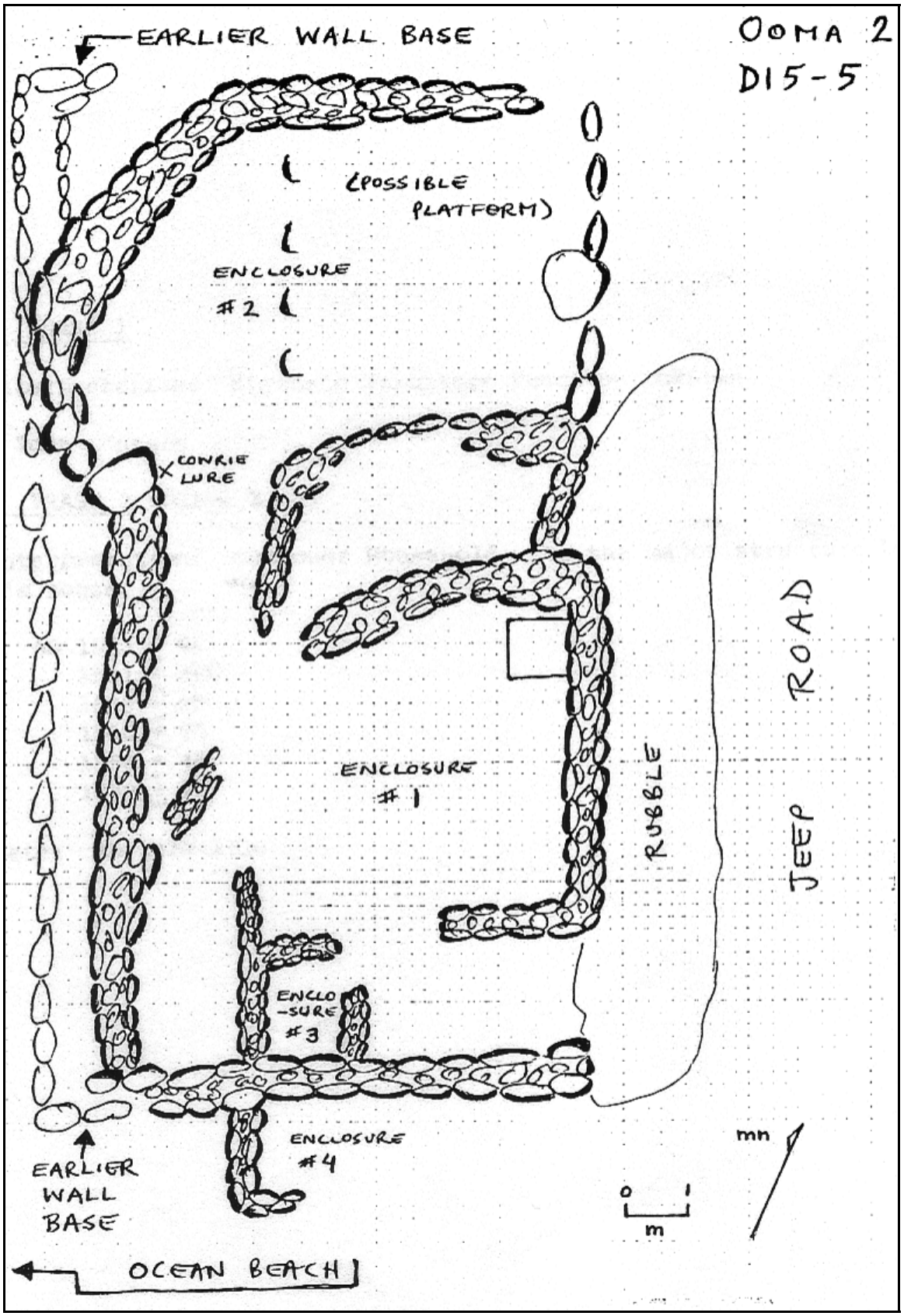

Figure 8. Cordy (1986:24) sketch map of SIHP Site 1914.

SIHP Site 1915

SIHP Site 1915 was first recorded by Reinecke (1930) as Site 73, a platform, during his coastal survey. However, Reinecke described only a single platform, labeling it a modern dwelling site of unusual construction. During the 1971-1972 Hawai'i Island portion of the State Inventory of Historic Places conducted by DLNR-SHPD, Site 73 was revisited, sketch maps were prepared, and it (the platform) was assigned the State Site Number 50-10-27-1915. Feature A of Site 1915 was then tested by Cordy in 1975, who assigned it the Bishop Museum Site number D15-19 and placed two excavation units in the surface of the platform. It was not until the Donham (1987) survey that Features B through E were recorded and added to Site 1915.

During the current preservation planning fieldwork Features B, C, and D could not be positively relocated, as only limited information pertaining to the form and location of these three features is presented in the Donham (1987) study. Several possible features (more than three) are present in an *ʻaʻā* flow to the east of Feature A. Feature E of Site 1915 was relocated however, and it was determined that Feature E contained human skeletal remains. DLNR-SHPD and the Hawai'i Island Burial Council have approved a Burial Treatment Plan (Rechtman and Clark 2006) that was prepared for Feature E. Donham (1987) provided the following description:

> This large, walled platform was originally recorded by Reinecke, who identified the feature as a "modern" house site. His description is as follows:
>
> > Site 73. Apparently a modern dwelling site of unusual construction: two terraces of pebbles, the upper 29x25x2 in front and 4-5' high elsewhere; the lower 19+10x25x3, with a three-sided pen at N.E.; surrounded by a carefully laid wall (Reinecke 1930:16).
>
> The site was later recorded by Martin as 50-10-27-1915; he also interpreted it as a historic habitation that had been "incorrectly identified on the U.S.G.S. Quad map as a heiau" (HRHP Archaeological form, Site 1915). Martin located ceramics, iron fragments, and bottle glass dating between AD 1850 and 1910, and a wide range of subsistence materials. Martin describes the structure as being "Very carefully built; unusual architecture." He also makes the following observation: "Probably represents fairly late and modified Hawaiian but with really very little European flavor" (HRHP Archaeological form Site 1915).
>
> Cordy investigated the site in 1975 and excavated two test units into the platform; one unit was located at the southern end of the platform, in the area of the former house foundation. The second test unit was located at the northern end of the lower level of the platform (see Cordy's site map. 1986:32) [Figure 10]. . . Eleven surface artifacts were apparently collected by Cordy; again, these are listed on his site map, but are not in the published list of artifacts recovered (1981: 243). All material is historic and includes glass, metal, and ceramic sherds.
>
> Cordy interpreted the site as having two construction phases. Phase 1 represents the historic house, which was not specifically dated. Phase 2 represents a prehistoric period bracketed by the hydration rind dates. Cordy offered no interpretation of the prehistoric component in his site map notes, but he indicated that the lower, northern portion of the platform was probably a modified earlier structure. The prehistoric component was not included in any discussions of Ooma II sites in Cordy's settlement pattern study (1981), since a function had not been identifiable. In his 1985 Working Paper, Cordy identifies Site D15-19 as a heiau, but does not indicate which structural features are associated with this heiau. His brief discussion of the site implies that the platform (previously identified as a house platform) is the site of the heiau:

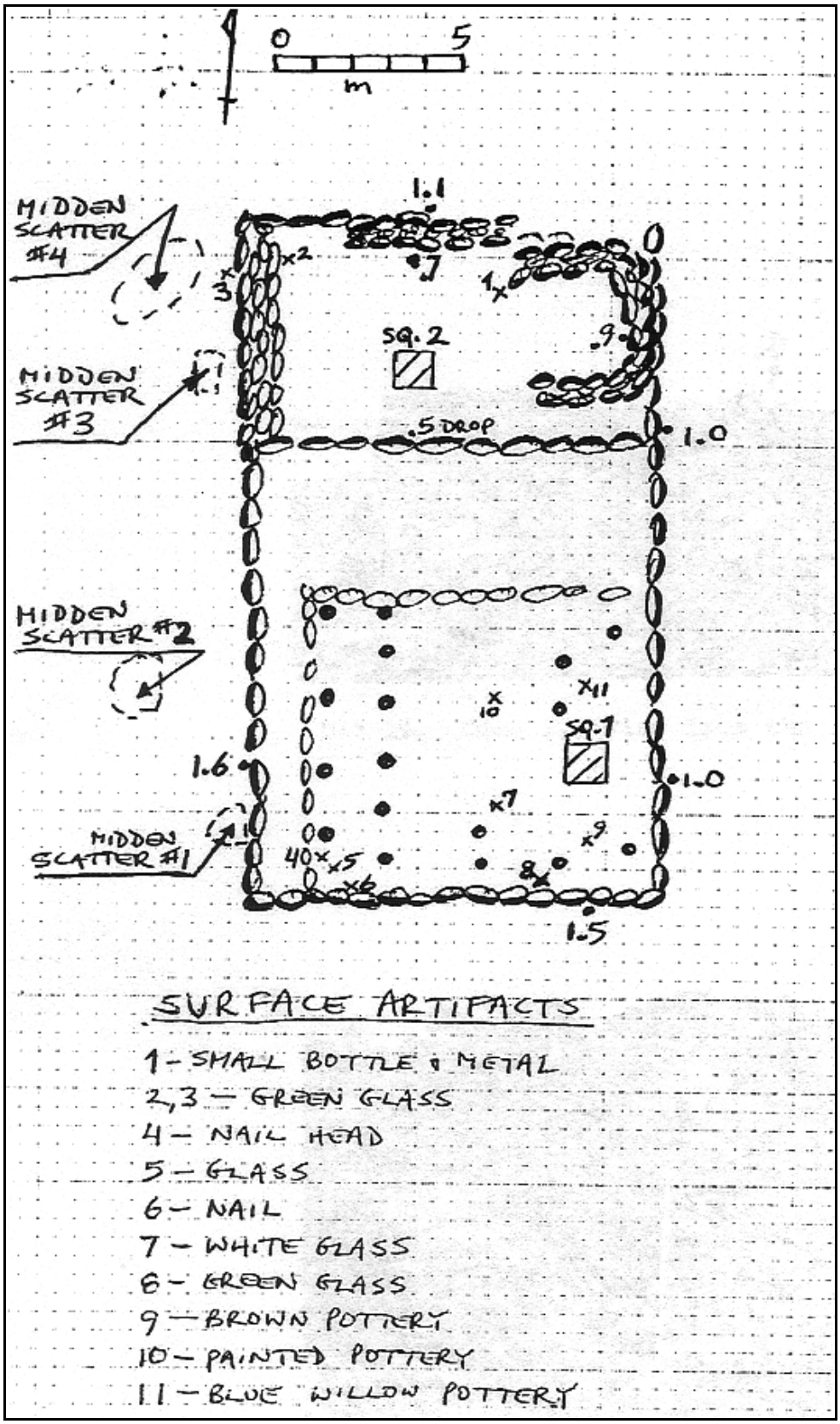

Figure 10. Cordy (1986:32) sketch map of Site 1915 Feature A.

> Last, there are 2 very large solitary structures in the coastal zone in Ooma 1 [2] (sites D15-18, and -19) which have been interpreted as heiau, D15-18 is a large enclosure, 300 sq m, with 2 internal platforms and a paving. D15-19 is a smaller structure, a high platform (160 sq.m.). Midden scatters near D15-19 are 5-10 cm deep, and the platform has a 10 cm deposit on top of its fill (Cordy 1985:31).

Cordy includes Site D15-19 in two lists of significant sites--those which would provide good site type examples for exhibition, and those with cultural significance. In the latter discussion, D15-19 is described as a "Possible heiau or other type of religious structure" (1985:45).

As specified in the scope of work, no additional testing or mapping was conducted at Site D15-19 during the PHRI survey. The structure was examined briefly, and no indications of different building stages were apparent. The lower tier along the west wall of the platform and the northern extension seem to have been built at the same time as the main platform. The location of a former superstructure, where two partially buried stone alignments and aligned postholes occur, is easily discernable on the main platform. These alignments are oriented east-west and are spaced 2.5 m apart, 6.0 m long. Postholes vary in size, with the largest c. 0.45 m in diameter. The platform has been verbally described by Reinecke and by Martin and has been mapped by Cordy and by Martin. These studies do not mention additional features that are located in the immediate vicinity, including a pavement (Feature B), a walled shelter (Feature C), rubble piles (Feature D), a rock mound (Feature E), and a filled depression (Feature F).

The rock mound (Feature E) is located 30.0 m east (90 degrees Az) of the platform (Feature A) and is the most distant associated feature (if in fact associated). The mound is constructed from aa boulders and waterworn basalt interspersed with some coral. It has a maximum height of 0.8 m and a diameter of 2.7 m. The mound had been opened at the southern side, near the base, exposing a depression that extends below ground surface and a number of fragmented skeletal (skull) remains. The remains were not accessible without additional excavation; they appeared to be human and are interpreted as such until further examined.

A small surface concentration of coral paving (0.9 m in diameter) occurs 1.20 m east of Feature E. Rubble piles (Feature D) and filled depression (Feature F) occur to the north of the aa flow and are associated with surface midden scatters. These features also have associated coral and may be burials.

Morphologically, the main platform has characteristics of a relatively elaborate historic house site. Recovered artifacts support this interpretation; however, the hydration rind dates do not. The dates may be associated with a former structure which was either disassembled or was incorporated into the latter house platform. (Donham 1987:103-106)

SIHP Site 1915 remains today as described by Donham (1987). As this site was not mapped during the Donham (1987) study, a scaled plan view drawing (Figure 11) was made of Feature A as part of the current study. Figures 12 and 13 show Features A and E, respectively.

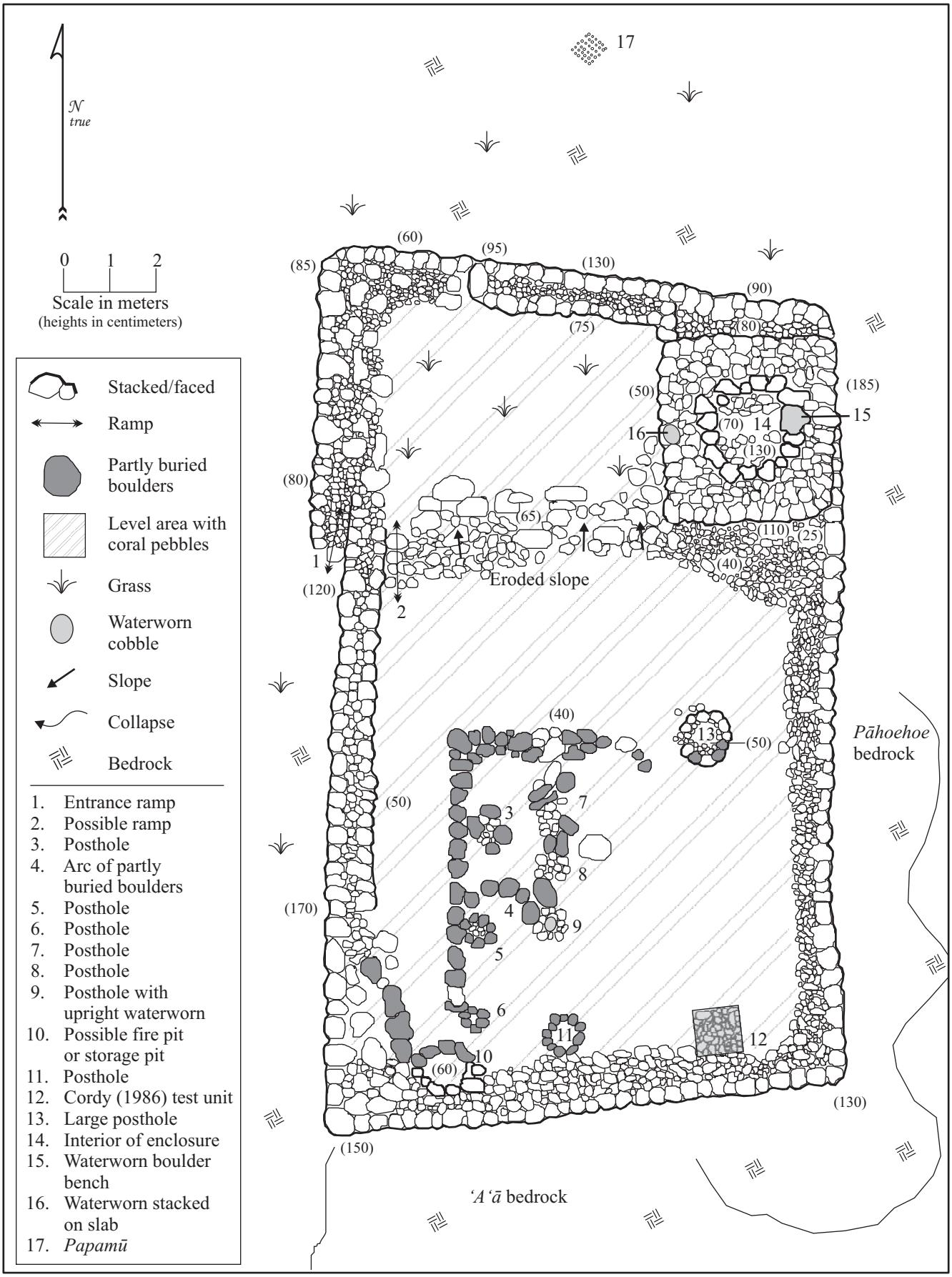

Figure 11. SIHP Site 1915 Feature A plan view.

Figure 12. View to northwest of SIHP Site 1915 Feature A.

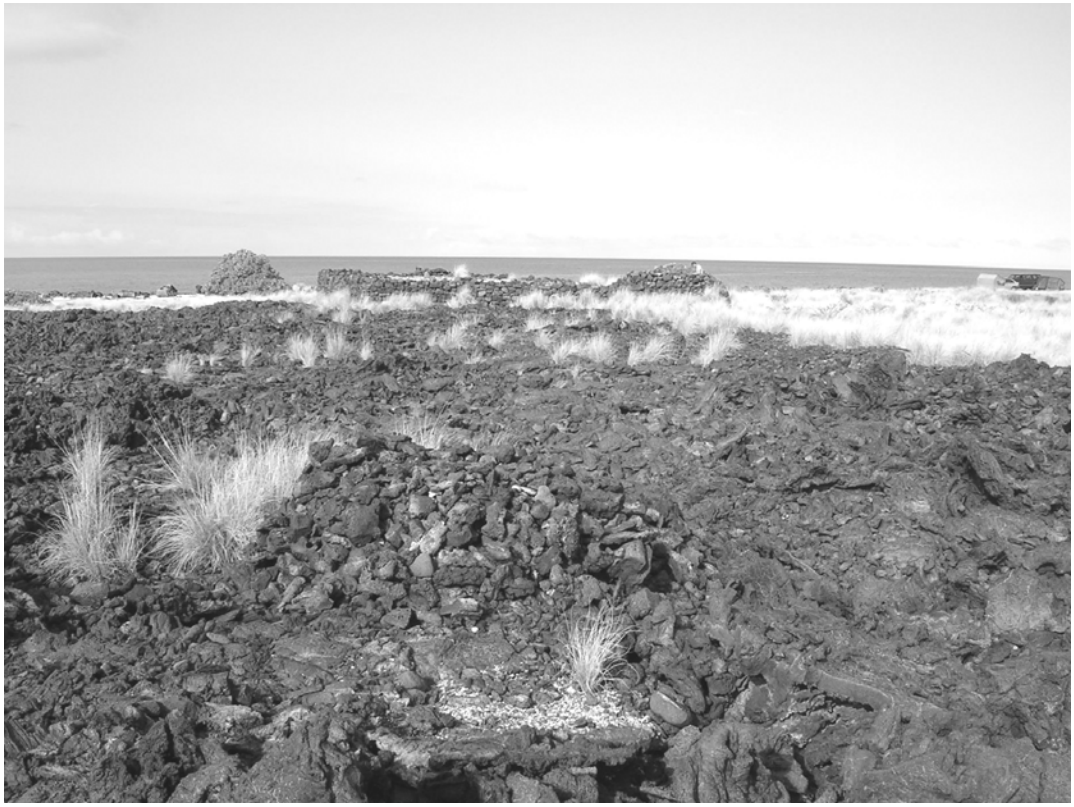

Figure 13. View to west of SIHP Site 1915 Feature E with Feature A in the background.

SIHP Site 16132

SIHP Site 16132 was first recorded by Reinecke (1930) as part of Site 71 and later by Martin as part of Site 1914. It was Cordy (1985) and later Barrera (1985) who defined Site 16132 as a discrete entity. As Donham (1987) relates:

> As discussed above, this complex was included as part of Reinecke's Site 71 and Martin's Site 50-10-27-1914. It was recorded by Cordy as two platforms with adjacent midden scatters and cave features. This site was subsequently identified by Barrera as Site T-18, which he describes as a complex of about 10 to 12 features.
>
> As described here Site D15-8 consists of 13 features. Feature A is a rectangular platform and correlates with Cordy's D15-8-1. This platform is raised 0.7 to 1.0 m above ground surface and is 5.8 by 4.0 m in plan. Cordy excavated a test unit at the northeast corner of the platform . . .
>
> Feature B, a smaller, square platform with an adjacent enclosure, is located less than 1.0 m west of Feature A. It was designated D15-8-2 by Cordy . . .
>
> Feature C, a modified and paved depression, is located 8.0 m south of Feature A. It is 7.4 m long and 4.8 m wide, and it covers the northern half of a shallow collapse in rough pahoehoe. Adjacent and to the west of this feature are two small cupboards, a walled depression, and surface midden. Immediately to the southwest is a second shallow collapse, with a cave at the southern end (Feature D). A cairn, which may actually be a collapsed rock mound, is located 3.0 m south of the cave entrance. This feature is circular in plan at the base (1.5 m in diameter) and is 0.3 to 0.4 m high. Stones have been displaced from the feature and are scattered about its base.
>
> Features E through J all occur in a large depression along the base of a minor pahoehoe pressure ridge. The western edge of this depression is 5.0 m northeast of Feature C. Feature E is a terrace located along the western edge of the depression, just outside the entrance to a small, shallow cave. Immediately to the east is a 3.0 m long, stacked wall (Feature F) which spans a sinkhole and partially encloses the entrances to two caves. The southern rim of the sinkhole (Feature G) is defined with a low, stacked wall, and surface midden is scattered around the perimeter of the sink (Feature H). At least two caves are accessed around the edges of the sinkhole; these features were not extensively examined at the time of survey.
>
> Feature I, a long, narrow platform (9.0 by 3.0 m), is situated at the eastern edge of the modified sinkhole. The northern portion of the platform has been filled with loose rubble in order to level the surface with a bedrock surface that is exposed at the southern end. It is defined with larger pahoehoe slabs and boulders. Surface midden and rubble paving occur adjacent to the platform to the east and west. A rubble-filled depression (Feature J) occurs immediately northeast of the platform's northeast comer.
>
> Feature K, a large, paved depression, is located 5.0 m north of Feature J. It is amorphous in shape and has been filled to an indeterminate depth. Maximum length is 8.8 m, and maximum width is 6.0 m. At the northern end of the depression is a small cave (Feature L) with a vertical entrance.
>
> Feature M is a small, circular platform with a slightly mounded surface. This feature is 6.0 m east of Feature K and is 25.2 m from a cave feature at Site D15-4. The platform is outlined with large slabs and boulders and is filled with smaller, rough lava rocks. It is 3.0 m in diameter and varies in height from 1.8 to 0.5 m. This feature has morphological characteristics of a burial.

> Surface midden and cave deposits are extensive and rich on this site and represent a significant information source.
>
> . . . Additional work at this site should focus on dating specific features and on identifying possible functional variations that may reflect temporal change in site use. As indicated in the discussion of Site D15-4, these features are not significantly separate from the Site D15-4 complex and were recorded by Reinecke and by Martin as part of the same complex. (Donham 1987:98-100)

SIHP Site 16132 is generally in the condition as reported by Donham (1987) (Figure 14); however because of scale and orientation issues with her map of the site, a new plan view (Figure 15) was prepared as part of the current study.

Figure 14. SIHP Site 16132 Feature I, view to northeast.

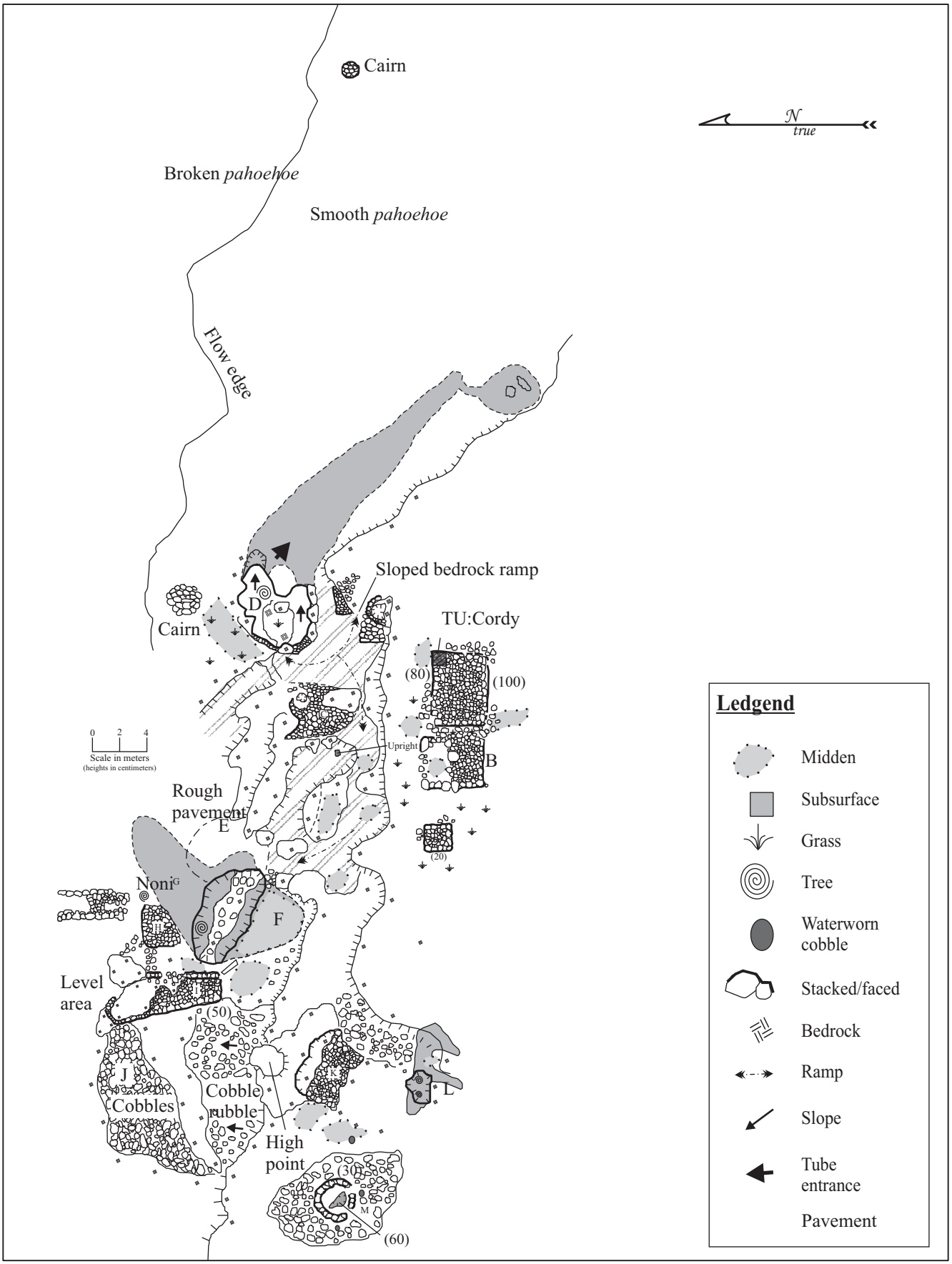

Figure 15. SIHP Site 16132 plan view.

SIHP Site 18025

SIHP Site 18025 is the northernmost of the seven sites discussed (see Figure 5). It was originally recorded by Cordy (1985) as Bishop Museum Site D15-6, a single feature habitation site. Donham (1987) added two additional features to the site describing it as a habitation complex containing a platform (Feature A), a surface paving (Feature B), and a low rubble wall (Feature D). Feature C is not mentioned in the Donham (1987) text, and no additional features were noted in the vicinity of Site 18025 during the current fieldwork. It may be that Feature D should have been labeled Feature C. Donham (1987) summarizes the previous work conducted at Site 18025 and describes the site thusly:

> This site was recorded by Cordy as a single feature. It is located 20.0 m northeast of Site D15-19, but was not mentioned by Reinecke, who described D15-19 as Site 73. It may be included as one of several house platforms within the Site 1916 complex; however specific platform descriptions are not given by Martin on the inventory form.
>
> The platform is constructed of leveled pahoehoe slabs that are roughly piled, with unfaced sides. It is rectangular in plan (6.0 by 3.0 m) and is raised 0.25 m above ground surface. An area of surface paving is (Feature B) is located directly north of the platform, and a low rubble wall (Feature D) is located nearby. Surface midden is scattered continuously from this platform to Site D15-19.
>
> Cordy excavated a single test unit at the eastern edge of the platform. . . . The feature was interpreted as a sleeping house. (Donham 1987:93)

Donham's (1987) description of SIHP Site 18025 remains valid and is augmented here with a photograph (Figure 16) and a scaled plan view drawing of the site's features (Figure 17).

Figure 16. SIHP Site 18025 Feature A, view to north.

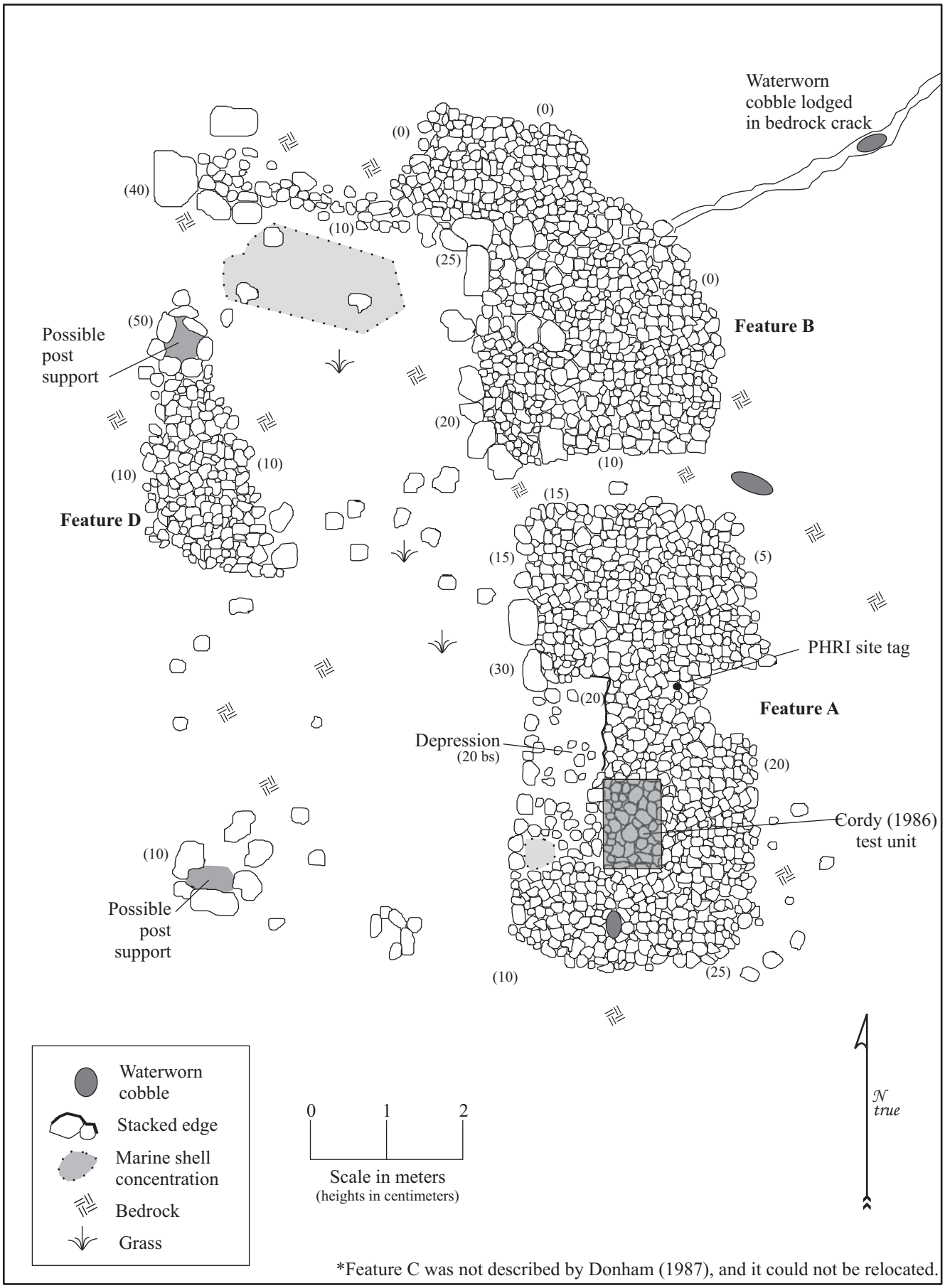

Figure 17. SIHP Site 18025 plan view.

SIHP Site 18026

SIHP Site 18026 was first recorded by Reinecke (1930) as part of Site 71 and as Donham (1987) describes was arbitrarily segregated from Site 16132:

> This site is part of a complex originally defined by Reinecke as Site 71; it included Cordy's Site D15-8, as well as features located between the two sites that were not included in Site D15-4 or in Site D15-8. It is described as follows:
>
> > A knob partly walled on its slopes, with a house site. Adjoining it on the south is a rough platform with three smooth boulders--heiau and kuula? (Site Dl5-4). Back of this is a house platform (D15-8) and a platform about a fine shelter cave (between D15-4 and 8). Another platform and wall are about a slight natural depression filled with bones, including those of a whale (D15-4) (Reinecke 1930:16).
>
> Martin's 1971 DLNR survey included this site as only part of a larger complex (50-10-27-1914), which included all the cave shelters located to the east of Site D15-4 and features of Site D15-8. Martin identified three major cave shelters, "a large number of burials," and platforms. He indicates, that the Site 1914 complex is mauka of Reinecke's Site 71, so it is uncertain whether he included the main platforms from Site D15-4 in this complex. Unfortunately, a sketch map was not compiled, so it is impossible to correlate features. Cordy's plan map of the site (1986a:22) shows only two features and does not indicate that other features are present.
>
> Efforts were made to accurately plot the numerous features of this complex and to determine if site boundaries could be found. A somewhat arbitrary boundary between Sites D15-4 and D15-8 was established between a cave and a burial platform spaced 25.2 m apart. Thirteen features are identified here as part of Site D15-4.
>
> Features A through E are shown on Cordy's plan map of the site. They include a rectangular platform (Feature A) adjacent to a walled depression that may represent a collapsed well (Feature D); a larger platform with four, upright waterworn boulders at its east end (Feature B); and a small, square platform (Feature C) adjacent to Feature B. These features are situated at the western edge of a prominent lava ridge that is comprised of aa and with very rough pahoehoe. A 2.0 to 4.0 m drop occurs immediately west of these features; the upper portions of this dropoff are faced, and crevices along the slope are filled with rubble. The area surrounding Features A and D is paved with small aa cobbles.
>
> Feature F is located 14.0 m north of Feature A. It is a well-preserved shrine constructed within a small, protected section of a collapsed blister. Two faced walls enclose a rectangular area, 4.0 m long and 3.0 m wide, in which are located three waterworn boulders (upright, horizontal, and smaller rounded).
>
> Adjacent to Feature F to the west is a large sinkhole surrounded by a rubble pavement. This sinkhole (Feature G) contains a large amount of midden and a more recent (?) deposit of Patellidae shells. Hidden scatter continues northward from the sinkhole to a paved area (Feature H), 4.0 m long and 2.5 m wide. To the north of the paved area is a small enclosure (Feature I, 3.0 by 3.0 m). A steppingstone path adjacent to Feature I on the northwest side connects this enclosure with a larger enclosure (Feature J) that opens to the west. This structure is roughly circular (3.6 m in diameter) and has walls faced on the interior side.
>
> Feature K is located 3.5 m northeast of Feature J. It is a cave shelter with a small, vertical entrance. A stacked wall is located just below the entrance. along the north side. The main chamber has an area of 18.8 sq m (3.3 by 5.1 m); ceiling height averages 1.06 m. Weathered coral, historic glass sherds, and Cypraeidae shell are present in the cave.

Feature L is 1.5 m northeast of the cave and consists of a nearly square excavation in loose rockfall, measuring 1.2 by 1.2 m at the opening and 0.8 m deep.

Feature H, a cairn, is located 1.0 m southwest of Feature B. This cairn is circular in plan, with a base diameter of 1.6 m and a maximum height of 1.0 m. It is situated on the top of a small overhang formation that is c. 1.5 m wide at the opening and has a ceiling height of 0.75 m.

Feature A was designated Site D15-4-1 by Cordy and was interpreted as a sleeping house. He excavated a test unit at the northern edge of the platform and apparently recovered no datable materials. . . . Feature B . . . was interpreted as a men's house variant. (Donham 1987:90-92)

SIHP Site 18026 is generally in the condition as reported by Donham (1987). The only observed impacts are a slight amount of accumulated modern rubbish and a few stones that have been recently moved and stacked. Donham's (1987) site map is reproduced here (Figure 18), and the cluster of Features A through E were remapped as part of the current project (Figure 19).

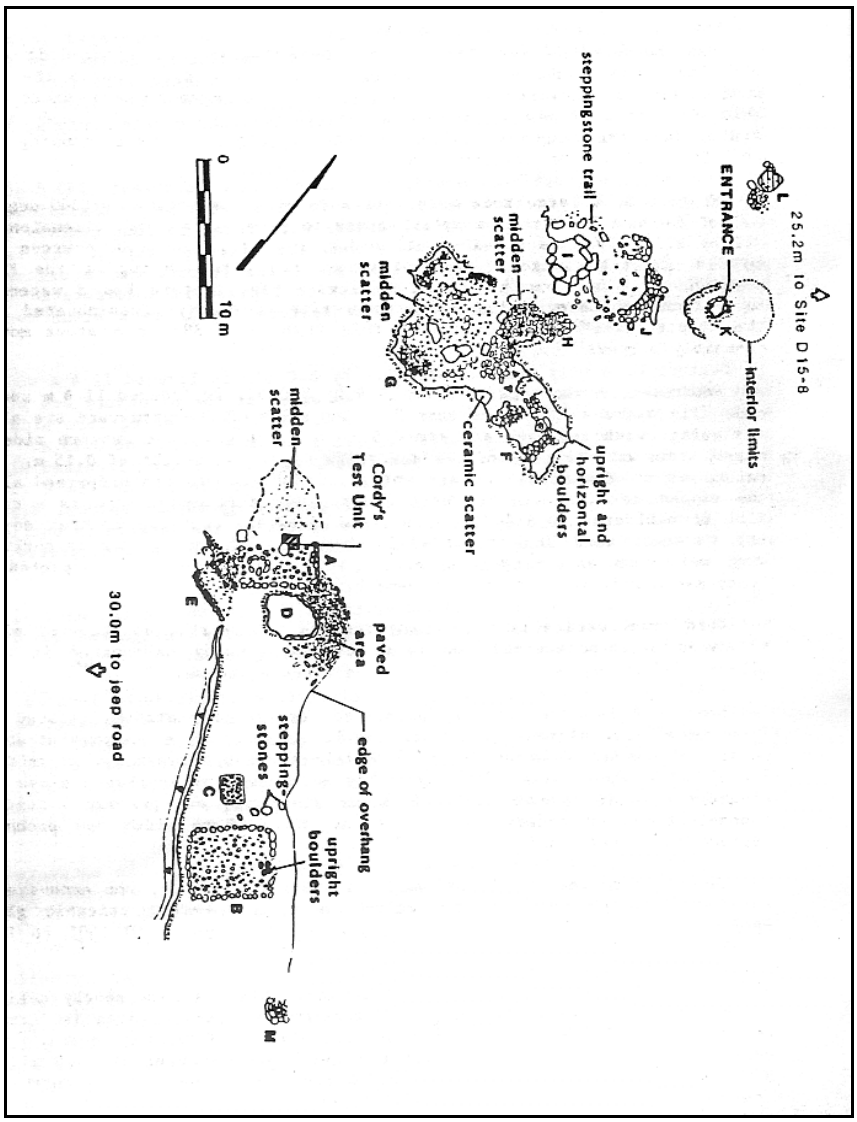

Figure 18. SIHP Site 18026 plan view (from Donham 1987:91).

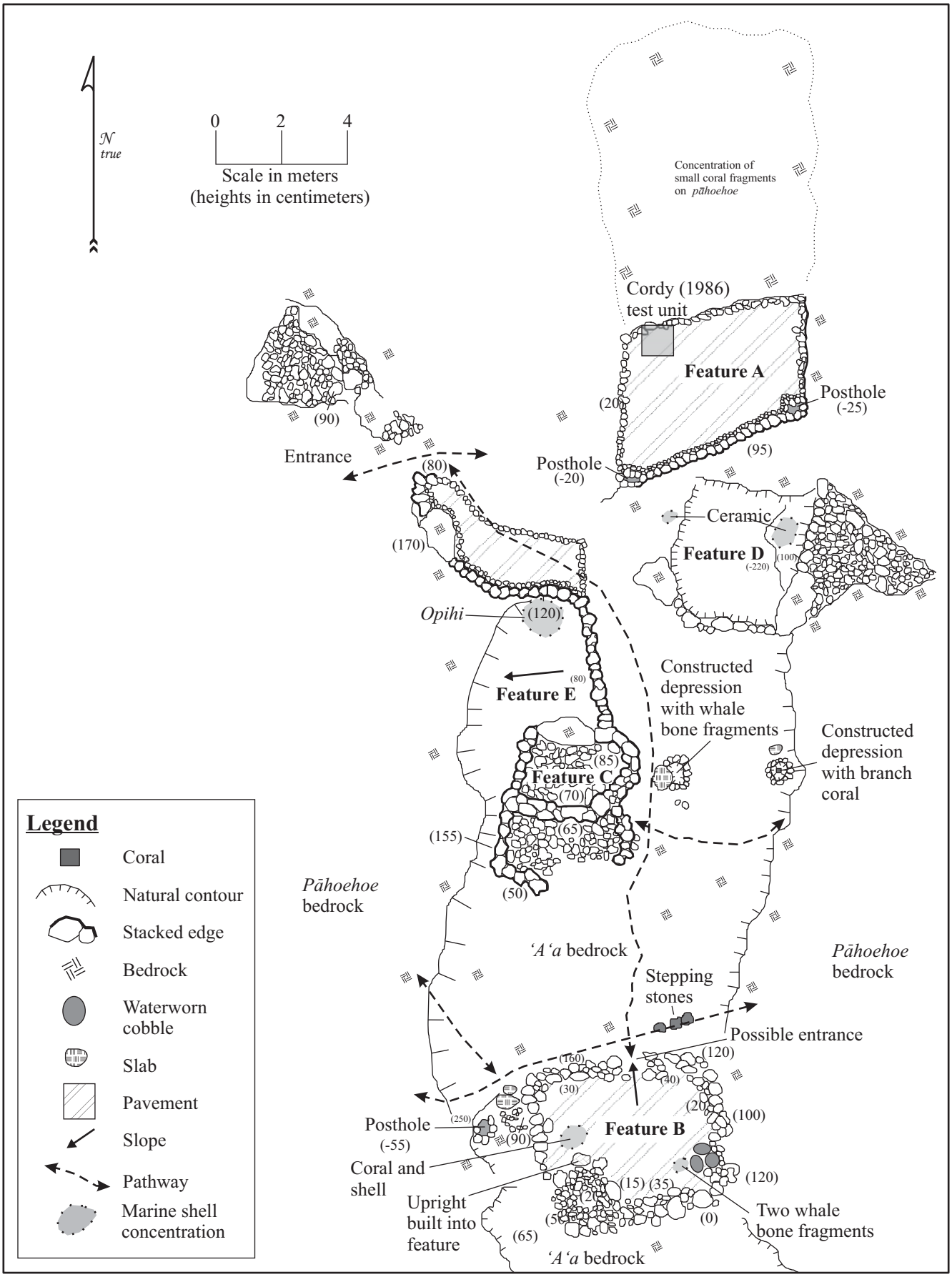

Figure 19. SIHP Site 18026 Features A, B, C, D and E plan view.

SIHP Site 18027

SIHP Site 18027 is the most inland of the seven preservation sites (see Figure 5). It was originally recorded by Donham (1987) as temporary site T-63; a complex containing thirteen features (Features A-M), including four cairns, four rubble piles, a cave shelter, an enclosure, two modified outcrops, an alignment, and a rubble pavement. Feature M, a cave shelter, is located outside of the current preservation area on an adjacent parcel to the south, and Features L and K, two cairns, are both located approximately along the boundary between the two parcels. Donham (1987:68), based on presence of a glass vase with flowers in it left at Feature K, suggested that that cairn was possibly a recently constructed memorial shrine. However, its location along the parcel boundary suggests a boundary function for the feature is more likely. No evidence that Feature K contained a burial, or could contain a burial (the feature is constructed on bedrock), was observed during the current fieldwork. Donham describes Site 18027 (as Site T-63) thusly:

> This site consists of 13 features within an area 95:0 m north-south by 30.0 m east-west. It is located at the coastal/inland interface in an area of relatively flat, broken pahoehoe and is one of five extensive complexes that occur in this interface zone. All of these complexes (T-6l, T-63, T-64, T-66, and T-67) include a number of minimally used shelters, small cairns, and rubble piles. Site T-63 includes four cairns, four rubble piles, a cave shelter, an enclosure, two modified outcrops, an alignment, and a rubble pavement.
>
> Feature A is the largest cairn on the site. It is located at the southern end of a loose cluster of five cairns and/or rubble piles. It is roughly circular at its base, with axes of 4.2 and 4.8 m and a height of 1.41 m. It is constructed from loosely piled pahoehoe slabs and has no faced or vertical sides. A portion of the cairn surface is flat; however, the overall shape is mounded. A few pieces of Conidae shell and coral are situated near the cairn.
>
> Feature B, a smaller cairn, is located 8.2 m north (360 degrees Az) of Feature A. It is circular in plan, with base axes of 3.2 and 3.35 m; height is 0.39 m. Construction is very similar to that of Feature A. and the overall form is mounded rather than vertically stacked. No portable remains were observed near this feature.
>
> Feature C is a rubble pile with a central depression possibly created by relic hunters. This feature is located 3.0 m northeast of Feature B and is very similar in overall size and shape. Base axes are 3.3 and 2.7 m; height is 0.38 m. The central depression penetrates to 0.2 m below the top of the feature. A few pieces of waterworn coral are present in the central depression.
>
> Feature D is located 4.0 m east of Feature C. This small rubble pile is scattered over an area 2.2 by 2.0 m and has a maximum height of 0.52 m. The east side of this pile is defined with upright slabs that have a height of 0.42 m. No portable remains occur near this feature.
>
> Feature E is a single layer of small pahoehoe cobbles placed in an area 3.3 m long and 2.4 m wide. There is no indication of a filled crevice beneath this pavement, which is located 9.0 m northwest of Feature B. Small coral fragments and a single piece of Cypraeidae shell are scattered on the paved area.
>
> Feature F is the most substantial structure on the site. It is a small habitation enclosure with a 0.9-m-wide opening in the northern wall. It is rectangular in shape, with squared corners and walls 4.5 by 4.0 m long. The walls are constructed from thin pahoehoe slabs stacked up to eight courses high (0.8 m) and three stones wide, and they are faced on both sides. Average wall width is 0.7 m, and the corners are 1.0 m wide. Interior space within the enclosure is 2.3 by 2.4 m. No midden or portable remains were observed inside or outside this structure. It is located near the center of the complex and is somewhat isolated, with the nearest feature (G) located 12.0 m to the northeast.

Features G, H, I and J form a second loose cluster, the center of which is 20.0 m south of Feature A. Features G and H are rubble piles spaced 6.0 m apart. Both appear to be dismantled cairns, particularly Feature G, which has the remains of a square shape, 1.1 m on a side. Stones are presently scattered over an area 2.1 by 2.4 m and 0.4 m high. The center of the feature has been excavated, and there is one piece of Cypraeidae shell nearby.

Feature H is a rubble pile that is currently scattered over an area 2.7 by 2.8 m. The original shape appears to have been square, 1.5 m on a side. Maximum height is currently 0.4 m Features G and H may have functioned as shelter post supports.

Feature I is an L-shaped alignment that incorporates a naturally uplifted pahoehoe shelf. The longest portion of the alignment is oriented northwest-southeast and is 6.0 m long. It curves southward at the western end and continues for 1.3 m. The bedrock portion of the alignment occurs at the curved section and is 0.8 m long. The alignment consists of large blocky pahoehoe boulders positioned two to three stones wide and a single stone high. No portable remains were observed in the area of the alignment, which is 5.0 m northeast of Feature H.

Feature J, a small modified outcrop, may have functioned as a storage facility. It consists of a small, cleared overhang, with stones piled around the entrance to create a smaller opening. Overall size of the overhang is 1.4 m wide and 0.7 m deep. An artificial opening, 0.4 sq m, was left in the positioned stones, creating a small sheltered area 0.24 m deep, with a ceiling height of 0.47 m. A few pieces of weathered coral were observed near this feature, which is located 7.0 m northeast of Feature I.

Features K, L, and M form the southernmost cluster of the complex. They are located on a prominent extension of the pahoehoe ridge, 20.0 to 30.0 m south of Feature F. feature K is a cairn and recent memorial shrine. The cairn is in much better condition than are the features north, and it is probably of recent construction. It is constructed from large pahoehoe slabs piled eight courses high, with two pieces of weathered coral positioned on top. The base is roughly circular (1.1 m in diameter), and the cairn is conical in shape.

At the base of Feature K cairn are two large slabs that lean upright against a fault line, forming a type of backdrop for several pieces of weathered coral and a glass vase with dried flowers (ginger?). The vase is modern, and the condition of the flowers indicates quite recent placement.

Feature L, a large cairn, is located 5.0 m west of Feature K. It is situated on a high uplift, which gives the feature the appearance of being larger than its actual constructed size. The cairn is constructed from stacked pahoehoe slabs and is roughly circular (2.0 by 1.67 m). It incorporates bedrock into the form, so that six courses are stacked on the south side and four courses on the north side to obtain a consistent height of 1.0 m. A well-defined hole is present in the center of the cairn and appears to have been part of the original structure. It is 0.25 m in diameter and 0.7 m deep, and it may be a posthole.

Feature M, a small cave shelter, is located along the west-facing slope of the ridge, 15.0 m south of Feature K. The entrance to the tube cave is oriented to the west and is 1.14 m above the cave floor; it is rather small (0.79 by 0.55 m). The main chamber of the shelter is 6.0 m long, 2.28 m wide, and has a ceiling height of 0.8 m. The tube continues as a crawlspace for a distance of 10.0 m northward from the main chamber. It is accessible, but only with difficulty. Minor modifications occur inside the cave and are confined to rockfall clearing and piling. A pile of rockfall near the entrance appears to have been formed into a circle for use as a hearth; however, there was no concentration of ash or midden within this formation.

> Portable remains observed in thee shelter include Conidae, Cypraeidae, Neritidae (common) and Thaididae shellfish families; waterworn pebbles; a few Echinoidea spines; and a modern Pepsi can. The deposit of material represents the most concentrated occurrence on the site; however, it is quite sparse. One crevice directly beneath Feature K may have been artificially filled. (Donham 1987:66-69)

As SIHP Site 18027 is the furthest away from the coastal road, it is the least visited by the general public. As such this site is in the same condition as reported by Donham (1987), and her site map (Figure 20) is reproduced here.

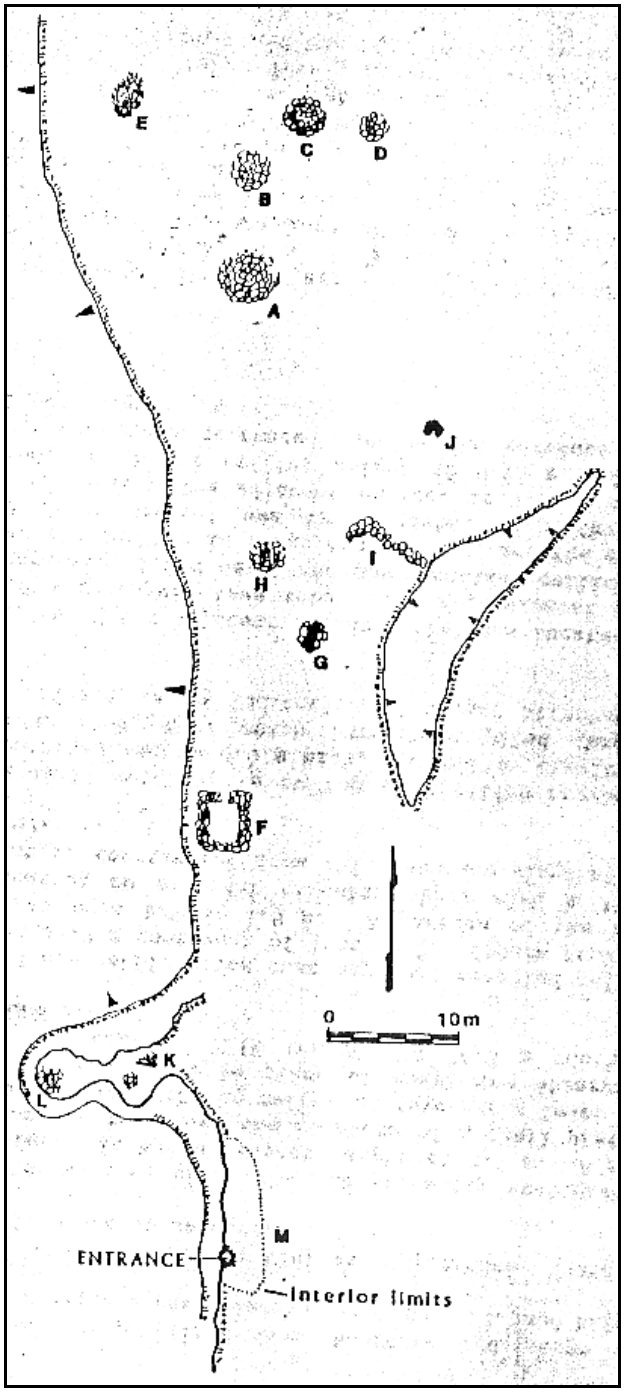

Figure 20. SIHP Site 18027 plan view (from Donham 1987:67).

CULTURE-HISTORICAL BACKGROUND

In Hawaiian society, natural and cultural resources are one and the same. Native traditions describe the formation (the literal birth) of the Hawaiian Islands and the presence of life on and around them in the context of genealogical accounts. All forms in the natural environment, from the skies and mountain peaks, to the watered valleys and lava plains, and to the shoreline and ocean depths were believed to be embodiments of Hawaiian deities. One Hawaiian genealogical account, records that Wākea (the expanse of the sky–father) and Papa-hānau-moku (Papa—Earth-mother who gave birth to the islands)—also called Haumea-nui-hānau-wā-wā (Great Haumea—Woman-earth born time and time again)—and various gods and creative forces of nature, gave birth to the islands. Hawai‘i, the largest of the islands, was the first-born of these island children. As the Hawaiian genealogical account continues, we find that these same god-beings, or creative forces of nature who gave birth to the islands, were also the parents of the first man (Hāloa), and from this ancestor, all Hawaiian people are descended (cf. Beckwith 1970; Malo 1951:3; Pukui and Korn 1973). It was in this context of kinship, that the ancient Hawaiians addressed their environment and it is the basis of the Hawaiian system of land use.

Archaeologists and historians describe the inhabiting of these islands in the context of settlement that resulted from voyages taken across the open ocean. For many years, researchers have proposed that early Polynesian settlement voyages between Kahiki (the ancestral homelands of the Hawaiian gods and people) and Hawai‘i were underway by A.D. 300, with long distance voyages occurring fairly regularly through at least the thirteenth century. It has been generally reported that the sources of the early Hawaiian population—the Hawaiian Kahiki—were the Marquesas and Society Islands (Cordy 2000; Emory in Tatar 1982:16-18).

For generations following initial settlement, communities were clustered along the watered, windward (*ko‘olau*) shores of the Hawaiian Islands. Along the *ko‘olau* shores, streams flowed and rainfall was abundant, and agricultural production became established. The *ko‘olau* region also offered sheltered bays from which deep sea fisheries could be easily accessed, and near shore fisheries, enriched by nutrients carried in the fresh water, could be maintained in fishponds and coastal waters. It was around these bays that clusters of houses where families lived could be found (McEldowney 1979:15). In these early times, Hawai‘i’s inhabitants were primarily engaged in subsistence level agriculture and fishing (Handy et al. 1972:287).

Over a period of several centuries, areas with the richest natural resources became populated and perhaps crowded, and by about A.D. 900 to 1100, the population began expanding to the *kona* (leeward side) and more remote regions of the island (Cordy 2000:130). In Kona, communities were initially established along sheltered bays with access to fresh water and rich marine resources. The primary “chiefly” centers were established at several locations—the Kailua (Kaiakeakua) vicinity, Kahalu‘u-Keauhou, Ka‘awaloa-Kealakekua, and Hōnaunau. The communities shared extended familial relations, and there was an occupational focus on the collection of marine resources. By the fourteenth century, inland elevations to around the 3,000-foot level were being turned into a complex and rich system of dryland agricultural fields (today referred to as the Kona Field System). By the fifteenth century, residency in the uplands was becoming permanent, and there was an increasing separation of the chiefly class from the common people. In the sixteenth century the population stabilized and the *ahupua‘a* land management system was established as a socioeconomic unit (see Ellis 1963; Handy et al. 1972; Kamakau 1961; Kelly 1983; and Tomonari-Tuggle 1985).

In Kona, where there were no regularly flowing streams to the coast, access to potable water (*wai*), was of great importance and played a role in determining the areas of settlement. The waters of Kona were found in springs and caves (found from shore to the mountain lands), or procured from rain catchments and dewfall. Traditional and historic narratives abound with descriptions and names of water sources, and also record that the forests were more extensive and extended much further seaward than they do today. These forests not only attracted rains from the clouds and provided shelter for cultivated crops, but also in dry times drew the *kēhau* and *kēwai* (mists and dew) from the upper mountain slopes to the low lands.

In the 1920s-1930s, Handy et al. (1972) conducted extensive research and field interviews with elder native Hawaiians. In lands of North and South Kona, they recorded native traditions describing agricultural practices and rituals associated with rains and water collection. Primary in these rituals and practices was the lore of Lono—a god of agriculture, fertility, and the rituals for inducing rainfall. Handy et al. (1972), observed:

> The sweet potato and gourd were suitable for cultivation in the drier areas of the islands. The cult of Lono was important in those areas, particularly in Kona on Hawai‘i . . . there were temples dedicated to Lono. The sweet potato was particularly the food of the common people. The festival in honor of Lono, preceding and during the rainy season, was essentially a festival for the whole people, in contrast to the war rite in honor of Ku which was a ritual identified with Ku as god of battle. (Handy et al. 1972:14)

Handy et al. (1972) noted that the worship of Lono was centered in Kona. Indeed, it was while Lono was dwelling at Keauhou, that he is said to have introduced taro, sweet potatoes, yams, sugarcane, bananas, and *‘awa* to Hawaiian farmers (Handy et al. 1972:14). The rituals of Lono "The father of waters" and the annual *Makahiki* festival, which honored Lono and which began before the coming of the *kona* (southerly) storms and lasted through the rainy season (the summer months), were of great importance to the native residents of this region (Handy et al. 1972: 523). The significance of rituals and ceremonial observances in cultivation and indeed in all aspects of life was of great importance to the well being of the ancient Hawaiians, and cannot be overemphasized, or overlooked when viewing traditional sites of the cultural landscape.

Over the generations, the ancient Hawaiians developed a sophisticated system of land and resources management. By the time ‘Umi-a-Līloa rose to rule the island of Hawai‘i in ca. 1525, the island (*moku-puni*) was divided into six districts or *moku-o-loko* (cf. Fornander 1973–Vol. II:100-102). On Hawai‘i, the district of Kona is one of six major *moku-o-loko* within the island. The district of Kona itself, extends from the shore across the entire volcanic mountain of Hualālai, and continues to the summit of Mauna Loa, where Kona is joined by the districts of Ka‘ū, Hilo, and Hāmākua. One traditional reference to the northern and southern-most coastal boundaries of Kona tells us of the district's extent:

> *Mai Ke-ahu-a-Lono i ke ‘ā o Kani-kū, a hō‘ea i ka ‘ūlei kolo o Manukā i Kaulanamauna e pili aku i Ka‘ū!*—From Keahualono [the Kona-Kohala boundary] on the rocky flats of Kanikū, to Kaulanamauna next to the crawling (tangled growth of) ‘ūlei bushes at Manukā, where Kona clings to Ka‘ū! (*Ka‘ao Ho‘oniua Pu‘uwai no Ka-Miki in Ka Hōkū o Hawai‘i*, September 13, 1917; Translated by Kepā Maly)

Kona, like other large districts on Hawai‘i, was further divided into ‘okana or kalana (regions of land smaller than the *moku-o-loko*, yet comprising a number of smaller units of land). In the region now known as Kona ‘akau (North Kona), there are several ancient regions (*kalana*) as well. The southern portion of North Kona was known as "Kona kai ‘ōpua" (interpretively translated as: Kona of the distant horizon clouds above the ocean), and included the area extending from Lanihau (the present-day vicinity of Kailua Town) to Pu‘uohau (now known as Red Hill). The northern-most portion of North Kona was called "Kekaha" (descriptive of an arid coastal place). Native residents of the region affectionately referred to their home as *Kekaha-wai-‘ole o nā Kona* (Waterless Kekaha of the Kona District), or simply as the *āina kaha*. It is within this region of Kekaha, that the lands of ‘O‘oma are found.

The *ahupua‘a* were also divided into smaller individual parcels of land (such as the *‘ili, kō‘ele, māla*, and *kīhāpai*, etc.), generally oriented in a *mauka-makai* direction, and often marked by stone alignments (*kuaiwi*). In these smaller land parcels the native tenants tended fields and cultivated crops necessary to sustain their families, and the chiefly communities with which they were associated. As long as sufficient tribute was offered and *kapu* (restrictions) were observed, the common people, who lived in a given *ahupua‘a* had access to most of the resources from mountain slopes to the ocean. These access rights were almost uniformly tied to residency on a particular land, and earned as a result of taking responsibility for stewardship of the natural environment, and supplying the needs of the *ali‘i* (see Kamakau 1961:372-377 and Malo 1951:63-67).

Entire *ahupua‘a*, or portions of the land were generally under the jurisdiction of appointed *konohiki* or lesser chief-landlords, who answered to an *ali‘i-‘ai-ahupua‘a* (chief who controlled the *ahupua‘a* resources). The *ali‘i-‘ai-ahupua‘a* in turn answered to an *ali‘i ‘ai moku* (chief who claimed the abundance of the entire district). Thus, *ahupua‘a* resources supported not only the *maka‘āinana* and *‘ohana* who lived on the land, but also contributed to the support of the royal community of regional and/or island kingdoms. This form of district subdividing was integral to Hawaiian life and was the product of strictly adhered to resources management planning. In this system, the land provided fruits and vegetables and some meat in the diet, and the ocean

provided a wealth of protein resources. Also, in communities with long-term royal residents, divisions of labor (with specialists in various occupations on land and in procurement of marine resources) came to be strictly adhered to. It is in this cultural setting that we find ʻOʻoma and the present study area.

The *ahupuaʻa* of ʻOʻoma (historically, ʻOʻoma 1st and 2nd) are two of some twenty ancient *ahupuaʻa* within the *ʻokana* of Kekaha-wai-ʻole. The place name ʻOʻoma can be literally translated as concave. To date, no tradition explaining the source of the place name has been located, though it is possible that the name refers to the indentation of the shoreline fronting a portion of ʻOʻoma. A few place names within ʻOʻoma were discussed in traditional accounts, thus we have some indication of the histories associated with this land.

While there are only limited native accounts that have been recorded about ʻOʻoma, we do know that the land was so esteemed, that during the youth of Kauikeaouli (later known as Kamehameha III), the young prince—son of Kamehameha I and his sacred wife Keōpūolani—was taken to be raised near the shore of ʻOʻoma under the care of his stewards from infancy until he was five years old (Kamakau 1961:263-264). Again, this is a significant part of the history of this land, as great consideration went into all aspects of the young king's upbringing (see Iʻi 1959 and Kamakau 1961).

The *ahupuaʻa* of ʻOʻoma cross several environmental zones that are generally called *wao* in the Hawaiian language. These environmental zones include the near-shore fisheries and shoreline strand (*kahakai*) and the *kula kai/kula uka* (shoreward/inland plains). These regional zones were greatly desired as places of residence by the natives of the land.

While the *kula* region of ʻOʻoma and greater Kekaha is now likened to a volcanic desert, native and historic accounts describe or reference groves of native hardwood shrubs and trees such as *ʻūlei* (*Osteomeles anthyllidifolia*), *ēlama* (*Diospyros ferrea*), *uhiuhi* (*Caesalpina kavaiensis*), and *ohe* (*Reynoldsia sandwicensis*) extending across the land and growing some distance shoreward. The few rare and endangered plants found in the region, along with small remnant communities of native dryland forest (Char 1991) give an indication that there was a significant diversity of plants growing upon the *kula* lands prior to the introduction of ungulates.

The lower *kula* lands receive less than 20 inches of rainfall annually, and it is because of their dryness, the larger region of which ʻOʻoma is a part, is known as "Kekaha." While on the surface, there appears to be little or no potable water to be found, the very lava flows which cover the land contain many underground streams that are channeled through subterranean lava tubes which feed the springs, fishponds and anchialine ponds on the *kula kai* (coastal flats). Also in this region, on the flat lands, about a half-mile from the shore, is the famed *Alanui Aupuni* (Government Trail), built in 1847, at the order of Kamehameha III. This trail or government roadway, was built to meet the needs of changing transportation in the Hawaiian Kingdom, and in many places it overlays the older near shore *ala loa* (ancient foot trail).

Continuing into the *kula uka* (inland slopes), the environment changes as elevation increases. Based on historic surveys, it appears that ʻOʻoma ends at a survey station named Kuhiaka, 2,145 feet above sea level (cf. Register Map No. 1449). This zone is called the *wao kanaka* (region of man) and *wao nahele* (forest region). Rainfall increases to 30 or 40 inches annually, and taller forest growth occurred. This region provided native residents with shelter for residential and agricultural uses, and a wide range of natural resources that were of importance for religious, domestic, and economic purposes. In ʻOʻoma, this region is generally between the 1,200 to 2,200 foot elevation, and is crossed by the present-day Māmalahoa Highway. The highway is situated not far below the ancient *ala loa*, or foot trail, also known as Ke-alaʻehu, and was part of a regional trail system passing through Kona from Kaʻū and Kohala.

The ancient Hawaiians saw (as do many Hawaiians today) all things within their environment as being interrelated. That which was in the uplands shared a relationship with that which was in the lowlands, coastal region, and even in the sea. This relationship and identity with place worked in reverse as well, and the *ahupuaʻa* as a land unit was the thread that bound all things together in Hawaiian life. In an early account written by Kihe (in *Ka Hōkū o Hawaiʻi*, 1914-1917), with contributions by John Wise and Steven Desha Sr., the significance of the dry season in Kekaha and the custom of the people departing from the uplands for the coastal region is further described:

> *...'Oia ka wā e ne'e ana ka lā iā Kona, hele a malo'o ka 'āina i ka 'ai kupakupa 'ia e ka lā, a o nā kānaka, nā li'i o Kona, pūhe'e aku la a noho i kahakai kāhi o ka wai e ola ai nā kānaka* – It was during the season, when the sun moved over Kona, drying and devouring the land, that the chiefs and people fled from the uplands to dwell along the shore where water could be found to give life to the people. (*Ka Hōkū o Hawai'i*, April 5, 1917 translated by Kepā Maly)

It appears that the practice of traveling between upland and coastal communities in the 'O'oma *ahupua'a* greatly decreased by the middle nineteenth century. Indeed, the only claimant for *kuleana* land in 'O'oma, during the *Māhele 'Āina* of 1848—when native tenants were allowed to lay claim to lands on which they lived and cultivated—noted that he was the only resident in 'O'oma at the time (see *Helu* 9162 to Kahelekahi below). This is perhaps explained by the fact that at time of the *Māhele* there was a significant decline in the Hawaiian population, and changes in Hawaiian land tenure led to the relocation of many individuals from various lands.

As part of recent cultural studies that were conducted for the 'O'oma *ahupua'a* (Rechtman and Maly 2003; Rechtman 2006) substantial archival and oral-historical research was performed, which included an examination of *Māhele* testimony, Boundary Commission descriptions, and grant records. In the *Buke Kakau Paa no ka Mahele Aina* (Land Division Book), between Kamehameha III and his supporters, it is documented that by the time of the *Māhele 'Āina*, 'O'oma was divided into two *ahupua'a*, 'O'oma 1st and 2nd. 'O'oma 1st was claimed by Moses Kekūāiwa (brother of Kamehameha IV and V, and Victoria Kamāmalu), one of the children of Kīna'u and M. Kekūanao'a, thus, a grandson of Kamehameha I. 'O'oma 2nd was held by Kamehameha III (*Buke Māhele*, January 27, 1848:13-14). On March 8, 1848, Kamehameha III assigned his interest in 'O'oma 2nd to the Government land inventory (*Buke Māhele*, 1848:183). Moses Kekūāiwa died on November 24, 1848, and his father, Mataio Kekūanao'a, administrator of the estate, relinquished in commutation, his rights to 'O'oma 1st, giving the land over to the Government land inventory (Foreign Testimony Volume 3:408). Thus, both 'O'oma 1st and 2nd were assigned to the Government Land inventory (Government Lands - Indices of Awards 1929:10). Only one additional claim (*Helu* 9162 by Kahelekahi) was made for 'O'oma during the *Māhele*; this claim was not awarded. It is interesting to note that Kahelekahi reported in his claim that he was the only person living in 'O'oma 2nd during the 15 years prior to his 1848 claim:

> ***Kahelekahi – Helu 9162***
> ***Kailua, Hawaii February 9, 1848***
> Greetings to all of you commissioner who quiet land titles, I hereby tell you of my claim for land. I have an entire ahupuaa situated there in Kona, it's name is Ooma 2. It is an old land gotten by me from Koomoa, and held to this time. For 15 years, I have been the only one residing on this land, there are no other people, only me. I am the only one, there is no one living here to help from one year to the next year. Kamehameha III is the one above, who has this land, and W.P. Leleiohoku is below him, and I am the one man dwelling there. The survey of the length and width of this land is not accurately completed. That is what I have to tell you.
>
> Done by me, Kahelekahi
> [Native Register Vol. 8:543; translated by Kepā Maly]

In 1849, S. Haanio, Tax Assessor of North Kona, submitted a report to the Board of Education regarding those individuals who were subject to the Tuesday Tax Laws (*Poalua*), to be worked as a part of the School Tax requirements of the time. At the time of Haanio's report, Kahelekahi was listed as living in Kalaoa; however, three individual families were identified as residents of 'O'oma, they were Kalua, Kamaka, and Mamali. Unfortunately, there is no indication of where these families were living in 'O'oma at the time. Based on traditional patterns of residency in the region, it is likely that they had primary residences in the uplands, near sheltered *māla 'ai* (agricultural fields), and kept near shore residences for seasonal fishing, collection of salt, and other resources of the coastal zone.

In conjunction with the *Māhele*, the King also authorized the issuance of Royal Patent Grants to applicants for tracts of land, larger than those generally available through the Land Commission. The process for applications was set forth by the "Enabling Act" of August 6, 1850, which set aside portions of government lands for grants. Between 1855 and 1864, at least six applications were made for land in the *ahupua'a* of 'O'oma, and four of them were patented (Table 1; Figure 21).

Table 1. Grants* in 'O'oma between 1855 and 1864.

Grant No.	*Applicant*	*Ahupua'a*	*Acreage*	*Year*
1590	Kauhini	Ooma 1	1816.00	1855 (cancelled)
1599	J. Hall	Ooma 2	101.33	1855 (cancelled)
1600	Kaakau	Ooma 2	58.50	1855
2027	Kameheu	Ooma 2	101.33	1855
2031	Koanui	Ooma 1	24.50	1856 (same as Grant 1599)
2972	Kaakau & Kama	Ooma 1	515.00	1856

*["Index of all Grants Issued…Previous to March 31, 1886;" 1887]

Grant Nos. 1600 (for Kaakau) and 2031 (for Koanui) are situated on the *mauka* side of the *Alanui Aupuni* (the Upper Government Road, near present-day Māmalahoa Highway) in 'O'oma 2nd and 1st.

Grant No. 1590 (surveyed for Kauhini) was situated across the *kula* lands from O'oma 1st in the south, to Hāmanamana, in the north. Communications from the 1880s, indicate that the parcel was never patented, though Kauhini had lived in 'O'oma 1st, through the time of his death (before 1888). At almost the same time that Kauhini's grant was surveyed, other grants in Kalaoa and 'O'oma covering a portion of the area described under Kauhini's grant were patented to Kakau and Kama (Royal Patent Grant No. 2972).

Grant No. 2027 (for Kameheu), situated in 'O'oma 2nd, extends from the *makai* edge of the Upper Government Road, to a short distance below the historic Homestead Road between Kaloko and Kalaoa, at about 900 feet above sea level (see Register Map No. 1449).

'O'oma grantee Kaakau (Grant No. 1600), also held an interest in Grant No. 2972 in the land of Kalaoa 5th and 'O'oma 1st, which he shared with his relative, Kama. Historic survey records (Figure 22) do identify "Kama's Grass House" near the shore in 'O'oma 2nd. The same house is also identified as "Keoki Mao's House" in J.S. Emerson's field notebook (Figure 23). In 1888, government surveyor J.S. Emerson identified Kama as a resident in 'O'oma, near the *mauka* government road (see communication below). This Kama is identified in oral history interviews (Rechtman and Maly 2003) as being an elder of the Kamaka line, from whom the often-mentioned Palakiko Kamaka and others descend. A temporary beach shelter—in the vicinity of "Kama's Grass House" marked near the shore of 'O'oma 2nd (see Figure 10)—remained in use by family members at least until the outbreak of World War II (Rechtman and Maly 2003; interviews with Peter Kaikuaana Park, George Kinoulu Kahananui, and Valentine K. Ako).

While no formal awards or grants of land appear to have been made for the near shore *kula* or beach lands, it is logical to assume that families living in the uplands of the 'O'oma, made regular visits to the near shore lands. The practice of continued travel between upland residences and near-shore shelters has been described by *kūpuna* Peter K. Park and Elizabeth Lee, who were born and raised in the *mauka* section of 'O'oma, and by other *kūpuna* from neighboring lands (Rechtman and Maly 2003; Rechtman 2006).

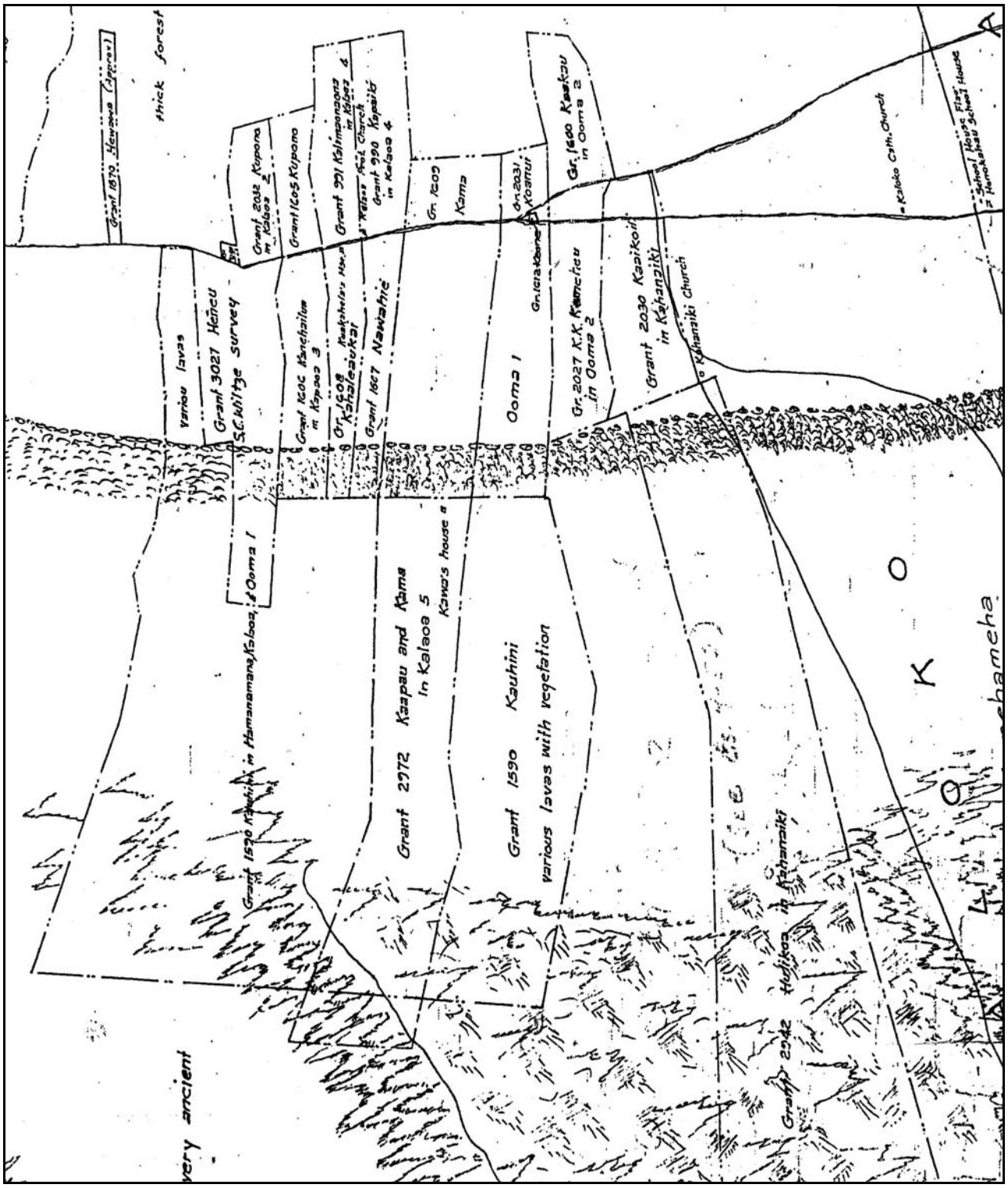

Figure 21. Portion of 1882 Register Map No. 1280 showing grant boundaries.

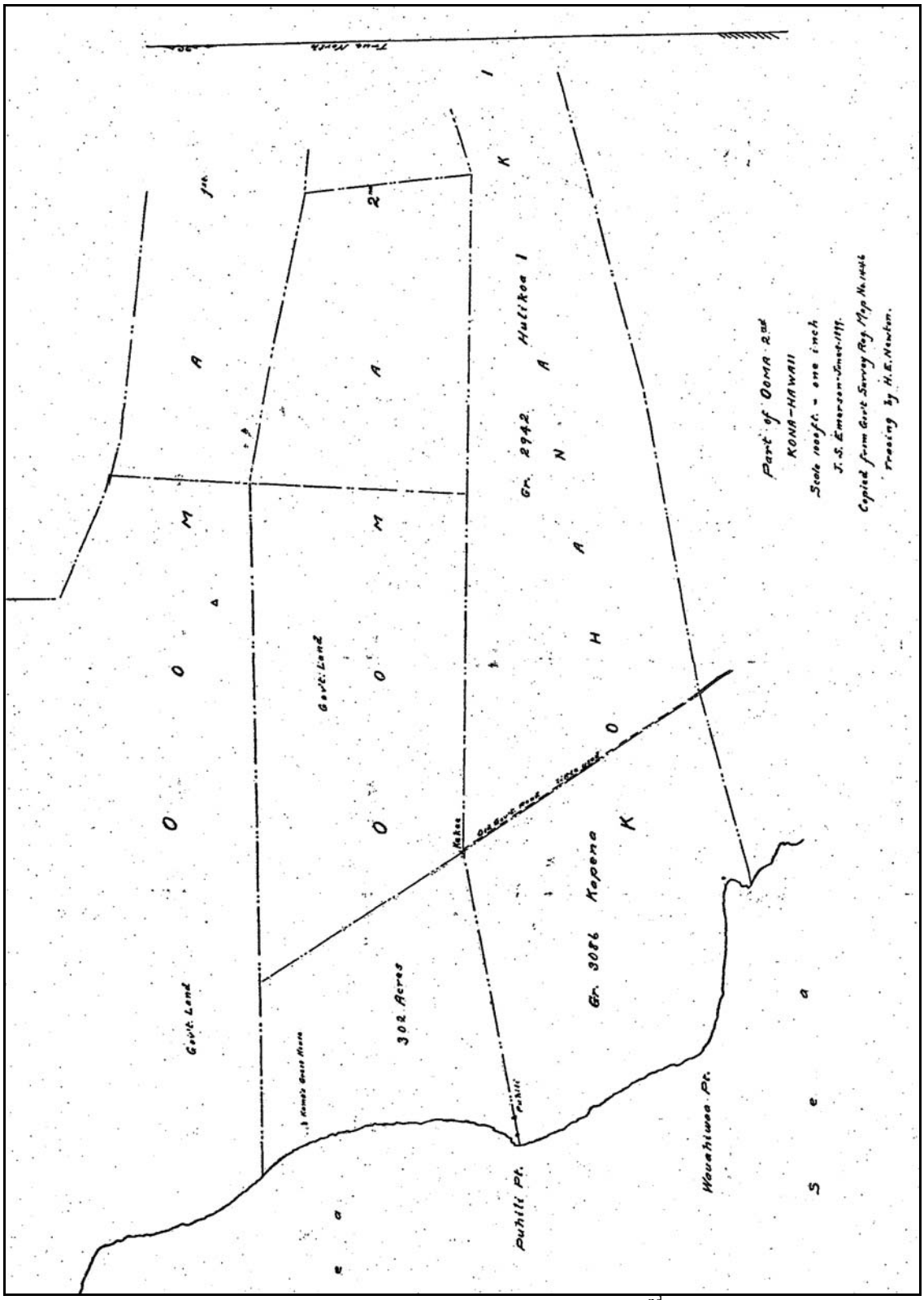

Figure 22. 1899 Grant Map No. 4536 showing *makai* portion of ʻOʻoma 2nd and identifying Kama's grass house.

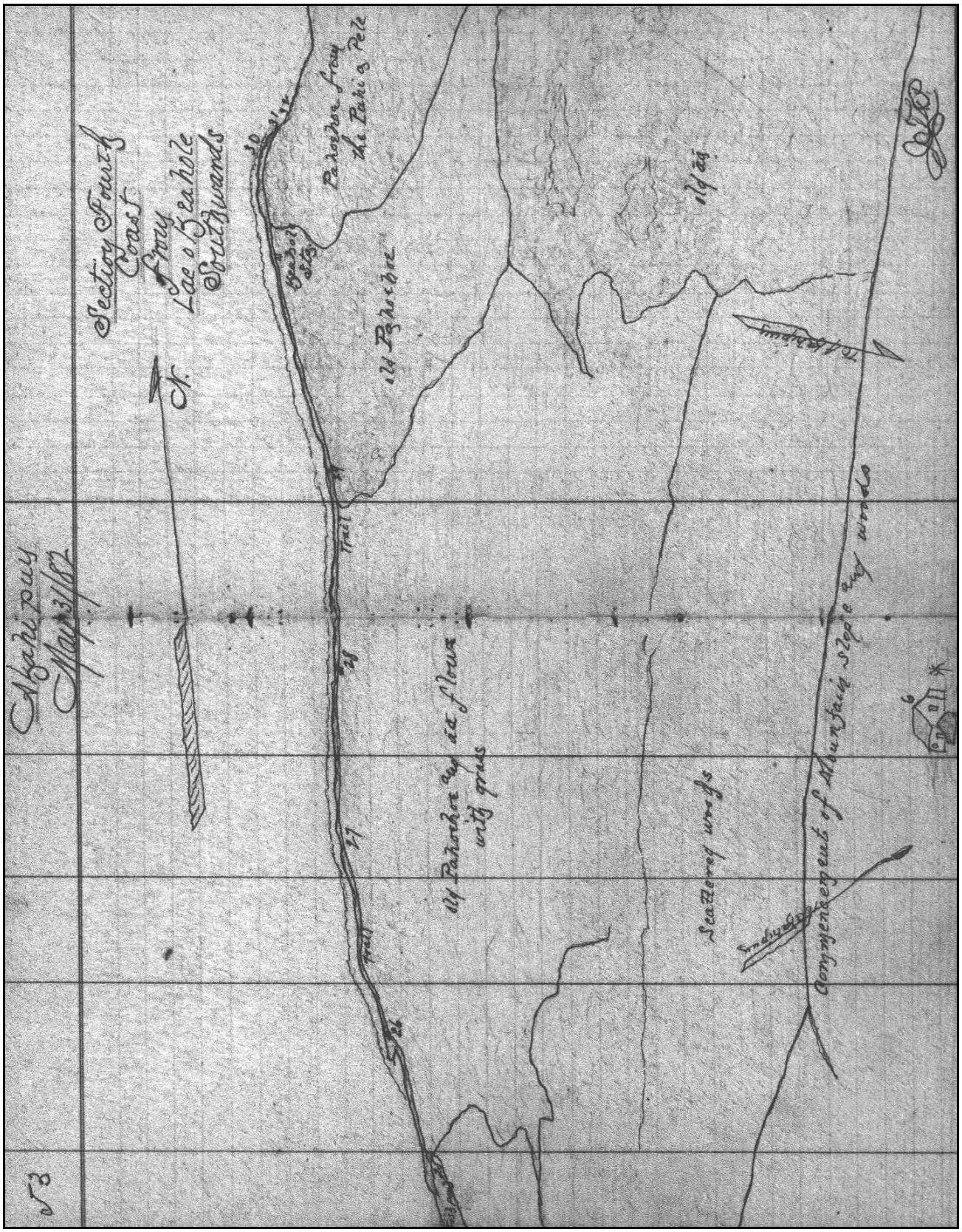

Figure 23. J. S. Emerson, field notebook map, Book 253:53 (State Survey Division; 28-Keoki Mao's grass house in Ooma).

Following the *Māhele* and Grant programs of the middle 1800s, it was found that many native tenants still remained on lands for which they had no title. In 1884, the Hawaiian Kingdom initiated a program to create Homestead lots on Government lands—a primary goal being to get more Hawaiian tenants in possession of fee-simple property (Homestead Act of 1884). The Homestead Act allowed applicants to apply for lots of up to 20 acres in size, and required that they own no other land. Between 1889 and 1912 several individuals were issued Homestead lots in ʻOʻoma (Table 2; Figure 24):

Table 2. Homestead lots sold in ʻOʻoma between 1889 and 1912.

Grant/Lot No.	***Name***	***Ahupuaʻa***
3804/50	J. Hoolapa	ʻOʻoma 1
3805/51	L. Kahinu	ʻOʻoma 1
3819/55	S. Kane	ʻOʻoma 1
3820/54	Loe Kumukahi	ʻOʻoma 1
3820 B/53	Papala	ʻOʻoma 1
3821/52	Kaulainamoku	ʻOʻoma 1
3822/48	J. Palakiko	ʻOʻoma 1
4343/49	J.M. Lilinoe	ʻOʻoma 1
5046/15	K. Kama Jr.	ʻOʻoma 1
5472/13	W. Keanaaina	ʻOʻoma 1
4273/56	E. M. Paiwa	ʻOʻoma 2
4536/coastal	J. Maguire	ʻOʻoma 2
5912/57	Holokahiki (Patented to J. Broad)	ʻOʻoma 2
9648/59	J. Kuhikahi (Patented to Hattie Kinoulu)	ʻOʻoma 2

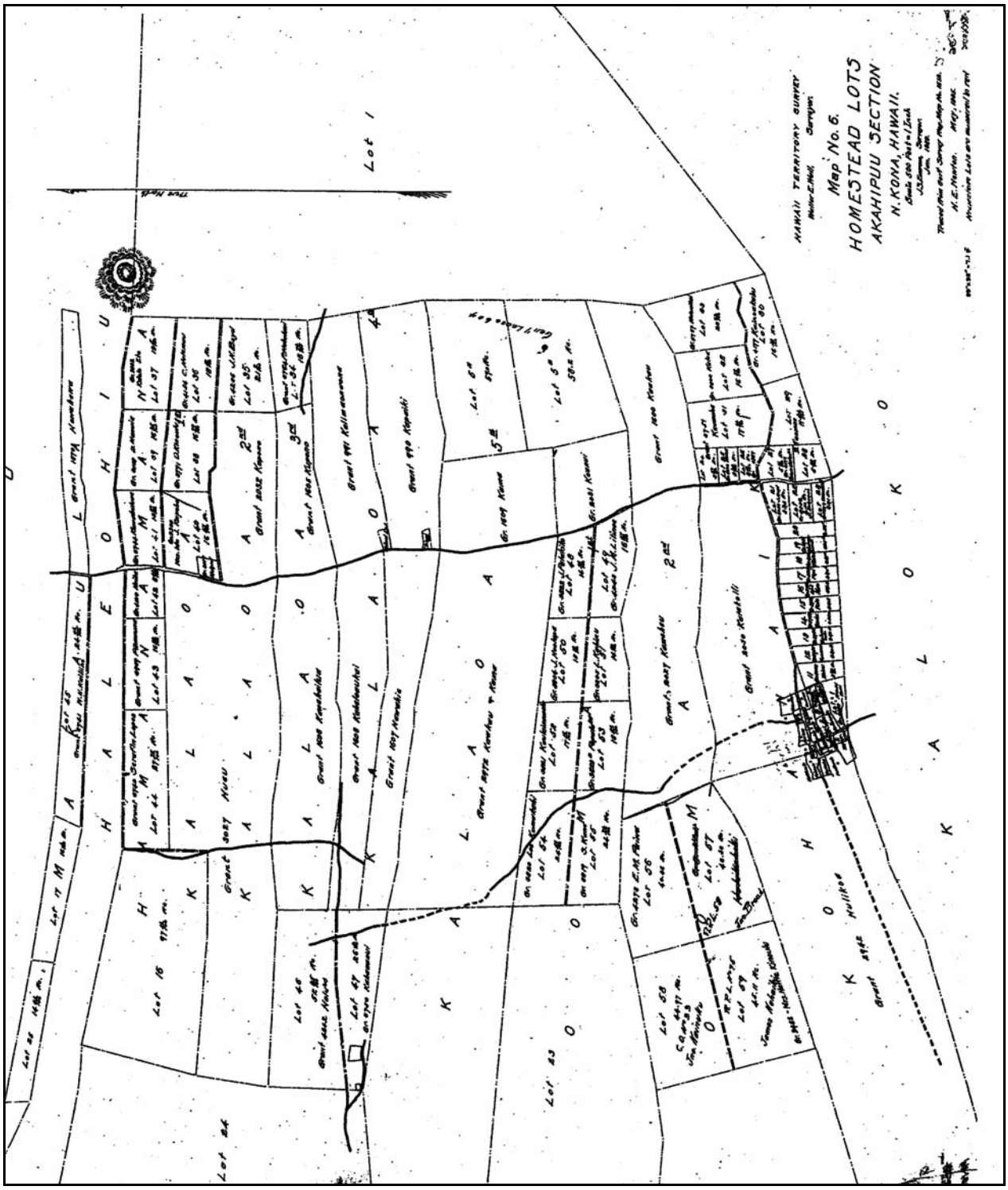

Figure 24. 1902 homestead map No. 6 showing Ooma-Kalaoa Homestead Lots (State Survey Division).

PROPOSED TREATMENT OF PRESERVATION SITES

All seven of the archaeological sites addressed by this preservation plan will be protected within a single roughly 15 acre archaeological preserve created and maintained by NELHA. This large single preservation easement is designed to help maintain the visual integrity and context of the preservation sites, which are part of an overall physical cultural landscape. The preservation elements of this plan were arrived at following conversations with identified descendants of the ʻOʻoma area who were consulted as part of the burial treatment planning process associated with SIHP Site 1915 (Rechtman and Clark 2006). Copies of this preservation plan were sent to the following individuals: Valentine Ako, Keawe Alapai, Iwalani Arakaki, William Hoohuli Norman Keanaaina, Samuel Keanaaina, George Kinoulu Kahananui, Kaleo Kualii, Elizabeth Lee, Arthur Mahi, Ruby Keanaaina McDonald, Cynthia Nazara, Peter Park, and Elizabeth Young.

Permanent Preservation Measures

Preservation through avoidance and protection (conservation) is the treatment proposed for all of the sites contained within the archaeological preserve. This preservation will be achieved through the establishment of a permanent preservation easement that includes all seven sites, along with a protective buffer surrounding the sites, defining a roughly a 15 acre area. The boundary of this preservation easement will begin at the southern boundary of the parcel and extend north for roughly 27 meters before turning to the northwest and extending for roughly 78 meters, then turning to the west and extending 65 meters to the shoreline. At no point will the buffer be closer than 15 meters (50 feet) to any of the features recorded at the preservation sites. The limits of the preservation easement will be professionally surveyed and recorded with the Bureau of Conveyances. No development activities whatsoever will be permitted within the preservation easement, and the landscape of the area will be left in its current natural state. Figure 25 shows the proposed preservation easement relative to the seven archaeological sites contained therein, as well as the boundary of the overall tax map parcel.

In an effort to protect the sites from the potential ravages of uncontrolled public access, several small signs of durable construction will be erected along the boundary of the archaeological preservation easement. Language for the signs will read:

ARCHAEOLOGICAL PRESERVE
State Inventory of Historic Places
Sites 50-10-27-1913, 1914,1915,16132, 18025, 18026,18027
ʻOʻoma 2nd Ahupuaʻa
This is a culturally significant place;
access is restricted. Please show your respect by not entering this area.

Historic sites are protected under state law.
Violation could result in a $20,000 fine.
(Chapter 6E-11, Hawaiʻi Revised Statutes)
DLNR-SHPD (808) 692-8015

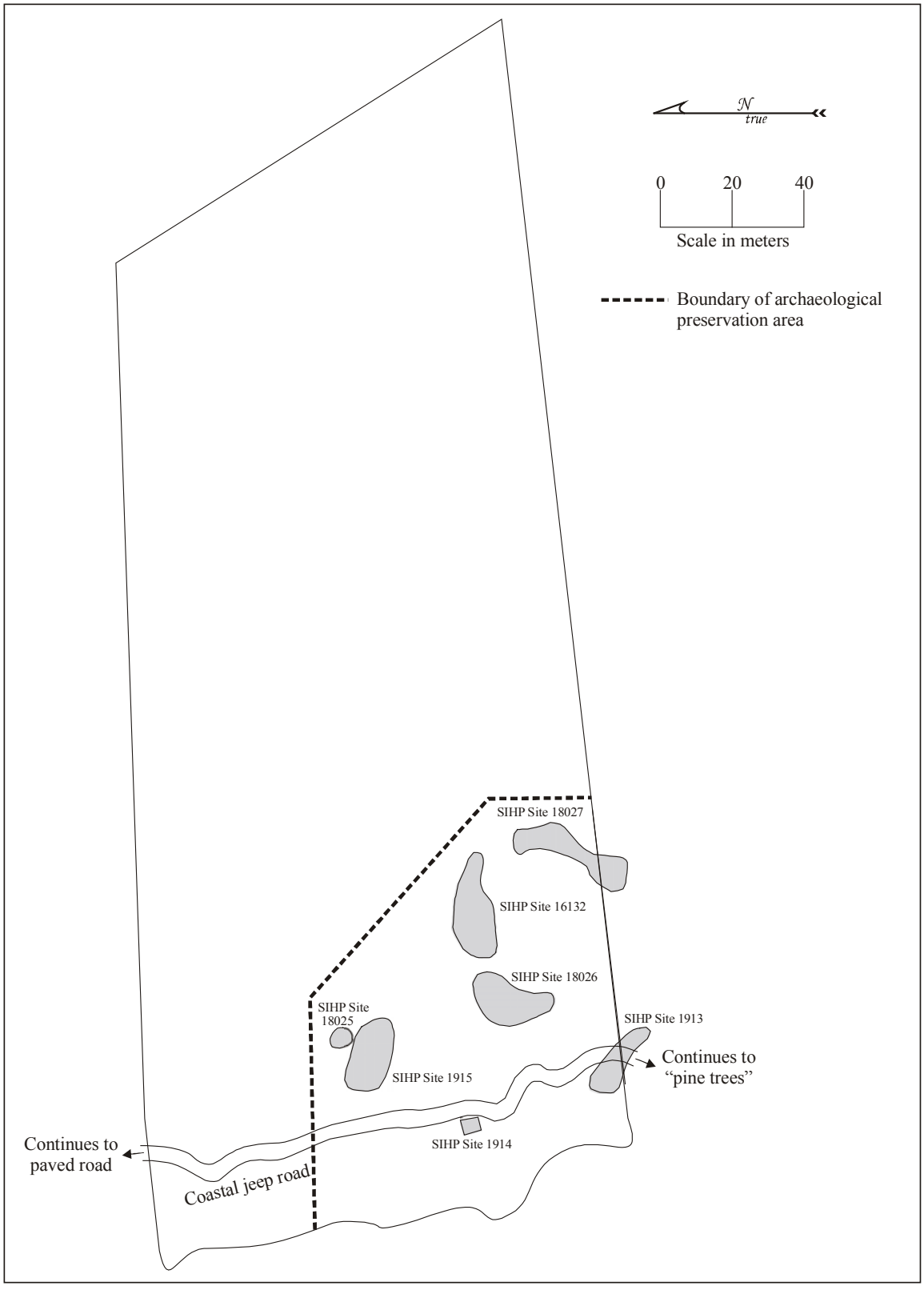

Figure 25. Archaeological preservation area.

A rubbish receptacle will be maintained for public use and a second set of signs will be placed at the ingress and egress points along the existing coastal access road, these signs will read:

ARCHAEOLOGICAL PRESERVE
State Inventory of Historic Places
Sites 50-10-27-1913, 1914,1915,16132, 18025, 18026,18027
'O'oma 2nd Ahupua'a

This is a culturally significant place;
please travel on existing pathways; do not move or take stones; and use rubbish receptacles.

Historic sites are protected under state law.
Violation could result in a $20,000 fine.
(Chapter 6E-11, Hawai'i Revised Statutes)
DLNR-SHPD (808) 692-8015

To help ensure the long-term preservation of the sites, a monitoring program will be established whereby all of the sites will be inspected and photo documented on an annual basis. As part of the current study an extensive series of photographs have been taken at each of the preservation sites; these photographs will be archived in the NELHA planning office for comparative use. Once a year in January, the sites will be photo-documented. The photographs will be compared to the previous years' photographs in an effort to identify any alterations (either natural or human-induced) to the sites. NELHA will notify DLNR-SHPD of the results of the inspections. If after three years no or very few alterations are observed, the monitoring program can be changed from annual inspections to one inspection every three years. If alteration or damage to any of the sites is observed, DLNR-SHPD will be contacted and consulted as to the most appropriate way to reverse the damage and/or restore the site.

Further, it is NELHA's intention that once the private properties to the south have been developed and public access to the coastal areas of Kohanaiki and the "pine trees" recreation area are formally established, the public vehicular travel on the existing coastal road that cuts through the archaeological preserve (and directly across several archaeological sites) will no longer be permitted.

Interim Protection Measures

As the area is not intended for development there is no need for any immediate interim protection measures. If the areas of the parcel to the east and north of the preservation easement undergo development in the future, a protective barrier (e.g., construction fencing, flagging, etc.) will be erected along the boundary of the preservation buffer.

IMPLEMENTATION OF THE PRESERVATION PLAN

NELHA will establish the preservation measures described in this plan as soon as it receives approval from DLNR-SHPD, and will also be responsible for implementing and maintaining the annual monitoring program.

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