

**Dismantling/Restoration Plan for a
Portion of the Kuakini Wall (SIHP 5-10-28-6302)
TMKs: (3) 7-5-010:085 and (3) 7-5-017:006
Wai‘aha 1st Ahupua‘a
North Kona District, Island of Hawai‘i
ASM Affiliates, September 2019**

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TMKs: (3) 7-5-010:085 and (3) 7-5-017:006

Wai'aha 1st Ahupua'a
North Kona District
Island of Hawai'i

DRAFT VERSION



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September 2019



Archaeology • History • Anthropology • Architectural History

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1. INTRODUCTION

At the request of Mr. Tom Waddle, on behalf of University of the Nations Kona, ASM Affiliates (ASM) has prepared this Dismantling/Restoration Plan for a portion of Kuakini Wall located on Tax Map Keys: (3) 7-5-010:085 and 3-7-5-017:006 in Wai‘aha 1st Ahupua‘a, North Kona District, Island of Hawai‘i (Figures 1 and 2). This portion of Kuakini Wall is included in the State Inventory of Historic Places (SIHP) as Site 50-10-28-6032. It was documented during an Archaeological Inventory Survey (Clark and Rechtman 2003) and determined to be significant under Criteria a, c, and d. This portion of the site is subject to an Archaeological Preservation Plan (Rechtman 2013) that has been accepted (Log No. 2014.2843, Doc. No. 1406MV15) by the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD). The Archaeological Preservation Plan stipulated, among other measures, that the collapsed portions of Site 6032 will be restored and stabilized, and that the missing southern portion of the wall will be reconstructed to the extent possible given availability of appropriate stones. In their acceptance letter for the Archaeological Preservation Plan (Appendix A), the DLNR-SHPD required that a separate dismantling/restoration plan be submitted to DLNR-SHPD for approval prior to the implementation. The current plan was prepared in response to that requirement.

A multi-modal preservation approach has been adopted for the portion of Kuakini Wall (Site 6302) within the current project area (see Figure 5). The overall preservation will be achieved through the establishment of a 20-foot wide preservation easement, with allowances for three breaches (Figure 4). Additionally, the stable intact portions of the wall will be conserved through avoidance and protection, collapsed portions of the wall will be restored and stabilized, the missing southern portion of the wall will be reconstructed to the extent possible given availability of appropriate stones, and the site will be interpreted for the public (Rechtman 2013). No construction, land modification, or other unauthorized activities would be permitted to occur within the preservation easement.

Construction of an access roadway and parking lots (see Figure 4), however, will require the creation of a new 40 foot wide gap in Site 6302 to accommodate emergency vehicles, curb and gutter, sidewalks, and landscaping. Also, at the northern end of the Kuakini Wall within the proposed development area, an existing gap in the wall will be widened by no more than 15 feet (roughly 5 meters) to facilitate the installation of sewer line and driveway (see Figure 4). A third, centrally located gap (see Figure 4) will be used for pedestrian ingress and egress across the property; the wall terminations at this breach have been previously stabilized. All rocks taken from the existing gaps, and during the creation of the new breach, will be removed by hand and used to repair existing collapsed sections of the wall within the project area, and to restore the missing portion of the wall beginning at its current southern termination and extending southward. The new wall terminations will be stabilized consistent with the recent treatment of this site in the vicinity of Palani Road (Rechtman and Nelson 2012). The current plan presents background information on the Kuakini Wall (Site 6302), with a detailed description of the portion of the wall located within the project area. This is followed by a description of the procedures to be followed during dismantling, stabilization, and restoration work, along with procedures for on-site guidance, supervision, and documentation of the work by a qualified archaeological monitor, as well as general monitoring provisions, instructions for the treatment of recovered remains and the curation of recovered items, and reporting requirements upon completion of the work.

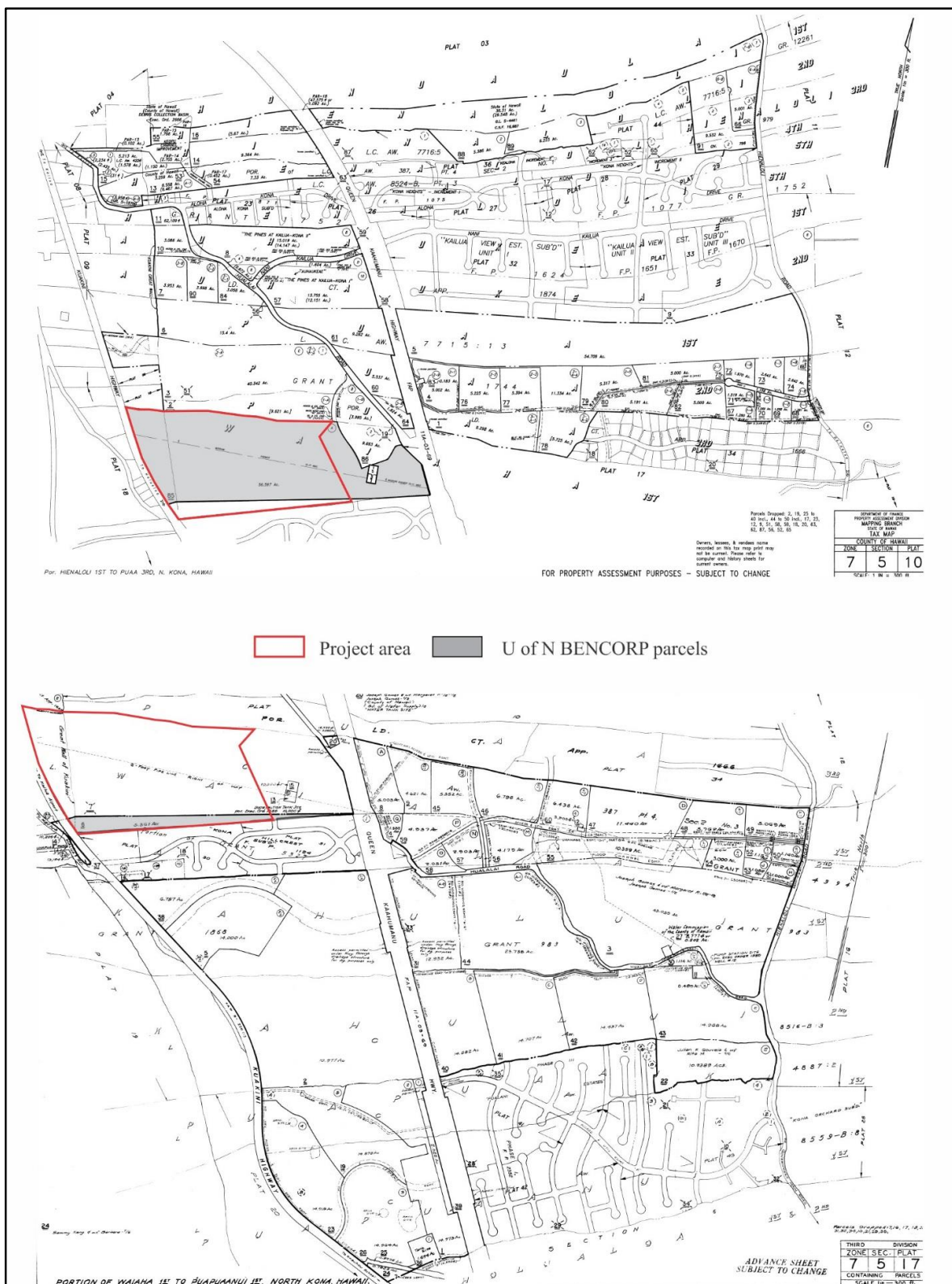


Figure 2. Tax Map Key plats (3) 7-5-10 and (3) 7-5-17 with the project area indicated.

1. Introduction

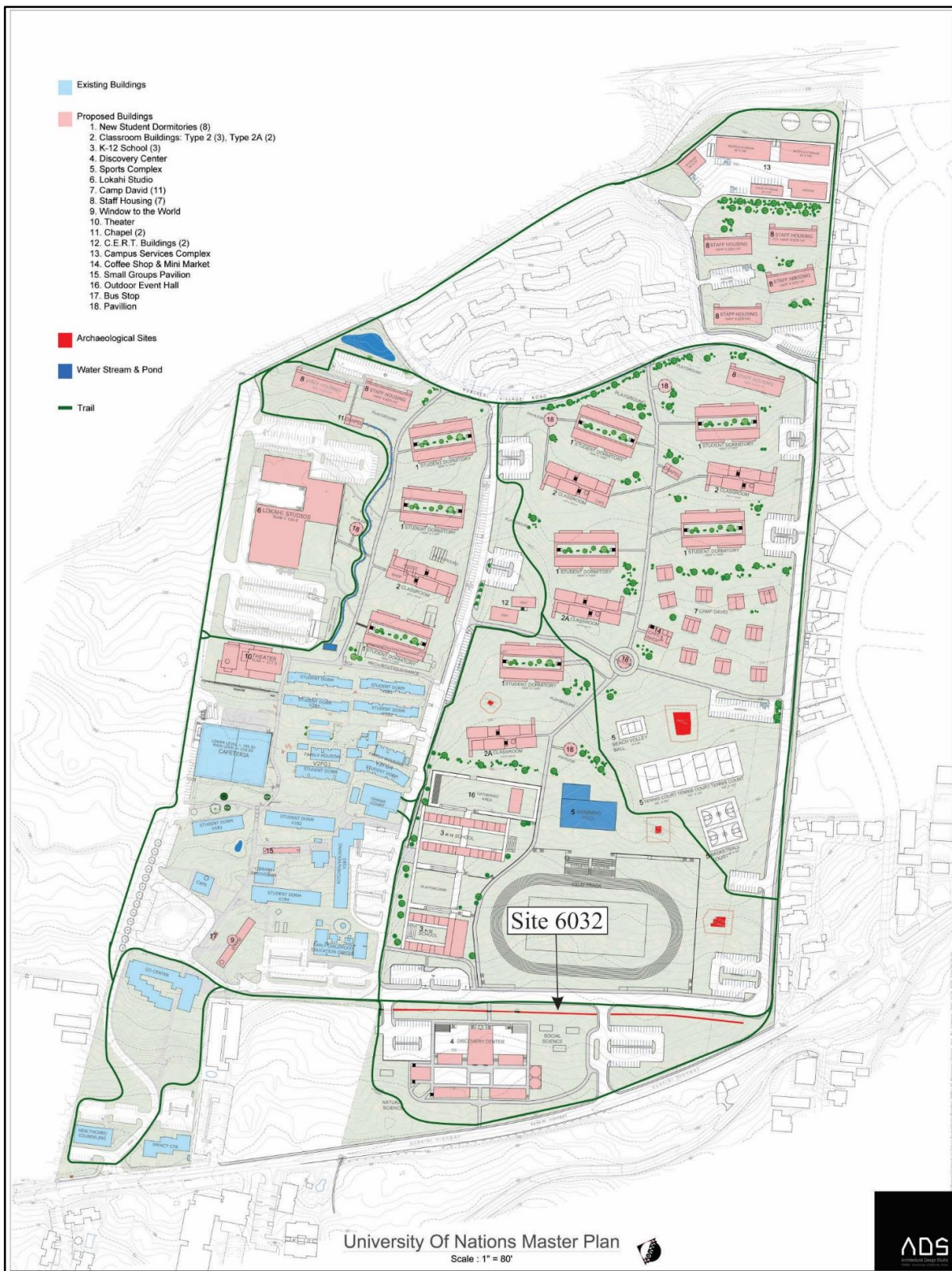


Figure 3. Development plan.

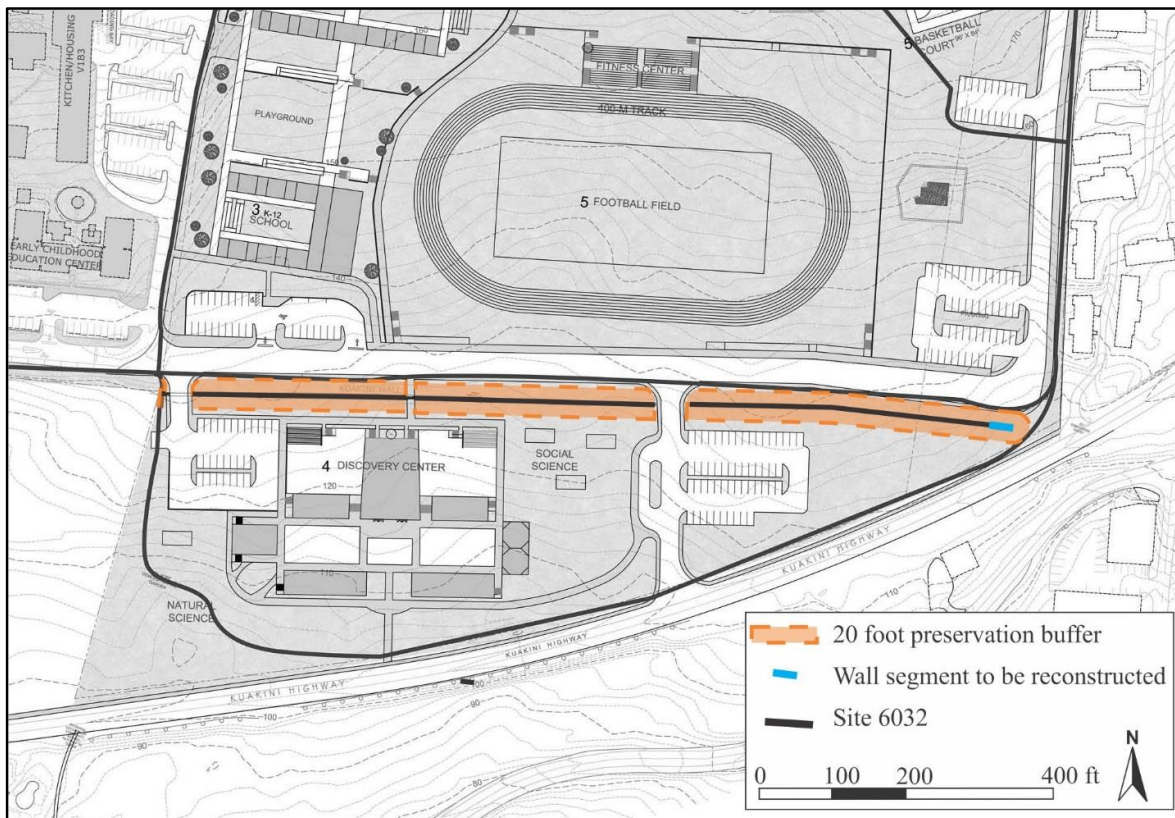


Figure 4. Detail of development plan with Site 6032 and preservation buffer indicated.

2. KUAKINI WALL (SITE 50-10-28-6302)

Site 6302 is the Statewide Inventory of Historic Places (SIHP) designation for Kuakini Wall, which extends through the western portion of the current project area. It is generally stated in the archaeological literature (e.g., O’Hare and Wolforth 1998) that the construction of the Great Wall of Kuakini began in the early 1800s as a response to the growing number of feral animals (e.g. cattle, goats, and pigs) running rampant in Kona. Although no record exists of Governor Kuakini having ordered the wall built, its final configuration is attributed to him. John Adams Kuakini was governor of Hawai‘i Island between 1820 and 1844. According to Kelly (1983), prior to 1855 this wall was simply known as the Great Wall or the Great Stone Wall. Records of the Māhele of 1848 for *kuleana* parcels awarded bordering the wall also refer to it this way. Its current name is perhaps a result of the Reverend Albert Baker’s (1915:83) description the wall:

Just a little above [the stone church at Kahalu‘u], and continuing all the way to Kailua, is a huge stone wall built in Kuakini’s time to keep pigs from the cultivated lands above.

Archival research helps shed some light on the timing of the construction of the Great Wall (Rechtman et al. 2005). In Lucy Thurston’s (1882) writings, she states that a stone wall was built in 1825 that completely surrounded the 5-acre property that was given to them; presumably the Great Wall had not yet been built. It was also recorded that the portion of the Great Wall extended north from the northeast corner of the Thurston’s property was constructed against the pre-existing Thurston residential compound wall. These facts indicate that the Kuakini Wall was not built as a single construction but rather likely incorporated many preexisting property boundary walls along its course. It is clear from historical records that construction of the wall did not begin until after 1825 and that significant portions of the wall were completed by 1850. It is also interesting to note that the wall’s originally cited function—to protect the cultivated fields *mauka* of the wall from feral animals—has been inverted over the years with the purpose becoming the protection of the coastal settlement areas *makai* of the wall.

3. THE DISMANTLING/RESTORATION EFFORT

A qualified archaeological monitor, under the direction of a Principal Investigator, will be present on-site to observe and document the dismantling of the wall, and will then conduct periodic monitoring (once a week) during the reconstruction and stabilization process. Dismantling will be conducted first, followed immediately by stabilization of the newly created wall ends. This will be followed by stabilization of the existing portions of the wall, and then by the reconstruction of the southern end of the wall across the University of Nations property. The dismantling, stabilization, and reconstruction effort will be conducted by skilled rock masons familiar with the construction techniques used historically to build rock walls in Kona. Specific procedures to be followed during the dismantling, reconstruction, and stabilization are described below, along with general monitoring procedures to be followed throughout the project.

DISMANTLING PROCEDURES

Prior to any dismantling, the archaeological monitor will meet with the construction team to ensure that they are aware of the plan and to discuss the procedures to be followed. It will be explained that the monitoring archaeologist has the authority to halt work activities in the event that undocumented cultural resources are encountered. The portions of the wall to be dismantled will be cleared of vegetation, and then photographed by the archaeological monitor. The extent of the portions of the wall to be dismantled will be clearly indicated in the field. A scaled plan view drawing of the area to be removed will be prepared prior to dismantling.

During dismantling, all rocks taken from the existing gap and the new breach will be removed by hand. All rocks will be retained for use during the stabilization and reconstruction efforts. Exterior rocks will be staged separately from the interior fill so that they can be used to face the repaired and reconstructed sections. After the rocks are removed from the existing gap and the new breach, the exposed interior of the wall on both sides of each breach will be photographed, and scaled cross-section drawings similar to that shown in Figure 5 will be prepared of each newly created wall end.

STABILIZATION

Stabilization of the newly created wall ends at the existing gap and the new breach will occur immediately after dismantling and required documentation is completed. The stabilized wall ends will be made to look (to the extent possible) like the dismantled ends. Photographs will be taken of the of the new wall terminations after they have been stabilized. Other partially collapsed sections of the wall will then be stabilized using rocks obtained during the dismantling phase of the project. The appearance of the stabilized portions of the wall will match that of the existing wall. All sections of the wall that will require stabilization will be photographed prior to and after any such work.

RESTORATION

Once stabilization has been completed, any remaining rocks obtained during the dismantling effort will be used to reconstruct the wall beginning at its current southern termination, and extending southward as far as the amount of collected rock material will allow. The reconstructed wall will be made to match the appearance of the existing wall. Upon completion of the reconstruction effort, the reconstructed portion of the wall will be photographed.

GENERAL MONITORING METHODS

When on site, the monitor will keep a daily log of activities performed and any discoveries made. The project area and dismantling/restoration/stabilization activities will be photographed over the course of the project, and these photographs will be included in the Dismantling/Restoration Report.

Cultural Deposits

The monitor will notify DLNR-SHPD if any previously undocumented, non-burial historic properties are identified. Any previously undocumented cultural deposits and sequences (including representative natural sequences) identified during the monitoring effort will be mapped, representative scaled profile drawings and plan views will be prepared, photographs will be taken, and the soils (if applicable) will be described in detail (using standard USDA soil descriptions and Munsell colors). If intact cultural deposits are discovered during monitoring, an assessment will be made as to their integrity and significance using the criteria enumerated in HAR 13§13-275-6(b). If the deposit is deemed significant and is likely to be further impacted by demolition activities, work in the affected area will be curtailed, and an appropriate mitigation strategy will be developed in consultation with DLNR-SHPD.

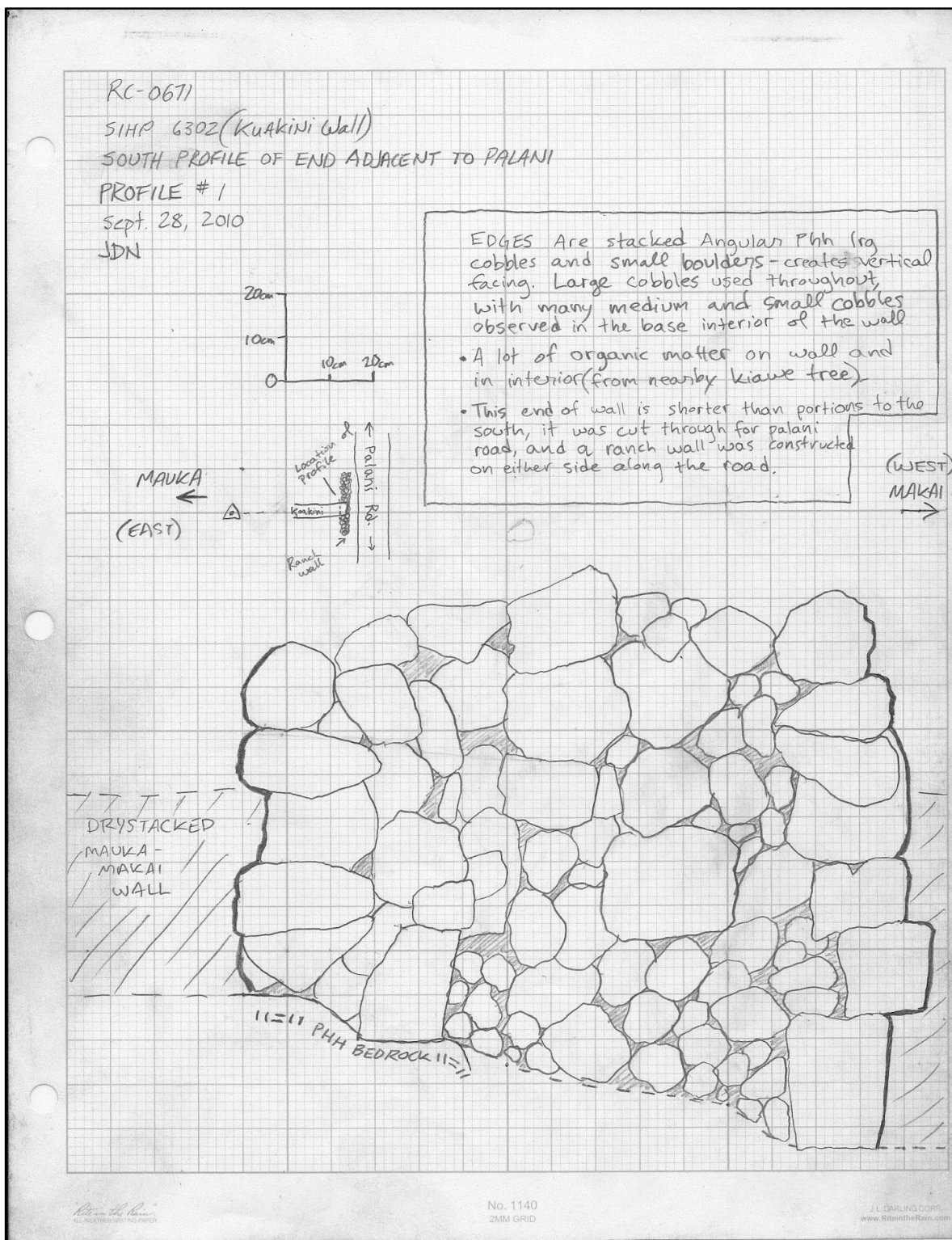


Figure 5. Example of scaled profile drawing and documentation of exposed wall interior (Rechtman and Nelson 2012).

Artifacts

Artifacts observed within the wall will be recovered and their general provenience recorded. All traditional Precontact Hawaiian artifacts and diagnostic post-Contact artifacts will be recovered for laboratory analysis. The precise locations of any items found *in situ* will be recorded and the items photographed and recovered for subsequent laboratory analysis. Any observed associations will also be documented, and the surrounding soil will be fully described using standard USDA soil descriptions and Munsell colors (if applicable).

Human Skeletal Remains

If human skeletal remains are encountered during the monitoring effort, the on-site monitor will halt work in the immediate area of the discovery, stabilize the remains, and contact the appropriate authorities. DLNR-SHPD staff from the Archaeology Branch and from the History and Culture Branch will be notified immediately, and the monitor will notify the appropriate on-site construction personnel. Either the monitor or the Principal Investigator will contact the Police and/or Medical Examiner, as appropriate. If the skeletal material is determined to be Historic or Precontact (as opposed to recent), the Principal Investigator will direct the applicant to seek DLNR-SHPD guidance on how to proceed with the discovery, and the human skeletal remains will be handled in compliance with HRS Chapter 43.6, HAR §13-300, and DLNR-SHPD directives.

TREATMENT OF RECOVERED REMAINS

All recovered material will be temporarily stored within a secure location. The recovered items will be recorded in a field catalog, and upon completion of the monitoring fieldwork the treatment of the items will be as follows:

Cultural Material

Artifacts from intact contexts will be analyzed. Analyzed items will be cleaned, weighed, measured, photographed, and illustrated (if appropriate). Analysis will include formal description and functional interpretation. The identification of artifacts, vertebrate faunal remains, and invertebrate faunal remains will include comparison with reference collections and materials, as needed.

Human Skeletal Remains

If DLNR-SHPD determines that the removal of buried human remains is an appropriate course of action, then a treatment/reburial plan will be developed in consultation with DLNR-SHPD and other consulted parties, as appropriate in accordance with Hawaii State law as outlined in HAR 13§13-300.

CURATION OF RECOVERED ITEMS

Any material recovered during the project will be temporarily stored for a period of no more than one year following submission of the final monitoring report, during which time arrangements will be made for permanent curation in consultation with the respective landowner and DLNR-SHPD. It will be the respective landowner's responsibility to secure permanent curation in an acceptable facility; included in this responsibility are the costs associated with long-term curation.

REPORTING

Within 30 days following completion of the dismantling, stabilization, and reconstruction effort, a draft dismantling/restoration report will be prepared and submitted to DLNR-SHPD for review and acceptance. This report will follow the specifications contained in HAR 13§13-279-5. If any human skeletal remains are recovered as part of the monitoring project, they will be summarized in the final dismantling/restoration report following procedures contained in HAR 13§13-300.

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2012 *Archaeological Monitoring Report for the Ane Keohokālole Highway Project (TMKs: 3-7-3-09:064; 3-7-4-08: 082, 083; 3-7-4-20:027, 029) Keahuolū, Kealakehe, Honokōhau and Kaloko ahupua'a, North Kona District, Island of Hawai'i.* Rechtman Consulting LLC RC-0671. Prepared for Nan, Inc., Honolulu.
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1882 *Life and times, of Mrs. Lucy G. Thurston, wife of Rev. Asa Thurston, pioneer missionary to the Sandwich islands, gathered from letters and journals of extending over a period of more than fifty years. Selected and arranged by herself.* S.C. Andrews, Ann Arbor, Michigan.

APPENDIX A
SHPD CORRESPONDENCE

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

WILLIAM J. AILA, JR.
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AQUATIC RESOURCES
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

June 19, 2014

Robert B. Rechtman, Ph. D.
ASM Affiliates Inc.
507-A East Lanikaula Street
Hilo, Hawai'i 96720

LOG NO: 2014.2843
DOC NO: 1406MV15
Archaeology

Dear Dr. Rechtman:

**SUBJECT: Chapter 6E-42 Historic Preservation Review –
Revised Archaeological Preservation Plan for the University of Nations
Waiaha Ahupua'a, North Kona District, Island of Hawai'i
TMK: (3) 7-5-010:085 and 7-5-017:006 (portion)**

Thank you for submitting the revised draft report titled *Preservation Plan for SIHP Site 6032 and Site 23681 TMK: 3-7-5-10:085 and 3-7-5-17:006 Waiaha 1st Ahupua'a, North Kona District, Island of Hawai'i RC-0783* (R. B. Rechtman, October, 2013). We received your submittal March 10, 2014. We apologize for the delayed review and thank you for your patience. Our records indicate that an archaeological inventory survey was conducted for this parcel by Clark and Rechtman (2003) and 26 historic properties were recorded. Eleven of these sites are recommended for no further work, ten sites are subject to data recovery (Rechtman and Loubster 2007), three sites are preserved under a burial treatment plan (Rechtman 2003) and two sites - the Kuakini Wall (SIHP 50-10-27-6032) and an agricultural heiau (SIHP 23681) are recommended for preservation. The subject plan proposes detailed preservation measures for these two sites. A draft of this plan was previously reviewed by SHPD and revisions were requested (Log 2013.6311, Doc 1402MV16).

According to the plan, the form of preservation proposed for the Kuakini Wall is "preservation as is" which is analogous to avoidance and protection, for the un-impacted portions of the wall; restoration and stabilization for collapsed portions of the wall; and reconstruction for the missing southern portion of the wall. The plan indicates that a separate dismantling/restoration plan will be submitted to SHPD for the restoration, stabilization, and reconstruction portions of the project. This information should include documentation of the areas that will be restored and a description of the work that will be done in order to retain the integrity of this historic property. SHPD agrees with the remaining aspects of the plan such as the interpretive signage, the proposed 20ft. buffers for both sites, and recordation of the preservation areas with the bureau of conveyances. This plan meets the requirements of Hawaii Administrative Rule §13-277 and is accepted by SHPD. Please send one hardcopy of the document, clearly marked **FINAL**, along with a copy of this review letter and a text-searchable PDF version on CD to the Kapolei SHPD office, attention SHPD Library.

Please contact Mike Vitousek at (808) 652-1510 or Michael.Vitousek@Hawaii.gov if you have any questions or concerns regarding this letter.

Aloha,

Theresa K. Donham
Archaeology Branch Chief