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COUNTY CLERK

TO: Honorable Alice Lee,
Council Chair
Maui County Council
County of Maui
200 South High Street
Wailuku, Hawai'i 96793

DATE: January 5, 2022

SUBJECT: Change in Zoning Annual
Compliance Report
for Parcel H-2 (Lot 19)

Enclosed is/are:

Copies	Date	Description
1 (HC) + 1 (CD)	January 2022	Change in Zoning Annual Compliance Report for Parcel H-2 (Lot 19)


X For your information
For necessary action
For your review
For your files

For your use
As requested
For your signature
Returning

REMARKS: On behalf of H2R, LLC, the owner of Parcel H-2 (Lot 19), we are transmitting the Change in Zoning Annual Compliance Report for your review. This report is in accordance with Condition No. 22 of Ordinance 3613 (Change in Zoning for Makena Resort Area). Condition No. 22 stipulates the following:

*"The developer shall provide timely annual compliance reports to the Planning Director and the Council. The compliance reports shall include:
(a) the status of the developer's compliance with each of these conditions;
and (b) a reasonable estimate of the time needed for full compliance."*

Should you have any questions or require additional information, please feel free to call me at (808)983-1233.

Signed: 
Yukino Uchiyama, AICP
Senior Associate

YU:yp
Copy to: Everett Dowling, Dowling Company, Inc. (w/enclosure)
Brian Ige, Dowling Company, Inc. (w/enclosure)
Leilani Pulmano, Pacific Rim Land (w/enclosure)

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Change in Zoning Annual Compliance Report

for

**PARCEL H-2 (LOT 19)
(TMK No. (2)2-1-005:085)**

**Prepared by
H2R, LLC**

January 6, 2022

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LIST OF EXHIBITS

Exhibit A.	Updated Site Plan and Roadway Sections
Exhibit B.	Agreement Regarding the Satisfaction of Condition No. 11 of Ordinance No. 3613
Exhibit C.	Letter from Department of Planning Regarding Compliance with Condition No. 12 of Ordinance No. 3613
Exhibit D.	Letter from Department of Planning Regarding Compliance with Conditions No. 14 and No. 15 of Ordinance No. 3613
Exhibit E.	Archaeological Inventory Survey
Exhibit E-1.	State Historic Preservation Division Acceptance Letter Dated August 30, 2021
Exhibit F.	Letter from Department of Planning Regarding Compliance with Condition No. 27 of Ordinance No. 3613
Exhibit G.	Supplemental Information for Biological Resources Survey Dated April 2020
Exhibit H.	Email from Hawaii Wildlife Fund Regarding Condition No. 38 of Ordinance No. 3613

I. BACKGROUND AND CONTEXT

Ordinance No. 3613, entitled “A BILL FOR AN ORDINANCE TO AMEND PORTIONS OF LAND ZONING MAP NOS. 5 AND 514 TO ESTABLISH A-2 APARTMENT DISTRICT, B-2 COMMUNITY BUSINESS DISTRICT, B-R RESORT COMMERCIAL DISTRICT, H-M HOTEL DISTRICT, PK-1 NEIGHBORHOOD PARK DISTRICT, PK-4 GOLF COURSE PARK DISTRICT, R-1 AND R-3 RESIDENTIAL DISTRICT ZONING (CONDITIONAL ZONING) FOR LANDS SITUATED AT MAKENA, MAUI, HAWAII”, authorized a Change in Zoning for parcels of land located in Mākena, Maui, Hawai‘i. Lands subject to the Change in Zoning action comprised approximately 603.303 acres, and are hereinafter referred to as “Zoned Parcels”. Of the Zoned Parcels, H2R, LLC (H2R) has ownership of Parcel H-2 (Lot 19), which is identified as Tax Map Key (TMK) No. (2)2-1-005:085 and comprised of approximately 27.825 acres. Parcel H-2 (Lot 19) is zoned “H-M, Hotel” per Ordinance No. 3613.

The Change in Zoning for the Zoned Parcels was issued subject to 44 conditions. Condition No. 22 stipulates the following:

The developer shall provide timely annual compliance reports to the Planning Director and the Council. The compliance reports shall include: (a) the status of the developer's compliance with each of these conditions; and (b) a reasonable estimate of the time needed for full compliance.

Pursuant to Condition No. 22, this Annual Compliance Report is hereby being submitted by H2R, as owner of the 27.825-acre Parcel H-2 (Lot 19) to document compliance with applicable conditions of zoning for Parcel H-2 (Lot 19). It is noted that about 95 percent (approximately 575 acres) of the Zoned Parcels are owned by AREG AC Makena Propco, LLC, which is doing business as Makena Golf & Beach Club Owners (MG&BC). As owner of the majority of the Zoned Parcels, several of the conditions are being met by MG&BC. As will be detailed in the following section, this report will provide the status of compliance and a reasonable estimate of the time needed for full compliance for each of the 44 conditions. It will be noted in each response when the condition is being met by H2R and when it is being met by MG&BC.

II. REPORT ON COMPLIANCE WITH CONDITIONS OF ZONING

As required pursuant to Condition No. 22, the following information is provided to report on compliance with the applicable conditions of Ordinance No. 3613 for Lot 19 (hereinafter referred to as "Parcel H-2"). Parcel H-2 is the sole parcel of the Zoned Parcels owned by H2R. Specifically, this report includes (a) the status of compliance, with each of the 44 conditions and (b) a reasonable estimate of the time needed for full compliance.

Condition No. 1: *In the R-1, R-2, and R-3 Residential District zoned areas, the density shall not exceed 2.5 single-family dwelling units per acre.*

Status of Compliance: Parcel H-2 is zoned "H-M, Hotel", and therefore, is not subject to the provisions of this condition.

Estimate of Time for Compliance: Not applicable.

Condition No. 2: *In the A-2 Apartment District zoned areas, the density shall not exceed eight units per acre, and the building height shall not exceed 45 feet. Height shall be measured from the natural or finish grade, whichever is lower.*

Status of Compliance: Parcel H-2 is zoned "H-M, Hotel", and therefore, is not subject to the provisions of this condition.

Estimate of Time for Compliance: Not applicable.

Condition No. 3: *In the B-2 Community Business District zoned areas, the gross floor area of each building shall not exceed 60 percent of the total lot area.*

Status of Compliance: Parcel H-2 is zoned "H-M, Hotel", and therefore, is not subject to the provisions of this condition.

Estimate of Time for Compliance: Not applicable.

Condition No. 4: *On Lot 19 (H-M Hotel District), the building height shall not exceed 45 feet and shall be consistent with the Urban Design Standards for Building Form in the Kihei-Makena Community Plan; no more than 89 units shall be developed; and no lockout units shall be allowed. Height shall be measured from the natural or finish grade, whichever is lower.*

Status of Compliance: H2R is the owner of Lot 19. H2R will comply with the provisions of the above-noted condition. The H-2 Residential Project (Project) will limit the building height to 45 feet. These restrictions are recorded in the Project's Design Guidelines.

Further, H2R confirms that no more than 89 units shall be developed and no lockout units shall be allowed. H2R's current plans consist of the development of up to 53 condominium lots, beach parking, and related infrastructure improvements on Lot 19. Each future individual lot owner will be allowed to construct a single-family dwelling unit and related accessory uses in accordance with the approved Design Guidelines.

Estimate of Time for Compliance: This condition will continue throughout the life of the Project.

Condition No. 5: *The developer shall preserve Makena's significant views of the Pacific Ocean and the broad vista to the Central Maui and Upcountry regions. The use of walls higher than four feet in front yard setbacks shall be prohibited.*

Status of Compliance: H2R will comply with this condition. A view analysis was completed for the Project to evaluate the Project in the context of the surrounding area and avoid potential adverse impacts to scenic vistas and view planes. As part of the Design Guidelines for the Project, walls used in front yard setbacks are limited to four (4) feet in height.

Estimate of Time for Compliance: This condition will continue throughout the life of the Project.

Condition No. 6: *In the B-2 Community Business District zoned areas, the following permitted uses shall incorporate acoustical measures into the facility to mitigate potential noise impacts: amusement enterprises, including billiard and pool halls; auditoriums and theaters; baseball and football stadiums and other sport activities and amusements; bowling alleys; dancing and hula studios; gymnasiums; miniature golf courses; music conservatories and music studios; physical-culture studios; and printing, lithography, and publishing shops.*

Status of Compliance: Parcel H-2 is zoned “H-M, Hotel”, and therefore, is not subject to the provisions of this condition.

Estimate of Time for Compliance: Not applicable.

Condition No. 7: *All exterior lighting shall be shielded from adjacent residential properties and nearshore waters, and shall be fully shielded to prevent uplight. Lighting requirements in force at the time of building permit application shall be applied.*

Status of Compliance: H2R will comply with this condition. The Project's Design Guidelines include a section on Lighting and Sign Standards. The Lighting Standards require all exterior lights to be indirect and shielded to prevent uplighting and spillover onto adjacent lots and areas. The Lighting Standards also include a provision that all exterior lighting meet Chapter 20.35, Outdoor Lighting, Maui County Code (MCC).

Estimate of Time for Compliance: This condition will continue throughout the life of the Project.

Condition No. 8: *In the B-2 Community Business District zoned areas, merchandise, equipment, and supplies shall be stored within enclosed buildings or enclosed areas that are appropriately screened with fencing and landscape planting for the following permitted uses: equipment rental and sales yards; hardware and garden supply stores; parcel delivery stations; and printing, lithography, and publishing shops.*

Status of Compliance: Parcel H-2 is zoned “H-M, Hotel”, and therefore, is not subject to the provisions of this condition.

Estimate of Time for Compliance: Not applicable.

Condition No. 9: *The developer, its successors and permitted assigns shall pay the Department of Education, \$3,000 per dwelling unit upon issuance of each building permit to be used, to the extent possible, for schools serving the Kihei-Makena Community Plan area; provided that, should the State pass legislation imposing school impact fees that apply to the Makena Resort Area, the developer, its successors and permitted assigns, shall from that point forward comply with the State requirements, or contribute \$3,000 per dwelling unit, whichever is greater. Should a previous agreement exist between the Department of Education and the landowner, this condition shall prevail.*

Status of Compliance: H2R executed an amendment to the Education Contribution Agreement for Makena Resort reflecting that Parcel H-2 will participate in the Department of Education facilities contribution program currently set at \$5,560 per unit. A copy of the First Amendment to Education Contribution Agreement for Makena Resort was included in H2R's Updated Annual Compliance Report dated June 19, 2020.

Estimate of Time for Compliance: Payment is due upon issuance of each building permit for a new dwelling unit during the life of the Project.

Condition No. 10: *The developer shall provide pedestrian and bicycle access ways within the roadways throughout and fronting the Makena Resort Area. A schematic plan for pedestrian and bicycle access ways throughout and fronting the Makena Resort Area shall be submitted to the Department of Planning for consideration by the Maui Planning Commission in conjunction with SMA permit applications.*

Status of Compliance: The 2010 Annual Compliance Report submitted by the former ownership entity of the majority of the Zoned Parcels, ATC Makena Holdings, LLC (now known as MG&BC), included the Makena Trail Master Plan 2010 prepared by Miyabara & Associates. The Makena Trail Master Plan 2010 provided a conceptual trail master plan for non-vehicular circulation throughout the Zoned Parcels in compliance with this condition.

Specifically to Parcel H-2, the Trail Master Plan provided a baseline of the trail system for the Project, which includes access pathways to and from the Project. The Project will also improve Mākena Alanui

Road and Mākena-Keone‘ō‘io Road to include pedestrian and bicycle access. Copies of the latest site plan and roadway section, which were updated during the Final EA preparation process, are included herein as **Exhibit “A”**.

Estimate of Time for Compliance: The Final EA for the Project was submitted to the Department of Planning in November 2021 for processing and is currently being updated to respond to comments received on November 23, 2021 from the Maui Planning Commission. The Final EA includes schematic plans for pedestrian and bicycle access ways.

Condition No. 11: *The developer shall make a contribution to the County for traffic improvements in an amount equal to \$5,000 per unit. The contribution shall be paid to the County prior to issuance of the initial building permit. Upon adoption of a traffic impact fee ordinance, the developer shall comply with the ordinance in lieu of this voluntary contribution. Should a traffic impact fee ordinance be adopted prior to the collection of this contribution, the applicable amount shall be the greater of the two. Such contributions or fees shall not be counted towards Condition No. 12 below.*

Status of Compliance: H2R will comply with this condition. H2R has worked with the County Department of Public Works (DPW) and executed an agreement regarding the \$5,000 per unit contribution for traffic improvements. A copy of the final agreement for contributions related to traffic improvements is included herein as **Exhibit “B”**.

Estimate of Time for Compliance: The contribution will be paid prior to issuance of the initial building permit for construction of a dwelling unit.

Condition No. 12: *Upon commencement of the first phase of construction, the developer shall pay its pro-rata share to upgrade Pi‘ilani Highway from Kilohana Drive to Wailea Ike Drive to four lanes of traffic, and shall cooperate with the State Department of Transportation and other area developers to implement such improvements concurrent with development.*

Status of Compliance: H2R has complied with this condition. H2R and State Department of Transportation (SDOT) entered into a Memorandum of Agreement (MOA) for their pro rata funding of local and regional transportation improvements. A copy of this MOA was included in H2R's Updated Annual Compliance report dated January 6, 2021. The MOA calls for funding to install a traffic light at the Pi'ilani Highway/Okolani Drive/Mikioi Place intersection in Wailea. The Department of Planning confirmed H2R's compliance with Condition No. 12 by letter dated April 26, 2021. See **Exhibit "C"**.

Estimate of Time for Compliance: On June 18, 2020, H2R funded their pro-rata share as outlined in the MOA.

Condition No. 13: *The developer shall provide construction access roads from Pi'ilani Highway to the construction sites. Construction traffic shall be prohibited on Kilohana Drive, Wailea Ike Drive, Wailea Alanui Drive, and Makena Alanui Drive to the extent practicable.*

Status of Compliance: H2R will comply with this condition to the extent practicable. The Applicant sent letters to the various landowners in the vicinity of the Project to request construction road access through their properties. As of yet, no landowner has responded to the request.

Estimate of Time for Compliance: At the time of construction on Parcel H-2, as applicable.

Condition No. 14: *The developer shall develop and submit a Transportation Management Plan ("TMP"), to be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation. The purpose of the TMP shall be to reduce traffic generated by construction activity related to the Makena Resort Area. The TMP shall provide for programs such as park and ride, shuttles, and/or restrictions on worker access to ongoing construction activity during peak hour traffic. Upon approval, project contractors shall implement the TMP during construction activities. The developer shall submit an annual report to the State Department of Transportation, the County Department of Public Works, the County Department of Transportation, and the Maui County Council to document the*

success of the TMP in meeting its benchmarks of reducing traffic during project construction.

The TMP shall be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation prior to issuance of each SMA permit within the Makena Resort Area.

Status of Compliance: H2R has compiled with this condition. A project-specific Construction Transportation Management Plan (TMP) has been prepared for the proposed project. This report has been approved by the SDOT, DPW, and the County of Maui, Department of Transportation (MDOT) in accordance with this condition. Copies of the Construction TMP and approval letters from the SDOT, DPW, and MDOT were included in H2R's Annual Compliance report dated January 6, 2021. The Department of Planning confirmed by letter dated August 4, 2021 that H2R has satisfied, in part, Condition No. 14 (development and approval of the Construction TMP by the listed agencies). See **Exhibit "D"**.

Estimate of Time for Compliance: As noted above, the Construction TMP has been reviewed and approved by the SDOT, DPW, and MDOT. The Applicant will submit an annual report to SDOT, DPW, and MDOT during construction.

Condition No. 15: *As part of the first SMA application, the developer shall submit a TMP to reduce the dependency on individual vehicular transportation modes. The TMP shall be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation to address post-construction traffic issues.*

Status of Compliance: H2R has compiled this condition. A project-specific Post-Construction TMP has been prepared for the proposed project. This report has been approved by the SDOT, DPW, and MDOT in accordance with this condition. Copies of the Post-Construction TMP and approval letters from the SDOT, DPW, and MDOT were included in H2R's Annual Compliance report

dated January 6, 2021. The Department of Planning confirmed by letter dated August 4, 2021 that H2R has satisfied Condition No. 15. Refer to **Exhibit “D”**.

Estimate of Time for Compliance: Compliance with this condition has been satisfied. The Applicant will implement the approved Post-Construction TMP.

Condition No. 16: *The developer shall participate in the pro rata funding and construction of adequate civil defense measures as determined by the State and County civil defense agencies.*

Status of Compliance: H2R will comply with this condition. In consultation with Hawai'i Emergency Management Agency (HiEMA), a new outdoor emergency siren will be installed either onsite or in the vicinity of Parcel H-2.

Estimate of Time for Compliance: H2R is in consultation with HiEMA to determine the location of the new emergency siren. Upon agreement with HiEMA, the emergency siren will be incorporated into the project plans.

Condition No. 17: *Should any human burials or any historic sites such as artifacts, charcoal deposits, stone platforms, pavings, or walls be found, the developer shall stop construction work in the immediate vicinity and notify the State Historic Preservation Division (SHPD), the Maui/Lanai Island Burial Council (MLIBC), and the Maui County Cultural Resources Commission (CRC).*

Status of Compliance: H2R will comply with this condition.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 18: *The developer, its successors and permitted assigns, shall provide a comprehensive preservation/mitigation plan pursuant to Chapter 6E, Hawaii Revised Statutes, that has been approved by the State Historic Preservation Division, Department of Land and Natural Resources, and the Office of Hawaiian Affairs prior to any grading within the project area.*

Status of Compliance: H2R will comply with this condition. It is noted that H2R purchased Parcel H-2 in 2018 and has since been working on satisfying the CIZ Conditions, including Condition No. 18.

Pacific Legacy, Inc. and ‘Āina Archaeology, both of which are permitted archaeological consultants in Hawai‘i, conducted a project-specific Archaeological Inventory Survey (AIS) of the project area in 2021 (hereinafter referred to as “2021 AIS”). See **Exhibit “E”**. The Department of Land and Natural Resources, State Historic Preservation Division (SHPD) accepted the 2021 AIS on August 30, 2021 (Project No. 2020PR34905/Doc No. 2107AM23). See **Exhibit “E-1”**. H2R’s archaeologists are currently updating the AIS report for resubmittal to SHPD following additional fieldwork that documented an additional feature at Statewide Inventory of Historic Places (SIHP) No. 50-50-14-06373 and an additional historic property consisting of a modified outcrop, both of which were identified during fieldwork but were recently discovered as not being included in the AIS report.

H2R, LLC will utilize the results of the 2021 AIS to complete an Archaeological Preservation Plan (APP), Archaeological Monitoring Plan (AMP), and Data Recovery Plan (DRP) for the H-2 Residential Project. It is noted that as part of consultation with the Office of Hawaiian Affairs (OHA), OHA outlined a co-approval protocol for these reports. As such, these reports will be submitted to SHPD and OHA for review and approval prior to grading within the project area.

Estimate of Time for Compliance: The APP, AMP, and DRP will be approved by SHPD and OHA prior to any grading within the project area.

Condition No. 19: *Marine monitoring programs shall be conducted which include monitoring and assessment of coastal water resources (groundwater and surface water) that receive surface water or groundwater discharges from the hydrologic unit where the project is located. Monitoring programs shall include both water quality and ecological monitoring.*

Water Quality Monitoring shall provide water quality data adequate to assess compliance with applicable State water quality standards at Hawaii Administrative Rules Chapter 11-54. Assessment procedures shall be in accordance with the current Hawaii Department of Health ("HIDOH") methodology for Clean Water Act Section 305(b) water quality assessment, including use of approved analytical methods and quality control/quality assurance measures. The water quality data shall be submitted biannually, or every six months, to HIDOH for use in the State's Integrated Report of Assessed Waters prepared under Clean Water Act Sections 303(d) and 305(b). If this report lists the receiving waters as impaired and requiring a Total Maximum Daily Load ("TMDL") study, then the monitoring program shall be amended to evaluate land-based pollutants, including: (1) monitoring of surface water and groundwater quality for the pollutants identified as the source of the impairment; and (2) providing estimates of total mass discharge of those pollutants on a daily and annual basis from all sources, including infiltration, injection, and runoff. The results of the land-based pollution water quality monitoring and loading estimate shall be submitted to the HIDOH Environmental Planning Office, TMDL Program.

The ecological monitoring shall include ecological assessment in accordance with the Coral Reef Assessment and Monitoring Program protocols used by the Department of Land and Natural Resources. The initial assessment shall use the full protocol. Subsequent biannual assessments can use the Rapid Assessment Techniques. Results shall be reported biannually to the Aquatic Resources Division, Department of Land and Natural Resources.

The monitoring and assessments shall be conducted by degreed scientists experienced with Clean Water Act programs, water quality monitoring, water quality assessment, water quality-based permitting, water quality modeling, watershed planning, and TMDL. Study design should be made available for both public review and peer review by the State Department of Health, Department of Aquatic Resources, and the University of Hawaii researchers. Results of monitoring shall be published and publicly available online.

Status of Compliance: MG&BC conducts the marine monitoring program required by this condition. The monitoring reports are submitted each year as part of MG&BC's Annual Compliance Report. These reports are also transmitted to the State Department of Health (DOH).

Estimate of Time for Compliance: Water quality monitoring and assessment for the Zoned Parcels will continue to be conducted by the MG&BC in compliance with the provisions of said condition.

Condition No. 20: *The developer shall implement efficient soil-erosion and dust-control measures during and after development to the satisfaction of DOH and the County.*

Status of Compliance: H2R will comply with this condition. To control runoff, sedimentation, and erosion during construction as well as post-construction, a comprehensive program of Best Management Practices (BMPs) will be implemented in accordance with applicable provisions of the Maui County Code and Drainage Rules of the Department of Public Works as part of the Project. This program includes Low Impact Development (LID) measures such as detention and infiltration basins and swales, and BMPs to capture runoff. All pre- and post-development runoff for the design storm will be retained onsite, which is in exceedance of the County of Maui Drainage Standards.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 21: *The developer shall give notice to the Department of Planning and the Council of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interests in the Makena Resort Area, prior to any development.*

Status of Compliance: H2R will comply with this condition.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 22: *The developer shall provide timely annual compliance reports to the Planning Director and the Council. The compliance reports shall include: (a) the status of the developer's compliance with each of these conditions; and (b) a reasonable estimate of the time needed for full compliance.*

Status of Compliance: This Annual Compliance Report is being submitted by H2R for Parcel H-2 in relation to this condition.

Estimate of Time for Compliance: This condition will continue annually during the life of the Project.

Condition No. 23: *Failure to fulfill any condition may result in a reversion to former or more appropriate zoning or community plan designations or other remedies.*

Status of Compliance: H2R acknowledges this condition.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 24: *If any of the property subject to this Change in Zoning is consolidated with other property for purposes of an SMA permit application, these conditions shall apply to the entirety of the consolidated property.*

Status of Compliance: H2R acknowledges this condition.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 25: *The developer shall comply with the County's Residential Workforce Housing Policy as provided in Chapter 2.96, Maui County Code.*

Status of Compliance: H2R will comply with this condition. As part of the Project, H2R proposes to construct up to 53 lots on Parcel H-2, which would require a total of fourteen (14) affordable housing units to comply with the Residential Workforce Housing Policy as provided in Chapter 2.96. The Project has provided eleven (11) affordable housing units in conjunction with Hale Mahaolu Ehiku project and the Department of Hawaiian Home Lands (DHHL). In 2008, the previous landowner of Parcel H-2 provided Hale Mahaolu an in-lieu fee to assist with construction of the Ehiku project (in Kihei) that equated to seven (7) affordable housing units. Additionally, H2R partner, Dowling Company, constructed homes for DHHL that created affordable housing units for native

Hawaiians and was issued affordable housing credits for those homes. Four (4) of these credits were assigned to this property. In summary, eleven (11) affordable housing units assigned to this property are homes that families have already been living in for well over 10 years.

The remaining three (3) affordable housing units will be satisfied in compliance with the provisions of Chapter 2.96, MCC.

Estimate of Time for Compliance: Chapter 2.96, MCC, requires compliance prior to final subdivision or building permit approval, whichever is applicable and occurs first. Compliance with this condition will occur prior to the issuance of the first building permit for the Project.

Condition No. 26: *The developer shall comply with all applicable County water ordinances. The water rates for the residential workforce housing units shall be no higher than the general water consumer rates set by the County in its annual budget, for as long as the units are subject to Chapter 2.96, Maui County Code.*

Status of Compliance: H2R will comply with this condition.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 27: *The developer shall provide a water conservation plan for the Makena Resort Area, approved by the Department of Water Supply, prior to the issuance of any SMA permits. For each project, the developer shall construct a dual waterline system to accommodate the use of non-potable water for landscaping and irrigation purposes prior to the issuance of any building permits.*

Status of Compliance: A Water Conservation Plan (WCP) for the Makena Resort area was approved by the County Department of Water Supply (DWS) on July 27, 2009. This report was included in the 2010 Annual Compliance Report submitted by ATC Makena Holdings, LLC (now known as MG&BC). For the Project, the 2010 WCP policies are incorporated into the project design as water

conservation strategies, including low-flow fixtures for indoor water use, Energy Star rated appliances, and requiring LEED Silver certification. These strategies are memorialized in the Project's Design Guidelines.

It is noted that the Project will incorporate a dual waterline system. The non-potable water sources are anticipated to be the Makena non-potable wells and recycled water from the Makena Wastewater Treatment Facility. A letter, dated September 17, 2020, was submitted to the Department of Planning requesting confirmation that this condition has been complied with. A copy of this letter was included in H2R's Annual Compliance report dated January 6, 2021. The Department of Planning acknowledged in a letter dated October 20, 2021, that the first part of the condition regarding WCP has been satisfied. The second part of condition regarding the construction of the dual water lines for potable and non-potable water will be deemed satisfied upon installation of the dual waterline. See **Exhibit "F"**.

<u>Estimate of Time for Compliance:</u>	As discussed above, the WCP for the Makena Resort area was submitted with the aforementioned Annual Compliance Report in 2010. The Project includes design of the aforementioned dual waterline which will be included in the construction plans for the Project.
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Condition No. 28: *All energy systems for all residential, commercial, and hotel units shall be designed and constructed to meet all applicable Energy Star® requirements established by the Climate Protection Division of the United States Environmental Protection Agency in effect at the time of construction. For purposes of this condition, energy systems shall include all hot-water systems, roof and attic areas, outside walls, windows, air-cooling systems, and heating systems.*

<u>Status of Compliance:</u>	H2R will comply with this condition. The Design Guidelines for the Project will require LEED Silver certification for all homes within the Project. As part of
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the LEED certification process, energy efficiency inspections will be completed to ensure that the homes will meet ENERGY STAR performance guidelines, currently outlined in the Pacific Program ENERGY STAR Certified Homes, Version 3 (Rev. 10) for Hawai'i.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 29: *All residential, commercial, and hotel units shall comply with Chapter 16.16, Maui County Code.*

Status of Compliance: H2R will comply with this condition.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 30: *All air-cooling systems and all heating systems for laundry facilities, swimming pools, and spa areas shall make maximum use of energy-efficient construction and technology.*

Status of Compliance: H2R will comply with this condition. As noted previously, the Project's Design Guidelines will require LEED Silver certification for all homes within the Project. As part of the LEED certification process, energy efficiency inspections will be completed. The process will evaluate the energy consumption of air-cooling systems, laundry facilities, swimming pools, and spas.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 31: *The developer shall construct a minimum of 60 new parking stalls at Maluaka Beach, including at least 10 at the north end, within one year of the issuance to the developer of any SMA permit by the Maui Planning Commission relating to a parcel or a portion thereof that is a subject of this Change in Zoning. Unless necessary to protect public safety or to comply with State or Federal law, the required parking stalls need not be asphalt surfaced. Development costs and land shall not satisfy park dedication requirements.*

Status of Compliance: H2R will comply with this condition in cooperation with MG&BC. On Parcel H-2, there is an existing beach parking lot comprised of 50 stalls. With the development of the Project, the beach parking lot will be relocated to the north, closer to the existing Maluaka beach access off of Mākena-Keone‘ō‘io Road. The new beach parking lot will be expanded and will comprise of 57 stalls.

It is noted that the existing 50-stall beach parking lot was originally comprised of 30 stalls. The beach parking lot was expanded by 20 stalls over time with recent developments in the area. The provision of 10 of these additional stalls constructed in 2012 was to satisfy, in part, Condition No. 31 of Ordinance No. 3613. As such, seventeen (17) of the required 60 stalls are planned to be constructed within Parcel H-2 to satisfy, in part, Condition No. 31.

As required, ten (10) stalls will be located at the north end of Maluaka Beach and developed by MG&BC. MG&BC is working to develop the final location of the remaining 33 required parking stalls within their land holdings.

Should MG&BC fail to fulfill its obligation to provide the required beach parking, an additional 33-stall beach parking lot, for a total of 90 beach parking stalls, is also a potential development option within Parcel H-2 in an area otherwise planned for a drainage retention basin or unit area, in order to satisfy the provision of Condition No. 31. This potential development option was also assessed in the Final EA.

Estimate of Time for Compliance: Within one (1) year of issuance of a SMA Use Permit relating to the Zoned Parcels. H2R and MG&BC will cooperate towards satisfying this requirement.

Condition No. 32: *The developer shall develop an expansion of the beach park at the south end of Maluaka Beach, such that the beach park shall comprise at least 1.5 acres of land area for public use and beach access. The developer shall submit the necessary applications required for the expansion within six months of the approval of this Change in Zoning. The land area of the expansion of the existing park shall be applied as credit toward satisfying a portion of any applicable park dedication requirements.*

Status of Compliance: This condition has been satisfied. A copy of the declaration and agreement was included in ATC Makena Holdings, LLC's (now known as MG&BC) 2018 Annual Compliance Report.

Estimate of Time for Compliance: This condition has been satisfied by MG&BC.

Condition No. 33: *To the extent practicable, the developer shall provide, in perpetuity, traversable lateral shoreline access in the area between the shoreward boundary and the mauka boundary of the Makena Resort Area. Costs associated with this condition shall not satisfy park dedication requirements.*

Status of Compliance: Parcel H-2 is not a shoreline adjacent property and thereby is not subject to this condition. In regards to the remainder of the Zoned Parcels, MG&BC prepared a schematic plan for pedestrian and bicycle access ways throughout the entire Makena Resort area. See Condition No. 10.

Estimate of Time for Compliance: Not applicable.

Condition No. 34: *Within one year of the approval of this Change in Zoning, the developer shall initiate and fund a plan for the development of the State Park at Makena for the State Department of Land and Natural Resources and the Department of Parks and Recreation, soliciting and taking into consideration the comments of various user groups, including Surfrider Foundation, Savemakena.org, Maui Tomorrow, the Kihei Community Association, and the Makena Homeowner's Association. The plan shall incorporate recreational, landscaping, parking, and facility concepts as a guide for future development of the park. Costs associated with this condition shall not satisfy park dedication requirements.*

Status of Compliance: This condition has been satisfied. The County Department of Planning issued a letter of condition fulfillment dated June 3, 2013. These documents were

included in ATC Makena Holdings, LLC's (now known as MG&BC) 2014 Annual Compliance Report.

Estimate of Time for Compliance: Compliance with this condition has been satisfied by MG&BC.

Condition No. 35: *The developer shall renovate and beautify Makena Landing (TMK: 2-1-007:094), see attached map, in coordination with the Department of Parks and Recreation and the State Department of Land and Natural Resources. Costs associated with this condition shall not satisfy park dedication requirements.*

Status of Compliance: As owners of Makena Landing, MG&BC is responsible for compliance with this condition. As discussed in MG&BC's 2021 Annual Compliance Report, a Shoreline Setback Determination (SSD) for the Makena Landing beach park property was issued by the Department of Planning on May 20, 2013. In addition, an SMA Minor Permit and Shoreline Setback Approval (SSA) for the proposed renovation and beautification work at the park were issued by the Department of Planning on October 1, 2013. Copies of these approvals were provided in ATC Makena Holdings, LLC's (now known as MG&BC) 2014 Annual Compliance Report.

In coordination with the Department of Parks and Recreation and the Department of Planning, MG&BC made various adjustments to the 2013 site plan to reflect input received from the Makena Community Advisory Group and the Makena Cultural Focus Group.

Estimate of Time for Compliance: MG&BC started the renovation and beautification work, including landscape improvements, shower improvements, replacing trash receptacles, and tree trimming. MG&BC will be coordinating the remaining renovation and beautification work elements with the County Department of Parks and Recreation.

Condition No. 36: *The developer shall maintain Makena Landing (TMK: 2-1-007:094), North Maluaka (TMK: 2-1-007:068), and South Maluaka (TMK: 2-1-005:124), see attached map, and all future parklands within the Makena Resort Area.*

Status of Compliance: As owners of these three (3) park areas, MG&BC is responsible for compliance with this condition. As discussed in the 2021 Annual Compliance Report submitted by MG&BC, a Unilateral Agreement was recorded in 2018 for the ongoing maintenance. A copy of the agreement was also included in MG&BC 2018 Annual Compliance Report.

H2R's understanding is that MG&BC will continue to maintain Makena Landing, North Maluaka, and South Maluaka as well as all future parklands within the Makena Resort Area.

Estimate of Time for Compliance: As noted above, the Unilateral Agreement was recorded in 2018 in compliance with this Condition and Condition No. 32. Maintenance of the noted parks and future parks will continue for the life of the Project.

Condition No. 37: *To exhibit respect for the Hawaiian culture and a Hawaiian sense of place, structures within the Makena Resort Area shall be based on or inspired by principles of Hawaiian island architecture in design and construction.*

Status of Compliance: H2R will comply with this condition. The Project's Design Guidelines require design elements associated with Hawaiian and Polynesian architecture. The Maui County Urban Design Review Board reviewed the Project on March 3, 2020 and commented that the Design Guidelines for the proposed homes were thoroughly done and with great detail.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 38: *The developer shall provide a baseline study survey of flora and fauna as part of each SMA permit application within the Makena Resort Area; the study shall be conducted by recognized independent experts on Hawaiian flora and fauna and list all endemic, indigenous, and endangered species, their distribution in the Makena Resort Area and adjacent shorelines. This study shall also include a preservation/mitigation plan and comments from the State Department of Land and Natural Resources, the U.S. Fish and Wildlife Service, and the U.S. Corps of Engineers, and the Maui representative of the Hawaii Wildlife Fund and The Nature Conservancy.*

Status of Compliance:

H2R has complied with this condition. As discussed in MG&BC's 2021 Annual Compliance Report, renowned botanist and forester Robert Hobdy prepared a baseline flora and fauna study of Mākena's coastal lands in 2008. The study was circulated to the agencies listed in this condition. No responses nor comments were received from the U.S. Fish and Wildlife Service (USFWS), Hawaii Wildlife Fund, The Nature Conservancy, and several divisions of the Department of Land and Natural Resources (DLNR). The U.S. Army Corps of Engineers (USACE) responded that it is their "*policy not to comment on the adequacy of consultant's site report; accordingly, the Corps will not provide comments...*". The DLNR State Parks provided clarification to the survey, which was subsequently updated. A copy of the flora and fauna study was submitted as part of the ATC Makena Holdings, LLC's (now known as MG&BC) 2010 Annual Report.

Separately, a biological resources (flora and fauna) survey for Parcel H-2 was prepared in December 2018. The report has been submitted to USFWS, DLNR, and USACE, Hawaii Wildlife Fund and The Nature Conservancy. Comments received by USFWS, DLNR, and The Nature Conservancy were included in H2R's Updated Annual Compliance report dated January 6, 2021, and comments were incorporated into a Supplemental Information for the Biological Resource Survey for the Project, which was prepared by Robert Hobdy in April 2020 and included in the Final EA that

is currently in process with the Department of Planning. See **Exhibit “G”**. Hawaii Wildlife Fund provided no comments via email dated November 11, 2021. See **Exhibit “H”**.

Estimate of Time for Compliance: As noted above, a Biological Resources Survey for the Project has been submitted to the above noted agencies.

Condition No. 39: *No transient vacation rentals or time shares shall be allowed within this Makena Resort rezoning application area; and further, no special use permit or conditional permit for such accommodations shall be accepted by the Department of Planning.*

Status of Compliance: H2R acknowledges this condition. This condition will be memorialized in the Project’s sales documents and conveyance document.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 40: *A second hotel shall not be constructed within the Makena Resort Area.*

Status of Compliance: H2R acknowledges this condition. It is noted that Parcel H-2 is being planned for up to 53-lot residential project.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 41: *All buildings constructed within the Makena Resort Area shall be LEED (Leadership in Energy and Environmental Design) certified if they are 500 square feet or larger.*

Status of Compliance: H2R will comply with this condition. As noted previously, the Project’s Design Guidelines require LEED Silver certification for all homes.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 42: *New dwelling units shall not exceed 800, excluding residential workforce housing.*

Status of Compliance: H2R and MG&BC acknowledge this condition. The proposed H-2 Residential Project will utilize up to 53 dwelling units of the 800 dwelling units permitted within Zoned Parcels, excluding residential workforce housing units.

Estimate of Time for Compliance: This condition will continue for the duration of the Project.

Condition No. 43: *The developer, its successors and permitted assigns, shall contribute \$1,000 per market-priced unit, collected at issuance of building permit, to the County, for the development and maintenance of a police station in South Maui.*

Status of Compliance: H2R will comply with this condition. A Contribution Agreement has been executed with the County of Maui, Maui Police Department. A copy of this Contribution Agreement was provided in H2R's Annual Compliance report dated January 6, 2021.

Estimate of Time for Compliance: Upon issuance of each building permit for construction of a dwelling unit, a \$1,000 contribution shall be payable.

Condition No. 44: *The developer shall provide Driveway "D" from Makena Alanui Road to Makena Resort Sewage Treatment Plant and beyond as an emergency evacuation route for the area.*

Status of Compliance: MG&BC is the landowner for Driveway "D" and it is our understanding that MG&BC acknowledges compliance with this condition.

Estimate of Time for Compliance: This condition will continue during the life of the Project.

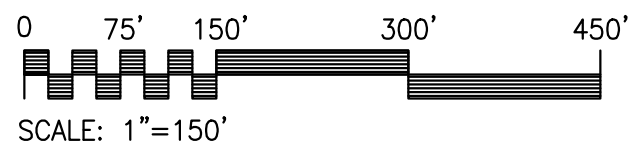
EXHIBIT A.

Updated Site Plan and Roadway Sections



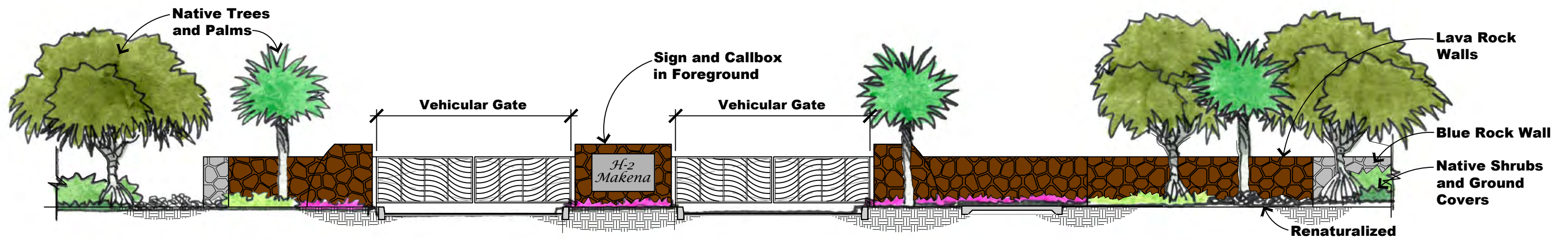
Note:

1. All permanently planted landscaped areas to be irrigated via automatically-controlled sprinkler systems using non-potable water.
2. Each individual lot owner shall be required to install a minimum of 1 Native Wiliwili tree per lot, in accordance with Design Guidelines.



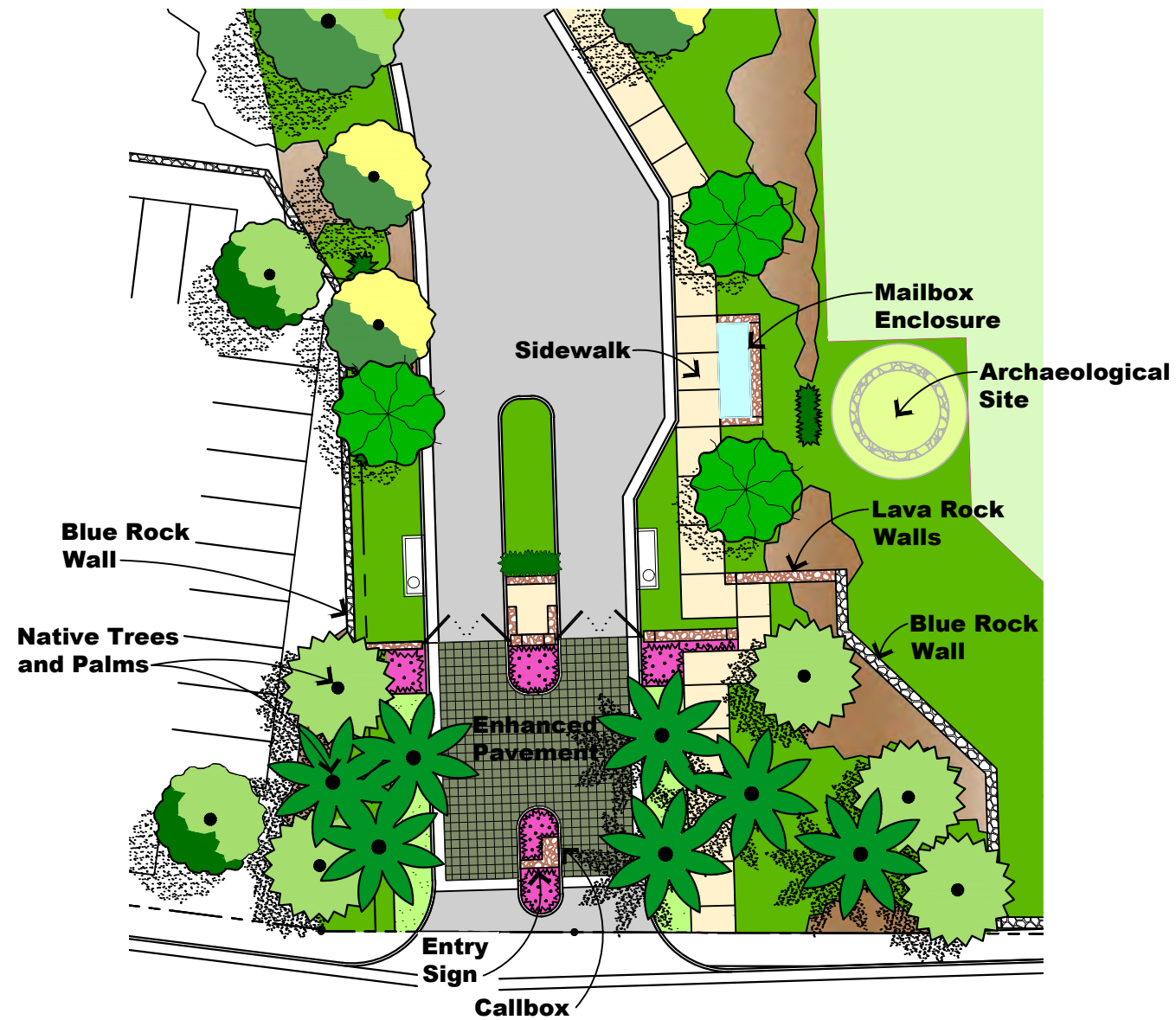
SCHEMATIC LANDSCAPE PLAN

Scale: 1" = 150'



PROJECT ENTRY ELEVATION

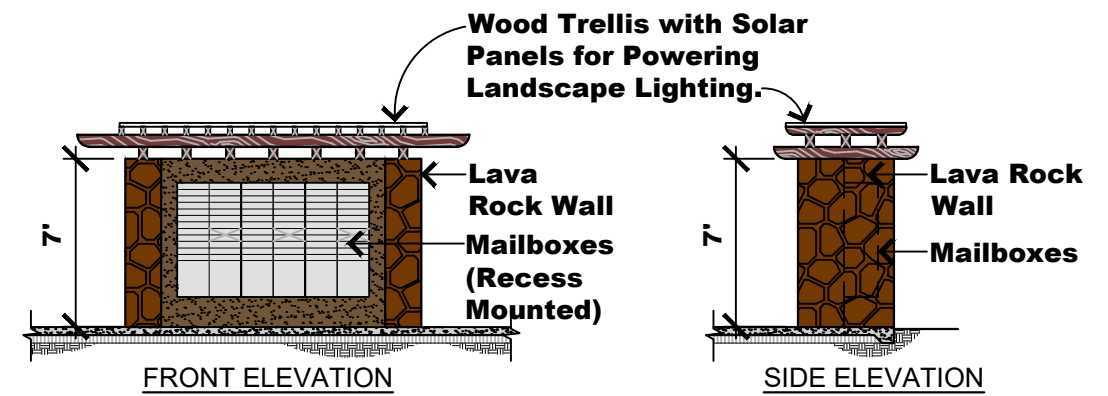
Scale: 1/8" = 1'-0"



Makena Keone'o'io Road

PROJECT ENTRY

Scale: 1" = 30'



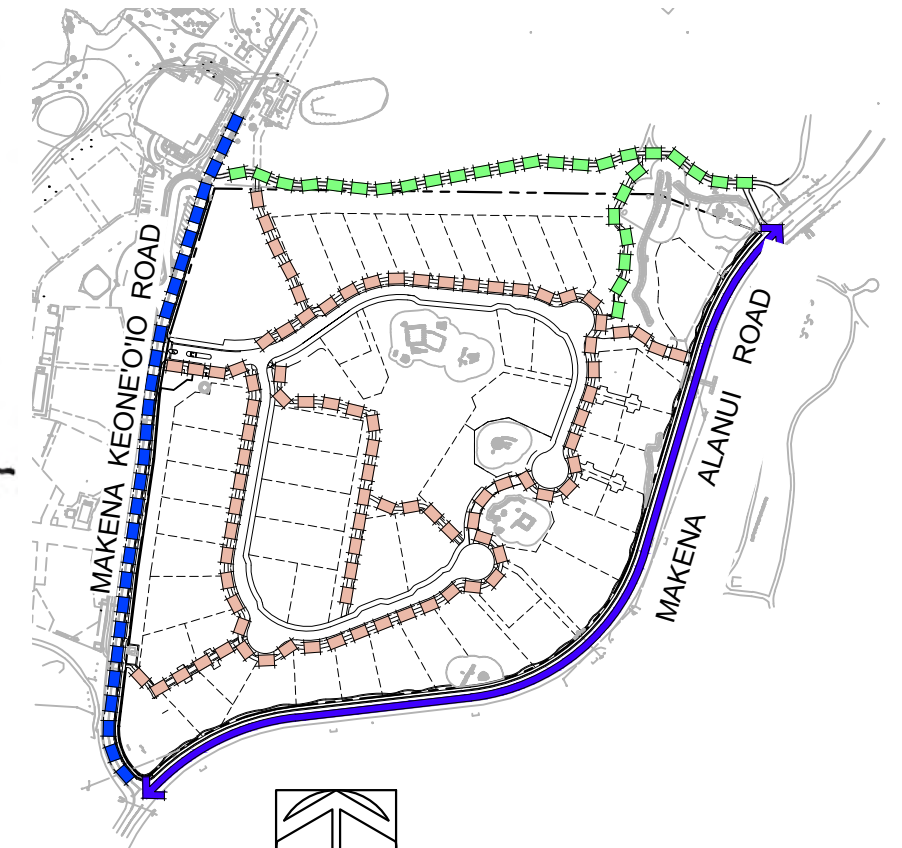
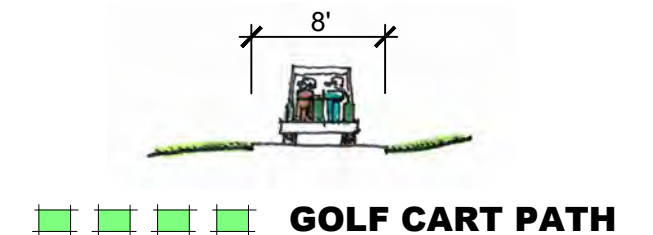
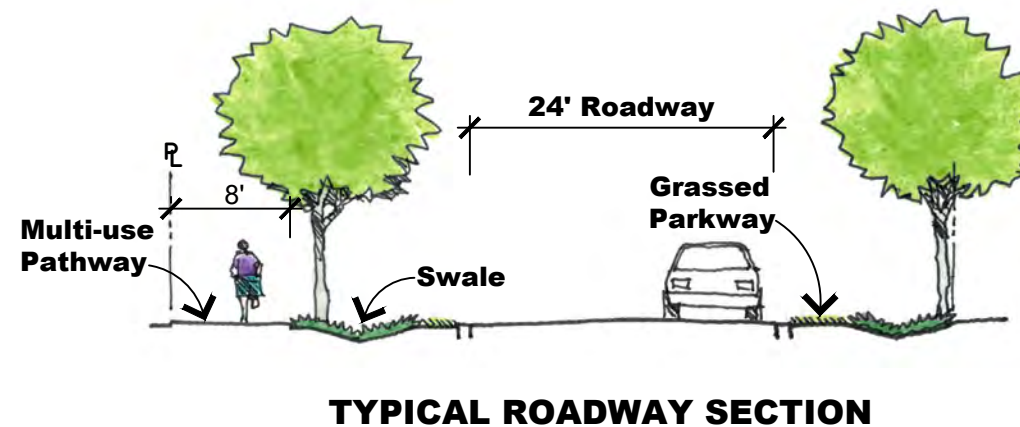
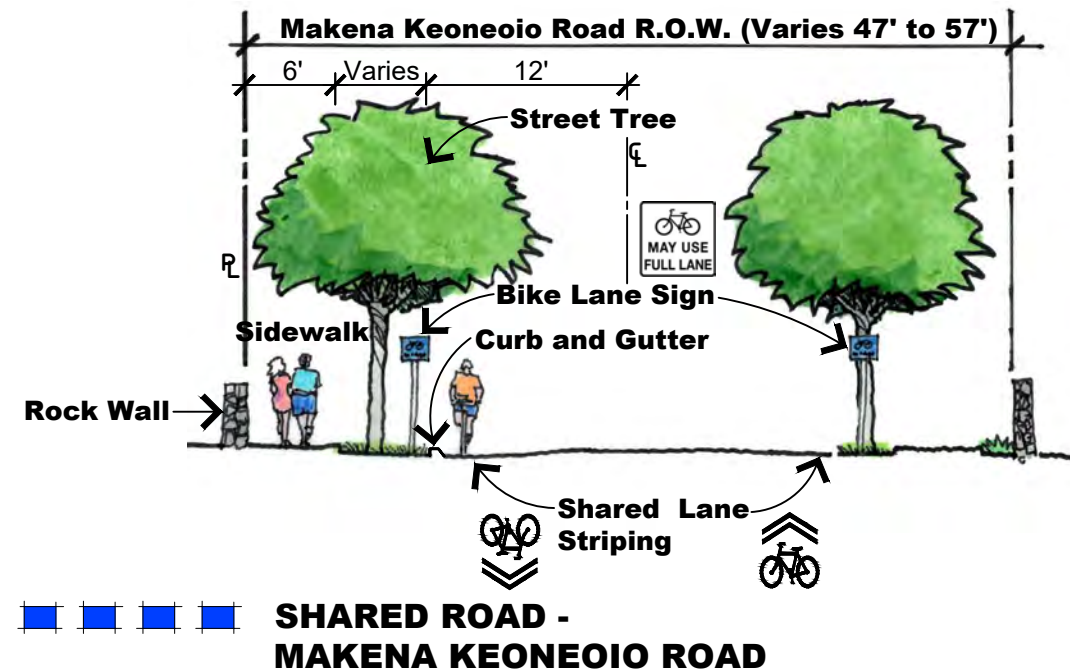
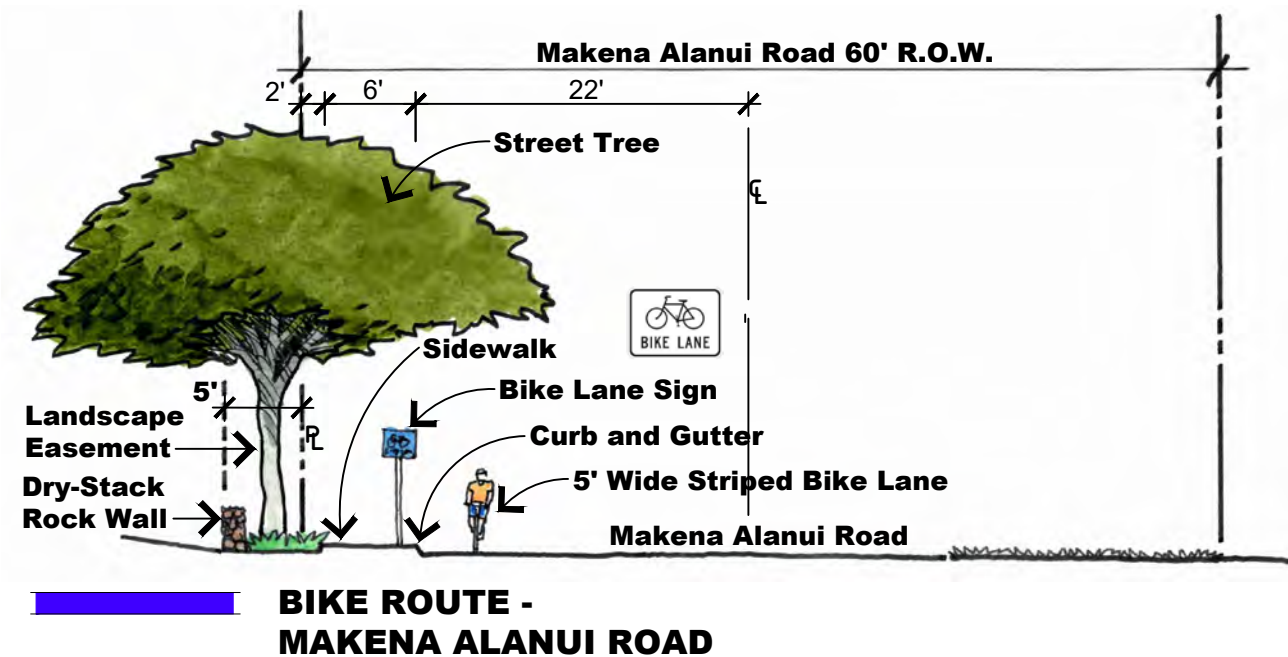
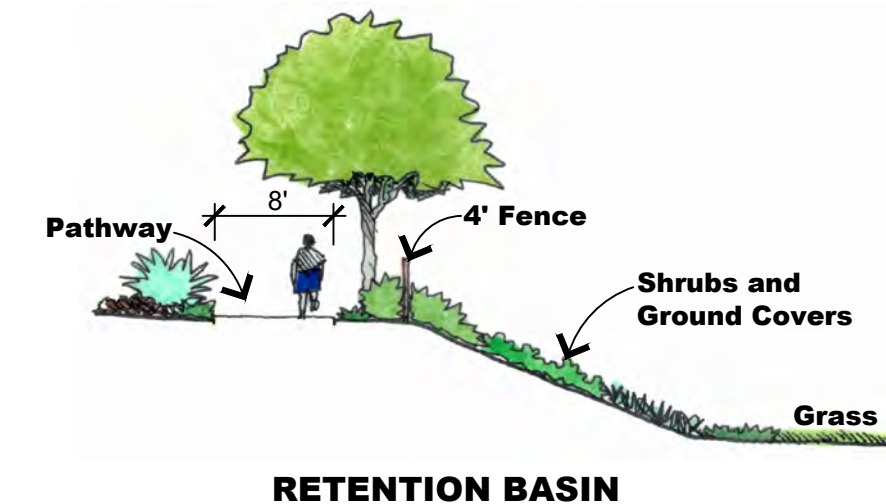
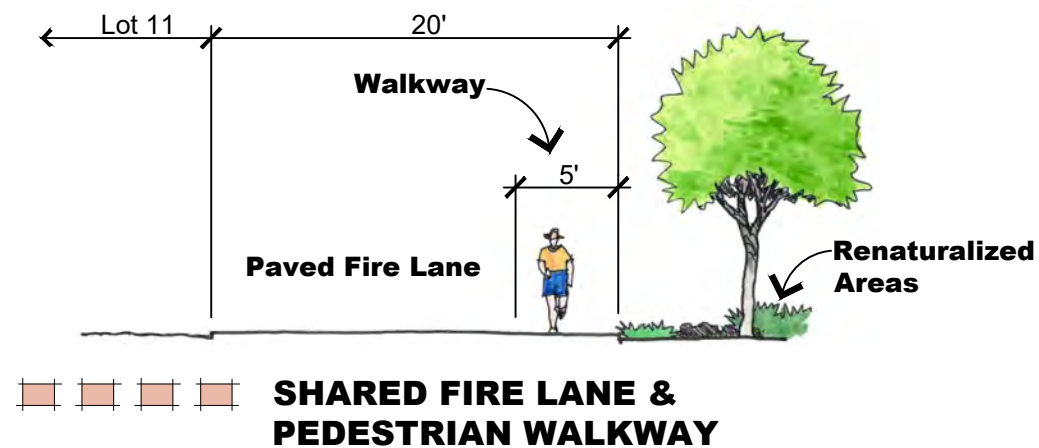
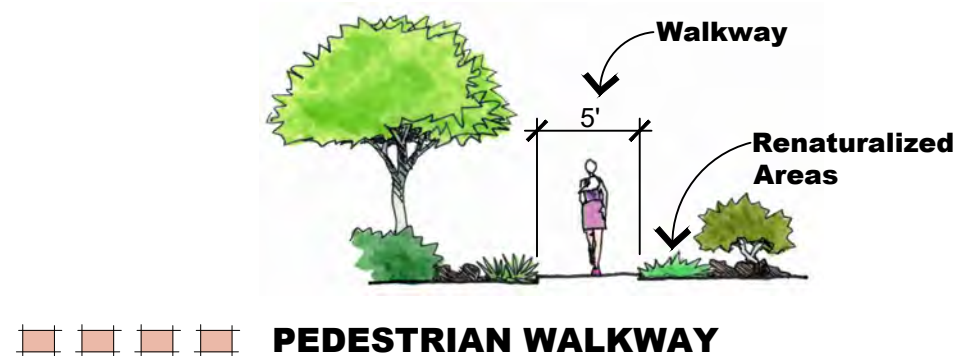
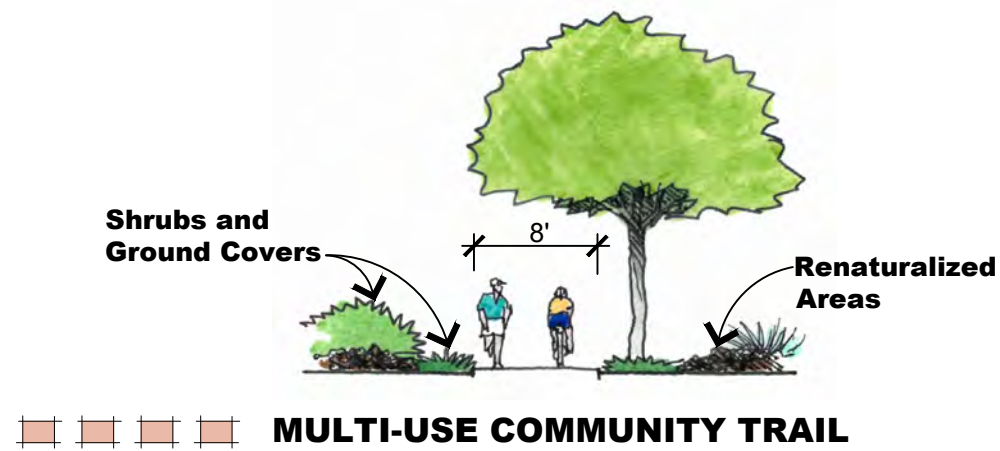
MAILBOX ENCLOSURE

Scale: 1/8" = 1'-0"

H2 RESIDENTIAL PROJECT

H2R, LLC
Makena, Maui, Hawaii

miyabara associates llc
Landscape Architects & Planners



TRAIL MAP

NTS

H2 RESIDENTIAL PROJECT

H2R, LLC
Makena, Maui, Hawaii

miyabara associates llc
Landscape Architects & Planners

EXHIBIT B.

**Agreement Regarding the Satisfaction of
Condition No. 11 of Ordinance No. 3613**

LAND COURT SYSTEM
Return by Mail () Pickup () To:

REGULAR SYSTEM

TMK: (2) 2-1-005-085

Total No. of Pages: 22

AGREEMENT REGARDING THE SATISFACTION
OF
CONDITION 11 OF ORDINANCE NO. 3613 (2008)

THIS AGREEMENT, made this 22nd day of March, 2021,
by and between H2R, LLC, a Hawaii limited liability company ("H2R"), whose mailing address
is 2005 Main Street, Wailuku, Hawaii 96793, and the COUNTY OF MAUI, a political subdivision
of the State of Hawaii ("County"), whose mailing address is 200 South High Street, Wailuku,
Hawaii, 96793, hereinafter collectively referred to as the "Parties".

MS

RECITALS:

- A. Ordinance No. 3613 (2008), entitled, "A BILL FOR AN ORDINANCE TO AMEND PORTIONS OF LAND ZONING MAP NOS. 5 AND 514 TO ESTABLISH A-2 APARTMENT DISTRICT, B-2 COMMUNITY BUSINESS DISTRICT, B-R RESORT COMMERCIAL DISTRICT, H-M HOTEL DISTRICT, PK-1 NEIGHBORHOOD PARK

DISTRICT, PK-4 GOLF COURSE PARK DISTRICT, R-1 AND R-3 RESIDENTIAL DISTRICT ZONING (CONDITIONAL ZONING) FOR LANDS SITUATED AT MAKENA, MAUI, HAWAII” was approved on January 7, 2009.

- B. Condition 11 of Ordinance No. 3613 (2008) (“Condition 11”) states, “The developer shall make a contribution to the County for traffic improvements in an amount equal to \$5,000 per unit. The contribution shall be paid to the County prior to issuance of the initial building permit. Upon adoption of a traffic impact fee ordinance, the developer shall comply with the ordinance in lieu of this voluntary contribution. Should a traffic impact fee ordinance be adopted prior to the collection of this contribution, the applicable amount shall be the greater of the two. Such contributions or fees shall not be counted towards Condition No. 12 below.” Relevant portion of Ordinance No. 3613 (2008) is attached hereto and made a part hereof as Exhibit “1”.
- C. H2R is the owner of the property identified as TMK (2)2-1-005-085 (“Property”).
- D. H2R intends to apply for its building permits and desires to satisfy the requirements of Condition 11.
- E. Chapter 14.68, Maui County Code (“MCC”), pertaining to Impact Fees for Traffic and Roadway Improvements in Kihei and Makena, Maui, Hawaii, does not establish a traffic impact fee.
- F. County and H2R agree that since the County’s traffic impact ordinance does not set forth an amount for the traffic impact fee, that H2R will pay the \$5,000 per unit as established by Condition 11 (“Contribution”).

AGREEMENT:

For valuable consideration, receipt of which is hereby acknowledged, H2R and County hereby agree as follows:

- 1. H2R or its successors in interest shall contribute to the County the amount of FIVE THOUSAND AND NO/100 DOLLARS (\$5,000.00) for each Dwelling Unit, as defined in Section 18.04.167, MCC (“Dwelling Unit”), developed on the Property.
- 2. The Contribution shall be due to the County of Maui at the time of application for each building permit for the construction of a Dwelling Unit. The Contribution shall only be required for the initial construction of a Dwelling Unit, and shall not be required for matters such as repairs, rehabilitation, reconstruction, demolition, expansion, and all other

activities requiring a building permit that are not related to the initial construction of a Dwelling Unit.

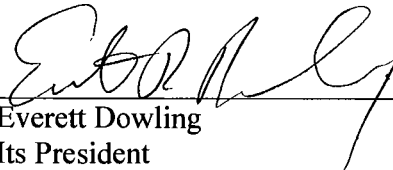
3. H2R and its successors in interest, as applicable, shall be responsible to make the Contribution as set forth herein. Should H2R and/or its successors in interest, make the Contribution as required by this Agreement, H2R and its successors in interest, shall be deemed to have satisfied the requirements of Condition 11 and any obligation to perform in regards to Condition 11 shall also be deemed to have been satisfied.
4. This Agreement constitutes the entire agreement between the Parties with respect to Condition 11 and supersedes all other prior agreements and understandings, both written and oral, between the Parties with respect to Condition 11.
5. If any provision of this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein and with the objective of implementing the intent of the Parties as determined by the Agreement as a whole.
6. This Agreement shall run with the land and shall bind and constitute notice to all subsequent grantees, mortgagees, lienors and any other person or entity who claims an interest in the subject property.

(SIGNATURES ON THE FOLLOWING PAGE)

IN WITNESS WHEREOF, the undersigned parties have executed this Agreement effective as of the date first above written.

H2R, LLC:


By Dowling Company, Inc.
Its Manager



Everett Dowling
Its President

COUNTY OF MAUI:


MICHAEL P. VICTORINO
Its Mayor

Approved:


Rowena Dagdag-Andaya
Director, Department of Public Works


Michele Chouteau McLean
Director, Department of Planning

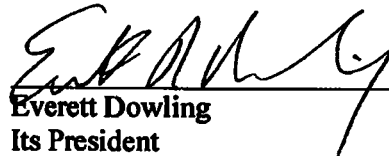
Approved as to Form and Legality:

Deputy Corporation Counsel

IN WITNESS WHEREOF, the undersigned parties have executed this Agreement effective as of the date first above written.

H2R, LLC:


By Dowling Company, Inc.
Its Manager


Everett Dowling
Its President

COUNTY OF MAUI:

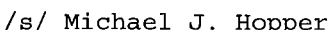

MICHAEL P. VICTORINO
Its Mayor

Approved:


Rowena Dagdag-Andaya
Director, Department of Public Works

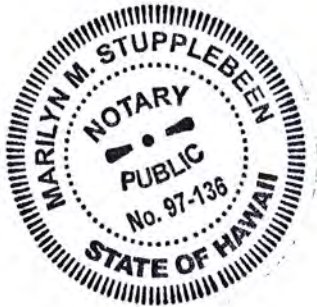

Michele Chouteau McLean
Director, Department of Planning

Approved as to Form and Legality:


/s/ Michael J. Hopper
Deputy Corporation Counsel

STATE OF HAWAII)
) SS.
COUNTY OF MAUI)

On this 21st day of October, 2020, before me appeared
Everett Dowling, to me personally known or proved on the
basis of satisfactory evidence to be the person whose name is subscribed to within the instrument
and acknowledged to me that they executed the same in their authorized capacity, and that by
their signature on the instrument the person or the entity upon behalf of which the person acted,
executed the instrument.

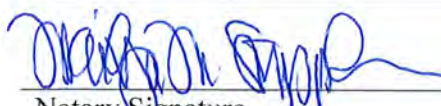




Notary Public, State of Hawaii

Marilyn M. Stupplebeen
Printed Name

My Commission Expires: 04/17/2021

NOTARY CERTIFICATION			
Doc. Date	<u>Not dated at notarization</u>	# Pages:	<u>22</u>
Notary Name:	<u>Marilyn M. Stupplebeen</u>	Judicial Circuit:	<u>Second</u>
Doc. Description:	<u>AGREEMENT REGARDING</u> <u>THE SATISFACTION OF CONDITION 11</u> <u>OF ORDINANCE NO. 3613 (2008)</u>		
 Notary Signature		<u>10/21/2020</u> Date	



STATE OF HAWAII)
) SS.
COUNTY OF MAUI)

On this 22nd day of March, 2021, before me appeared Michael P. Victorino, to me personally known, who being by me duly sworn did say that he is the Mayor of the County of Maui, a political subdivision of the State of Hawaii, in the capacity shown, having been duly authorized to execute such instrument in such capacity, and that the seal affixed to the foregoing instrument is the lawful seal of the said County of Maui, and that the said instrument was signed and sealed in behalf of said County of Maui by authority of its Charter, and the said Michael P. Victorino acknowledged the said instrument to be the free act and deed of said County of Maui.

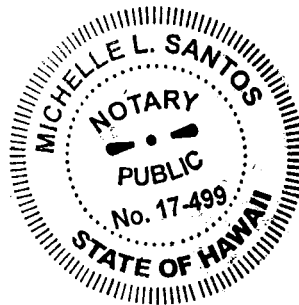
IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Michelle L. Santos

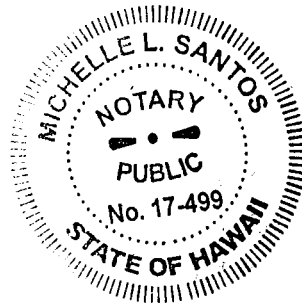
Notary Public, State of Hawaii

Print Name: Michelle L. Santos

My commission expires: 12-3-21



NOTARY PUBLIC CERTIFICATION			
Doc. Date:	<u>3/22/2021</u>	# Pages:	<u>22</u>
Notary Name:	<u>Michelle L. Santos</u>	Judicial Circuit:	<u>2nd</u>
Doc. Description:			
<u>Agreement regarding the satisfaction of condition II of</u>			
<u>Ordinance No. 3613 (2208)</u>			
<u> </u>			
Notary Signature:	<u>3/22/2021 Michelle L. Santos</u>		
Date:	<u>03-22-2021</u>		



MCS

EXHIBIT "1"

ORDINANCE NO. 3613

BILL NO. 117 (2008)

A BILL FOR AN ORDINANCE TO AMEND PORTIONS OF
LAND ZONING MAP NOS. 5 AND 514 TO ESTABLISH A-2 APARTMENT
DISTRICT, B-2 COMMUNITY BUSINESS DISTRICT, B-R RESORT
COMMERCIAL DISTRICT, H-M HOTEL DISTRICT, PK-1 NEIGHBORHOOD
PARK DISTRICT, PK-4 GOLF COURSE PARK DISTRICT, R-1 AND R-3
RESIDENTIAL DISTRICT ZONING (CONDITIONAL ZONING) FOR LANDS
SITUATED AT MAKENA, MAUI, HAWAII

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Pursuant to Chapters 19.08, 19.12, 19.14, 19.18, 19.22, 19.510, and 19.615, Maui County Code, portions of Land Zoning Map Nos. 5 and 514 are hereby amended for certain parcels of land located in Makena, Maui, Hawaii, identified in Table 1, comprising approximately 603.303 acres, and more particularly described in Exhibit "A", which is attached hereto and made a part hereof, and in Land Zoning Map No. L-585, on file in the Office of the County Clerk of the County of Maui and which is by reference made a part hereof.

Table 1

CHANGE IN ZONING				
TMK	Lot No.	From	To	Acres
2-1-5:por. 108, por. 120; 2-1-6:36, por. 57; 2-1-8:por. 78, por. 79, por. 81, por. 90	1, 17, 18	County Ag, A1, A2, R1, GC & OS, R-3, OZ	PK-4	437.085
2-1-5:por. 108; 2-1-8:por. 78, por. 79, por. 81, por. 90	2A, 2C, 8A, 8C, 21B	County Ag, R1, A1, R-3, OZ, GC & OS, STP	A2	119.719
2-1-8:por. 90	4,6	A1, A2	R3	3.361

2-1-7:por. 68	11B	R-2	BR	0.460
2-1-5:por. 108, por. 124; 2-1-6:por. 56, por. 57, por. 59; 2-1-7:por. 68, 93, por. 94	5, 12, 13, 14, 16	Park, R-2, GC & OS, R-1, H-M	PK-1	4.205
2-1-5:83, 84, 85, por. 108, por. 120, 2-1-7:4	15B, 19	GC & OS, B-R, A-1, OZ	HM	28.173
2-1-5:por. 108	20	A2, GC & OS, R-3	B2	9.817
2-1-5:por. 108	22A	A2	R1	0.483
Total				603.303

SECTION 2. Pursuant to Section 19.510.050, Maui County Code, the changes in zoning established by this ordinance, as set forth in Table 1 above, comprising approximately 603.303 acres and delineated on Land Zoning Map No. L-585, are subject to the conditions set forth in Exhibit "B", which is attached hereto and made a part hereof, and the Unilateral Agreement and Declaration for Conditional Zoning, which is attached hereto and made a part hereof as Exhibit "C".

SECTION 3. Existing zoning in Land Zoning Map No. 514, which is not changed by this ordinance, identified in Table 2, comprising 152.386 acres, and more particularly described in Exhibit "D", which is attached hereto and made a part hereof, is incorporated within Land Zoning Map No. L-585, remaining in full force and effect.

Table 2

EXISTING ZONING (ORDINANCE NO. 832)			
TMK	Lot No.	Zoning	Acres
2-1-5:por. 108 2-1-8:por. 78, por. 79, por. 80, por. 90, 98, por. 99, 100, 106	2B, 3, 8B, 8D 10, 21A	A-2	97.628
2-1-7:92	7	R-3	0.420
2-1-8:por. 80, por. 99	9	R-2	2.918
2-1-7:por. 68; 2-1-8:por. 80	11A	B-R	9.062
2-1-5:86, por. 124, 125; 2-1-6:37, por. 56, por. 59	15A	H-M	38.262
2-1-5:por. 108	22B	R-1	4.096
Total			152.386 acres

SECTION 4. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM
AND LEGALITY:


JAMES A. GIROUX
Deputy Corporation Counsel
County of Maui
S:\CLERICAL\LJN\ORDICIZ\makenaciz.wpd

EXHIBIT “A” IS INTENTIONALLY OMITTED

EXHIBIT "B"

Conditions of Zoning

INTRODUCTORY NOTES:

A. Unless otherwise specified, each condition applies to each project.

B. The following definitions shall apply to these conditions:

"County" means the County of Maui.

"Developer" means Keaka LLC; Makena Golf, LLC; Makena Hotel, LLC; Makena MF-2&3, LLC; and Makena Resort Services LLC; their successors and permitted assigns; and any future developer or owner of any property that is the subject of this Change in Zoning.

"Project" means each development that requires an SMA permit from the Maui Planning Commission.

"SMA" means Special Management Area.

"State" means the State of Hawaii.

Density and Height Restrictions

1. In the R-1, R-2, and R-3 Residential District zoned areas, the density shall not exceed 2.5 single-family dwelling units per acre.
2. In the A-2 Apartment District zoned areas, the density shall not exceed eight units per acre, and the building height shall not exceed 45 feet. Height shall be measured from the natural or finish grade, whichever is lower.
3. In the B-2 Community Business District zoned areas, the gross floor area of each building shall not exceed 60 percent of the total lot area.

4. On Lot 19 (H-M Hotel District), the building height shall not exceed 45 feet and shall be consistent with the Urban Design Standards for Building Form in the Kihei-Makena Community Plan; no more than 89 units shall be developed; and no lockout units shall be allowed. Height shall be measured from the natural or finish grade, whichever is lower.
5. The developer shall preserve Makena's significant views of the Pacific Ocean and the broad vista to the Central Maui and Upcountry regions. The use of walls higher than four feet in frontyard setbacks shall be prohibited.

Noise Mitigation

6. In the B-2 Community Business District zoned areas, the following permitted uses shall incorporate acoustical measures into the facility to mitigate potential noise impacts: amusement enterprises, including billiard and pool halls; auditoriums and theaters; baseball and football stadiums and other sport activities and amusements; bowling alleys; dancing and hula studios; gymnasiums; miniature golf courses; music conservatories and music studios; physical-culture studios; and printing, lithography, and publishing shops.

Lighting Standards

7. All exterior lighting shall be shielded from adjacent residential properties and nearshore waters, and shall be fully shielded to prevent uplight. Lighting requirements in force at the time of building permit application shall be applied.

Screening of Certain Uses

8. In the B-2 Community Business District zoned areas, merchandise, equipment, and supplies shall be stored within enclosed buildings or enclosed areas that are appropriately screened with fencing and landscape planting for the following permitted uses: equipment rental and sales yards; hardware and garden supply

stores; parcel delivery stations; and printing, lithography, and publishing shops.

Education

9. The developer, its successors and permitted assigns, shall pay the Department of Education \$3,000 per dwelling unit upon issuance of each building permit to be used, to the extent possible, for schools serving the Kihei-Makena Community Plan area; provided that, should the State pass legislation imposing school impact fees that apply to the Makena Resort Area, the developer, its successors and permitted assigns, shall from that point forward comply with the State requirements, or contribute \$3,000 per dwelling unit, whichever is greater. Should a previous agreement exist between the Department of Education and the landowner, this condition shall prevail.

Transportation

10. The developer shall provide pedestrian and bicycle access ways within the roadways throughout and fronting the Makena Resort Area. A schematic plan for pedestrian and bicycle access ways throughout and fronting the Makena Resort Area shall be submitted to the Department of Planning for consideration by the Maui Planning Commission in conjunction with SMA permit applications.
11. The developer shall make a contribution to the County for traffic improvements in an amount equal to \$5,000 per unit. The contribution shall be paid to the County prior to issuance of the initial building permit. Upon adoption of a traffic impact fee ordinance, the developer shall comply with the ordinance in lieu of this voluntary contribution. Should a traffic impact fee ordinance be adopted prior to the collection of this contribution, the applicable amount shall be the greater of the two. Such contributions or fees shall not be counted towards Condition No. 12 below.
12. Upon commencement of the first phase of construction, the developer shall pay its pro-rata share to upgrade

Piilani Highway from Kilohana Drive to Wailea Ike Drive to four lanes of traffic, and shall cooperate with the State Department of Transportation and other area developers to implement such improvements concurrent with development.

13. The developer shall provide construction access roads from Piilani Highway to the construction sites. Construction traffic shall be prohibited on Kilohana Drive, Wailea Ike Drive, Wailea Alanui Drive, and Makena Alanui Drive to the extent practicable.
14. The developer shall develop and submit a Transportation Management Plan ("TMP"), to be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation. The purpose of the TMP shall be to reduce traffic generated by construction activity related to the Makena Resort Area. The TMP shall provide for programs such as park and ride, shuttles, and/or restrictions on worker access to ongoing construction activity during peak hour traffic. Upon approval, project contractors shall implement the TMP during construction activities. The developer shall submit an annual report to the State Department of Transportation, the County Department of Public Works, the County Department of Transportation, and the Maui County Council to document the success of the TMP in meeting its benchmarks of reducing traffic during project construction.

The TMP shall be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation prior to issuance of each SMA permit within the Makena Resort Area.

15. As part of the first SMA application, the developer shall submit a TMP to reduce the dependency on individual vehicular transportation modes. The TMP shall be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation to address post-construction traffic issues.

Civil Defense

16. The developer shall participate in the pro rata funding and construction of adequate civil defense measures as determined by the State and County civil defense agencies.

Historical and Cultural Resources

17. Should any human burials or any historic sites such as artifacts, charcoal deposits, stone platforms, pavings, or walls be found, the developer shall stop construction work in the immediate vicinity and notify the State Historic Preservation Division (SHPD), the Maui/Lanai Island Burial Council (MLIBC), and the Maui County Cultural Resources Commission (CRC).
18. The developer, its successors and permitted assigns, shall provide a comprehensive preservation/mitigation plan pursuant to Chapter 6E, Hawaii Revised Statutes, that has been approved by the State Historic Preservation Division, Department of Land and Natural Resources, and the Office of Hawaiian Affairs prior to any grading within the project area.

Nearshore Water Quality

19. Marine monitoring programs shall be conducted which include monitoring and assessment of coastal water resources (groundwater and surface water) that receive surface water or groundwater discharges from the hydrologic unit where the project is located. Monitoring programs shall include both water quality and ecological monitoring.

Water Quality Monitoring shall provide water quality data adequate to assess compliance with applicable State water quality standards at Hawaii Administrative Rules Chapter 11-54. Assessment procedures shall be in accordance with the current Hawaii Department of Health ("HIDOH") methodology for Clean Water Act Section 305(b) water quality assessment, including use of approved analytical methods and quality control/quality assurance measures. The water quality

data shall be submitted biannually, or every six months, to HIDOH for use in the State's Integrated Report of Assessed Waters prepared under Clean Water Act Sections 303(d) and 305(b). If this report lists the receiving waters as impaired and requiring a Total Maximum Daily Load ("TMDL") study, then the monitoring program shall be amended to evaluate land-based pollutants, including: (1) monitoring of surface water and groundwater quality for the pollutants identified as the source of the impairment; and (2) providing estimates of total mass discharge of those pollutants on a daily and annual basis from all sources, including infiltration, injection, and runoff. The results of the land-based pollution water quality monitoring and loading estimate shall be submitted to the HIDOH Environmental Planning Office, TMDL Program.

The ecological monitoring shall include ecological assessment in accordance with the Coral Reef Assessment and Monitoring Program protocols used by the Department of Land and Natural Resources. The initial assessment shall use the full protocol. Subsequent biannual assessments can use the Rapid Assessment Techniques. Results shall be reported biannually to the Aquatic Resources Division, Department of Land and Natural Resources.

The monitoring and assessments shall be conducted by degreed scientists experienced with Clean Water Act programs, water quality monitoring, water quality assessment, water quality-based permitting, water quality modeling, watershed planning, and TMDL. Study design should be made available for both public review and peer review by the State Department of Health, Department of Aquatic Resources, and the University of Hawaii researchers. Results of monitoring shall be published and publicly available online.

20. The developer shall implement efficient soil-erosion and dust-control measures during and after development to the satisfaction of DOH and the County.

Transfer of Ownership

21. The developer shall give notice to the Department of Planning and the Council of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interests in the Makena Resort Area, prior to any development.

Compliance with Conditions

22. The developer shall provide timely annual compliance reports to the Planning Director and the Council. The compliance reports shall include: (a) the status of the developer's compliance with each of these conditions; and (b) a reasonable estimate of the time needed for full compliance.
23. Failure to fulfill any condition may result in a reversion to former or more appropriate zoning or community plan designations or other remedies.
24. If any of the property subject to this Change in Zoning is consolidated with other property for purposes of an SMA permit application, these conditions shall apply to the entirety of the consolidated property.

Residential Workforce Housing

25. The developer shall comply with the County's Residential Workforce Housing Policy as provided in Chapter 2.96, Maui County Code.

Water

26. The developer shall comply with all applicable County water ordinances.

The water rates for the residential workforce housing units shall be no higher than the general water consumer rates set by the County in its annual budget, for as long as the units are subject to Chapter 2.96, Maui County Code.

27. The developer shall provide a water conservation plan for the Makena Resort Area, approved by the Department of Water Supply, prior to the issuance of any SMA permits. For each project, the developer shall construct a dual waterline system to accommodate the use of non-potable water for landscaping and irrigation purposes prior to the issuance of any building permits.

Energy

28. All energy systems for all residential, commercial, and hotel units shall be designed and constructed to meet all applicable ENERGY STAR® requirements established by the Climate Protection Division of the United States Environmental Protection Agency in effect at the time of construction. For purposes of this condition, energy systems shall include all hot-water systems, roof and attic areas, outside walls, windows, air-cooling systems, and heating systems.
29. All residential, commercial, and hotel units shall comply with Chapter 16.16, Maui County Code.
30. All air-cooling systems and all heating systems for laundry facilities, swimming pools, and spa areas shall make maximum use of energy-efficient construction and technology.

Access for Parks and Recreation

31. The developer shall construct a minimum of 60 new parking stalls at Maluaka Beach, including at least 10 at the north end, within one year of the issuance to the developer of any SMA permit by the Maui Planning Commission relating to a parcel or a portion thereof that is a subject of this Change in Zoning. Unless necessary to protect public safety or to comply with State or Federal law, the required parking stalls need not be asphalt surfaced. Development costs and land shall not satisfy park dedication requirements.
32. The developer shall develop an expansion of the beach park at the south end of Maluaka Beach, such that the beach park shall comprise at least 1.5 acres of land

area for public use and beach access. The developer shall submit the necessary applications required for the expansion within six months of the approval of this Change in Zoning. The land area of the expansion of the existing park shall be applied as credit toward satisfying a portion of any applicable park dedication requirements.

33. To the extent practicable, the developer shall provide, in perpetuity, traversable lateral shoreline access in the area between the shoreward boundary and the mauka boundary of the Makena Resort Area. Costs associated with this condition shall not satisfy park dedication requirements.
34. Within one year of the approval of this Change in Zoning, the developer shall initiate and fund a plan for the development of the State Park at Makena for the State Department of Land and Natural Resources and the Department of Parks and Recreation, soliciting and taking into consideration the comments of various user groups, including Surfrider Foundation, Savemakena.org, Maui Tomorrow, the Kihei Community Association, and the Makena Homeowner's Association. The plan shall incorporate recreational, landscaping, parking, and facility concepts as a guide for future development of the park. Costs associated with this condition shall not satisfy park dedication requirements.
35. The developer shall renovate and beautify Makena Landing (TMK: 2-1-007:094), see attached map, in coordination with the Department of Parks and Recreation and the State Department of Land and Natural Resources. Costs associated with this condition shall not satisfy park dedication requirements.
36. The developer shall maintain Makena Landing (TMK: 2-1-007:094), North Maluaka (TMK: 2-1-007:068), and South Maluaka (TMK: 2-1-005:124), see attached map, and all future parklands within the Makena Resort Area.

Hawaiian Island Architecture

37. To exhibit respect for the Hawaiian culture and a Hawaiian sense of place, structures within the Makena Resort Area shall be based on or inspired by principles of Hawaiian island architecture in design and construction.

Native Forests and Species

38. The developer shall provide a baseline study survey of flora and fauna as part of each SMA permit application within the Makena Resort Area; the study shall be conducted by recognized independent experts on Hawaiian flora and fauna and list all endemic, indigenous, and endangered species, their distribution in the Makena Resort Area and adjacent shorelines. This study shall also include a preservation/mitigation plan and comments from the State Department of Land and Natural Resources, the U.S. Fish and Wildlife Service, and the U.S. Corps of Engineers, and the Maui representative of the Hawaii Wildlife Fund and The Nature Conservancy.

Transient Vacation Rentals/Time Shares

39. No transient vacation rentals or time shares shall be allowed within this Makena Resort rezoning application area; and further, no special use permit or conditional permit for such accommodations shall be accepted by the Department of Planning.

Hotel Limitation

40. A second hotel shall not be constructed within the Makena Resort Area.

LEED Certified Buildings

41. All buildings constructed within the Makena Resort Area shall be LEED (Leadership in Energy and Environmental Design) certified if they are 500 square feet or larger.

Dwelling Units

42. New dwelling units shall not exceed 800, excluding residential workforce housing.

Police

43. The developer, its successors and permitted assigns, shall contribute \$1,000 per market-priced unit, collected at issuance of building permit, to the County, for the development and maintenance of a police station in South Maui.

Emergency Evacuation

44. The developer shall provide Driveway "D" from Makena Alanui Road to Makena Resort Sewage Treatment Plant and beyond as an emergency evacuation route for the area.

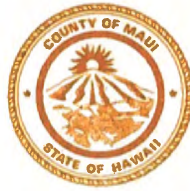
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EXHIBIT “C” IS INTENTIONALLY OMITTED

EXHIBIT C.

**Letter from Department of Planning
Regarding Compliance with
Condition No. 12 of Ordinance No. 3613**

MICHAEL P. VICTORINO
Mayor
MICHELE CHOUTEAU MCLEAN, AICP
Director
JORDAN E. HART
Deputy Director



DEPARTMENT OF PLANNING

COUNTY OF MAUI
ONE MAIN PLAZA
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HAWAII 96793

April 26, 2021

RECEIVED

MAY 04 2021

PACIFIC RIM LAND, INC.
MAUI MAIN

Ms. Leilani Pulmano
Pacific Rim Land Inc.
1300 N. Hoopono Street, Suite 201
Kihei, Hawaii 96753

Dear Ms. Pulmano:

**SUBJECT: H2R, LLC COMPLIANCE WITH CONDITION NO. 12 OF
CHANGE OF ZONING ORDINANCE NO 3613 FOR PARCEL H-2
(LOT 19), MAKENA RESORT, MAKENA, ISLAND OF MAUI,
HAWAII; TMK: (2) 2-1-005:085 and 120 (CIZ 99/0015)**

The Department of Planning (Department) is in receipt of a copy of the Memorandum of Agreement between H2R LLC and the State Department of Transportation dated May 19, 2020 and a copy of check No. 1221 in the amount of \$273,208 which represents H2R's fair share funding and participation in the construction of local and regional transportation improvements.

Condition No. 12 of Ordinance 3613 states, "Upon commencement of the first phase of construction, the developer shall pay its pro-rata share to upgrade Piilani Highway from Kilohana Drive to Wailea Ike Drive to four lanes of traffic, and shall cooperate with the State Department of Transportation and other area developers to implement such improvements concurrent with development."

It is noted that lands owned by H2R, specifically TMK (2) 2-1-005:085, represents approximately 5% of the total lands zoned by Ordinance No. 3613. The remaining 95% of the lands are owned by a separate entity, Makena Golf & Beach Club Owners and are part of a separate project, Makena Resort.

Inasmuch as H2R is developing the first project that is subject to Ordinance No. 3613, the Department finds that the Memorandum of Agreement and above referenced payment satisfy condition No. 12 of the change in zoning ordinance for the proposed development of Parcel 085.

Thank you for your attention to this matter. Should you require further clarification, please contact Current Planning Supervisor Ann Cua by email at ann.cua@mauicounty.gov or by phone at (808) 270-7521.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for MICHELE MCLEAN, AICP
Planning Director

xc: Ann T. Cua, Current Planning Supervisor (PDF)
Project File

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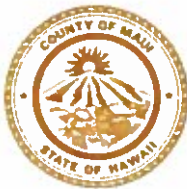
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MAIN LINE (808) 270-7735

CURRENT DIVISION (808) 270-8205 / LONG RANGE DIVISION (808) 270-7214 / ZONING DIVISION (808) 270-7253

EXHIBIT D.

**Letter from Department of Planning
Regarding Compliance with Conditions No. 14
and No. 15 of Ordinance No. 3613**

MICHAEL P. VICTORINO
Mayor
MICHELE CHOUTEAU MCLEAN, AICP
Director
JORDAN E. HART
Deputy Director



DEPARTMENT OF PLANNING
COUNTY OF MAUI
ONE MAIN PLAZA
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HAWAII 96793
August 4, 2021

Ms. Leilani Pulmano
Pacific Rim Land Inc.
1300 N. Holopono Street, Suite 201
Kihei, Hawaii 96753

Dear Ms. Pulmano:

SUBJECT: H2R, LLC COMPLIANCE WITH CONDITIONS 14 AND 15 OF ORDINANCE NO. 3613 GRANTING A CHANGE IN ZONING FOR PARCEL H-2 (LOT 19), RELATING TO A TRANSPORTATION MANAGEMENT PLAN, MAKENA RESORT, MAKENA, ISLAND OF MAUI, HAWAII; TMK: (2) 2-1-005:085 and 120 (CIZ 99/0015)

The Department of Planning (Department) is in receipt of the following documents:

1. Construction Transportation Management Plan (CTMP) dated December 3, 2020, prepared by Austin Tsutsumi & Associates, Inc.
2. Post-Construction Transportation Management Plan (TMP) dated December 3, 2020, prepared by Austin Tsutsumi & Associates, Inc.
3. Transmittal letter from H2R, LLC dated December 8, 2020
4. Approval letter from the State Department of Transportation dated August 4, 2020
5. Approval letter from the County Department of Transportation dated July 31, 2021
6. Approval letter from the County Department of Public Works dated November 16, 2020

Condition No. 14 of Ordinance No. 3613 states, "The developer shall develop and submit a Transportation Management Plan ("TMP"), to be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation. The purpose of the TMP shall be to reduce traffic generated by construction activity related to the Makena Resort Area. The TMP shall provide for programs such as park and ride, shuttles, and/or restrictions on worker access to ongoing construction activity during peak hour traffic. Upon approval, project contractors shall implement the TMP during construction activities. The developer shall submit an annual report to the State Department of Transportation, the County Department of Public Works, the County Department of Transportation, and the Maui County Council to document the success of the TMP in meeting its benchmarks of reducing traffic during project construction.

The TMP shall be reviewed and approved by the State Department of Transportation, the County Department of Public Works and the County Department of Transportation prior to issuance of each SMA permit within the Makena Resort area."

Ms. Leilani Pulmano
August 4, 2021
Page 2

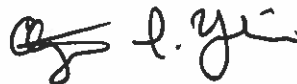
Condition No 15 of Ordinance 3613 states, "As part of the first SMA application, the developer shall submit a TMP to reduce the dependency on individual vehicular transportation modes. The TMP shall be reviewed and approved by the State Department of Transportation, the County Department of Public Works, and the County Department of Transportation to address post-construction traffic issues."

It is noted that lands owned by H2R, specifically TMK (2) 2-1-005:085, represents approximately 5% of the total lands zoned by Ordinance No. 3613. The remaining 95% of the lands are owned by a separate entity, Makena Golf & Beach Club Owners and are part of a separate project, Makena Resort.

Inasmuch as H2R is developing the first project that is subject to Ordinance No. 3613, the Department finds that the CTMP satisfies condition No. 14 of said ordinance, in part, specifically the development and approval of the CTMP by the listed agencies. The Department looks forward to H2R implementing the CTMP during construction and submittal of an annual report to the listed agencies towards mitigating construction traffic in order to fully satisfy this condition. The Department also finds that the TMP satisfies condition No. 15 of the change in zoning ordinance for the proposed development of Parcel 085.

Thank you for your attention to this matter. Should you require further clarification, please contact Current Planning Supervisor Ann Cua by email at ann.cua@mauicounty.gov or by phone at (808) 270-7521.

Sincerely,



CLAYTON I. YOSHIDA
Planning Program Administrator

for MICHELE MCLEAN, AICP
Planning Director

xc: Ann T. Cua, Current Planning Supervisor (PDF)
Project File
MCM:CIY:ATC:rma
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EXHIBIT E.

Archaeological Inventory Survey

FINAL

ARCHAEOLOGICAL INVENTORY SURVEY
OF THE PROPOSED H2 RESIDENTIAL DEVELOPMENT
IN THE AHUPUA'A OF MALUAKA,
DISTRICT OF HONUA'ULA
(MODERN TAX DISTRICT OF MAKAWAO),
ISLAND OF MAUI

[TMK: (2) 2-1-005:085 and 120 (por.),
formerly including TMK: (2) 2-1-005:083, 084, 108 (por.)]



CULTURAL
RESOURCES
CONSULTANTS

Hawai'i Office:
Kailua, O'ahu

California Offices:
Bay Area
Sierra/Central Valley

Pacific Legacy: Exploring the past, informing the present, enriching the future.

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FINAL

**ARCHAEOLOGICAL INVENTORY SURVEY
OF THE PROPOSED H2 RESIDENTIAL DEVELOPMENT
IN THE AHUPUA‘A OF MALUAKA,
DISTRICT OF HONUA‘ULA
(MODERN TAX DISTRICT OF MAKAWAO),
ISLAND OF MAUI**

**[TMK: (2) 2-1-005:085 and 120 (por.),
formerly including TMK: (2) 2-1-005:083, 084, 108 (por.)]**

Prepared by:

Mara A. Mulrooney, Ph.D.,
Caleb C. Fechner, B.A.,
James D. McIntosh, B.A.,
and
Amber Joliz Steinbruchel, B.A.

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(808) 263-4800

and

Tanya L. Lee-Greig, M.A.

‘Āina Archaeology
1305 North Holopono Street, Suite 6
Kihei, HI 96784
(808) 593-3020

Prepared for:
H2R, LLC

September 2021

ABSTRACT

At the request of H2R, LLC, Pacific Legacy, Inc. and ‘Āina Archaeology conducted an archaeological inventory survey of an approximately 28-acre parcel located within the *ahupua‘a* of Maluaka in the *moku* of Honua‘ula (modern tax district of Makawao) on the island of Maui [TMK: (2) 2-1-005:083, 085 and 120 por.; formerly including TMK: (2) 2-1-005:084, 108 por.].

The present survey was conducted to assist H2R, LLC in preparing construction permits to support their planned development of the project area for a proposed residential development. The entire 28-acre project area was previously subjected to three archaeological inventory surveys that were completed between 2006 and 2008 (Donham 2006; Rotunno-Hazuka et al. 2008a; Rotunno-Hazuka et al. 2008b). SHPD reviewed and accepted the AIS reports in 2006 and 2008 (Log No. 2006.2117, Doc. No. 0606MK35; Log No. 2008.3048, Doc. No. 0807PC41; Log No. 2008.04506, Doc. No. 0810PC21).

The current archaeological inventory survey resulted in the identification and recording of 16 historic properties containing 75 component features. Identified historic properties included features related to pre- and post-Contact use of this area and include enclosures, modified outcrops, modified depressions, wall segments, surface scatters of artifacts, terraces, and a cistern. These historic properties have been assessed for integrity and site significance in accordance with Hawai‘i Administrative Rules (HAR) §13-284-6.

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H2 Residential Project, Maluaka Ahupua'a
Honua'ula, Maui
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H2 Residential Project, Maluaka Ahupua'a
Honua'ula, Maui
September 2021



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Note: In this report, the spellings and the use of diacritical marks (glottal stops and macrons) follow conventions issued by Pukui and Elbert (1986) and Pukui et al. (1974) with limited exceptions – spellings and diacritical marks are used as the original sources used them in quotations, titles, and proprietary names. For example, Pohakuloa Training Area is used without the macron in “Pohakuloa” because it is part of the name of the installation, but when referring to the region in general, the Hawaiian name “Pōhakuloa” is used.

Cover photo: Portion of Site 50-50-14-06373, Features 2 and 3 (aerial drone-based photo, February 2021).

1.0 INTRODUCTION

At the request of H2R, LLC, Pacific Legacy, Inc. and 'Āina Archaeology conducted an archaeological inventory survey (AIS) with subsurface testing of portions of the H2 Project Area in the *ahupua'a* (traditional land division) of Maluaka in the *moku* (district) of Honua'ula (modern tax district of Makawao) on the island of Maui. This project-specific AIS was requested by SHPD in November 2020 (Log No. 2020.01122; Doc. No. 2011AM04).

The AIS focused on approximately 28 acres of land situated *mauka* (inland) of Mākena Keonoio Road. This 28-acre site will be the location of the H2 Residential Development (Figure 1). The AIS consisted of a pedestrian survey and subsurface testing to determine what, if any, historic properties may be affected during planning for and construction of the proposed infrastructure.



Figure 1. Location of H2 Residential Project Area.

1.1 PROJECT AREA

The project area is located in the *ahupua'a* of Maluaka, *moku* (district) of Honua'ula (modern tax district of Makawao), in Maui County. Approximately 28 acres in extent, the project area is designated as TMK: (2) 2-1-005:085 (Figure 2). Portions of this parcel were formerly designated as TMK: (2) 2-1-005:083, 084, and 108. The parcel is owned by H2R, LLC. The project area also includes easements that extend into TMK: (2) 2-1-005:120, directly north of the H2 project area. The easements cover an area of approximately 0.4 acres.



Figure 2. Location of H2 Residential Project Area with County of Maui TMK parcel boundaries shown.

1.1.1 Project Description

The H2 Residential Project consists of up to 53 residential lots for single-family homes, beach parking, and related infrastructure. The project area is bounded by Mākena Alanui Road to the east and south, Mākena-Keonoio Road to the west, and Mākena South Golf Course hole 17 and the Mākena Golf and Beach Club site to the north. The residential project will be situated entirely within Parcel 085; the easements in Parcel 120 to the north will be set aside as an archaeological preservation area and utility connections. Offsite activities include roadway improvements, infrastructure connections to existing utility lines, and electrical improvements along existing roadways. The project area sits within the zoning districts: H-M Hotel District and the PK-Golf Course District.

1.2 ENVIRONMENTAL SETTING

The H2 Residential Project Area is located ca. 245 m (800 feet) from the coast at ca. 15 m (50 feet) above mean sea level. This portion of Maui is relatively dry, receiving 15 to 20 inches of rain annually (Donham 2006:3). The project area is fairly level and is dominated by introduced plant species consisting of *koa haole* (*Leucaena glauca*), *kiawe* (*Prosopis pallida*), *panini* cactus (*Opuntia megacantha*), and various shrubs and grasses.

Project area soils (Figure 3) consist of Mākena loam, stony complex (Foote et al. 1972:91):

This complex occurs on the lower leeward slopes of Haleakala, between Mākena and Kamaole. It consists of Mākena loam and Stony land. Stony land occurs on low ridges and makes up 30 to 60 percent of the complex. Mākena loam occurs as gently sloping areas between the low ridges of Stony land. (Foote et al. 1972:91)



Figure 3. Soils in the H2 Residential Project Area (Sources: USDA Soil Survey Geographic [SSURGO] Database; Esri 2017).

2.0 METHODS

This section outlines the methods used during background research, fieldwork, laboratory analysis, consultation, and preparation of the archaeological inventory survey report.

2.1 BACKGROUND RESEARCH METHODS

During the course of literature and historic map research for this project, a number of repositories were visited. Relevant archaeological reports were obtained from the library of the Hawai'i State Historic Preservation Division (SHPD). Historic documents, maps, and reference volumes were found in the Hawai'i State Archives, the University of Hawai'i Library system, Bishop Museum Archives, and private collections. Online sources of information included the United States Department of Agriculture (USDA), Department of Accounting and General Services (DAGS), the Office of Hawaiian Affairs Kipuka and Papakilo Databases, the State of Hawai'i Office of Planning Statewide GIS Program, Waihona 'Aina, and AVAKonohiki.org.

2.2 FIELD METHODS

Fieldwork for this project included pedestrian survey, recordation of historic properties, and backhoe testing of the area. Survey, recordation, and testing were carried out over a period of three non-consecutive weeks between January and March of 2021. The survey was completed under the overall supervision of Principal Investigators Mara Mulrooney, Ph.D. (Pacific Legacy) and Tanya Lee-Greig, M.A. ('Aina Archaeology). The 'Aina Archaeology field crew included Amanda Ruberti, B.A., Sina Stennes, B.A., Corrine Taylor, B.A., and Daniel Moore, B.A., and the Pacific Legacy field crew included Caleb Fechner, B.A., Mike Lawson, B.A., and James McIntosh, B.A. In total, 14 working days were required to complete fieldwork.

The project area was subjected to a pedestrian survey with 100% coverage. Subsurface testing was conducted in selected portions of the project area using the method of backhoe test trenching.

2.2.1 Pedestrian Survey

Pedestrian survey of the project area was undertaken to identify and document historic properties. Transects were conducted by members of the archaeological field crew spaced 5 m apart. When an archaeological feature was encountered, it was examined to determine whether it constituted an isolated element or whether it formed part of a larger complex of features.

Once identified, each site and its component features were fully documented. Those that could be correlated to previously identified features were numbered accordingly. All newly recorded features were assigned a temporary field number to facilitate identification. This consisted of a T (for temporary) followed by a consecutive number (i.e. T-001). Individual structural features within a specific site were assigned consecutive feature number designations to aid in recording and mapping. Vegetation clearance was undertaken as needed to expose all architectural features.

The accurate location of each site was mapped using a handheld Trimble GeoExplorer XT global positioning system (GPS) and positions were differentially corrected to provide precision of less than 2 m. An individual point was taken for each site (site datum, indicated on plan maps) and for each individual feature (feature datum; usually in the center of the structure). Site boundaries were also recorded as a polygon by walking around the outer perimeter of the site's outermost features or architectural components.

Detailed site and feature descriptions, which included a narrative description, measurements, and other relevant information were recorded for all identified historic properties. Documentation also included digital photography of each site and individual features. A 50 cm long, red and white photo scale and a north arrow were used for photography. Plan-view maps were prepared for each site using tape and compass and/or GPS-based mapping techniques.

2.2.2 Subsurface Testing

Backhoe test trenching was undertaken in selected portions of the project area in order to get adequate coverage of areas that will be impacted by proposed project infrastructure. A total of 12 trenches measuring 5 × 0.75 m were excavated using a Komatsu 55MR mini track excavator with a 2-foot-wide bucket, and soil profiles were recorded in detail. Soils were described following USDA nomenclature (USDA 1951) and using Munsell color notations (Munsell Color 2000). No archaeological materials were identified in the test trenches. No additional subsurface test excavations were carried out at any identified sites and features in the area.

2.3 LABORATORY METHODS

No materials were collected during the pedestrian survey or test trenching for this project. Surface artifacts were recorded using photography during fieldwork and were left in situ. All analyses were undertaken using photographs and notes that were collected in the field.

2.4 GEOSPATIAL METHODS

Historic maps were georeferenced in ArcMap version 10.6.1 using the Mākena 7.5-minute USGS topographic quadrangle (1993) and/or Maui County Tax Map Key (TMK) map (2019). Known points were used to correlate the location of historic maps relative to these base layers; however, the location of the project area on historic maps should be considered approximate. Geospatial data recorded using the handheld Trimble GeoExplorer XT GPS units were downloaded and post-processed using Pathfinder Office version 4.0. Recorded positions were differentially corrected to ensure accuracy with precision of less than 2 m. GPS positions were exported as ESRI shapefiles with a Universal Transverse Mercator, North American Datum for 1983, Zone 4 North (UTM NAD 83 Z4N) projection.

2.5 CONSULTATION

Consultation included pre-and post-fieldwork community meetings and site visits with individuals who are knowledgeable about the history of the area. Prior to the commencement of fieldwork, the project team conducted a site visit with SHPD to discuss an appropriate subsurface testing strategy, which was also discussed during the pre-fieldwork community consultation meeting. This and other consultation meetings involved lineal and cultural descendants as well as representatives from the Office of Hawaiian Affairs (OHA), Maui County, and SHPD. The testing strategy was approved by SHPD prior to fieldwork. Regular correspondence was maintained with staff members from SHPD throughout the duration of the project.

3.0 BACKGROUND RESEARCH

The H2 Residential Project Area lies in the traditional *moku* (district) of Honua'ula, which is now part of the *moku* of Makawao). It rests within the *ahupua'a* (traditional land division) of Maluaka. During the pre-Contact period, this area included agricultural features, habitation features, and ceremonial features. Ranching operations began in the region during the mid to late 1800s and dramatically transformed the landscape throughout the late 19th and 20th century.

3.1 TRADITIONAL AND HISTORICAL BACKGROUND

3.1.1 Pre-Contact Period

The first major delineation of land boundaries on the island of Maui occurred during the rule of Kaka'alaneo and was overseen by a *kahuna* named Kalaihaohi'a (Beckwith 1970:383). This resulted in the creation of large land divisions called *moku* (districts), which were further broken down into subdistricts, the primary ones being *ahupua'a* and *'ili*, and managed by agents of the ruling chiefs (Beckwith 1970:383). The *moku o loke*, or *moku* as it is most commonly called, literally means "to cut across, divide, separate" (Lucas 1995:77). When used as a term of traditional land tenure, a *moku* is similar to a modern political district. Maui is divided into twelve *moku*: Hāmākuapoko, Hāmākualoa, Ko'olau, Hāna, Kīpahulu, Kaupō, Kahikinui, Honua'ula, Kula, Wailuku, Kā'anapali, and Lāhaina.

Within these *moku* are smaller units of land termed the *ahupua'a*, the name of which is derived from the Hawaiian term *ahu* (altar), which was erected at the point where the boundary of land was intersected by the Alaloa (main road encircling the island), upon which a carved *pua'a* (hog) image, made of *kukui* wood and stained with red ochre was placed along with the tax of food items from that particular land unit as payment to the *ali'i* (chief) during the annual progression of the *akua makahiki* (Alexander 1882:4).

Typically, the configuration of the *ahupua'a* division would extend from the sea (*ma kai*) to the mountain (*ma uka*) so that the *ali'i* (chiefs), as well as the *maka'āinana* (native tenant) could have access to resources of the *wao lā'au* or *wao nahele* (forested region), the *wao 'ama'u* and *wao kanaka* (cultivated land), and the *kula uka* and *kula kai* (the lower grasslands and shoreline) (Alexander 1882:4; Mueller-Dombois 2007). While the boundaries of an *ahupua'a* generally followed prominent landforms (i.e. ridgelines, the bottom of a ravine, or defined by a depression) there were times where a stone or rock that was notable from a tradition or sacred use would mark a corner or determine a line (Alexander 1890:105–106). Along similar lines, the growth of a certain kind of tree, herb or grass, or the habitat of a certain kind of bird would sometimes define a division (Alexander 1890:105–106).

Honua'ula is comprised of some twenty *ahupua'a*, which, from north to south, include: Paeahu, Palaeua, Keauhou, Kalihi, Waipao, Pāpa'anui, Kā'eo, Maluaka (which does not appear to extend to the summit), Mo'oiki (fronting the islet of Molokini), Mohopilo (which does not reach the shoreline), Mo'olua, Mo'omoku, Onau, Kanahena, Kualapa, Kalihi, Papaka Kai, Kaunuaheane, Kalo, and Kanaio. While the *ahupua'a* in the northernmost and southernmost extents of Honua'ula cover lands from *ma uka* to *ma kai*, it is unclear if the *ahupua'a* located *ma uka* of Pu'u Ōla'i, between Maluaka and Onau, extend to the summit. Additionally, Mohopilo Ahupua'a appears to be land-locked without a corresponding *ma kai lele* or section near the shoreline.

The H2 Project Area is situated within the *ahupua'a* of Maluaka of Honua'ula Moku, which begins in the sea and includes, Oneuli (Onouli) Bay and Beach which is bounded by Pu'u Ōla'i to the south and Ka Lae Maluaka to the north (Figure 4 and Figure 5).



Figure 4. A portion of the Dodge 1885 map of Maui showing the H2 Project parcel in relation to Maluaka Ahupua'a, Honua'ula Moku.

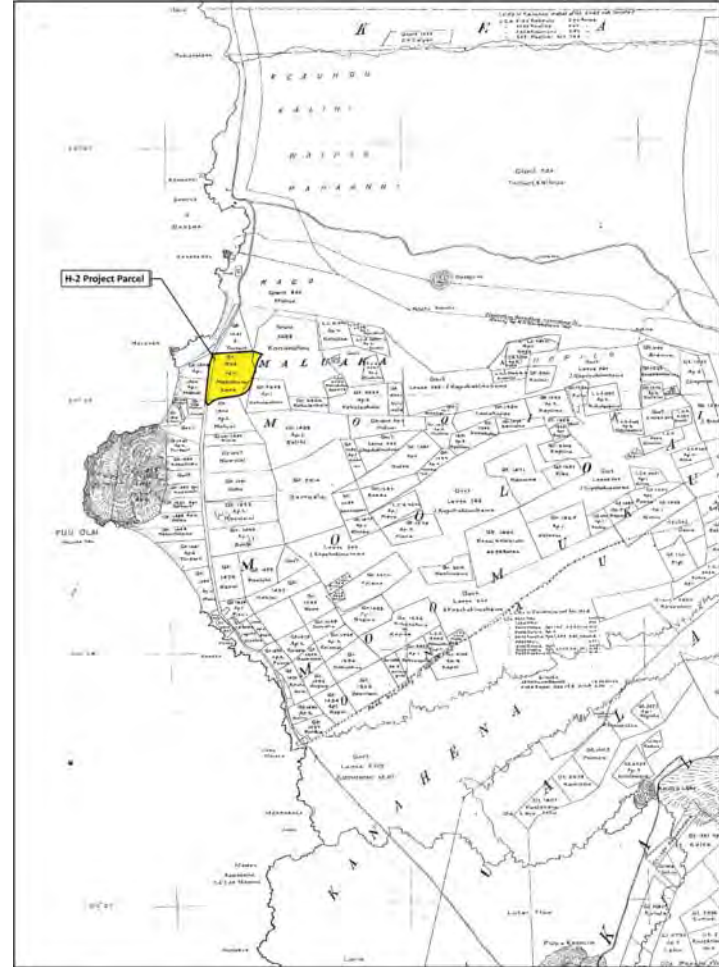


Figure 5. A portion of the Honua'ula Title Map (Wall 1894) showing the H2 Project parcel in relation to the northern ahupua'a boundary of Maluaka and adjacent ahupua'a.

He mau Mo'olelo o Maluaka Ahupua'a i ka Wā Kahiko—Traditions of the Maluaka Ahupua'a at Honua'ula Prior to Western Arrival

One of the origin stories of the Hawaiian people speaks to the creation of their islands as being born to the gods, Papa and Wakea. In an ancient *oli* (chant) which tells this origin story, Hawai'i Island is first to be born, followed by Maui, and then the rest:

*Hanau o Maui he moku, he aina,
Na kama o Kamalawalu e noho.*

Maui was born an island, a land,
A dwelling place for the children of Kamalawalu.
(Fornander 1916b:2–3)

In the chant, Maui is called “a dwelling place for the children of Kamalawalu,” who was the grandson of Pi'ilani, a 16th century *Mō'i* (paramount ruler) of Maui and founder of one of its greatest dynasties (Barrère 1975:1). One of the traditional poetic names for Maui is Maui-a-Kama, named after Kamalawalu, whose children are the people of Maui. It's because of them that we have the ability to know the historical names, *mo'olelo*, cultural sites, and practices of the area in and around Maluaka Ahupua'a.

Wahi 'Inoa—Place Names of Maluaka Ahupua'a and Adjacent Areas

In Hawai'i, names have traditionally been given to virtually everything. In the preface of *Place Names of Hawaii*, Samuel Elbert states that:

Hawaiians named taro patches, rocks and trees that represented deities and ancestors, sites of houses and heiau, canoe landings, fishing stations in the sea, resting places in the forests, and the tiniest spots where miraculous or interesting events are believed to have taken place.

Place names are far from static ... names are constantly being given to new houses and buildings, land holdings, airstrips, streets, and towns and old names are replaced by new ones ... it is all the more essential, then to record the names and the lore associated with them (the ancient names) now. (Pukui et al. 1974:x)

Lyons also notes that as a consequence of the long tenancy of the people on land, “every piece of land had its name, as individual and characteristic as that of its cultivation” (Lyons 1903:23). Intrinsic in these statements is the knowledge that the oldest place names held meaning and could tell the story of an area, or recorded the resources of a particular place, prior to European contact. Consideration of the place name meanings for the study area may yield some insight into the stories, patterns of life, and land use within the *ahupua'a* of Maluaka.

The names listed below are for areas, divisions, and features of the land and sea that comprise these two *ahupua'a*, as identified through research of the Mahele 'Aina documents, Hawaiian-language newspapers, and other available historic literary resources. Unless indicated otherwise, the spelling and orthography presented below are taken from Pukui et al. (1974).

'Ahihi	Entwined; the name for the bay that fronts Oneloa beach (Pukui et al. 1974)
'Alalākeiki	Child's wail; the name for the channel that separates Kaho'olawe and Maui (Pukui et al. 1974:9)
Haleola (<i>'ili</i>)	House [of] life (Pukui et al. 1974:38); <i>'ili</i> of Mo'olua (Bailey 1929:572)
Kā'eo (<i>ahupua'a</i> and <i>pu'u</i> [hill])	Full, as a food calabash (literally); Full of knowledge (figuratively) (Pukui and Elbert 1986:109)
Ka Lae Mamane	The <i>māmāne</i> tree point; the name for the point that bounds the south end of 'Ahihi Bay
Laie (<i>'ili</i>)	The <i>'ie</i> (<i>Freycinetia arborea</i>) leaf (Pukui et al. 1974:127–128)



Mākena or Makena (<i>wahi 'inoa</i> and bay)	Abundance (Pukui et al. 1974:142). Without the macron over the first “a” it means “mourning, wailing, lamentation” and “calm, of sea, atmosphere” (Pukui and Elbert 1986:229)
Maluaka (<i>ahupua'a</i>)	The cast shadow (Thrum 1922:658)
Māniana (<i>ahupua'a</i>)	A shuddering sensation (Pukui et al. 1974:145); <i>'ili</i> of Mo'olua (Bailey 1929:572)
Mohopilo (<i>ahupua'a</i> and stream)	Rail bird bad smell [from droppings] (Pukui et al. 1974:153)
Mo'oiki (<i>ahupua'a</i>)	Small lizard or land parcel (Pukui and Elbert 1986; Pukui et al. 1974:158); <i>ahupua'a</i> of Honua'ula, Maui (Bailey 1929:572)
Oneloa (beach)	Long sand; also known as Big Beach; a 3,300-foot stretch of beach that forms Mākena State Park's popular shoreline (Clark 1989:35–36)
Oneuli or Onouli (beach and bay)	Dark sands; also known as Black Sand Beach and Naupaka Beach; a beach to the north of Pu'u Ōla'i and directly <i>makai</i> of the H2 project parcel (Clark 1989:37–38) Mr. Abner Delima and Ms. Kaonohi Lee, who were raised in their family home near the base of Pu'u Ōla'i on the Oneloa side of the <i>pu'u</i> , grew up knowing the beach and bay as Onouli. Literally, the name refers to dark <i>ono</i> (<i>Acanthocybium solandri</i>) (Pukui et al. 1974:171), a fish that can be found in the epipelagic zone, or surface layer, of the open ocean (https://oceana.org/marine-life/ocean-fishes/wahoo).
Pahe'e-o-Lono	Lono's slide; point on the Molokini islet (Pukui et al. 1974:174)
Paipili (<i>'ili</i>)	No translation found
Poihihi (<i>'ili</i>)	No translation found
Pualoalo (<i>'ili</i>)	Short for <i>pua aloalo</i> (Pukui and Elbert 1986:347), hibiscus flower (Pukui and Elbert 1986:345); <i>'ili</i> of Mo'olua (Bailey 1929:572)
Pu'u Ōla'i (landform)	Earthquake hill; the 360-foot-high hill and beach, a prominent and legendary landform at the southernmost end of Oneuli Beach (Pukui et al. 1974:204, Clark 1989:36)

Handy et al. (1991) summarize the relationship between Hawaiians and the natural environment best in the following passage:

The sky, sea, and earth, and all in and on them are alive with meaning indelibly impressed upon every fiber of the unconscious as well as the conscious psyche. Hawaiian poetry and folklore reveal this intimate rapport with the elements. (Handy et al. 1991:23–24)

[T]he relationship which existed from very early times between the Hawaiian people ... is abundantly exemplified in traditional mele (songs), in pule (prayer chants), and in genealogical records which associate the ancestors, primordial and more recent, with their individual homelands, celebrating always the outstanding qualities and features of those lands. (Handy et al. 1991:42)

This relationship of Hawaiians to the natural environment is especially prevalent in the *mo'olelo* (traditional knowledge) of the wider *moku* of Honua'ula, a large part of which revolves around the lyrical descriptions of the elemental characteristics of the *'āina* (land) where the names of the *ahupua'a* are noted in name chants and the winds and rains of the region are recounted in legends and poems.

One of the most valuable repositories of Hawaiian wind names is a book called *The Wind Gourd of La'amaomao*, which is a translation of a traditional legend, compiled by Moses Kuaea Nakuina and published in 1902. The titular wind gourd was believed to contain all the winds of Hawai'i, which could be summoned by chanting their names. Papa, a name for a Honua'ula wind, is included in a chant that names the winds of Maui and Moloka'i, and the excerpt below contains the names of some neighboring winds:



‘Ai-loli is of Kaupō,
Moa’e is of Kahikinui,
Papa is of Honua’ula
Nāulu is at Kanaloa,
Hau descends from the uplands of Kula,
It’s the wind of that place,
Searching the pili,
Nau is the wind of Kula. (Nakuina 1990:55, emphasis added)

The various rains of Hawai‘i were also given names. Some were named after people, others after their particular traits or the way they interacted with the area and local vegetation. Different rains from different parts of the islands often share the same name. The book *Hānau Ka Ua Hawaiian Rain Names* (Akana and Gonzalez 2015) contains many of the rain names that were recorded in newspapers from the 1800s and other primary source materials. There are at least two rains associated with the moku of Honua’ula: Lanipa’ina and Nāulu.

“Ka ua Lanipa’ina o ‘Ulupalakua” is “[t]he Sky-crackling [Lanipa’ina] rain of ‘Ulupalakua” (Pukui 1983:170), which is *mauka* of the current project area and Maluaka Ahupua’a in the nearby *ahupua’a* of Kā’eo. The Lanipa’ina rain features prominently in a lengthy letter written by someone named Makaikai and published in the newspaper *Ka Lahui Hawaii*, which describes the events one Fourth of July at James Makee’s Rose Ranch in ‘Ulupalakua (discussed below):

E ‘olu’olu ‘oe a me kou kāpena e ho’okomo iho i
nā mea ‘ano hou i hana ‘ia ma ‘Ulupalakua i ka
lā 4 iho nei o Iulai, ‘oiai ho’i ka ua Lanipa’ina e
kilihune ana i luna o “Prospect Hill.”

You and your captain, please add the new events
that took place at ‘Ulupalakua this past Fourth of
July while the Lanipa’ina rain was drizzling over
“Prospect Hill.”

Aia ho’i i ka hiki ‘ana aku i ka hora 12 awakea, i
ka wā ho’i a nā pua e luhe mālie mai ana i ka
nani, a e kilihune kili hau ana ka ua Lanipa’ina i
ka liko o ka pua, pēla i ‘ike ‘ia aku ai ka pū’ali
koa, “Ka Ua Lanipa’ina Military Company” e
paikau ho’okahakaha mai ana ma lalo o ke
alaka’i mai au ‘ana a ko lākou Kāpena R. W.
Wilcox.

When 12 noon came, indeed the period when
flowers gently droop in their beauty, and the
Lanipa’ina rain was coming down in a cold
drizzle over the buds of the flowers, that was
when the group of soldiers, “Ka Ua Lanipa’ina
Military Company,” could be seen parading back
and forth under the expert leadership of their
captain, R. W. Wilcox. . . .

(Akana and Gonzalez 2015:136–137)
(Translation: Collette Leimomi Akana)

A second rain of the area is called Nāulu and is usually associated with Makawao. One reference to it, in relation to Honua’ula, comes to us indirectly by way of a wind name from a 1910 report by Ralph S. Hosmer, who was the Territory of Hawai‘i’s first forester. In the report he says:

There is much verbal testimony that in former days, say 25 years ago and before, there were many light drifting showers at the south end of East Maui, at ‘Ulupalakua, which originated over Kaho’olawe and drifted across the channel with the Nāulu breeze. (Akana and Gonzalez 2015:127)

Hawaiian proverbs, or *‘ōlelo no’eau*, have also been passed down through oral traditions. Many *‘ōlelo no’eau* have been collected and published in Hawaiian-language newspapers and other primary and secondary sources. They often have both a literal and metaphorical meaning (called *kaona*), which is given where applicable. *‘ōlelo no’eau* about geography can help us to understand natural phenomenon, land use, and the history of a place. While there aren’t any *‘ōlelo no’eau* that refer specifically to Maluaka, there are two for the *moku* of Honua’ula and one for *wahi* (place) ‘Ulupalakua. The two *‘ōlelo no’eau* about Honua’ula speak to the strength of its people:

Honua’ula, e pāluku ‘ia ana na kihi po’ohiwi e na ‘ale o ka Moa’e.

Honua’ula whose shoulders are pummeled by the Moa’e wind. A poetical expression for a person being buffeted by the wind. Honua’ula, Maui, is a windy place.

....

Honua’ula kua la’ola’o.

Callous-backed Honua’ula. Said of the people of Honua’ula, Maui, who were hard workers. The loads they carried often caused callouses on their backs.
(Pukui 1983:79)

The one *‘ōlelo no’eau* for ‘Ulupalakua is referred to above and refers to the name and quality of its rain:

Ka ua Lanipa’ina o ‘Ulupalakua.

the Sky-crackling rain of ‘Ulupalakua. Refers to ‘Ulupalakua, Maui.
(Pukui 1983:170)

The Mythical Era

Preserved in *mo’olelo* (traditional stories) are tales about a period in Hawai‘i before *kānaka* (humans), when gods and deities inhabited the islands, often bringing about the creation of lands and resources. Below are excerpts of *mo’olelo* about this era set in Honua’ula.

Mo’ikeha and His Traveling Companion Honua’ula

Place names are often inspired by the physical characteristics of the area being named. Honua’ula translates to mean “red land” (Pukui et al. 1974:51). It’s possible that the origin of the name lies elsewhere, because reddish soils are not common in Honua’ula, where black lava fields and brown soils cover the landscape. One theory is that the name Honua’ula comes from the *mo’olelo* of Mo’ikeha, a chief from Tahiti who resettled in Hawai‘i and eventually became the king of Kaua’i. Among those who joined Mo’ikeha on his voyage from Tahiti was a man named Honua’ula.

In the story, as recounted by Fornander, when the canoe reached Maui, Honua’ula elected to stay behind, perhaps settling in the district that now shares his name:

One early morning at dawn, just at the rise of the star Sinus, Moikeha boarded his double canoe, taking with him all his attendants and followers, and set out from Tahiti. From that morn until sunrise when they first beheld Hilo all went well, whereupon Kamahualele stood up and prayed by way of a mele their voyage hither. Upon their arrival at Hilo, Kumukahi and Haehae became charmed with Hilo, and so expressed to Moikeha their desire to remain there, whereupon Moikeha allowed them to take up their residence at Hilo. Moikeha soon after set sail from Hilo, sailing along the north coast of Hawaii until they arrived at Kohala, when Mookini and Kaluawilinau expressed their desire to take up their residence at Kohala. Moikeha therefore landed them there. On leaving Kohala they sailed along the eastern coast of Maui until they reached Hana, when one of his men, Honuaula, expressed his desire of making this his place of residence, so he too was allowed to remain behind. (Fornander 1916a:114–116)

Molokini

The crescent-shaped islet of Molokini is located in ‘Alalākeiki Channel between Kaho’olawe and Maui, off the coast of Honua’ula. Molokini’s origin story ties the tiny islet to Pu’u Ōla’i, the prominent shoreline hill that towers over Maluaka. According to *mo’olelo*, Molokini was a *mo’o* (large mythological lizard) who, until her death, was known as Puuoinaina. She lived most of her life on Kaho’olawe, which was then called Kohemalamalama. She took two brothers as her husbands before falling for Pele’s lover Lohiau and becoming the target of the fire goddess’ wrath, which led to the creation of Molokini and Pu’u Ōla’i, as recounted by Fornander:

But when Pele heard what Puuoinaina had done she became angry, she then cursed Puuoinaina. When Puuoinaina heard this cursing from Pele she felt so ashamed that she ran into the sea. She left her home, Kohemalamalama, now called Kahoolawe. Pele, residing at Kahikinui, thought so much of her husband, Lohiau, who was living at Kealia, Kamaalaea, that she started out to meet him; but she found her way blocked by Puuhele, so she went from there and waded through the sea. She saw her lizard rival, Puuoinaina, stretching from Kahoolawe to Mākena, so she came along and cut the lizard in two, right in the middle, separating the tail from the head. The tail became Puuolai at Mākena, and the head became Molokini. When the husbands heard that their wife was dead, they looked and beheld the head of their beloved standing in the sea, so they called the name of the islet Molokini. That is the story of how it was born of its parents and how it obtained this new name Molokini. (Fornander 1918:518)

A Riddle for Ka-Miki

The following passage comes from a *mo'olelo* called “Kao Hooniua Puuwai no Ka-Miki” (The Heart-Stirring Story of Ka-Miki). Published between 1914 and 1917 in the Hawaiian-language newspaper *Ka Hoku o Hawaii*, the story features two brothers, descendants of the goddess Haumea, who possessed magical powers. In the following excerpt, Ka-Miki is asked by a chief named Kahuku to solve a riddle relating to Maui, and in his answer, Ka-Miki describes Maui's various lands, including Honua'ula and Mākena. Implied in this excerpt is that the name commonly used for Mākena may have been “Makena” (without the kahakō), because of it being a place where the winds die down. One definition for “Makena” is “calm, of sea, atmosphere.”

O ka ua hoelo a ka Ukui i ka ulawena, o
Honuaula ia, ilaila i make ai ka makani.
A make i ke kula; o Makena ia he okana aina a
me Kula, o kauwahi moe kokolo alulu hele a ke
kula hoi mai, he aina ua kaulana mai na lii kahiki
loa mai.

And where the cold 'Ūkiu wind bears down,
glowing red [driving the dust], is Honua'ula
where the winds begin to die.
Where the wind dies upon the kula (plains), is
the sub-region of Mākena and Kula, where the
mists are seen creeping low, traveling to and fro
along the plain. This is a land famous with the
chiefs from the distant past.
(Maly and Maly 2005:29) (Translation: Kepā
Maly)

Nā Po'e Kahiko no Ahupua'a o Maluaka—Traditional Hawaiian Settlement of Maluaka Ahupua'a

Settlements in early Hawai'i often followed a basic pattern. Canoe landing sites evolved into coastal settlements, with footpaths and trails connecting coastal villages to fishponds, agricultural plots, the upland forests, *heiau* and other sacred sites (de Naie and Donham 2007:42). It's likely that the bays and beaches from Ka'eo to Mo'oiki served as canoe landings since the earliest days of Honua'ula's settlement with a network of trails likely branching outward (de Naie and Donham 2007:42).

Maui's southeastern region is dry and water is scarce, and the settlement of Honua'ula likely occurred as populations expanded in the more hospitable windward areas (Matsuoka et al. 1996:72). The shortage of water dictated where and when people resided and cultivated during the year. Matsuoka describes a seasonal pattern of moving between *mauka* and *makai* in accordance with the planting cycle, as documented by a *kama'āina* named Sam Po:

According to [Sam Po], even up through the latter half of the 19th century, the Hawaiians in the district continued to live mauka or makai and plant in accordance with the annual rains. About once month before the rainy season began, they would carry dirt down from the mountains to the coast in lauhala baskets and fill holes in the lava in preparation for planting. . . . While on the coast, the Hawaiians would subsist on fishing and various vegetable foods that they cultivated in soil placed in the pockets of lava and nurtured by the rain. When the vegetables matured (Hawaiian watermelon, Ipu ololo, Ipu nuhou-lani, pumpkin, and poha or Ipu 'ala) they were consumed. After a period of about six months, just when the climate became dry, the families would make the return journey to their upland habitation sites. (Matsuoka et al. 1996:73)



In the June 8, 1836 issue of the newspaper *Ke Kumu Hawai'i*, someone named Naleipuleho provided one of the earliest first-hand accounts of life in Honua'ula on record. It also speaks to how the availability of water and other resources dictated patterns of residency and travel. Translated by Kepā Maly, the following excerpt gives a glimpse of life in Honua'ula as it may have been since the earliest days of settlement:

He aina wi, o Honuaula. O ka uwala ko laila ai, a
me ka kalo, he ai pau wale no ia. Eia ka ai mau
loa, heko, heki lau o ke aa, o ke ki lau a me ka
muo, o na ai mau loa ia.

Eia ke ano o ka noho ana o na kanaka; elua wahi
noho. Ma kahakai, mauka ma waena o ka aina. O
ke kii ana o ka ai a na kanaka ma kahakai he
loihi loa. He kokoke ka wai o lakou. Pomaikai
lakou i ke kokoke o ka wai a me ka ia. Poino ko
lakou mau ai i ka loihi o ka ai.

O na kanaka i noho ma waena o ka aina,—
pomaikai lakou i ka ai i ke kokoke o ka ai. Poino
lakou i ka wai i ka loihi o ke ana o ka wai. Aia no
i kahakai kawai e kii ai. Ina e kii i uka i ka wai, he
loihi ke pii aku i luna, he naenae ka pii ana,—aia
no i ka lae laau ka wai, i hoi mai he lole ke kuli i
ka loihi o ka hoi ana mai, i ke kii ana o ka wai
elua ipu nui e ukuhi ai i ka wai, a piha, hoi mai.
Hooheehē i na huwai, lilihi, a piha, a koe ke
koena he wai auau, he wai hoopulu hana wauke,
i mea kapa.

Na I. Naleipuleho

Honuaula is a land of famines. The sweet potato
is the food there, and the taro, but they are foods
which do not last. Here are the foods which are
always available, sugar cane, ti leaf roots, and
the budding leaves of the ti are the steady foods.
Here is how the people live; there are two places
of residency. Along the shore, and in the mid
uplands of the land. The people who live on the
shore, must travel a great distance to get
vegetable foods. But the fresh water is close to
them. They are blessed to be near the drinking
water and fish. Though they are greatly
burdened in having to travel far for their other
foods.

The people who reside in the middle of the land,
are fortunate that their foods are close to them.
But they are unfortunate because the fresh water
is a great distance from them in the caves. There
is water which they can get from the shore. If
they travel to the uplands to get water, it is a
great ascent, and fatiguing — the water is there
in the forest groves; returning causes pain in the
knees, for the great distance of the trip, and for
only two large water containers in which to pour
the water and return. The water gourds hang
down, and there is a little that remains for
bathing, and moistening the wauke, made into
kapa. (Maly and Maly 2005:14) (Translation:
Kepā Maly)

Ka 'Oihana Mahi 'Ai i Loko o Ahupua'a o Maluaka—Traditional Agriculture and Gathering within the Lands of Maluaka

While farming in Honua'ula primarily occurred along the lower uplands, where rain fell almost daily, it was also known that “the eastern and coastal portion of Honua'ula was thickly populated by Hawaiian planters until recent years” (Handy and Handy 1972:508) despite the shortage of water. It is possible that cultivated fields occupied large parts of Honua'ula, prior to the introduction of cattle when the uplands were still heavily forested and rain fell more frequently (Handy and Handy 1972:508). 'Uala (sweet potatoes) grew reliably well, and dryland *kalo* was also grown further upland and in the forests when they were more prevalent (Handy and Handy 1972:272, 508). With regard to 'uala at Honua'ula, Handy and others note that this particular crop was the primary staple of the district and explain the most common method of 'uala agriculture as follows:

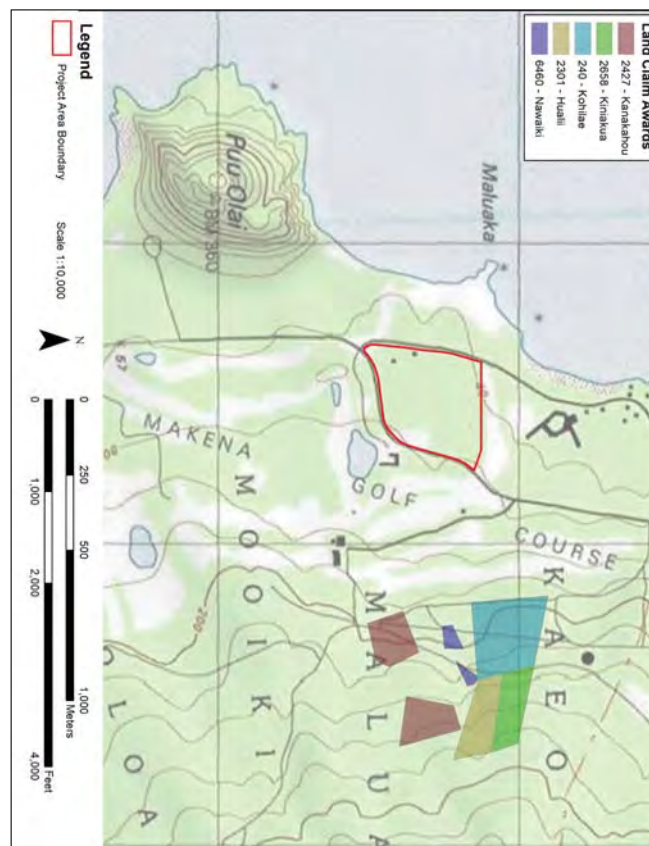
Where soil is powdery and dry ... the earth is heaped up carelessly into low mounds spaced with no particular precisions or care. The slips are planted two or three in a mound, being placed vertically in holes made with the digging stick. The base of the cutting is stuck six to eight inches into the ground and the earth is pressed down around it. After the entire field is planted, the mounds are covered with mulch to hold the moisture. The potato leaves are not covered. In an old patch where aftergrowth [sic] of old vines and roots is growing, the shoots from old stock are covered with earth, as they bear along with the new slips. (Handy et al. 1991:130–131)



Where potatoes are planted in crumbling lava combined with humus ... the soil is softened and heaped carelessly in little pockets and patches utilizing favorable spots on slopes. The crumbling porous lava gives ample aeration without much mounding. (Handy et al. 1991:131)

When lava flows buried some agricultural lands, holes were dug into the rock, filled with soil, and used to grow sweet potatoes (Matsuoka et al. 1996:74). Evidence of these unique cultivation practices can still be found among the lava fields of Honua'ula, Luala'ilua, and at Pu'u-o-kali (Matsuoka et al. 1996:74). As a part of the division of lands that occurred during between 1845 and 1851 and passage of the Kuleana Act of 1850, the native tenants who lived and worked on Crown, Government, or *Konohiki* lands were able to claim these lands if they could show that they had occupied, improved, or cultivated the lands they were claiming (Garovoy 2005). Though the testimony provided by both the claimant and witnesses for the claimant provides a specific snapshot of life, land use, and traditional resources at the time of the Māhele, it can be inferred that such practices and reliance on resources were a continuation of generational practices within the *ahupua'a*. One such instance, in relation to the above practice of potato cultivation in the *'a'a* or lava flow, can be found in the claims awarded just *mauka* of the H2 project parcel (Figure 6) where descriptions for *'āpana* as being "wahi aa, a me uala maole [sic]" or *'a'a* lands and native or indigenous sweet potato (Helu 2658 Ap. 1 to Kiniakua, Helu 2427 Ap. 2-4 to Kanakahou, and Helu 2581 Apana 2 to Hualii) (Figure 7) were included on the survey notes of the award.

Figure 6. A portion of the 1995 USGS 7.5-minute series topographic map, Makena Quadrangle showing the location of the proposed H2 Project Area in relation to nearby Land Commission Awards as recorded in the Honua'ula Title Map (Wall 1894).



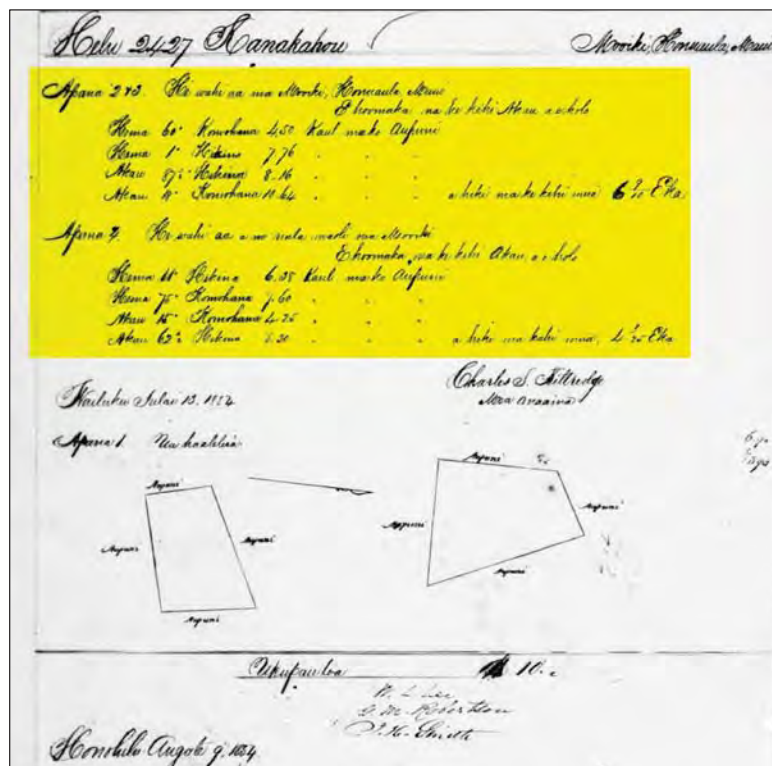


Figure 7. Land Commission Award for Kuleana Helu 2427 related to the cultivation of 'uala maoli to Kanakahou (Office of Hawaiian Affairs 2014).

Though the above specific claims were listed as being in Mooiki and Mohopilo, at the time of the Māhele, there were several unawarded claims for *mala* (sections or small farms) of 'uala haole or 'uala kahiki made for lands at Maluaka (Irish potato) (Helu 2397 [Kauliili] and Helu 2563 [Wawaiki]) (Figure 8). It is likely that prior to turning to foreign potato cultivation as a cash crop during the early to mid-1800 potato boom, the native tenants of the region were cultivating 'uala maoli (native potato) as a subsistence crop on their *kuleana* lands.

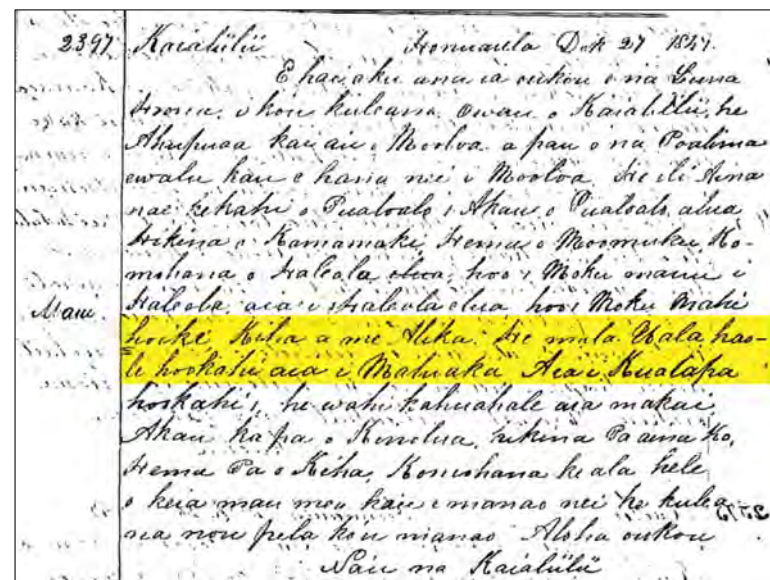


Figure 8. Testimony given by Kauliiliili for Kuleana Helu 2397 highlighting the claim for *mala* 'uala haole at Maluaka (Office of Hawaiian Affairs 2011).

While 'uala was arguably the staple crop of the traditional agricultural system of Maluaka, testimony given to the Land Commission also shows that *kalo* (taro) was also potentially cultivated in the area along with *moku mau'u* or grassland areas (Figure 9).

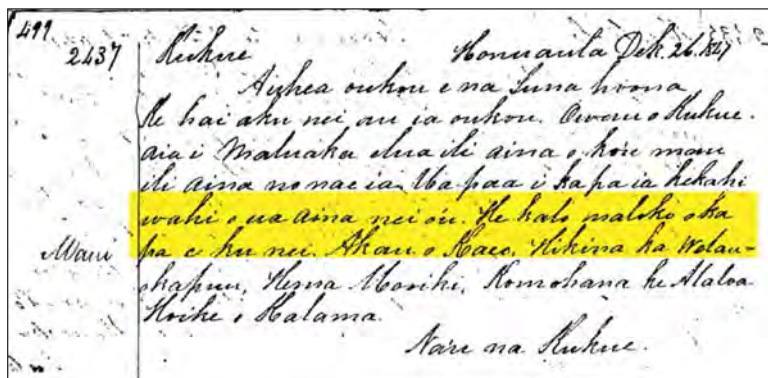


Figure 9. Testimony given by Kukue for Kuleana Helu 2437 highlighting the claim for a fenced in area of *kalo* at Maluaka (Office of Hawaiian Affairs 2011).

Ka 'Oihana Lawai'a no Ahupua'a o Maluaka—Aquaculture and the Fishing Traditions of Maluaka

Honua'ula is mentioned in the historical record in ways which suggest that the coastline has long been a point of arrival and departure for canoes traveling to and from Maui. Channel waters between the islands can be notoriously rough, and parties must occasionally wait for better weather, as indicated in the following excerpt from the story of Lā'ieikawai, a chiefess from Hawaiian mythology, recorded and published in the newspaper *Kuokoa* in 1862 by S.N. Hale'ole. In this part of the story, Lā'ieikawai and her lover 'Aiwohi are making their way from Maui to Hawai'i Island, and they end up spending a month in Honua'ula as they wait for the ocean conditions to improve:

[P]ae i Mala, ma Lahaina, e haalele lakou ia wahi, hiki lakou i Keoneio, ma Honua'ula, a malaila i noho loihi ai ekolu anahulu. No ka mea, ua nui ka ino ma ka moana, a pau na la ino, alaila, ua ike ia mai ka maikai o ka moana. Ia manawa ko lakou haalele ana ia Honua'ula, i holo aku la a hiki ma Kaelelululu, ma Kona, Hawaii. (*Nupepa Kuokoa*, December 27, 1862:1)

Having landed at Māla, at Lāhaina, they then departed from that place and arrived at Keone'ō'io, in Honua'ula. There, they resided for a period of three anahulu [a total of thirty days]. They did this because the sea was extremely rough. When the stormy days ended, they saw the ocean was good. (Maly and Maly 2005:23) (Translation: Kepā Maly)

The story of Lauka'ie'ie adds some visual detail to the picture of Honua'ula as an ancient canoe landing site. Published as a series of articles in the newspaper *Nupepa Ka Oiaio* between January 5, 1894 and September 13, 1895, it tells the tale of Lauka'ie'ie, her brother Mākanikeo, and their traveling companions as they visit various parts of Hawai'i. The following excerpts are set in Honua'ula:

Ia Mākanikeo, malaila e nanea nei, aia na manowaa mawaho ae o Keoneioio ma Honua'ula, ke pii pono ala i ke alo makani. A eia no ka maka hope mawaho ae o Puuolai a ua hoomalu aku ka holo ana o na waa no ka moana kaulana o Alenuihaha me ka pii wahi ale ole o ua moana huhu ala o ale ahii. Aia ke kiei iho la ke kuahiwi kamehai o Haleakala, a ke oni mai la o Maunakea me Maunaloa a me Hualalai, mamua pono me ko lakou kulana kilakila o ka nani.

[Passing between Maui and Kaho'olawe]: Mākanikeo had the fleet of canoes rest at Keone'ō'io, in Honua'ula, which rises up in the face of the wind. It is marked by Pu'u Ola'i, where on the side the canoes find shelter, before entering the famous sea of 'Alenuihāhā, where there is no place that the angry and wild waves of the sea do not rise. From here [Honua'ula], one may gaze upon the wondrous mountain of Haleakalā, as Mauna Kea, Mauna Loa and Hualālai appear to move before you, in their outstanding beauty. (Maly and Maly 2005:24) (Translation: Kepā Maly)

Fisheries and Fishponds

The people of Honua'ula were strongly connected to the ocean. Its waters were noted by 19th-century historians and writers for its well-stocked fisheries. According to Handy, the coastline of Maluaka, and their neighboring *ahupua'a*, supported continuous populations of people who relied on the ocean for food and trade:

Between Mākena and the lava-covered terrain of Keoneio (another famous fishing locality) the coastal region includes the small ahupua'a of Onau, Moomuku, Mooloa, Mooiki, Maluaka, Kaeo. According to an old Kamaaina, these ahupua'a had in former times a continuous population of fisher folk who cultivated potatoes and exchanged their fish for taro, bananas, and sweet potatoes grown by the upland residents of the Ulupalakua section. A few Hawaiians still live here. One living near Puu Olai has a sizable sweet potato patch in the dusty soil near the shore; another raises fine potatoes in a low flatland of white sand near the abandoned schoolhouse of Mākena. (Sterling 1998:229)

The following traditional names and locations of Honua'ula's fishing grounds were gathered from the Hawaiian Ethnological Notes archived at the Bishop Museum and published in Elspeth Sterling's book *Sites of Maui*, and they reveal an intimate knowledge of the sea. Some of the descriptions have been abbreviated:

Pahua is the first and is located at Kanaio. Laeloa is (one of the) landmarks; when it appears directly over Holu Point, that is the upper mark. Puwai is the lower mark and it is called Ka-hope-o-ka-waa. It is a cave on the beach at Kanaio. The stone within the cave resembles a man standing there and when it appears slightly toward the windward side, the canoe is over the spot. It is 40 or more fathoms deep.

Hui is another fishing ground...
Keahua is another...
Kalawa is another fishing ground...
Pohaku-ula is another fishing ground...
Kiele is another, it is situated at Luailua...
Papuaa is another fishing ground...

Koa-hau is another. When the hill of Keoneio appears above Puu-olai that is its upper landmark. When the hill of Kaka on Kahoolawe appears above (in line with) Pahee-o-lono Point on Molokini, that is the lower mark.

Na-ia-a-Kamahalu is another one. When Hoaka, which is in the upland of Kahoolawe on the western side appear to be in line with the cape of Ke-ala-i-kahiki that is the upper landmark. When the hill of Keoneio appears to be in line of the seaward side of Puu-olai, that is the lower landmark.

Na-i'a-a-Kamali'i is another. When the cave on Mākena appears to be close to the point of Paopao at Puu-olai, that is the upper landmark. The cave at Pali ku in Keoneio is the other landmark.

When it appears between the two stone at Mokuha and Kanahena, that is the low landmark.
(Sterling 1998:215–216)

With regard to *loko i'a*, or fishponds, Honua'ula Moku contains two types of *loko i'a*, as categorized by Kikuchi (1973), which consists of *loko kuapā* (Type I) and *loko pu'uone* or *haku'one* (Type II and Ila). *Loko kuapā* are the "classic" fishpond types that consisted of a *kuapā* (seawall) constructed along a shallow shoal and reef projected shoreline. Although there are variations of the *loko kuapā* depending on the geology of the shoreline, the common feature for this type of pond is the construction of a *kuapā*. The enclosing *kuapā* would be augmented with sluice gates and shelters constructed on the walls next to the sluice gates (Kikuchi 1973:213 and 227). *Loko pu'uone*, or *haku'one*, were isolated *loko i'a* along the shoreline that were usually formed by the development of a *pu'uone* or *haku'one* (single, elongated sand ridge) that ran parallel to the coastline (Kikuchi 1973:9 and 228). These types of *loko* generally contained one or more ditches leading the ocean and sluice gates (Kikuchi 1973:228). Variations of this type of pond is also dependent on the shoreline geology where one sub-type, Type Ila, is found in young lava flows where the flow surrounded the pond and thus isolated it from the sea, and another, Type Ila1, is formed by limestone or beach rock sinks.

Two of the more well-known ponds within Honua'ula Moku, one at 'Apuakehau and the other at Keone'o'io, both of which are *loko kuapā* (Figure 10 and Figure 11). Beyond the location of the pond at 'Apuakehau, as noted in the boundary description for Grant 234 to Torbert and Wilcox (in Sterling 1998:231), the field sketches of E.D. Baldwin (in Maly and Maly 2005:217), as well as, placement on both the Honua'ula title map (Wall 1894) and coastal survey map for Mākena Bay (Jackson 1885), not much is known about the construction of this pond, which was said to have been destroyed as a result of surf impacts by 1931 (Walker 1931:299). The more widely recognized fishpond within Honua'ula was built at Keone'o'io, to which Malo attributes the following tradition:

There was a king named Kahoukapu, whose wife was barren, so they had no children. But being very desirous of offspring, she went to consult with Paao, the priest, about it. "Here I am," said Paao. "What shall I do to beget a child?" asked Laakapu. "You must go and fetch a fish as an offering to the deity for yourself," said Paao. Then she went away, and having obtained a fish, returned to Paao, saying, "Here is a fish for the deity." "What sort of a fish is it?" asked Paao. "A weke," said Laakapu. "Throw it away," said Paao, "the deity will not eat such a fish as that. It is like a rat. It's full of bones; so is a rat. It has a beard; so has a rat. It is lean; so is a rat. Go and fetch another fish." Laakapu then brought a maomao; but Paao declared it also was a rat. Laakapu, now discouraged and out of patience, said to Paao, "Tell me what sort of a fish you want." "A paoo, that is no rat," said he. Then Laakapu brought a paoo to the priest ... Then Paao offered the fish as a sacrifice to the idol deity with the prayer, "Grant a child unto Laakapu." And in due season Laakapu gave birth to a child. But it was of doubtful sex, and she named it Kauholanuimahu. On the death of Kahoukapu, the kingdom passed into the hands of Kauholanuimahu. After reigning for a few years, Kauholanuimahu sailed over to Maui and made his residence at Honua-ula. He it was that constructed that fishpond at Keoneoio. The wife of Kauholanuimahu remained on Hawaii and took to herself another husband; his kingdom also revolted from him but Kauholanuimahu returned to Hawaii and recovered it by war. (Malo 1951:255–256)

Fornander asserts that the residence of Kauholanuimahu at Honua'ula was contemporaneous with the chief Kaka'alaneo of Maui and that he spent an extensive amount of time at Honua'ula where he exercised royal oversight. His wife, Neula, was thought to have been a Maui chiefess, an implication which leads Fornander to speculate that Honua'ula may have been her patrimonial estate and the reason for the frequent residence of Kauholanuimahu (Fornander 1880:71).



Figure 10. Excerpt from F.S. Dodge and E.D. Baldwin's field book (1883:30) for the survey of Honua'ula, Maui, showing the fishpond at 'Apuakehau in relation to Mākena Bay and Landing and Keawala'i Church.

The other known fishponds within Honua'ula are located at the edge of the lava flow from Keone'o'io to Kanahena (Figure 12 and Figure 13) and just back of the coastline along the sandy beaches of Oneloa and Oneuli (Onouli), all of which are of the *loko pu'uone* or *loko haku'one* type. Along the rocky shoreline are Pohakuapaeia (Pohaku Paea), Pohakukahi, Kahiloa, Kauhīpaiakini, Halua, Kahikamao, and Owi (spelling uncertain) which are Type Ila under Kikuchi's pond type classification, while Paniaka, along a section of Oneloa within Mo'olua, and an unnamed pond noted in the boundary survey of Land Grant 1510 to Torbert at Oneuli (Onouli) within Maluaka and just *makai* of the proposed H2 project (Figure 14) is of the classic Type II under Kikuchi's pond type classification (Kikuchi 1973:Appendix A).

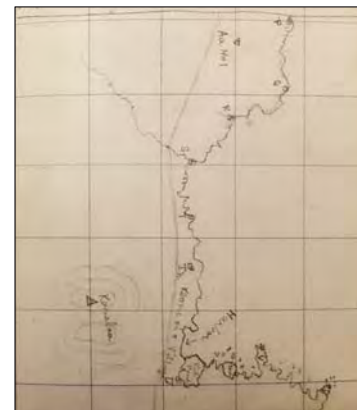


Figure 11. Excerpt from F.S. Dodge and E.D. Baldwin's field book (1883:25) for the survey of Honua'ula, Maui, showing Keone'o'io Village in relation to the pond.



Figure 12. Excerpt from F.S. Dodge and E.D. Baldwin's field book (1883:42) for the survey of Honua'ula, Maui, showing Keone'o'io Pond (top of frame) in relation to nearby Type IIa ponds.



Figure 13. Excerpt from F.S. Dodge and E.D. Baldwin's field book (1883:46) for the survey of Honua'ula, Maui, showing the twin ponds of Kauhipaiakini and Halua, as well as Pohakupaea.

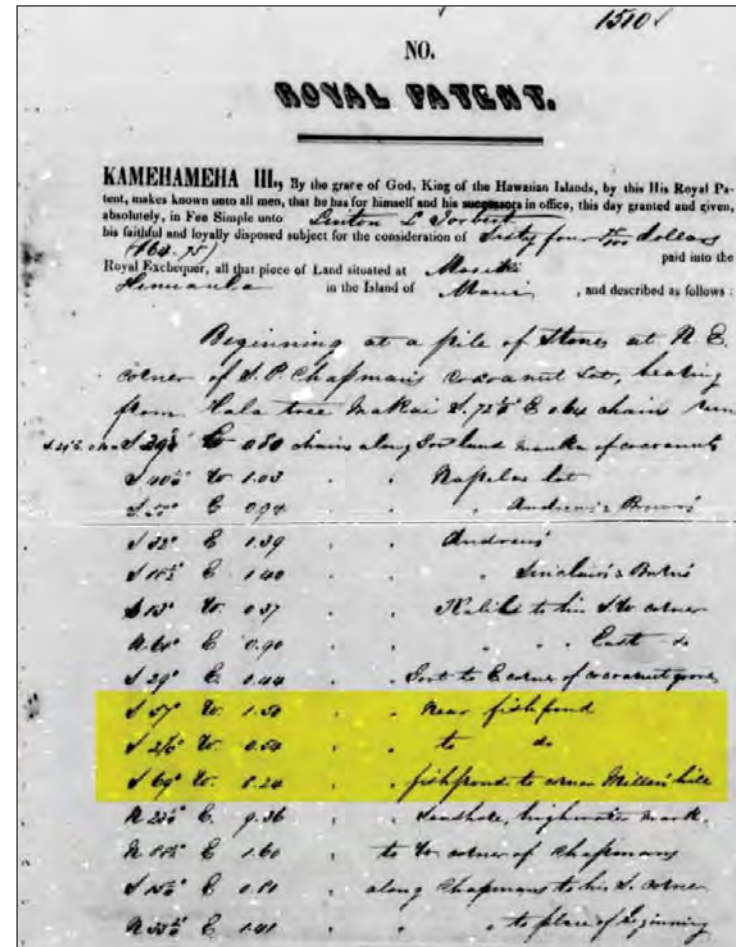


Figure 14. Land Grant 1510 to Linton L. Torbert highlighting the survey notes showing the boundary following an unnamed fishpond; note that Miller's Hill is a reference to Pu'u Ola'i.

In his dissertation on Hawaiian aquaculture systems, Kikuchi refers to the statements of Kamakau and Summers with regard to “ownership” and management of the ponds and pond resources. With regard to *loko pu'uone* or *haku'one*, these types of ponds were owned by the commoner as a tenant of the land who was in turn “owned” by the chief and *konohiki* (land manager), with Summers making a further distinction based on size whereby a small *pu'uone* requiring little construction effort was attributed to commoners, while larger *pu'uone* were attributed to chiefs (Kikuchi 1973:109–110). Kikuchi's research, however, found that 18 of the *pu'uone* included in his study were controlled by the *ali'i* or *konohiki*, and according to 19th-century observations recorded by J.G. Wood (1878:1086), “the size of the pond is an invariable test of the rank and wealth of the owner.” When taking into account Kikuchi's research, coupled with the fact that the ponds were retained for lease or sale by the Hawaiian Government at the time of the Māhele, at least as far as the ponds at Honua'ula were concerned, it would seem that the “ownership” of the fishponds lay with the either the *ali'i* or *konohiki* rather than the *maka'ainana*. With regard to the reliance on fishpond resources and the labor that went into maintaining and harvesting fish from the ponds, Wood makes the following observation:

These fishponds are very common in Hawaii and are mostly made by the women. They are formed by taking advantage of the coral beach, which has numerous small bays or inlets with comparatively narrow mouths. Across the mouths of these bays the natives pile pieces of coral rock so as to prevent any fish from escaping. They are deepened as occasion may require, and it is not an uncommon thing to see a number of women up to their waists in mud and water busily employed in cleaning out a fishpond, and evidently enjoying the work rather than thinking it a hardship. While they are thus at work on land, their husbands and brothers are equally hard at work on sea, catching the fish which are to be transferred to the pond.

The natives rely much for their supplies of food on these ponds, as fish forms a considerable portion of their diet, pork and fowls being too expensive to be considered anything but luxuries, and only to be eaten constantly by the rich....

They are watched as carefully as game preserved in our own country, and suffer as much from poachers, who however, seldom escape detection. (Wood 1878:1086)

Fishing Methods and Practices

Drying fish was a regular practice in Honua'ula, where it could be traded and stored for times when food ran short, which occurred with some regularity. Drying fish went hand-in-hand with the production of salt, which was gathered from basins along the shoreline of Oneuli (Onouli) (Sterling 1998:5, 213).

A traditional fishing method of Honua'ula has been preserved by Daniel Kahā'ulelio, who recalled how his parents would fish for *kala* and *kole* (two species of surgeonfish) using a special blend of *palu* (bait). His parents were from Keone'ō'io and would have been alive during the early-to-mid-1800s:

They used coconut milk with the ink sac that had been well-broiled over a charcoal fire. It was rubbed fine with an 'alā stone, then the coconut milk was added. That was the palu they used at Keone'ō'io, Honua'ula, their birthplace. Their lauhala bags were filled to the brim with kala and kole. (Kahā'ulelio 2006:116)

At Oneuli (Onouli), *hukilau*, or large net communal fishing surrounds, was the method that fishermen and their families used to gather *akule* (big eyed scad). In a 2003 oral history interview with Samuel Ponopake Chang, conducted by Kēpā Maly and Nanea Armstrong, Chang, who was born in Mākena in 1911, describes how his *tūtū* would watch for the school of *akule* from the shore and direct the fishermen in their canoes as they surrounded the fish with a net that would be pulled in from the beach (Maly and Maly 2003:962). Mr. Abner Delima also describes how *hukilau* was carried out at Oneuli (Onouli), just *makai* of the H2 project parcel, when he was growing up at Oneloa in the 1950s and 1960s.



At least four sites in the vicinity of the project area have been identified by researchers and informants as fishing *ko'a* or *ku'ula*. *Ko'a* had multiple functions. They were landmarks used by fishermen out at sea to help identify the location of fishing grounds. Some were used as places to *kilo*, to observe ocean and weather conditions and to sight schools of fish. There were also places of spirituality and ritual. Fishermen and their families would visit the *ko'a* to ask for safety, good fishing conditions, and give thanks for a productive catch. The presence of an upright stone at the *ko'a* signified *Ku'ula-kai*, one of the primary fishing gods, from whom fishermen would seek blessings and make offerings (de Naie and Donham 2007:84–85).

Oneuli (Onouli) *ko'a* was first recorded in 1929 by Winslow M. Walker, who described the site in his unpublished manuscript as follows:

The *ko'a* at Onouli [sic] is located below the [former Mākena] school and about 100 feet back from the shore. It is a rough platform 13 by 14 ft and 5 ft high at the front. A low wall surrounds it on three sides. Blocks of *Aa*, *iliili*, and a few pebbles and coral fragments were found in its construction. (Walker 1931:103)

Another *ko'a* was located near the southern end of Maluaka Beach. There is some question as to when it was destroyed, because as recent as the 1960s, there were reports by *kama'aina* (native-born residents) of its use (de Naie and Donham 2007:87). Winslow Walker stated that a “small *heiau*, probably a *ko'a*, formerly stood on a rocky point now occupied by the Baldwin cottage at Mākena at the spot known as Kīlauea in Ka'eo” (Walker 1931).

Pu'u Ōla'i, the large land form situated directly to the southwest of the H2 project parcel features prominently in the fishing traditions of the area. Certain *manō* (sharks) are considered to be ancestral gods in Hawaiian tradition, and Pu'u Ōla'i is reported to be the site of a large underwater cave, which Ashdown states as having been “a sacred dwelling-place for these ancestral deities [sharks]” (Ashdown 1971:22). Many families of this region identify with *manō* as their '*aumakua* (ancestral god), and this cave is where they would interact with their '*aumakua* and carry out their duties (de Naie and Donham 2007:140–141). In addition to the cave, it has been reported that at the base of Pu'u Ōla'i, there was a *ko'a* in the form of a “square heap of black stone” where “fishermen made offerings before putting out to sea” (Sterling 1998:229).

Traditional State Ceremony and Religion

Within proximity to Maluaka, the archaeological and historical record documents note that there are, or were, the existence of at least seven *heiau*, or temples of the Hawaiian religion. Close to the shore there is Kalani Heiau at Kā'eo, a *heiau* that was said to have been atop Pu'u Ōla'i, and a *heiau* at neighboring Mo'oiki on a ridge *mauka* of Pu'u Ōla'i. *Mauka* site dedicated to state ceremony included a *heiau* at Ke'ekē'ehia, known to some as Mausoleum Hill, as well as the *heiau* of Kalailani, Kalaniana, and Kamahina which appear to have been destroyed. The following sections provide more in-depth discussions of the *heiau* noted.

Kalani Heiau

Kalani Heiau is located on a 5.5-acre parcel of privately owned land in Kā'eo near the Maluaka Beach Parking Lot. Ashdown has asserted that the *heiau* was constructed or rededicated by Kauhōlanuimahu, an *ali'i* from the mid-1400s who lived for a time at Honua'ula, although she doesn't refer to it by the name “Kalani” (Ashdown 1971:50), a name that has been attributed to a family connected to the area (Haun and Henry 2003:28). She refers to it as “the *heiau* in One'uli” which was also named “One lau'ena, the land of plenty” (Ashdown 1971:50). Archaeological excavations completed within the *heiau* and subsequent radiocarbon analysis of recovered charcoal samples indicates that the site was in use between 1420 and 1490 (Haun and Henry 2003:16, 24). This *heiau*, according to Ashdown, was part of a larger complex situated in what was once a sacred coconut grove called Nahawale (Ashdown 1971:50). In ancient times,



Nahawale was considered a *pu'uhonua*, or place of refuge, and the *heiau* is where the sick came for healing (ibid).

The first recorded reference to the *heiau* as Kalani Heiau was during a reconnaissance conducted in 1916 by an archaeologist from the Bishop Museum named J.F.G. Stokes, who noted only the name he was given but did not actually visit the site (Maly and Maly 2005:233). The site was later visited by another museum archaeologist by the name of Winslow Walker who provided this early description of the *heiau*, which he visited during his survey of Maui in 1929 and 1930:

At Kao, not far from the shore. A large *heiau* said to be of sacrificial also but reduced largely to a shapeless pile of rock. It measures 126 feet across the front and has a width of 98 feet. No walls are in evidence, it being apparently an open platform 8 feet above the surrounding country built of rough *Aa* blocks with some coral and pebbles on top. Interior structure has been demolished by cattle. (Walker 1931:268)

These initial accounts of Kalani Heiau make note of its primary features. It has a notched L-shape. It is one of the largest *heiau* in the *moku* of Honua'ula, and although Ashdown posits that it was a place of healing (Ashdown 1971:50), it has also been classified as a sacrificial *heiau*. The archaeologists' accounts note further that on particular nights of the moon, their informants reported hearing the sound of drumming in the vicinity of the *heiau* (Maly and Maly 2005:231).

The Heiau at Pu'u Ke'eke'ehia

Pu'u Ke'eke'ehia (literally, Hill of the Zigzag Path) is the name of a hill above the *mauka* reaches of Maluaka Ahupua'a. The hill has also been known as Mausoleum Hill, because the former landowner Captain James Makee built a burial place there (Ashdown 1971:44). Historic maps and newspaper articles published in the 1800s indicate that at one time, this hill was the site of a *heiau*, although it has not been re-identified.

One of the few references of the *heiau* comes from someone named J. Kealohapauole, who submitted a letter to the editor of the newspaper *Kuokoa* in 1872. His letter describes some of the features of 'Ulupalakua, including Ke'eke'ehia:

Na Hiohiona o Ulupalakua.

Eia no keia kulanaakauhale, mawaena o na kakai pii e hoopuni ana, a huli aku ia kona alo a nana ia Kahoolawe, a ma kona aoao akau ka puu o Keekeehia, aia maluna pono iho he heiau mai ka po mai, a e lohe ana no oe i ka leo o ka pahu i na po i o Kane a me Lono[.]

The Appearance of 'Ulupalakua.

The village is between the rising cliffs which surround it, and it faces Kaho'olawe. On the north side is the hill Ke'eke'ehia. There is atop that hill, a heiau from ancient times, and from which, on the nights of Kane and Lono, may be heard the voices of the drums. (Maly and Maly 2005:39) (Translation: Kepā Maly)

Ashdown provides an additional, if somewhat confusing, account of the Ke'eke'ehia Heiau. She gives it the name "Hale Pue'o," and while it's possible that she meant "pueo," the Hawaiian word for owl, she states that "according to the old Hawaiians," the name meant "[s]tand firmly on your own two feet when you know it is right" (Ashdown 1971:44). That definition aligns with its ancient function, according to Ashdown, as a place where judgments and decrees were made and evil rejected (ibid).

Kalailani, Kalaniana, and Kamahina

Walker made note of the *heiau* at Ke'eke'ehia and also briefly mentioned the names of three others that once existed, all presumably in the same region: "Heiaus Kalailani, Keekeehia, Kalaniana, and Kamahina said to have been in this region are all gone" (Walker 1931:270). The

only evidence he found of any of the *heiau* was a three-foot-high platform, measuring over 4,500 square feet, which had at one time had been used as a house site (Sterling 1998:232).

The Heiau at Pu'u Ōla'i

There is at least one reference to a *heiau* having once existed atop Pu'u Ōla'i. In the notes of the archaeologist J.F.G. Stokes, and though he did not see it himself, he wrote that "Mawai opio" (young Mawai or Mawai Junior) told him that at Pu'u Ōla'i, there was a "heiau said to be on top of hill" (J. Stokes's original typewritten field notes annotated by Walker in 1929, Maui Archaeology Records, AR7 Folder 2-24, Maui Historical Society).

The Heiau at Mo'oiki

A name has yet to be attributed to the *heiau* at Mo'oiki, which is located on a ridge behind Pu'u Ōla'i. Little is known about the *heiau*. Lucienne de Naie, in *Project Ka'eo*, provides this description:

There are ten separate features to the complex and several other enclosures nearby that are probably also related to it. The heiau is U-shaped with open terraces on the makai side. The heiau is positioned on the ridge in a spot which allows a dramatic view of Kaho'olawe, unblocked by the prominent shape of Pu'u Ōla'i. (de Naie and Donham 2007:84)

de Naie and Donham (2007:84) go on to note that the apparent relationship between the *heiau* site and Kaho'olawe Island in the distance is very compelling, stating that while few have visited the site, one cultural practitioner who has, believes the *heiau* complex is aligned with similar features on the shore of Kaho'olawe.

Nā Mo'olelo o nā Ali'i ma Honua'ula – The Stories of Chiefs at Honua'ula

The *mo'olelo* of Maui's *ali'i* document the famous battles, journeys, alliances, romances, and accomplishments that occurred throughout history and often reveal a little bit about the places where these events occurred.

Kauholanuimahu, the Ali'i from Hawai'i Island

Kauholanuimahu was a Hawai'i Island chief who ruled in the mid-1400s and spent considerable time in, and exercised influence over, Honua'ula. Kauholanuimahu was the son of La'akapu, who came from Honua'ula, and a Hawai'i Island chief named Kahoukapu (Matsuoka et al. 1996:76). When his father died, his mother returned to Honua'ula and her lands became his. Fornander states that he "resided a great portion of his time at Honuaula, Maui where he exercised royal authority, and, among other useful works, built the fishpond at Keoneoio" (Fornander 1880:8). He is also credited with building a *heiau* in Kā'eo, *mauka* of Keawala'i Church (Matsuoka et al. 1996:76).

Kiha-a-Pi'ilani and Ke Alaloe

Kiha-a-Pi'ilani was the son of Pi'ilani and ruled as King of Maui during the late 1500s. For a short while prior to his reign, Kiha-a-Pi'ilani resided in Honua'ula. He lived in secret among the *maka'āinana* to avoid execution by his brother (Kamakau 1992:22).

Kiha-a-Pi'ilani's older brother Lono-a-Pi'ilani became King upon the death of their father Pi'ilani, despite Pi'ilani's stated wish that his sons share Maui's rule. For a short time, the two had a harmonious relationship. Kiha-a-Pi'ilani was a kind *ali'i*. He was attentive to the well-being of the *maka'āinana*, offering them food in times of shortage. His older brother viewed his generosity as an attempt to curry favor and undermine his rule, and so a rift developed. One day, the two got into a fight, and Lono-a-Pi'ilani became so certain of his brother's disloyalty, that he resolved to have him killed.

Kiha-a-Pi'ilani fled first to Moloka'i and then to Lāna'i before returning in secret to Maui. He and his wife managed to reach the uplands of Honua'ula without being discovered by Lono-a-Pi'ilani's men, and there they were welcomed by the *maka'āinana* there. According to Kamakau, they first lived at a place called Ke'eke'e (Kamakau 1992:23), which de Naie suggests refers to Pu'u Ke'eke'ehia (de Naie and Donham 2007:105). Eventually, they relocated to the vicinity of Kula and Makawao before Kiha-a-Pi'ilani sought to wrest Maui from his brother's control, which he accomplished with the help of his brother-in-law 'Umi-a-Liloa, the Hawai'i Island chief.

During his reign, he managed to finish the construction of Ke Alaloe (The Long Road), a paved footpath that encircled both Maui's east and west ends, a length of approximately 138 miles (de Naie and Donham 2007:75). The project was started under his father, the chief Pi'ilani in ca. 1516. It improved travel, trade, and communication, and the collection of *ho'okupu* (taxes). In Honua'ula, Ke Alaloe travelled along the coastline, crossing the beaches from Wailea heading south to Po'olenalena and Maluaka and then over the lava fields to Keone'o'io. Large sections were paved with stone, about which Martha Fleming provides some insight:

The *Alii* had a line of men stand from the sea and hand stones along the line till they reached the required place. Here the stones were artfully put into position. The trail was paved with flat, hard beach stones. Those on the steeper grades were very flat, while those in less sloping country were more rounded. In open country, each side of the trail was flanked with large field boulders solidly sunk into the ground and standing above the center from one to five feet. . . . On the steep gulches, only one side of the trail had this guard. The stones, or flags, on the floor of the trail were placed horizontally to abutments in quite regular lines. It took four or five stones to make a line across. The second row of horizontal stones was placed parallel to the other in a checker-board fashion to prevent wash. The width of the trail between the balustrades was from four to five feet, giving a regular appearance as it stretched over the country. There were few turns in the trail, even where the grade was steepest. (Fleming 1933:5)

The Invasion of Kalani'ōpu'u

Just prior to the reign of Kamehameha, Maui was controlled by Kahekili and Hawai'i Island by Kalani'ōpu'u. Kamakau writes that in 1776, war broke out in Honua'ula when Kalani'ōpu'u and his army invaded the district and terrorized its people, prompting Kahekili to come their defense and defend his rule over the island:

In the year 1776 Ka-lani-'ōpu'u and the chiefs returned to war on Maui, and in the battle with Kahekili's forces at Wailuku were completely overthrown. The army landed at Keone'o'io, their double canoes extending to Mākena at Honua'ula. There they ravaged the countryside, and many of the people of Honua'ula fled to the bush. When Kahekili heard of the fighting at Honua'ula he got his forces together—chiefs, fighting men, and left-handed warriors whose sling-shots missed not a hair of the head or a blade of grass. Ka-lani-'ōpu'u landed his forces before noon, a great multitude filling the land from Kiheipuko'a at Kealia to Kapa'ahu, all eager with the thought that the Alapa were to drink the waters of Wailuku. (Kamakau 1992:85)

Kalola and the Olowalu Massacre of 1790

The chiefess Kalola was the daughter of Kekaulike, Mō'i of Maui during the 1700s. Her brother was Kahekili, the famous warrior king mentioned above who came to control seven of the eight Hawaiian Islands and paved the way for Kamehameha's eventual unification. There are accounts documented by Fornander and Kamakau of Kalola residing or spending time in Honua'ula (Fornander 1880:214, 228; Kamakau 1992:145).

Kalola and her husband Ka'ōpuiki figured prominently in one of Maui's most infamous attacks, the Olowalu Massacre of 1790. The massacre itself resulted in the brutal murder of more than a hundred Hawaiians at a village located in what is now known as Olowalu. This event was precipitated by a series of incidents involving the British-American captain Simon Metcalf and the crew of a fur trading ship called *Eleanora* (also called the *Eleanor*), which anchored at Honua'ula in 1790. Barrère suggests that this was Mākena Bay (Barrère 1975:21). An

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anonymous officer's account of the event was published in 1792 in a London journal called *Gentleman's Magazine*.

Kalola and Ka'ōpuiki were present when the *Eleanora* first docked at Honua'ula. They went out to greet the foreigners and offer goods to trade, at which point Ka'ōpuiki took notice of a smaller boat, called a cutter, tied to the *Eleanora*'s stern. The boat was constructed with highly coveted metal parts. That night, Ka'ōpuiki and some others snuck out to the ship and cut the smaller boat loose. Sleeping inside was one of Metcalf's crewmen, who was killed during the mission. Realizing that the boat was missing, Metcalf sent out a search party but found nothing.

The next day, several more canoes came out to the *Eleanora* with pigs and fruit to offer. They were told to go away but didn't obey, and so, Metcalf fired on them, killing and wounding several Hawaiians. The next day, according to an officer's account, "four or five thousand people" gathered at the shoreline, "all armed with slings, spears, and arrows" ("Americans at Otaheite" 1792:318). A battle ensued, with the boat firing its cannons at the beach and likely killing and wounding many. A crew went to shore and set fire to the village and heiau, and any survivors eventually fled *mauka* to avoid being shot at.

After that, the *Eleanora* left Honua'ula and headed north. The officer wrote,

We had been under way about an hour and a half, with a light breeze, when the natives in canoe alongside, informed us that the chief of the people that had stolen the boat, lived behind a point, to the northward, we then hauled our wind, went round the point and came to anchor. ("Americans at Otaheite" 1792:319)

The next day, Ka'ōpuiki came aboard the ship and offered to return the boat, which had been stripped of its metal parts, and the boat's keeper, who was dead, in exchange for a reward. Ka'ōpuiki later returned with just the boat's keel, angering Metcalf.

Sensing danger, Kalola had declared a *kapu* forbidding anyone from making contact with the ship. It lasted three days, and when it was over, hundreds of villagers paddled out to the *Eleanora* in the hopes of trading with the crew. Presenting a friendly demeanor, Metcalf managed to corral the canoes along one side of his ship, and once they were packed tightly together, he ordered his crew to fire the guns. It was a scene of carnage, with at least a hundred dead and a hundred wounded. Kamakau describes the aftermath:

Even those who swam away were shot down. John Young was an eyewitness on board the ship and has testified to the great number who were killed at this time. At noon that day the *Eleanor* sailed, and the people went out and brought the dead ashore, some diving down into the sea with ropes and others using hooks; and the dead were heaped on the sands at Olowalu. Because the brains of many were oozing out where they had been shot in the head, this battle with the ship *Eleanor* and her captain was called "The spilled brains" (Kalolo-pahu). It was a sickening sight, as Mahulu and others have reported it; the slaughtered dead were heaped upon the sand; wives, children, parents, and friends came to view and mourn over their dead; and the sound of loud wailing arose. (Kamakau 1992:146)

3.1.2 Post-Contact Period

In 1778, Captain James Cook made Hawai'i known to the West, and the flow of seamen, merchants, missionaries, and plantation owners that followed forever altered the land, people, and culture of Hawai'i. The sections below explain how these changes affected the people and lands of Maluaka and the surrounding district of Honua'ula.

Transitions in Population and Land Use

In May of 1786, the French explorer Jean-François de La Pérouse sailed past Maui and landed briefly to the south of Maluaka at Keone'o'io, anchoring in the bay that now bears his name. It

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was his belief that he was the first European to set foot on Maui and spent one day ashore engaging in trade and exploring the area (Dunmore 1985:227). Accounts from this expedition suggest a relatively large and well-established community with ready access to resources:

More than one hundred and twenty of them, men, women, and children had been out in their canoes since the crack of dawn and immediately offered to begin trading. Two of them, who seemed to be the men of authority, approached. They made a long, serious speech to La Pérouse, who did not understand a single word, and presented him with a pig, which he accepted. In return he gave them some medals, hatchets, and pieces of iron, which they valued very highly. By this generosity, the French succeeded in winning the friendship of the islanders.

During his reconnaissance, La Pérouse saw four small villages of ten or twelve houses. These are made of grass and are covered with the same material. They have the same shape as the thatched cottages found in certain parts of France. The roofs are pitched on two sides, and the door, which is located on the gable end, is only three feet high, so that it is necessary to stoop when entering. The furnishings consist of mats, which like our carpets make a very neat flooring on which the islanders sleep. The only cooking utensils they have are gourds painted in various colors. Their cloth is made from the paper mulberry tree, but, although painted in a great variety of colors, it appears less skillfully made than the cloth of other South Sea Islanders.

When he returned aboard, the commander learned that Captain Clonard, his executive officer, had received a chief and had bought a cape and a fine red helmet from him; he had also acquired more than one hundred pigs, some bananas, yams, taro, mats, and various small objects made of feathers and shells. (Jean-François de Galaup 1969:24–25)

Another early description that we have of Honua‘ula is from the account of Archibald Menzies, a Scottish naturalist who was on Captain George Vancouver’s 1793 voyage through the Hawai‘i. The impression the Menzies got was of a “barren” and “thinly inhabited” place:

[E]arly in the morning of 10th, when we bore away along the southern shore, with a steady breeze, till we came to Molokini, and there it became light and fluctuating in its direction, by the high land of Maui intercepting the regular trade wind. We had some canoes off from the latter island, but they brought no refreshments: indeed this part of the island appeared to be very barren and thinly inhabited. (Thrum 1909:92–93)

The century that followed is characterized by immense change. Contact with the foreigners from the U.S. and Europe brought new customs and practices, new ways of organizing land and labor, new technologies, as well as new threats and, for a few, new opportunities. Honua‘ula, as elsewhere throughout Hawai‘i, felt the effects of these changes in large and small ways.

A Declining Population

One of the more consequential aspects of this period was a steady decline in population beginning in the 1830s. The first formal population counts were conducted by the missionaries in 1831–1832 (Schmitt 1973:5), when 3,340 people were counted in Honua‘ula, which made it Maui’s fourth-most populated district behind Lahaina, Hamakualoa, and Hāna (de Naie and Donham 2007:113). This was likely near its peak before exposure to foreign epidemics and disease took its toll.

Contact with the wider world brought Hawai‘i into a global market economy and transformed traditional Hawaiian society in complex ways. Whaling was one of the first industries to find a foothold in Hawai‘i, and as it drew young Hawaiian men away from the land and their families and onto whaling ships, the communities of Honua‘ula felt the effects. In an 1846 letter to editor of *The Polynesian*, a missionary named Jonathan S. Green expressed his dismay at the threat such a loss posed:

The fact that the number of young men who leave home, and engage their services on board whale ships, is rapidly increasing, is one of the facts, so far as my people are concerned, which fills me

with painful apprehension. More or less of the Hawaiian youth, I am aware, have engaged in this business for many years, especially those living in the vicinity of Honolulu, Lahaina, Hilo and Kaawaloa. But of late the number of these has greatly increased—at least in our vicinity—so that the present season not a few of the most promising young men from Kula, Honuaula and Wailuku have gone to sea. During the three years past we have had an excellent native school at Makawao, taught by a graduate of Lahaina Seminary. Many of these young men had made good proficiency in their studies—had nearly completed their course of education, and some few of them had commenced teaching. Now that these youth were just ready to engage in labors for the good of the nation, they have nearly all gone on board whale ships, and thus our hopes of good to the nation through them is for the present, utterly blighted. (Maly and Maly 2005:18)

The Nuisance of Cattle

In places like Honua‘ula, the presence of cattle had profound impacts to the land and to people’s livelihoods. Cattle were first given to Kamehameha by Captain George Vancouver in 1793, who hoped it would become “a convenient source of beef provisions for ships in the mid-Pacific, as well as a civilizing tool to transform the Hawaiian people” (Fischer 2015:31). Kamehameha placed a *kapu* (prohibition) on the animals, and over the ensuing decades, their numbers multiplied. It’s not known when cattle were brought to Maui, but the first reliable population count was taken in 1852 which counted a total of 40,700 cattle on all islands (Fischer 2015:58).

The herds of wild cattle were a destructive force on the native environment. The ecologist Christopher Lever notes that in Hawai‘i, “feral cattle have had a serious negative impact on the vegetation of dry, mesic, and wet forests at both high and low altitudes. Indeed, it has been claimed that they have been the single most destructive animal in the islands” (Lever 1994:44). Appreciating the scale of such impacts, Handy concludes that Honua‘ula was more hospitable before the cattle transformed it:

In Honuaula, as in Kaupo and Kahikinui, the forest zone was much lower and rain more abundant before the introduction of cattle. The usual forest-zone plants were cultivated in the lower upland above the inhabited area. Despite two recent (geologically speaking) lava flows which erupted from fissures below the crater and only a few miles inland and which covered many square miles of land, the eastern and coastal portion of Honuaula was thickly populated by Hawaiian planters until recent years. (Handy et al. 1991:113–114)

In these conditions, and in an area already prone to drought, the deforestation of the land made Honua‘ula’s residents even more vulnerable. On June 8, 1838, Jonathan S. Green submitted this report to the Hawaiian Spectator, describing a time when the conditions were so bad, it forced the people of Honua‘ula to seek food in other districts:

Hoapilikane [Governor of Maui] is now ordering all the people from Honuaula, one of our out stations, away from home, 20 miles to dig fishponds. They have been here by fifties to request food. For they work for naught and board themselves. They have no food on their own land, it being a time of famine at that place, so they have to get food where they can find it. They carry their food to the place of their labor, leaving their families to seek sustenance as they can. (Maly and Maly 2005:61)

Not only did cattle cause deforestation, they threatened farmers’ crops. There are numerous reports of cattle driving farmers off of their lands. In an 1846 article published in *The Polynesian*, the writer, while summarizing Kamehameha III’s visit to Maui, notes that “the cattle have done much mischief by trespassing on the plantations, and driving the owners from their little farms. Two districts have in consequence been deserted” (Maly and Maly 2005:17).

One of the more tragic incidences resulted in the death of a man named Aki from Honua‘ula (Maly and Maly 2005:16–17). Linton Torbert, who came to own much of ‘Ulupalakua and the surrounding lands, owned some cattle that had allegedly trampled on Aki’s farmland. Aki allegedly cut several of their legs, injuring Torbert’s cattle. Torbert and his blacksmith Benjamin

Furbush confronted Aki, they got into a scuffle, and while Aki was attempting to flee, he was shot in the back and killed. Torbert and Furbush were sentenced to four years in prison, which was commuted with the payment of a fine, \$200 each.

Up until the early 1840s, land use, access, and subsistence activities in Maluaka had likely remained as they had from ancient times. With the changes described above however, by the mid-1840s, Western ideals of land ownership and commerce would usher in a dramatic change in Hawaiian land tenure with the Great Māhele, and formalize a shift from a subsistence-based economy to commercial ranching and agriculture.

1845–1851—The Māhele

The Māhele reformed Hawai'i's traditional system of land tenure, from one where the chiefs and people held the land in common, to one of private ownership modeled off of Western land regimes. It was a multi-part process that began in 1845 with the establishment of a Board of Commissioners to Quiet Land Titles, also known as the Land Commission. Those who intended to secure rights or title to any lands would submit their claims to the five-member Land Commission Board. The Board would then determine the validity of those claims and issue a Land Commission Award (LCA) to successful claimants (Chinen 1958:8–9). Upon payment of a commutation fee to the government, a Royal Patent would be issued, perfecting title to the land (Chinen 1958:21).

The actual land division, or *māhele*, began in 1848. It required an initial process of clarifying and separating out the respective property interests of the King, the chiefs and *konohiki* (*ahupua'a* managers), and the native tenants or *hoa 'āina* (Chinen 1958:15). The intent was for the King (Kamehameha III) to retain his own individual lands (known as the Crown Lands), and for the remaining lands to be divided into thirds and entitled to the government, the chiefs and *konohiki*, and the native tenants (Chinen 1958:15–16). These three land categories are known as Government Lands, Konohiki Lands, and Kuleana Lands. This *māhele* (division) between the King and more than 240 chiefs and *konohiki* occurred between January and March of 1848. In what's called the *Buke Māhele* (Māhele Book), the chiefs and *konohiki* surrendered all interests in any lands the King wanted to retain, and he did the same with any lands they wanted to retain. The *ali'i* and *konohiki* claims were typically for entire *ahupua'a* or smaller, whole subdivisions within *ahupua'a*. Commutation fees were often paid in land, at a rate of one-third of an awardee's total award, and placed into the inventory of Government Lands (Alexander 1890:114).

The distinction between Crown and Government Lands is an important one. From their inception, they were regarded as separate and distinct classifications of property. Crown Lands were defined as the:

... private lands of His Majesty Kamehameha III., to have and to hold for himself, his heirs and successors forever; and said lands shall be regulated and disposed of according to his royal will and pleasure subject only to the rights of tenants. (Kingdom of Hawaii 1848)

At the death of Kamehameha III, the Crown Lands passed to Kamehameha IV. But at the death of Kamehameha IV, there was no immediate heir to the throne, which created some confusion as to the inheritance of Crown Lands and whether or not it followed the family line or the throne. It was decided by the Supreme Court that under the confirmatory Act of June 7th, 1848, "the inheritance is limited to the successors to the throne [...] the wearers of the crown which the conqueror had won," and that at the same time "each successive possessor may regulate and dispose of the same according to his will and pleasure as private property, in the manner as was done by Kamehameha III" (Alexander 1890:121).

In contrast to the Crown Lands were the Government Lands, which were defined and set aside in a manner more typical of public lands. They were defined as:

those lands to be set apart as the lands of the Hawaiian Government, subject always to the rights of tenants. And we do hereby appoint the Minister of the Interior and his successors in office, to direct, superintend, and dispose of said lands, as provided in the Act ... [p]rovided, however, that the Minister ... shall have the power, upon the approval of the King in Privy Council, to dispose of the government lands to Hawaiian subject, upon such other terms and conditions as to him and the King in Privy Council, may seem best for the promotion of agriculture, and the best interests for the Hawaiian Kingdom. (Kingdom of Hawaii 1848)

In 1850, most of the chiefs ceded a third of their lands to Kamehameha III in order to obtain an allodial title for the remainder. The majority of these lands were then placed into the Government land base (Alexander 1890:114). The designation of such lands to be set aside as Government lands paved the way for land sales to foreigners, and in 1850 the legislature granted resident aliens the right to acquire fee-simple land rights (Moffat and Fitzpatrick 1995:41–51). As a part of the initial division, Maluaka Ahupua'a went to Mose Kekuaiawa who then ceded the *ahupua'a* to Kamehameha III (Figure 15) and entered into the inventory of Government lands.

Figure 15. Māhele record highlighting Maluaka Ahupua'a being transferred from Mose Kekuaiawa to Kamehameha III (Buke Māhele 1848).

In designations of lands as either Crown or Government, and through all awards of whole *ahupua'a*, *'ili*, and later land sales to foreigners, the rights of the native tenants were expressly reserved, "Koe na Kuleana o Kanaka" (Reserving the Rights of Native Tenants) (Alexander 1890:114). For the native tenants, it took the passage of the Act of August 6, 1850, commonly known as the Kuleana Act, to facilitate the process of taking title to their own landholdings, which became known as Kuleana Lands. The Act waived the commutation fee, although a survey was still required. The tenants were permitted to make claims for any lands that they actually cultivated and were required to provide evidence of such through testimony, and claims often included multiple *'ili*, or *'āpana*, located both *mauka* and *makai*.

Claims of Native Tenants

A total of 12 claims for *kuleana* lands in Maluaka Ahupua'a were presented to the Land Commission with fairly diverse agricultural claims. Types of land uses noted within claimant

testimony includes potato planting areas, *kalo* or dryland taro (Helu 2437, 4322B, 5263, 5275, and 5402B), *maia* or banana (Helu 4322B), and *papipi* or prickly pear cactus (Helu 2427 and 2524B) were all made before the Land Commission (Table 1).

Although the intent was for the land to be divided equally among the government, chiefs, and native tenants, the outcome was far from equitable, with the native tenants receiving less than one percent of all the land in Hawai'i, a total of 28,658 acres (Van Dyke 2008:48). Though 12 claims for were put forward for *kuleana* lands specific to Maluaka, none were awarded and over the course of the Māhele, the lands of Maluaka Ahupua'a were sold to individuals via Land Grant.

Land Grants

While the Māhele was underway, it became clear that the process did not adequately meet the needs of native tenants, nor did it address the demands of foreign residents. Often, native tenant claims went unawarded, or the land that was awarded was insufficient to support a family's subsistence lifestyle. At the same time, foreigners were seeking larger and larger tracts of land to further their business interests. While a provision of the Kuleana Act provided a mechanism that enabled both groups to purchase land from the inventory of Government Lands, it was foreign buyers who largely benefited from it (Maly and Maly 2005:152).

A number of these Land Grants, the ownership of which was transferred via Palapala Sila Nui (Royal Patent Grants), were issued to both foreign and native investors for lands within Maluaka Ahupua'a which also include the current project area. The land documents of the Māhele shows the government sale of two *āpana* (sections) covering an approximate total of 30.68 acres to Makahanohano as a part of Land Grant 1508 in November 1854. The current project area covers Apana 2 of Land Grant 1508, the price of which was negotiated by the Government land agent John T. Gower at \$0.75/acre (J.T. Gower to John Young, Minister of the Interior, March 25, 1853, on file at the Hawai'i State Archives).

At the time of the Māhele, Land Grant 1508 Apana 2 was bound by Linton Torbert's Grant to the north, a stone wall (*pa pohaku*) to the east, the land of Maluai to the south, and the roadbed (*pa alanui*) to the west. As in all large land transactions where a sale of government lands was made, the rights of native tenants, *koe ke kuleana o na kanaka*, were reserved in continuation of the reserved tenancies characterized by traditional Hawaiian land tenure (Figure 16) (Garovoy 2005).

Government Fishpond Leases

At the same time that the Hawaiian Government was negotiating the sale of Government Lands, the land agents were directed to lease, rather than sell, the fishponds at Honua'ula as can be seen in this missive from John T. Gower to John Young:

Before receiving instructions not to sell any fish ponds I had bargained with Manu for a lot in Mooloa Honuaua, of eleven acres at sixteen dollars per acre in which was situated a small angular pond called "Paniaka." The \$16 per acre is the full value of the pond and land. Will the sale be confirmed? I think ought to be under the circumstances. Can the fish ponds be leased for a term of years? As there seems to be a demand for them, would it not be advisable to lease by auction? (J.T. Gower to John Young, March 1st, 1853, Kula and Honuaua Sales, on file at the Hawaii State Archives)

With the exception of the sale of Paniaka to Manu, the ponds listed in Figure 17 between Keone'o'io and Kanahena were submitted to the Hon. Council for lease consideration, and though they were surveyed (see Figure 10 through Figure 13), it is currently unclear whether or not the leases were granted. Additionally, it does not appear that a lease for the pond that borders Torbert's Land Grant 1510, which would have been directly *makai* of the proposed H2 project, was negotiated by Gower during his tenure as the East Maui land agent.



Table 1. Summary of Land Commission Awards for Maluaka Ahupua'a (Office of Hawaiian Affairs 2011, 2014)

Helu	Claimant	'Ili	Notes on the Land Claim	Award Acreage
499	Auwae		Claimant Testimony: 1 <i>hale</i> (house) Foreign Testimony: Auwae is <i>luna</i> (overseer) of land in Waikapu and Honua'ula but owns none of his own	Honua'ula claims not awarded
2397	Kauliili		Claimant Testimony: 1 <i>māla</i> (garden patch)— <i>'uala haole</i> (Irish Potato)	Not awarded
2427	Kanakahou		Claimant Testimony: <i>Papipi</i> (prickly pear cactus); noted that their witness was Puniahu	Not awarded
2437	Kukue		Native Testimony: Piipii sworn, 1 <i>kula</i> (field)— <i>'uala haole</i> (Apana 2), lands were inherited from parents Claimant Testimony: 2 <i>'ili</i> lands (land section, subdivision of <i>ahupua'a</i>)— <i>kalo</i> (taro), one <i>'ili</i> is completely fenced in with taro within the <i>'ili</i> , witness is Kalama	Not awarded
2524B	Moku (wahine)	Maluaka	Native Testimony: — Kailii sworn, 1 <i>kula 'ili</i> (Apana 4), <i>mauka</i> by <i>pa aina</i> (fenced land), inherited from parents in the time of Kamehameha I Foreign Testimony: Appeared before E. Bailey on July 6, 1854 and relinquished all of her land claims in Honua'ula	Not awarded
2563	Wawaiki	Poihili	Claimant Testimony: 7 <i>moku mau'u</i> (grassland areas), witness is Mahiai; 1 <i>māla</i> — <i>'uala haole</i> ; 3 <i>pahale</i> (house lots), bordered to the west by the ocean, witness is Kamalo	Not awarded
2581	Hualii		Claimant Testimony: <i>wahi kahuahale</i> (house lot), witness is Kaohilae	Not awarded
4322B	Kauhola		Native Testimony: Piipii sworn, 1 taro and banana (Apana 3), received from Kamalo in 1847	Not awarded
5263	Kauhola		Claimant Testimony: 2 <i>māla</i> — <i>kalo</i> , witnesses are Kaiilili and Kukue	Not awarded
5275	Kuhaulua (Kekuahaulua)		Claimant Testimony: 1 <i>māla</i> — <i>kalo</i> , witness is Piipii	Not awarded
5402B	Nawaiki	Paipili, Laie	Native Testimony: Hahaloa sworn, 2 <i>kula</i> (Apana 1 at Paipili and Apana 7 at Laie); Apana 1 bound <i>makai</i> by the sea; <i>kalo</i> (Apana 6— <i>kalo</i> at Paipili), bound on the Kahikinui side by the government road, inherited from parents in 1819. Foreign Testimony: Initially settled the claim by S.M. Kamakau through witnesses; however, when the area was to be surveyed by Richardson there was much dispute. Claimant sold all of his rights to Linton Torbert.	Not awarded



Land in Support of Commercial Interests

Even before the Māhele, lands in the Honua'ula District were being used to support commercial enterprises, namely sugar and cattle. Up until the early 1840s, land use, access, and subsistence activities remained as they had from ancient times. But by the mid-1840s, things began to change as the new land ownership rules of the Māhele facilitated a shift in use from subsistence to commercial ranching and agriculture (Maly and Maly 2005:13).

In December of 1845 and January of 1846, King Kamehameha III traveled to Maui to speak to the issue of land privatization. A newspaper article published on February 14, 1846 in *The Polynesian* gave readers a recap of the visit, and the author tells of the agricultural developments in Honua'ula, giving us a glimpse at some of the developments and challenges to come:

Agriculture on Maui is in a forward state, compared with Oahu. At Honuaula there are 178 acres under cultivation of sugar cane with a good sugar mill managed chiefly by natives. One farm, besides sugar, raises \$5000 worth of Irish potatoes annually. There are 12 foreigners here, one of whom John White, arrived in 1799. On some parts of Maui the cattle have done much mischief by trespassing on the plantations, and driving the owners from their little farms. Two districts have in consequence been deserted. (Maly and Maly 2005:16)

Linton Torbert

One of the early players in Honua'ula's new economy was a man named Linton L. Torbert. An active member of the Royal Hawaiian Agricultural Society, he began his farming operation on 2,300 acres of leased land in 'Ulupalakua. He first grew potatoes and corn to sell to merchant ships and to meet a sudden spike in demand fueled by California's Gold Rush. Later, he planted sugar.

While Torbert purchased parcels of land in Maluaka (Land Grant 1441: Apana 3 and Land Grant 1510), his largest acquisitions were to the north in Kā'eo and Pāpa'anui Ahupua'a. In a letter to Keoni Ana, he stated his intent for his properties:

If I get this land my intention is this. To manufacture sugar as extensively as possible. To accomplish this end I shall get 30 or 40 families of natives to come and live on the farm. I will find them houses and food, school their children & learn them to work. (Maly and Maly 2005:160)

Captain James Makee

Captain James Makee was a whaler from Massachusetts who settled in Hawai'i in 1843. In 1854, Makee acquired an interest in Torbert's 'Ulupalakua estate and by 1858, financial difficulties forced the sale of Torbert's remaining Honua'ula lands to Makee, which is how he came to establish a sugar plantation operation in 'Ulupalakua. He named his estate Rose Ranch after his wife's favorite flower (Maly and Maly 2005:172).

One of Makee's signature improvements was in locating a reliable source of water, as reported in an article from the July 7, 1866 issue of *Nupepa Kuokoa*:

Hunahuna mea hou o Hawai'i Nei.

Bits of News About Hawai'i.

PAU KA PILIKIA. Ma keia pa hana, ua kukulu ae o J. Makee i na hale laau a me na punawai hohonu ma na hakala o na hale laau. Ua pau ka pilikia o na kanaka a me na wahine ma keia pa hana, ua ulakolako maoli i ka wai. O keia aina i ka wa kahiko, he kula pānoa wale no, he a-a, he haoa, aohe wai e loa. O ka wai o keia aina i ka wa mamua, he pu-maia, he lau kakonakona; a i keia wa, limua ka wai, pau ka pilikia. Me ka mahalo. E wiki oe e ke Kuokoa.

The trouble has ended. By this work, J. Makee has built a wooden house and deep reservoir on the side of the house. The troubles of the men and women are now ended by this work, they are now truly well supplied with water. This land, in ancient times, was a barren open place, a rocky, scorched land, where water could not be gotten. The water of this land in times before, was from the stumps of the banana trees, and from the leaves of the kākōnakona grass; but now there is water where moss can grow. The problem is resolved. (Maly and Maly 2005:37) (Translation: Kepā Maly)

JOHN KELIIKANAKAOLE. Ulupalakua, Maui, June 12, 1866.

Makee's plantation was renowned for its beauty, productivity, and the hospitality of its owners. King Kalākaua and his wife Queen Kapi'olani were frequent guests. Makee's wife Catherine planted gardens decorated with roses, exotics plants, and other flowers that visitors to 'Ulupalakua Ranch can still enjoy today. Here's another visitor's report, published in the November 14, 1868 issue of *Nupepa Kuokoa*:

The nature of this land is like that of a rose garden filled with blossoms. The beautiful home of J. Makee, Esq., has no equal... The things grown there are like nothing else seen, there are beautiful flowers, and trees of all kinds. The road passes through the gardens, and to the large reservoir within the arboretum, it looks like a pond. When he finished showing us around the gardens, he took us to meet his lady (his wife), the one about whom visitors say, "She is the queen of the rose garden." (Maly and Maly 2005:38)

Makee managed the plantation and mill for just over 20 years. Through a series of conveyances shortly before and after his death in September of 1878, most of the Rose Ranch lands ended up going to the Makee children. By 1883, the sugar growing operation was replaced with cattle ranching. In 1886, James Dowsett, father-in-law to one of James Makee's sons, purchased the Rose Ranch estate from the Makee children. Between 1886 and his death in 1898, Dowsett bought and leased additional lands, expanding the ranch's holdings. His daughter Phoebe, wife of Charles Makee, inherited the estate. When her husband Charles died, she married Dr. James Raymond, who bought the ranch in 1900, renamed it Raymond Ranch, and concentrated operations on raising and slaughtering cattle.

These vast ranchlands would become the domain of Hawaiian *paniolo* (cowboys). One of Hawai'i's most celebrated *paniolo*, Daniel Ikua Purdy, who earned international fame when he won the World's Steer Roping Championship in 1908 at the Cheyenne Frontier Days Rodeo, would eventually come to work at the Raymond Ranch in 1914. Ikua Purdy came to 'Ulupalakua from the Parker Ranch on Hawai'i Island to work as Raymond's ranch foreman and remained in 'Ulupalakua until his death in 1945.

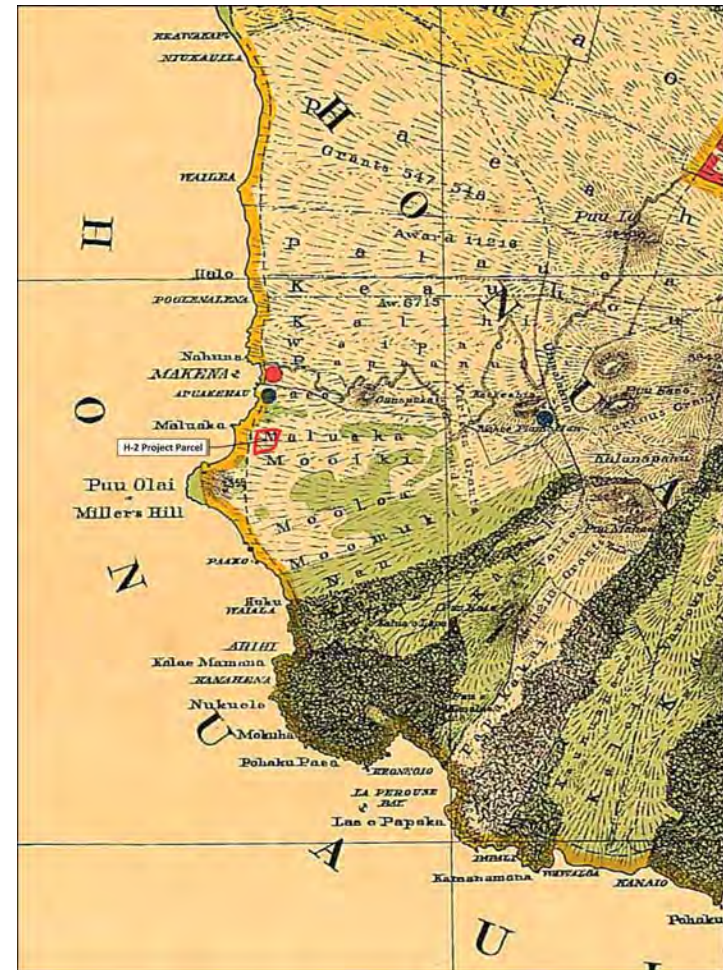
Government Education and the Establishment of Mākēna School

On the 6 of June I left Lahaina on my way to Hana and stopped at Honuaua to inspect the schools there. Honuaua is a portion of Wailuku district although Makawao intersects it at Kalepolepo. The following schools are in Honuaua.

The population of Honaūla—what is not employed on the Makee Plantation—are chiefly fishermen, apparently a thrifty, handy set of people, to judge from the general appearance of their houses, not a few of which were of wood, and many of the others, especially along the seaboard, being neatly built and looking tidy and clean within. The children seem to be numerous and those I observed were decently clad and looked bright and healthy. (Barrère 1975:57-58)

The children are working hard with their gardens. They pull the weeds and roll heavy stones away. The little children clean about the school building. Some of the children are repairing the stone wall. The children have planted beans, radishes, corn, melons and potatoes. They are growing very nicely now. Some of them are shooting up. I hope that our gardens will win your prize. (Hanu 1908)

Archaeological Inventory Survey Report
H2 Residential Project, Maluaka Ahupua'a
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Ke Alanui Aupuni: The Mākena-Keoneoio Government Road

In addition to the construction of the two schools, there was also an *Aupuni* (Government) road that paralleled the coastline. Likely built atop the traditional *Alaloa*, the improvements to the trail that would become the Mākena-Keoneoio Road were completed during the period between 1824 and 1840 when Hoapili served as Maui's governor (Natural Area Reserves System 2012:20). An 1865 newspaper article from *Nupepa Kuokoa* describes the location and construction of the road as follows:

[K]ana oihana me ka oluolu. E noho ana ia ma kana oihana nui, hoomaka oia e hana i ke alanui mai Honua'ula, a hiki i Kaupo, e pili ana ma kahakai, malalo iho o kae kakai mauna o Haleakala, ma keia alanui i hanaia, he nui na a a wai, he alanui maikai ia i ko Hoapili wa e olo ana, ma ia alanui oa kanaka e hele ai, a i keia wa, aole hele nui na kanaka no ka inoino, kapaia mai keia "Ko Hoapili alanui." Ko Hoapili huna ana i na iwi o Kamehameha. I ka makahiki 1819.

Nupepa Kuokoa, Mei 18, 1865

It was while he [Hoapili] held this position [as Maui's governor] that he had construction of the road from Honua'ula to Kaupō begun, running along the shore, and along the mountain cliffs of Haleakalā. Along this road was many stony beds, and it was a good road when Hoapili traveled it. Along this road, many people traveled, but in this time, there are not many people who travel it, for it is in disrepair. It is called, "Hoapili's Road." It was Hoapili who hid the bones of Kamehameha in 1819... W. Kealoha (Kealoha 1865 as cited in Maly and Maly 2005:204)

Hoapili was known to use a form of chain-gang labor and tasked prisoners with the construction and repair of Maui's roads (de Naie and Donham 2007:116). In time, however, the maintenance of the road was neglected, and by 1865 when the above *Nupepa Kuokoa* article was published, it was in disrepair.

Pā Aupuni—The Government Wall at Honua'ula

A survey sketch of the Honua'ula shoreline and upper 'Ulupalakua area showing major landmarks, roads, walls, and households of the region was completed by Linton Torbert in 1850 (Figure 19). Of interest is the depiction of a linear feature labeled as "Old Aupuni Wall" (Old Government Wall). The *pā aupuni* (Government Wall), along with the *alanui aupuni* (Government Road), is noted as a bounding feature in *kuleana* land descriptions by native tenants residing in Ka'eo as a part of their testimony before the Land Commission during the Māhele (Maly and Maly 2005:6, 124, 129, and 237). Beyond Torbert's map and the descriptions provided in the testimonies of the native tenants of Ka'eo and their witnesses, and official Government record related to either, the timeframe of construction or the purpose of the wall at Honua'ula has yet to be found. This lack of formal accounting notwithstanding, the Old Aupuni Wall may be contemporaneous with and potentially constructed for the same purpose as the Great Wall of Kuakini in the Kona region of Hawai'i Island.

Reportedly constructed after 1825 by then Governor John Adams Kuakini, the purpose of the Kuakini Wall was to protect the cultivated fields *mauka* of the wall from feral pigs (Rechtman 2013:8), then subsequently lengthened and fortified to protect the coastal settlement areas *makai* of the wall from cattle that had taken over the *mauka* areas by the 1850s (Kona Historical Society 1998:19–20). Though there appear to be no formal Government records of the construction of Kuakini's Wall, references to the wall are well documented in both the Māhele records for *kuleana* parcels bordering the wall and the 1882 memoir of Lucy Thurston (Rechtman 2013:8).

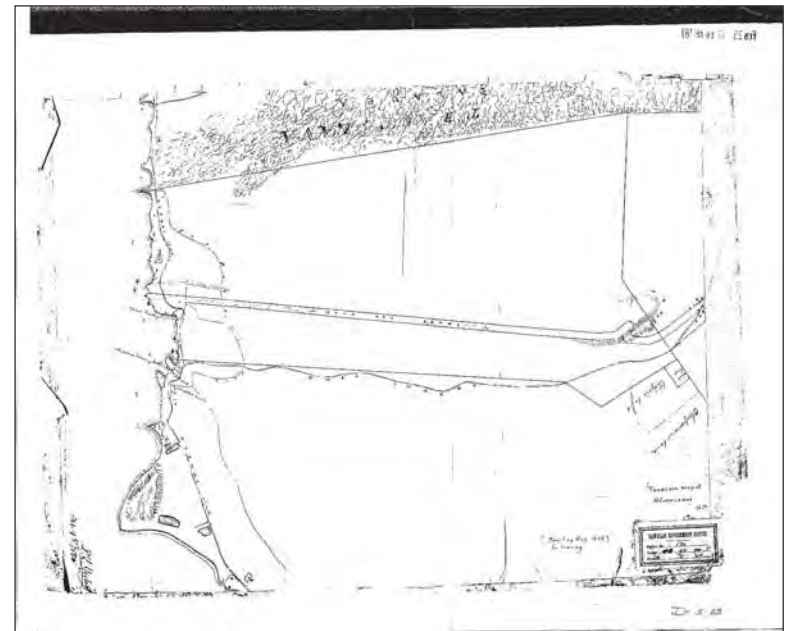


Figure 19. Survey sketch of 'Ulupalakua (Registered Map 170) completed by Linton Torbert in 1850.

Similar to the Kuakini Wall, the survey descriptions of both the Land Grant to Makahanohano (see also Figure 16), as well as Land Grants (LG) to the south of the Makahanohano grant (LG 1500 to Maluai, LG 1496 to Nana, LG 1497 to Nawaiki, LG 1481 to Kahu, and LG 1483 to Maaaweiki) also note what appears to be a common *mauka* boundary that consists of a *pā pōhaku* (stone wall) (Figure 20 and Figure 21).

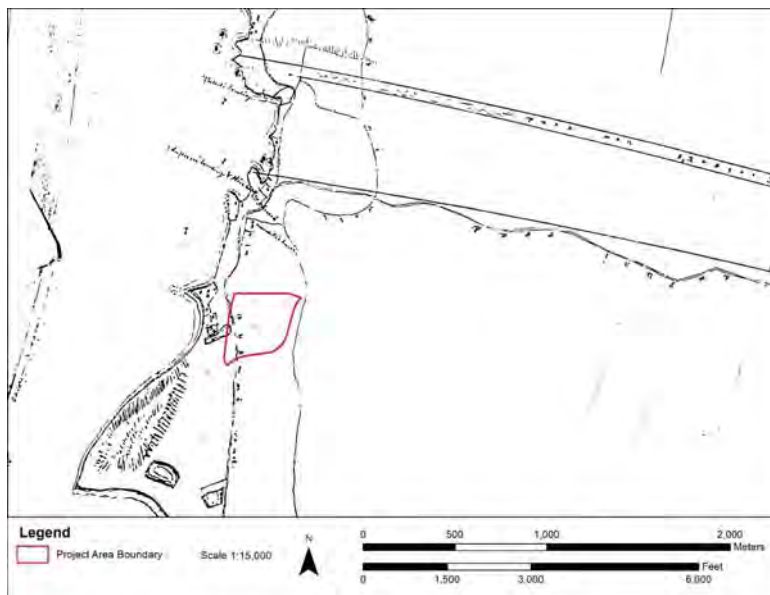


Figure 20. Georeferenced survey sketch of 'Ulupalakua (Registered Map 170) showing the approximate location of the current project area in relation to the "Old Aupuni Wall" and "Aupuni Road."

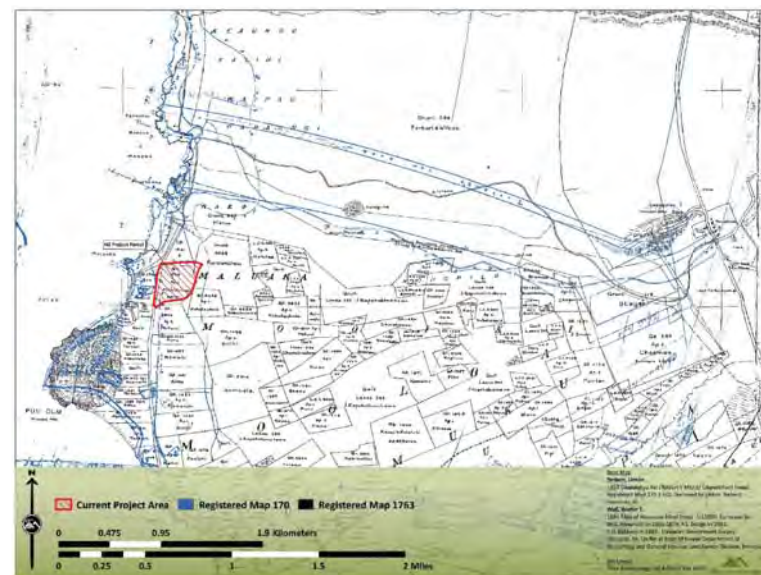


Figure 21. Georeferenced survey sketch of 'Ulupalakua (Registered Map 170) colored in blue and 1894 Government Map of Honua'ula (Registered Map 1763) showing the approximate location of the current project area in relation to the "Old Aupuni Wall," "Aupuni Road," and Land Grants 1500, 1496, 1497, 1481, and 1483.

Additionally, these Land Grants note that the *makai* boundary is the *alanui* or *pā alanui* (road). As it is understood that the reference to the *alanui* is a reference to the Government Road, it is therefore also possible that the reference to the *pā pohaku* is a reference to the *pā aupuni* or Old Aupuni Wall. When looking at the location of the Land Grants noted above, in relation to the Old Aupuni Wall as depicted in the sketch completed by Torbert (1850), and also taking into account a large margin of error in rectifying the historic sketch map in relation to the 1894 Wall map of Honua'ula, the position of the noted Land Grant *mauka* boundaries in relation to the wall is nonetheless compelling. With this cartographic analysis, coupled with the physical description of what appears to be a continuous wall that runs parallel to the coastline in the Land Grants awarded in 1854, there appears to be a strong possibility that the *pā pohaku* and the Old Aupuni Wall are one in the same.

MALUAKA IN THE 20TH CENTURY

The legacy of ranching continued well into the 20th century, with a burst of wartime activity giving way to a search for new sources of industry. With vast stretches of undeveloped land, perfect weather, and sandy beaches, Honua‘ula was primed for the boom in resort development that has characterized the modern era. The sections below provide an overview of the events that bring us to today.

The ‘Ulupalakua Ranch

In 1922, the ranch was sold to Frank Fowler Baldwin, manager and owner of the Hawaiian Commercial & Sugar Company. The Baldwins gave it the name ‘Ulupalakua Ranch. In the 1920s, Mākena Bay just to the north was one of the busiest ports on Maui. As the export of beef produced at ‘Ulupalakua Ranch grew, so too did the traffic of interisland steamers at Mākena’s landing. By the mid-1920s, there were over one hundred families living in the area (Clark 1989:38).

Improvements to Kahului Harbor slowed the flow of traffic to the landing at Mākena, diminishing travel and commerce in the area and causing population levels to fall.

The Baldwin family retained ownership of the ‘Ulupalakua Ranch until 1963, when it was sold to the Ranch’s present owner Pardee Erdman, along with James Coberly and his wife Jean Coberly. Mr. Erdman acquired the Ranch’s ‘Ulupalakua lands, and the Coberlys acquired its Kipahulu lands. In 1974, Pardee Erdman partnered with Emil Tedeschi, a winemaker from California, to bring vineyards and a winery to ‘Ulupalakua, which now does business as MauiWine.

World War II Military Exercises

Prior to the war, sometime in the 1930s, twenty acres of land fronting Oneloa, to the south of Pu‘u Ōla‘i, were cleared for the installation of a radio range station, which consisted of a network of five radio towers that transmitted directional signals to assist aircraft with navigation (Cottrell 2018:2).

During World War II, the U.S. military used Hawai‘i as a major training, staging, and supply base for its Pacific command. During the war years, the military population on Maui outnumbered the local resident population by a factor of four (Chris Hart & Partners 2006:7). Dozens of training sites were located on the island. Up and down the coastline between Ma‘alaea and Cape Kīna‘u, including Molokini, the military ran combat training exercises involving amphibious equipment and tactics. Military exercises were also staged at Kaho‘olawe, and the proximity of this stretch of coastline, as well as the long stretch of beach at Oneloa to the south of the H2 project parcel and Maluaka to the north of the project parcel, made the immediate area useful for various training drills (Cottrell 2018:2). The military made other changes to the area, including the construction or widening of roads, clearing of large land areas, and the dismantling of the Mākena Landing pier.

Those families who lived near the Landing were forced to evacuate and had their homes razed. In an interview, Annie Leimomi Chang Wilmington, who was born in Mākena in 1907, shared her recollections of the wartime upheaval: “When the war started coming, they told everybody from the beach they had to move. [People] were selling their houses ... but [the military] took [bulldozed] all the homes so we didn’t get anything but fifty dollars for it” (Lee-Greig 2002). After the war, little was left for former residents to return to, and many stayed away (Clark 1989:38).

Resort Development

Following the war, Maui saw a steady decrease in population as the sugar and pineapple industries began to shrink and opportunities on O‘ahu and the U.S. mainland drew residents, younger ones in particular, away. This prompted a search for new sources of industry, and in a

1959 *Report of Land Use for the Island of Maui*, tourism was identified as a potential growth engine (Chris Hart & Partners 2006:10). One of the biggest barriers to capturing a greater share of the Hawai‘i visitor market was Maui’s lack of hotel accommodations. From this need arose the concept of the resort destination development, with a range of amenities to serve guests, including hotels, restaurants, shopping centers, and golf courses. In 1961, Kā‘anapali pioneered the resort model on Maui and set a precedent for the developments that would follow (Chris Hart & Partners 2006:11).

Maui’s business and political leadership soon looked towards the sparsely populated Kula Kai region, commonly referred to as Kihei, and identified the area as having potential as a future residential, resort, and employment hub. Another report was prepared, the *Kihei Civic Development Plan*, which provided a long-range plan to steer development of the region between 1970 and 1990 and set the stage for a massive real estate speculation and development boom (Chris Hart & Partners 2006:11).

Development of the area between Mākena Landing and Mākena State Park, including the lands of the current project area, was spearheaded by Japanese real estate investors through an entity called Seibu Holdings, Inc. (hereafter, “Seibu”). In 1973, ‘Ulupalakua Ranch sold 16 acres of beachfront property and an additional 1,000 acres, which includes parcels that were consolidated within the overall H2 project parcel, to Seibu for the creation of its proposed Mākena Resort. In the period that followed, Seibu paved part of the old dirt Mākena Road, developed two golf courses plus the Mākena Golf Clubhouse, added public comfort stations, tennis courts, and parking and picnic areas, and completed the \$40 million, 300-room Maui Prince Hotel in 1986. The hotel was situated on a 38-acre beachside parcel, and its design was inspired by a modern interpretation of a traditional Japanese castle. The property featured five restaurants and bars, swimming and wading pools, retail and meeting spaces, as well as outdoor locations for weddings and events.

During the entitlement process, Seibu sought to close a portion of the Mākena-Keoneoio Road in exchange for the construction of a new road (now called Mākena Alanui Road) and land contributions to Mākena State Park. This portion of the Mākena-Keoneoio Road in question was actually a segment of Ke Alaloe, and a group called Hui Ala Nui O Mākena formed to preserve the road and thereby protect a traditional right-of-way. The effort was largely successful, with Seibu agreeing to preserve, in perpetuity, an 1,100-foot section of the trail, which bisected its Maui Prince Hotel property (De Leon 1987). The agreement caused it to be closed to vehicular traffic and improved as a 20-foot wide, stone-paved pedestrian walkway (De Leon 1987).

In 2007, Seibu sold the hotel and resort properties for \$575 million to Mākena Hotel LLC. In 2009, the hotel was rebranded as the Mākena Beach and Golf Resort and operated by Benchmark Hospitality International (Dingeman 2009). Three years later, the property went into foreclosure. A consortium called ATC Mākena Holdings purchased the majority of the former Seibu property in 2010, and operated the hotel until 2016, when it closed in preparation for a complete overhaul of the hotel property.

In June 2007, Hana Pono, LLC completed a Cultural Impact Assessment for the 1,860 acres of former Seibu lands acquired by Mākena Hotel, LLC entitled *Mākena* (Tau‘a and Kapahulehua 2007) which included the lands of the proposed H2 Residential Project. For that study, several interviews were completed with individuals who were either raised in the Mākena to ‘Ulupalakua region or who had generational ties to the area and spent time in the region with their *kūpuna*.

3.2 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS IN THE MĀKENA REGION

The first archaeological sites identified in the Mākena region were three *heiau* described by J.F.G. Stokes of Bishop Museum in 1916: one *heiau* on Pu'u Ōla'i, one inland named Kalani Heiau, and another named Nanahu Heiau on the point north of Mākena Bay (Stokes 1918).

In 1929, Winslow Walker, also of Bishop Museum, conducted an island-wide survey of *heiau* sites on Maui. The survey results were never published. Walker made notes on 230 sites, as well as fishponds, fishing *ko'a*, burials, village sites, and artifacts of interest. Walker visited the nearby *heiau* noted by Stokes and recorded the Pohakunahana Heiau in the Mākena region, which was described as being "back of the store at the bottom of the hill beyond the pig-pen" (Walker 1931, as cited in Donham 2006). The *heiau* are listed in the State Inventory of Historic Places (SIHP) and additional studies have been conducted at these sites.

Four *ko'a*, or fishing shrines, were described by Walker in the Honua'ula District, one of which was the *heiau* visited by Stokes in 1918 at Nanahu; the other three were Kaulana Ko'a at Keone'ō'io, a large *ko'a* at Pa'ako in Mo'omuku, and the *ko'a* at Onouli. One site that was noted by Walker was a fishpond that had been destroyed by the surf. It is likely that the fishpond mentioned was a pond north of Keawala'i Church at Apuakehau Point (Walker 1931).

Walker describes the *ko'a* at Onouli as located below a school, 100 feet from the shore, with low walls on three sides with blocks of 'a'ā, 'ili'ili, and coral fragments in its construction. It is probable that Walker's "Onouli" is actually Oneuli, and that he is referring to the Old Mākena School, which is in the current project area. This structure was later documented by Rotunno-Hazuka et al. (2005) and Donham (2006) during AIS investigations in the H-1 parcel (designated as SIHP 50-50-14-05711), which is located west of the current project area (see below).

Handy et al. (1991) gathered information about traditional settlement patterns, agriculture practices, and traditional lore in the 1930s. They observed that the area must have supported a sizable population when the fishing, taro, and sweet potato patches were taken into account in the Mākena region (Handy et al. 1991:272).

Bishop Museum was contracted by the State of Hawai'i to conduct a statewide field survey during the early 1970s (see Donham 2006). Two site inventories were generated, one for traditional Hawaiian sites and the other for Post-Contact-era structures. The *heiau* in the Mākena region previously recorded by Stokes and Walker were listed in the inventory, along with a large habitation complex referred to as the Mākena Complex (which was later assigned SIHP No. 50-50-14-01266). The Mākena Complex was recorded as a rectangular area that encompasses 3,600 ft (1.9 km) of shoreline between the north base of Pu'u Ōla'i and the north end of Maluaka Beach, and between the shoreline and Mākena-Keonoio Road. Post-Contact sites in the Mākena region recorded by Bishop Museum in 1971 include Kanahena Landing (50-50-14-01581), the John N. Makaiwa House (50-50-14-01582), the Pu'u Ōla'i slaughterhouse (50-50-14-01583), Keawala'i Church (50-50-14-01584), and the Mākena Landing (50-50-14-01585).

In 1974, Bishop Museum conducted an archaeological survey of Seibu Resort lands that crossed ten *ahupua'a* of central Honua'ula (Clark 1974). Bishop Museum site numbers were assigned to 114 sites, but an approximate 264 sites/features were noted.

In 1978, Bishop Museum conducted the archaeological mitigation for Seibu golf course in Mo'oiiki and Maluaka (Haun 1978). Haun documented a complex of features (SIHP No. 50-50-14-01853) including a habitation platform, boundary walls, enclosures, and a well. Later that year, Cordy returned to the area to complete survey and excavations in a third increment area (Cordy 1978). Nine new sites were recorded within the *makai* section of the third increment area. Four features that had been combined by Haun were given Bishop Museum site numbers, along with two historic-era house sites that had been previously mapped but not recorded.

In 1979, additional work was done in the area for a proposed hotel and residences (Rogers-Jourdane 1980). The survey included most of the land between Mākena Keonoio Road and Mākena Alanui Road, to Nahuna Point (100 acres). Two wall sites were identified and assigned SIHP numbers (50-50-14-01864 and 50-50-14-02272). Testing at the site was done the same year (Dennison 1979).

In 2011, Scientific Consultant Services (SCS) conducted an archaeological inventory survey in the Mākena region. This survey identified five new sites (SIHP No. 50-50-14-07084 to -07088), while test excavations redocumented a previously known ceremonial platform/mound (50-50-14-07086). The newly documented sites included a traditional agricultural terrace and habitation/agricultural areas, as well as a historic ranching wall (-07086), which was the only site within the survey area recommended for preservation. (Perzinski and Dega 2011).

Hodara et al. (2014) conducted an archaeological inventory survey conducted in 2014. Nine previously identified sites were re-identified and in poor condition, and one new site was identified: a historic mixed temporary habitation/agricultural site including a temporary habitation, two terraces, and two outcrops modified for planting (SIHP No. 50-50-14-07607).

SCS conducted a survey and test excavations in TMK: (2) 2-1-008:080 in 2015; they identified 12 new sites (SIHP No. 50-50-14-07069, -07072 to -07080, -07082, and -07083) and re-documented five previously known sites (50-50-14-07068, -07070, -07071, -07081, -07095). Nine traditional sites included collapsed agricultural mounds, a permanent habitation double-enclosure (-07071), rock shelters, enclosures, outcrops modified for temporary habitation, and a lava blister habitation area. Four sites dated from the historic period and included walls and an enclosure associated with ranching, and an alignment marking an old road. A single mixed-period site comprised enclosures associated with habitation and ranching (-07081). Of these sites, two were recommended for preservation (-07071, -07081) and six for further data recovery (-07078, -07079, -07081, -07082, -07083, -07095) (Perzinski and Dega 2015).

Burials have previously been encountered in the Mākena area. These consist of multiple burial complexes, including two historic cemetery complexes (SIHP No. 50-50-14-05089, -05091) and an individual traditional infant burial (50-50-14-05090) documented and preserved on TMK: (2) 2-1-006:034 and 035 (Rotunno-Hazuka et al. 2002; Dega 2003; Cordle et al. 2008). Unsuccessful attempts were made in 1994 and 2000 to employ archaeological subsurface testing on TMK: (2) 2-1-005:083 to locate an infant burial from the 1920s belonging to the Poepoe family on their former property (Rotunno-Hazuka et al. 2008b:13).

Table 2. Summary of Previous Archaeological Investigations in the General Vicinity of the H2 Project Area

Reference	Study	SIHP # 50-50-14-xxxxx	Findings
Walker 1931	Archaeological Survey		Walker Identified 4 fish <i>ko'a</i> , and 3 <i>heiau</i> in the Mākena area
Clark 1974	Archaeological Reconnaissance Survey		Reconnaissance survey of 1300 acres of Seibu lands, 114 sites recorded.
Davis and Bordner 1977	Archaeological Reconnaissance Survey		Proposed realignment of Makena Coast Road (current Makena Alanui Road), Site complex 248 recorded on both sides of survey corridor.
Cordy 1978	AIS		Archaeological inventory survey identified 76 sites; 32 sites were excavated, with 26 sites potentially datable. TMK: (2) 2-1-006:(pors.) 036, 037, 057; TMK: (2) 2-1-005:(pors.) 032, 033, 034, 035, 086, 088, 090, 095, 096, 097, 108, 113, 114, 120; TMK: (2) 2-1-008:108 (por.)
Rogers-Jourdane 1979	AIS	-02262 to -02270	Archaeological inventory survey identified 21 sites: 11 traditional, 8 post-contact, and 2 undetermined. TMK: (2) 2-1-005:086, 124, 125; TMK: (2) 2-1-006:037 (por.), 059; TMK: (2) 2-1-007:068; TMK: (2) 2-1-008:080, 098, 099, 100 (por.), 106, 122
Sinoto 1981	AIS	-02258	Archaeological inventory survey identified 13 traditional sites, 5 of which were midden and artifact scatters. TMK: (2) 2-1-005:108, TMK: (2) 2-1-008:(pors.)
Cleghorn et al. 1988	Archaeological Reconnaissance Survey	-01007	Archaeological reconnaissance survey was conducted at the Old Mākena School site and an adjacent cul-de-sac parcel, 8 features were recorded. TMK: (2) 2-1-005:084, TMK: (2) 2-1-006:037 (por.)
Joens et al. 1994	AIS	-03194	The final report on AIS survey, which involved mapping and excavations, repeated the misattribution of historic homestead site and its 6 features to TMK: (2) 2-1-007:066, 004
Sinoto and Pantaleo 1994	Supplemental AIS report	-03194	Supplemental archaeological fieldwork to record and assess a historic enclosure (Feature 5) associated with the historic homestead located mostly on TMK: (2) 2-1-007:004, as covered in Joens et al. 1994. TMK: (2) 2-1-005:086
McIntosh and Pantaleo 1998	Supplemental Surface Survey report		An evaluation of previous fieldwork in the area, supplemented by new surveys, identified historic perimeter walls. TMK: (2) 2-1-005:083-085, 108 (por.); TMK: (2) 2-1-007:004; and TMK: (2) 2-1-008:por 090
Haun and Henry 2000	AIS	-00196, -05036 to -05040	Survey and test excavations identified 6 sites with 34 features. Traditional sites included Kalani Heiau, a temporary habitation, 10 agricultural mounds, and modified outcrops. Historic sites included ranch walls/enclosures, a garden enclosure, and agricultural clearing mounds. One complex comprised both pre-Contact and historic features. TMK: (2) 2-1-007:067
McGerty and Yeomans 2001	AIS	-04986	Survey and test excavations identified a single site (SIHP -04986) comprising 13 rock walls and enclosures associated with ranching which were interpreted as dating no earlier than the mid- to late 1800s. TMK: (2) 2-1-007:066

Reference	Study	SIHP # 50-50-14-xxxxx	Findings
Rotunno-Hazuka et al. 2002	AIS	-05209 to -05211, -05089 to -05091	Survey and test excavations on two parcels identified the remnants of a fishpond, a late historic-period complex of interconnected enclosing walls including a residential compound (SIHP -05210), a livestock enclosure (SIHP -05211), a small cemetery of three burials comprising an enclosure and two rock mounds (SIHP -05089), and surface scatters of traditional artifacts and late 19th- to early 20th-century historic artifacts. 2 burial complexes with 8 burials (SIHP -05089, -05091) and one individual burial (SIHP -05090). TMK: (2) 2-1-006:034 & 035
Haun and Henry 2003	Addendum AIS report	-00196, -05036	Mapping and test excavations requested by SHPD to define the limits of Kalani Heiau and check for possible association between a knoll -05036 and the <i>heiau</i> . The fieldwork found that the condition of the <i>heiau</i> had changed little from what was recorded in 1979. Excavations within and around the <i>heiau</i> was inferred to have been used for both habitation and ritual purposes. The knoll was determined to have served a habitation function, although a ritual function could not be excluded.
Rotunno-Hazuka and Pantaleo 2005	AIS	-01007	Survey and test excavations to reassess parcels including the Old Mākena School Complex (SIHP -01007). A majority of the sites showed evidence of modern disturbance associated with construction. Nothing of the Old Mākena School Complex, except the cistern, survived the construction of a public beach. The cistern was still in good condition. 6 new sites were identified. One heavily disturbed remnant enclosure was interpreted as a possible pre-Contact <i>ko'a</i> (shrine) associated with marine resource exploitation. One other remnant C-shaped enclosure may also have been pre-Contact. Further subsurface data collection was recommended.
Rotunno-Hazuka et al. 2005	AIS	-01007, -05711, -05706	Revisions to the report of survey and test excavations to reassess parcels including the Old Mākena School Complex. Temporary site numbers were replaced with SIHP numbers. TMK: (2) 2-1-005:084; TMK: (2) 2-1-006:037 & 056
Donham 2006	AIS	-01007, -01853, -01864, -02272, -05706 to -05711, -05795 to -05799	Survey and test excavations documented 15 sites within the AIS project area. Traditional and historic sites were recorded. TMK: (2) 2-1-005:084 and (2) 2-1-006:037 and 056.
Hunt and Dega 2007	AMR		Monitoring for minimal ground disturbance for wetland restoration in an area known to contain archaeologically sensitive material; nothing of archaeological significance was reported.
Rotunno-Hazuka et al. 2008a	AIS	-06366, -06367	Survey and test excavations of two sites, a historic homestead and a modified outcrop with three features.
Rotunno-Hazuka et al. 2008b	AIS	-06371 to -06374, -06376 to -06379	Survey and test excavations, 8 identified sites, including enclosures, modified depressions, wall segments, platforms, C-shaped walls, L-shaped walls, U-shaped walls.

Reference	Study	SIHP # 50-50- 14-xxxx	Findings
Perzinski and Dega 2011; 2016	AIS	-07084 to -07088	This survey identified 5 new sites (-07084 to -07088), while test excavation redocumented a previously known ceremonial platform/mound (-07086). The newly documented sites included a pre-Contact agricultural terrace and habitation/agricultural areas, as well as a historic ranching wall. SIHP -7086 was the only site within the survey area recommended for preservation. TMK: (2) 2-1-008:099
Hodara et al. 2014	AIS		Inventory survey re-located 9 previously known sites. This survey noted that the 9 sites on the property were found in mostly poor condition. TMK: (2) 2-1-005:086
Perzinski and Dega 2015	AIS	-07068 to -07083, -07095	Survey and test excavations identified 12 new sites and re-documented 5 previously identified Pre-Contact sites, including mounds, enclosures, rock shelters, modified outcrops, and Post-Contact features including ranching walls, enclosures, and a road alignment. TMK: (2) 2-1-008:080.

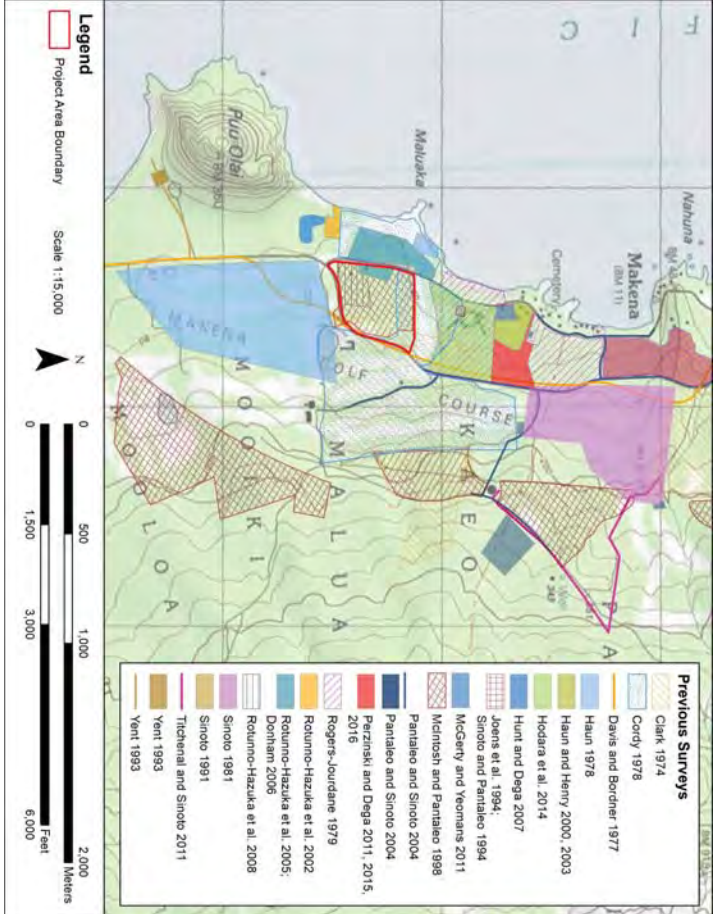


Figure 22. Previous archaeological investigations in the general vicinity of the H2 Residential Project Area.

3.3 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS WITHIN AND ADJACENT TO THE PROJECT AREA

Six previous archaeological studies were conducted within the area that is the subject of the current AIS. Some also investigated adjacent areas. These include the large-scale survey that was conducted by the Bishop Museum, described above (Cordy 1978), followed by a reconnaissance survey (Cleghorn 1988) and investigations at the Old Mākena School Site (Site - 01007), which included a historical document and literature search (Hurst and Cleghorn 1991) and data recovery investigations in 1991 (see Mulrooney et al. 2020). AIS investigations within and adjacent to the project area were undertaken in the early 2000s. The first of these included a portion of the current project area (TMK: (2) 2-1-005:084) and the H-1 project area (TMK: (2) 2-1-006:037 and 056) *makai* of Makena Keonoio Road (Rotunno-Hazuka et al. 2005; Donham 2006). The remainder of the H2 Project Area was subsequently subjected to two AIS investigations, one of which was carried out in the parcel previously designated as TMK: (2) 2-1-008:083 (Rotunno-Hazuka et al. 2008a) and the other of which was carried out in the parcel previously designated as TMK: (2) 2-1-008:085 and a portion of TMK: (2) 2-1-008:120 (located immediately north of the current project area) (Rotunno-Hazuka et al. 2008b). A summary of findings from these studies is presented below, and the more recent project areas are depicted in Figure 23.

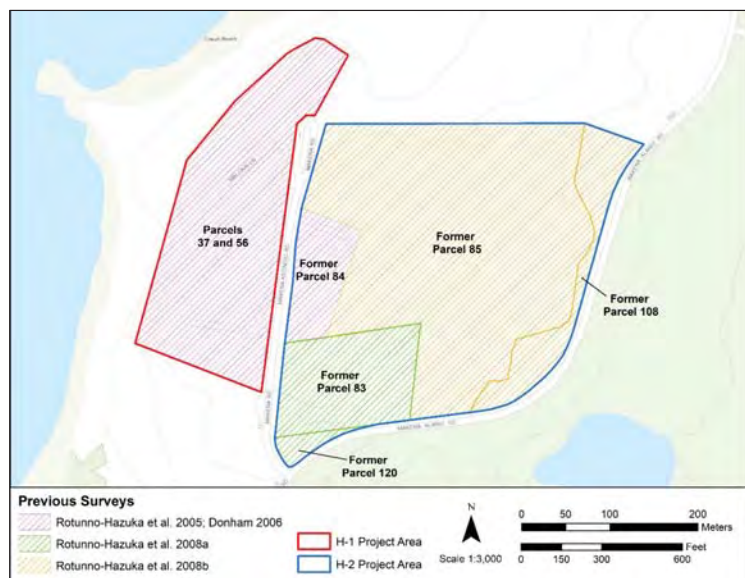


Figure 23. Previous archaeological investigations within and adjacent to the H2 Residential Project Area.

Cordy 1978

Within the current project area, Cordy (1978) recorded 6 sites. These included an enclosure on a modified outcrop (Site 50-Ma-B8-218; later designated as SIHP 50-50-14-06371), clearing mounds at a historic house site (Site 50-Ma-B8-229-2; later designated as SIHP 50-50-14-06372), a complex with a double enclosure and associated features (Site 50-Ma0B8-225; later designated as SIHP 50-50-14-06373), walls (Site 50-Ma-B8-230; later designated as SIHP 50-50-14-06374), and a modified outcrop with a pavement, enclosures, and an L-shaped wall (Site 50-Ma-B8-231, later designated as SIHP 50-50-14-6379). He conducted test excavations at Site 50-Ma-B8-225/SIHP 50-50-14-06373, inside each portion of the double enclosure (Features 2 and 3). The test unit in Feature 3 contained cultural material, which included sparse amounts of coral as well as 'ili 'ili.

Reconnaissance Survey, 1988

In 1988, an archaeological reconnaissance survey was conducted at the Old Mākena School site (SIHP 50-50-14-01007) and an adjacent cul-de-sac parcel (Cleghorn et al. 1988). Extensive disturbance to the cul-de-sac parcel was observed, likely due to its proximity to the road. Six shovel test pits yielded no cultural material and displayed soil profiles of beach dune sand overlaying reddish yellow Mākena loam. Some surface features were recorded, including two stacked walls, two roughly square platforms, and a large cement-lined cistern with two irregular rock alignments partially encircling the opening. The detailed site description for the Old Mākena School site is included in Section 4.2.2.

Historical Documents and Literature Search; Data Recovery Investigations, 1991

In 1991, archaeologists from the Applied Research Group at Bishop Museum conducted a supplemental historical documents and literature search for the Old Mākena School Site (Hurst and Cleghorn 1991). This research indicated that in 1865, the original school at Mākena was located on the grounds of the Keawala'i Church (a.k.a. Mākena Church) and was named Keawakapu School. Fornander, in 1865, described it as built with cobblestone walls, a *pandanus* leaf roof, and an 'ili'ili-paved floor (Barrère 1975:56–57). The name of the school apparently changed to "Mākena School" by 1889 (Cleghorn et al. 1988:7–8; Hurst and Cleghorn 1991:7). Based on research of historical maps and letters, Hurst and Cleghorn stated that the Mākena School was established on a two-acre plot of privately owned land before 1882 and possibly in 1879. The two-acre "Old Mākena School" property was transferred to the Territory of Hawai'i in 1917. The school remained open until 1929 or 1930 (Hurst and Cleghorn 1991:10).

Archaeological Inventory Survey, 2006

In 2005 and 2006, Theresa Donham conducted an AIS of 12.2 acres that included portions of the H-1 and H-2 project areas (Donham 2006). The AIS identified the foundations of the Mākena School Site school building, which Donham designated Feature 6. Fifteen sites comprising 80 features were recorded in the project area. Eleven of the sites, which included 22 features, had been identified during previous surveys (designated as Sites -01007, -01853, -01864, -01865, -02272, and -05706 through -05711) and the remaining four sites (-05796 through -05799) were newly identified.

Archaeological Inventory Surveys, 2008

In 2008, Rotunno-Hazuka et al. completed two archaeological inventory surveys in Parcels 83, 85, and portions of Parcels 108 and 120, owned by Keaka, LLC holdings; this was a continuation of previous fieldwork done in 2001 and then again in 2007 by Archaeological Services Hawaii in association with Aki Sinoto Consulting.

In Parcel 83, two sites with 18 features were recorded (50-50-14-06366 and -06367). Site -06366 was recorded as a complex of 15 features associated with a historic homestead associated with the Poepee family. Site -06367 was interpreted as a pre-Contact agricultural and temporary habitation site with three structural modifications of a bedrock outcrop.

Table 3. Previously Identified Sites in the H2 Residential Project Area

Site No.	No. of Fe.	Type	Function	Age	Test-ing	Signifi-cance	Mitigation Recom-mendation
1007	7	Building, privies, cistern, walls	Makena School	Late 19th - early 20th century	Yes	a, d	Data Recovery
5798	4	House, wall, imu, trash pit	Habitation	Early to mid-20th century	No	d	No Further Work
5799	2	Remnants of house, wall	Habitation	Early to mid-20th century	No	d	No Further Work
6366	15	House frame, artifact scatters, clearing mounds, boundary walls	Habitation	1920s-1960s	Yes	d	No Further Work
6367	3	U-shaped wall, L-shaped wall, terrace	Habitation/ Agricultural	Late Pre-Contact/ Early Post-Contact	Yes	d	No Further Work
6371	6	Terrace, enclosures, U-shaped wall, linear alignment, modified depression	Habitation/ Agricultural	Pre-Contact	Yes	d	Preservation
6372	3	House site, clearing mound, trash pit	Habitation/ Agricultural	Post-Contact	Yes	d	No Further Work
6373	8	double enclosure, platform, U-shaped wall, wall segments, linear alignment, modified depression	Habitation/ Agricultural	Pre-Contact	Yes	c, d	Preservation
6374	5	Walls	Boundary Maintenance	Post-Contact	No	d	Partial Preservation; No Further Work
6376	4	U-shaped wall, low wall, modified depressions, small enclosure	Temporary Habitation/ Agricultural	Pre-Contact	Yes	d	No Further Work
6377	2	Enclosure, linear wall, U-shaped wall	Temporary Habitation/ Agricultural	Pre-Contact	Yes	d	Preservation
6378	4	Enclosures, modified depression, natural overhang	Habitation/ Agricultural	Pre-Contact	Yes	c, d	Preservation
6379	3	Platform, L-shaped walls, U-shaped wall	Habitation/ Agricultural	Pre-Contact	Yes	c, d	Preservation

Table 4. Previous Testing Summary in the H2 Residential Project Area

Site No.	Feature No.	Feature Description	Testing Extent (Reference)	Findings
01007	3	Privy	Data recovery (see Mulrooney et al. 2020)	Historic artifacts
01007	4	Privy	Data recovery (see Mulrooney et al. 2020)	Historic artifacts
06366	A	3-walled enclosure (A-1, A-2, A-3)	Manual testing 110 sq. m.	Search for infant burial, 1994. Surface materials: glass, metal, ceramic, lumber fragments, marine shell. No burial identified.
06366	B	Remnants of wooden house foundation	Backhoe testing (40 linear m) and manual testing (24 linear m).	Search for infant burial, 2000. Historics: glass, metal, rubber, a shell button, roof shingles. No burial identified.
06366	C	House foundation	1 × 1 m test unit	Marine shell, urchin spines, fish bone, kukui nut, charcoal. Historics: glass, metal, mortar, and earthenware were collected.
06366	D	Indeterminate feature	1 × 1 m test unit	Marine shell, glass, and metal were collected
06366	H	Rock mound	1 × 1 m test unit	Marine shell, fire cracked rock. Historics: metal, glass fragments.
06366	M	Rock mound	1 × 1 m test unit	Historics: glass, metal, leather, and plastics. Marine shell, mammal bones, fish bones, charcoal.
06366	N	Rock mound	1 × 1 m test unit	Historics: glass, metal. Marine shell, fish bones, charcoal.
06367	A	U-shaped wall	1 × 1 m test unit	Very sparse marine materials.
06367	B	L-shaped wall	1 × 1 m test unit	No archaeological materials.
06367	C	Cobble fill covering small lava bubble, blister	1 × 1 m test unit	No archaeological materials.
06371	2	Circular walled pit	0.5 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	Marine shell, coral, basalt shatter, volcanic glass.
06371	3	Circular walled pit	0.5 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	Marine shell (including burnt piece), coral.
06372	1	Historic house site	2 shovel test units, 0.3 × 0.3 m (Rotunno-Hazuka et al. 2008b)	No archaeological materials.
06372	2	Rock mounds	3 test units, 1 × 1 m (Rotunno-Hazuka et al. 2008b)	No archaeological materials.
06372	N/A	N/A	8 backhoe trenches in general vicinity of site: 9 × 1 m; 9 × 1 m; 10 × 1 m; 9 × 1 m; 11 × 1.15 m; 5 × 2 m;	No archaeological materials.

Site No.	Feature No.	Feature Description	Testing Extent (Reference)	Findings
			7 × 1 m; 9 × 1 m (Rotunno-Hazuka et al. 2008b)	
06373	2	Enclosure	1 × 1 m test unit (Cordy 1978)	Shell midden.
06373	3	Enclosure	1 × 1 m test unit (Cordy 1978); 1 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	Coral and 'ili 'ili stones.
06373	4	C-Shape	0.5 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	Marine shell, coral, a dog tooth, charcoal, fire cracked rock.
06376	1	Modified outcrop, wall	8 shovel test units, 0.25 × 0.25 m (Rotunno-Hazuka et al. 2008b)	No archaeological materials.
06376	2	Modified outcrop, U-shaped wall	1 × 0.5 m test unit; 1.5 × 1 m test unit; 3 shovel test units (Rotunno-Hazuka et al. 2008b)	Marine shell, coral, basalt debitage, urchin, charcoal, a basalt flake, fire cracked rock. Radiocarbon dating of charcoal sample: 190 +/- 40 BP.
06376	4	Modified outcrop, alignment and soil	1 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	No archaeological materials.
06378	1	Square enclosure	1 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	One basalt flake, charcoal flecking, urchin, animal bone fragments, coral.
06379	1	Modified outcrop, enclosure	2 × 1 m test unit; 1 × 1 m test unit (Rotunno-Hazuka et al. 2008b)	Marine shell, basalt flakes.
06379	2	Modified outcrop, L-shaped wall	1 × 1 m test unit (Rotunno-Hazuka et al. 2008b)	Volcanic glass, marine shell, urchin.
06379	3	L-shaped wall w/ soil	1.5 × 1 m test unit; 1 × 0.5 m test unit (Rotunno-Hazuka et al. 2008b)	Fire-cracked rock and charcoal-infused soil. Radiocarbon dating of charcoal sample, 290 +/- 40 BP

3.5 BACKGROUND SUMMARY AND PREDICTIVE MODEL

The H2 Residential Project area, situated in coastal Mākena, contains 13 previously recorded historic properties that speak to the rich history of the Mākena region. The background research and previous archaeological investigations presented above predicts four general themes of land use and settlement in the project area and vicinity: 1) pre-Contact settlement dominated by temporary habitation features, dryland agricultural features, and ceremonial features that date from the AD 1400s onward; 2) mid-19th century ranching features, especially walls; 3) a late-19th century to early 20th century schoolhouse and associated features (Old Mākena School), and; 4) early to mid-20th-century to modern historic homesteads.

4.0 RESULTS OF FIELDWORK

Fieldwork involved pedestrian survey, detailed recordation of historic properties, and subsurface backhoe testing that included the mechanical excavation of test trenches that measured 5 m long × 0.75 m wide.

4.1 SURVEY COVERAGE

To ensure that all surface archaeological features present within the survey area were located and identified, pedestrian transects were undertaken in 100% of the survey area with field crew spaced at 5 m intervals. Visibility ranged from good to fair due to thick vegetation, including *panini* cacti that made some areas impassible.

4.2 ARCHAEOLOGICAL SURVEY FINDINGS

The AIS resulted in the identification and documentation of 16 historic properties, 12 of which had previously been documented and four of which were newly identified. Two additional historic properties, both historic homesteads, that had been previously documented (SIHP 50-50-14-05799 and 50-50-14-06372) were no longer present on the surface, as was also the case for a portion of SIHP 50-50-14-06366, a historic homestead. Each of these historic properties had been recommended for no further work during previous investigations (Donham 2006; Rotunno-Hazuka et al. 2008b) and were situated in areas that are heavily disturbed due to grading activities. The County of Maui LiDAR dataset confirmed field observations of disturbed areas, as is shown in Figure 25.

The historic properties documented likely served a range of functions. These built structures were used for habitation, ceremonial, and agricultural activities that were carried out during the late pre-Contact and early post-Contact period, as well as boundary maintenance activities reflected by the construction of various ranching walls and the possible (or likely) Aupuni (government) wall during the mid-1800s, and educational activities at the Old Mākena School complex during the late 19th to early 20th century. Homesteads in the project area speak to the continued use of this area, especially by the Poepoe family into the mid-20th century.

Subsurface testing was conducted away from identified historic properties and was concentrated in the western portion of the project area, especially in areas that will be impacted by the proposed residential development. A total of 12 test trenches were excavated and no subsurface archaeological materials were identified during testing.

4.2.1 Major Types of Archaeological Sites and Features

Documented historic properties include walls, mounds, enclosures, alignments, modified depressions, platforms, terraces, modified outcrops, cleared areas, artifact scatters, and remnants of historic features (Table 5). The 16 historic properties contain a total of 75 individual features. Of the 75 features that were recorded during the current survey, 43 of these probably date to the pre-Contact period. The remaining 27 features date to the post-Contact period.

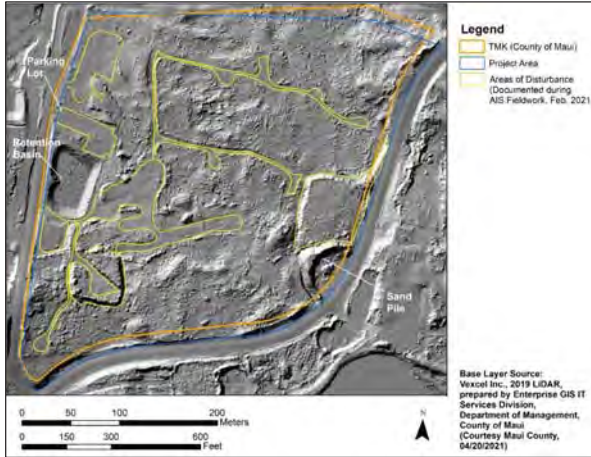


Figure 25. Map showing previously disturbed areas within the H2 Residential Project Area overlaid on County of Maui LiDAR dataset for TMK: (2) 2-1-008:085.



Figure 26. Graded area in southwestern portion of project area; disturbed Feature A-1 wall of SIHP 50-50-14-06366, a historic homestead (view to northwest).

Table 5. Summary of Historic Properties Recorded during the Current AIS

SIHP No. [50-50-14-]	Temp Site No.	Feature	Site/Feature Type	Possible Function	Probable Age
01007		2	Wall segment	Boundary Maintenance	Late 19 th – early 20 th century
		5	Cistern	Water Management	
		7	Wall segments	Boundary Maintenance	
05798		1	Wall segment	Habitation	Early to mid- 20 th century
06366		A	Former boundary wall	Habitation	1920s–1960s
		B	Remnants of house	Habitation	
		E	Artifact scatter	Habitation	
		F	Artifact scatter	Habitation	
		K	Mound	Agriculture	
		L	Mound	Agriculture	
		M	Mound	Agriculture	
		N	Mound	Agriculture	
		O	Mound	Agriculture	
		P	Mound	Agriculture	
		Q	Mound	Agriculture	
		R	Mound	Agriculture	
		S	Concrete pier blocks	Habitation	
06367		A	U-shaped wall	Temporary Habitation	Pre-Contact
		B	L-shaped wall	Temporary Habitation	
		C	Terrace	Temporary Habitation	
		D	Cleared area	Temporary Habitation	
		E	Wall segment	Temporary Habitation	
06371		1	Terrace	Temporary Habitation	Pre-Contact
		2	Enclosure	Temporary Habitation	
		3	Enclosure	Temporary Habitation	
		4	Enclosure	Temporary Habitation	
		5	U-shaped wall	Temporary Habitation	
		6	Alignment	Temporary Habitation	
		7	Modified depression	Temporary Habitation	
06373		1	Platform	Ceremonial/Habitation	Pre-Contact
		2	Enclosure	Ceremonial/Habitation	
		3	Enclosure	Ceremonial/Habitation	
		4	U-shaped wall	Ceremonial/Habitation	
		5	Wall segment	Ceremonial/Habitation	
		6	Alignment	Ceremonial/Habitation	
		7	Wall segment	Ceremonial/Habitation	
		8	Modified depression	Ceremonial/Habitation	

SIHP No. [50-50-14-]	Temp Site No.	Feature	Site/Feature Type	Possible Function	Probable Age
06374		2	Wall segment	Ranching	Post-Contact
		3	Wall segment	Ranching	
		4	Wall segment	Ranching	
		5	Wall segment	Ranching	
06376		1	Wall	Temporary Habitation/Agriculture	Pre-Contact
		2	U-shaped wall	Temporary Habitation/Agriculture	
		3	Modified depressions	Temporary Habitation/Agriculture	
		4	Enclosure	Temporary Habitation/Agriculture	
06377		1	U-shaped wall	Temporary Habitation/Agriculture	Pre-Contact
		2	Enclosure	Temporary Habitation/Agriculture	
		3	Wall	Temporary Habitation/Agriculture	
		4	Terrace	Temporary Habitation/Agriculture	
06378		1	Enclosure	Habitation/Ceremonial/Agriculture	Pre-Contact
		2	Modified depression	Habitation/Ceremonial/Agriculture	
		3	Enclosure	Habitation/Ceremonial/Agriculture	
		4	Natural overhang	Habitation/Ceremonial/Agriculture	
06379		1	Platform	Temporary Habitation/Agriculture	Pre-Contact
		2	L-shaped wall	Temporary Habitation/Agriculture	
		3	L-shaped wall	Temporary Habitation/Agriculture	
		4	U-shaped wall	Temporary Habitation/Agriculture	
08850 (Formerly 06374, Fe. 1)		1	Wall segment	Boundary Maintenance	Post-Contact
		2	Wall segment	Boundary Maintenance	
		3	Wall segment	Boundary Maintenance	
		4	Wall segment	Boundary Maintenance	
		5	Wall segment	Boundary Maintenance	
		6	Wall segment	Boundary Maintenance	
08846	T-001	1	Enclosure	Temporary Habitation/Agriculture	Post-Contact
		2	Modified depression	Temporary Habitation/Agriculture	
		3	Modified depression	Temporary Habitation/Agriculture	
08847	T-002	1	Modified depression	Temporary Habitation	Pre-Contact
		2	Terrace	Temporary Habitation	
		3	Cleared area	Temporary Habitation	
08848	T-003	1	Wall	Agriculture	Pre-Contact
		2	Wall	Agriculture	
		3	Terrace	Agriculture	
		4	Terrace	Agriculture	
08849	T-004	1	Mound	Agriculture	Post-Contact
		2	Mound	Agriculture	



Figure 27. Sites identified during the AIS in the H2 Residential Project Area.

4.2.2 Site Descriptions

SIHP No.: 50-50-14-01007

Site Type: Old Mākena School Complex

No. of Previously Identified Features: 7 (school foundation, 3 walls, 2 privies, cistern)

No. of Features Identified during Current AIS: 3 (2 wall sections, cistern)

Overall Dimensions: 123 m L (N/S) × 60 m W (E/W)

Condition: Fair/Poor

Possible Age: Late 19th to Early 20th Century

Possible Function: School

Site 50-50-14-01007 includes remnants of the Old Mākena School site, which was previously recorded by Cleghorn et al. (1988) (Figure 28) and Donham (2006) (Figure 29 and Figure 30). The Old Mākena School was located on a ca. two-acre parcel that was subdivided from Grant 1508:2. The school was probably built before 1882, possibly in 1879, and definitely by 1917. It operated until 1929 or 1930. The school consisted of a one-room schoolhouse that probably measured ca. 10.0 m (N/S) × 8.0 to 8.5 m (E/W) (c. 32 × 26 feet). Features at the Old Mākena School Site included an adjacent cement-lined water cistern and two associated privies. The school property was probably enclosed by stone walls, segments of which still remain.

Previous Descriptions

The original recorded description from Cleghorn et al. 1988 is below.

Feature 1:

A crude stacked wall roughly 80 meters long, 0.8 meter wide, and 0.5 meter high parallels the Makena road and forms the western boundary of the southern half of the parcel. The utilization of waterworn stones suggests modern origins. Also extensive past disturbance is indicated. According to a Territorial Survey Map (CSF No. 2809), this wall was in existence in 1936 and extended along the entire length of the western boundary of the parcel.

Feature 2:

Core filled, double faced wall approximately 0.8 meter wide, and ranging from 0.4 to 1.0 meter in height defines the northern boundary of this parcel. The northern parcel boundary is roughly 76 meters, however, the wall continues eastward beyond the limits of the parcel. The more diagnostic construction of this wall contrasts markedly with that of the Feature 1 wall and suggests a traditional land boundary.

Feature 3:

A roughly square (3.0 by 2.7 meters) platform constructed of a single course of basalt boulders is 0.27 meter high along the western side and flush with the ground surface along the eastern side. A two by eight length of lumber is centrally incorporated into the structure, dividing it into east and west halves. The western half is boulder filled and the eastern half is a depression. Several square nails, 8 centimeters in length protrude from the lumber.

Feature 4:

Another platform almost identical in construction with Feature 3 measures 3.3 by 3 meters. This structure also incorporates a depression and a length of lumber.

Feature 5:

A large cement lined cistern, 4.5 meters in diameter and 3 meters deep is located west of the two platforms. Two irregular stone alignments appear to partially encircle the cistern. The Makena loam material resulting from the excavation of the cistern appear[s] to be contained within the encircling alignment. At the top edge of the cistern are six slots that probably held a wooden cover. (Cleghorn et al. 1988:5–7)

In the report detailing the results of the Cleghorn et al. (1988) reconnaissance survey, Features 1 and 5 were recommended for no further work with Feature 5 being covered for safety reasons, while Features 2 and 4 were recommended for preservation, as they would not be affected by the construction of the parking lot. Data recovery was recommended for Feature 3 to determine function.

Additionally, oral interviews were recommended prior to further fieldwork. The features were considered significant for either Criterion a (association with events or broad patterns important in the history of an area) or d (has yielded or has the potential to yield information significant for the understanding of traditional culture, history, prehistory, and/or foreign influences on traditional culture and history) of the National Register of Historic Places. Features 2–4 were assessed as significant under Criteria a and d, while Feature 5 was assessed as significant under Criterion d.

No further work was recommended for the cul-de-sac parcel. It was noted that the sand in the project area is shallow, so it was unlikely for there to be unmarked burials. Data recovery excavations were conducted at Features 3 and 4 (which were identified as privies) in 1991. The results of the data recovery investigations undertaken by Bishop Museum in 1991 are detailed in a data recovery report that was compiled by Pacific Legacy in 2020 (Mulrooney et al. 2020).

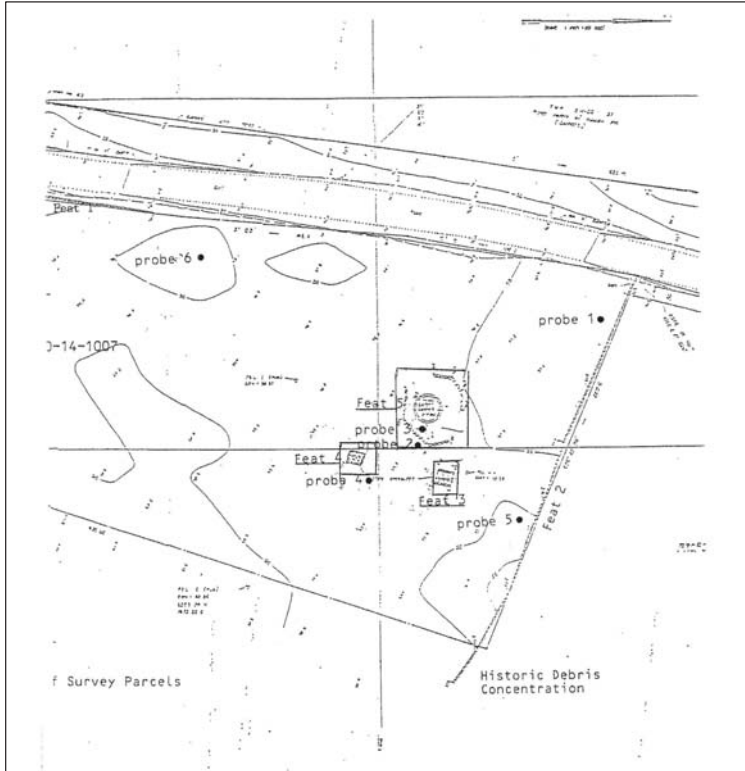


Figure 28. Site 50-50-14-01007: location of identified features and shovel probes excavated during the 1988 reconnaissance survey from Cleghorn et al. (1988:4, Figure 2). On file in the Anthropology Department, Bishop Museum; © Bishop Museum Archives.

In 2006, Donham returned to the area and recorded the Old Mākena School complex. Her site description follows:

Site 50-50-14-1007 was first recorded and listed in the State Inventory in 1988, following a reconnaissance survey of the Makena Road cul-de-sac and public beach access parking lots. (Cleghorn et al. 1988). At the time it was recorded, Site 1007 was named the Mākena School Parcel Historic Complex, and the designated site area encompassed the entire two-acre school parcel (Cleghorn et al. 1988:5). For the purposes of this survey, the school site area has been redefined to include the area of the school structures. Other non-related habitation structures within the school parcel have been given separate SIHP site numbers. The parcel 84 boundary walls recorded by Cleghorn et al. have been kept with the school site.

Five surface features were located within the complex during the 1988 reconnaissance survey. These included 1) a stone wall which follows the western boundary of the parcel; 2) a stone wall which follows the northern boundary of the parcel; 3) a roughly square platform divided in half by structural lumber, with a depression on one side; 4) a second platform similar to Feature 3; and 5) a cement lined cistern (Cleghorn et al. 1988:5, 7). Also noted, but not recorded was a concentration of modern material within the southern third of the parcel. This area has been recorded during the current survey as SIHP Sites 5798 and 5799.

Cleghorn et al. were not able to find documentation to verify the opening and closing dates of the school. Based on available information, they postulated that the school opened some time around or before 1917, when the parcel was deeded to the Territory of Hawai'i; and it was closed before 1930, when Handy and Handy visited the area (Cleghorn et al. 1988:8). Cleghorn et al.'s report includes a Territorial survey map of the school parcel dated 1936, which depicts a c. 20 foot E-W by 30 foot N-S structure adjacent to the west side of the Feature 5 cistern. Cleghorn et al. felt that the structure would have overlapped a portion of the cistern, and thus suggested that "... the cistern probably post-dates the abandonment of the school" (Cleghorn et al. 1988:9). They also suggested that the two platforms (Features 3 and 4) could be remnants of two privies, however they noted that further work would be needed to substantiate their interpretation.

Further archaeological work (data recovery) was recommended for Feature 3, which was located within the area of the proposed parking lot. No further work was recommended for Features 1, 2, 4, and 5, which were not within the proposed construction area. Filling or covering of the cistern was recommended due to safety reasons.

Data recovery excavations were conducted at Features 3 and 4 in 1991 (Hurst 1991). A brief summary report was prepared for Seibu, however, a formal report of findings has not yet been completed.

Four of the five previously identified features (1, 2, 4, and 5) were located during the current survey, and two newly identified feature (6 and 7) were added to the complex. Features 1, 2 and 7 are stone walls that define the north, west and south boundaries of the school lot. Features 4, 5 and 6 comprise the remains of the Makena School facility. Feature 3, one of the two postulated privies, is no longer present. We found that the cistern (Feature 5) had been filled, per prior recommendations. (Donham et al. 2006:29)

Donham described the newly identified Feature 6 in the excerpt below.

Feature 6 is a rectangular pattern of surface rubble and low berms that appear to represent the remnants of the school building foundation. This feature was not recorded by Cleghorn et al.; it is generally diffuse and the stones appear to have been dispersed outward from their original configuration, possibly by machinery. The north and south sides are defined by partially buried aligned boulders and cobbles and a surface scatter of loose stones. These two alignments are parallel and spaced an average of 10 meters apart. The north alignment [is] 9.8 meters long and the south alignment is 8.0 meters long. The west end of both alignments curve slightly to meet a mounded soil and rock berm that defines the west edge of the feature. The berm averages 0.80 meter wide and is 9.8 meters long. The overall area defined by these alignments and berm is 10.0 meters N-S by 8.0 to

8.5 meters E–W (c. 32 by 26 feet). This is relatively close to the dimensions of the school building as calculated from the territorial survey map; and the location correlates well with the location shown on the survey map. (Donham 2006:33)

Donham conducted limited testing in the area of Features 5 and 6:

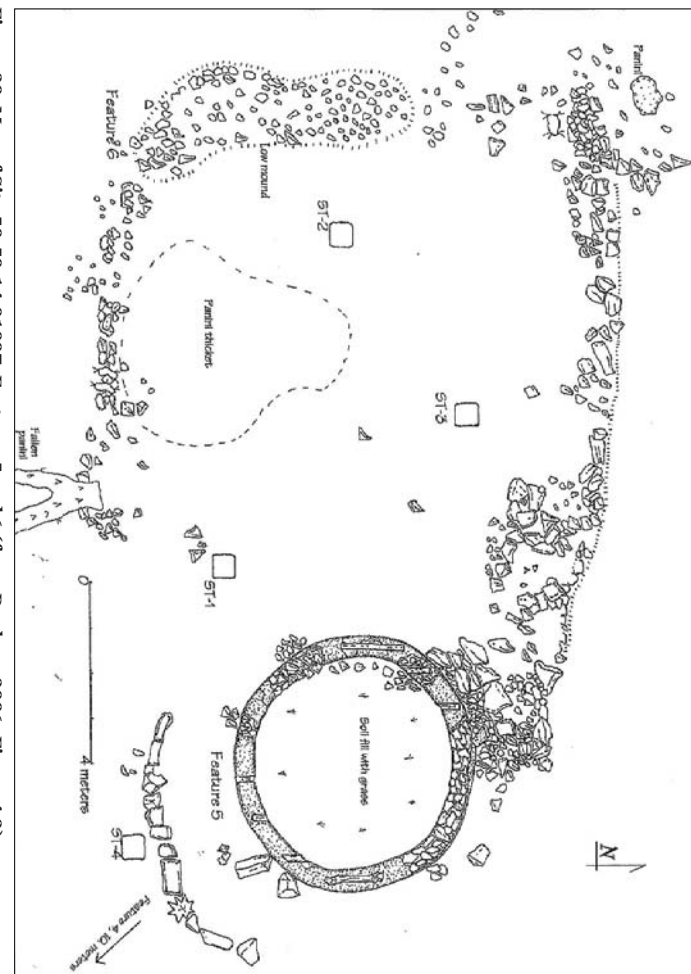
Four 0.50 by 0.50 meter shovel tests were excavated in the area of Features 5 and 6, in order to determine the extent of disturbance to the immediate area of the structure, and to determine whether deposits predating the school might be present. Shovel Test (ST) 1 was located along the eastern perimeter of Feature 6; ST 2 and 3 were located inside the Feature 6 area, and ST 4 was located just outside the boulder alignment, to the south of Feature 5 [...]. All four of the tests showed a consistent soil stratigraphy consisting of three layers. Layer I is fine dark brown to strong brown loose loamy sand with *kiawe* duff; it varies from 0.04 to 0.10 meter in thickness [...]. Layer II is loose, fine yellowish brown aeolian sand that varies in thickness from 0.10 to 0.15 meters. Layer III is yellowish brown very stony compact silty clay loam. This layer was encountered at 0.16 to 0.25 meter below surface and grades to an *in situ* 'a'a flow. Cultural materials were encountered in Layer I at all four shovel test locations. Layer II contained cultural material in all tests except ST-3, and Layer III was sterile in all units, with the exception of one piece of glass recovered from Layer III of ST-1 [...]

A total of 397 artifacts were recovered during shovel testing. Of this total, nearly all (381, 96%) are associated with the school building and school activities and are consistent with materials reported by Hurst from Feature 4. Among these items are 217 pieces of flat (window) glass, 100 pieces of painted and unpainted glaze (from windows), 20 small pieces of chalk, 11 nails (five square), 10 pieces of No. 2 pencil lead, 10 pieces of slate chalk board, six slate pencil fragments, and two metal eraser holders with portions of wooden No. 2 pencils.

Sixteen artifacts are modern and were introduced to the site after the school was closed. These include nine fragments of a single plastic CD and six beverage bottle sherds (one clear, four green). These items were confined to the relatively thin Layer I deposit at ST-1 and 4.

Overall, it appears that the subsurface deposits at the site accurately reflect the time frame of the school operation; although some degree of horizontal movement of materials is expected, given the condition of the foundation. (Donham 2006:33)

Figure 29. Map of Site 50-50-14-01007, Features 5 and 6 (from Donham 2006: Figure 4.2).



Donham identified a third boundary wall that she designated Feature 7. She discusses the three boundary walls (Features 1, 2, and 7), which are illustrated in Figure 30:

The three stone walls associated with the school site area boundary walls that help define the two-acre parcel was subdivided from Grant No. 1508:2 and designated as the school lot. The walls are shown on the 1936 Territorial survey map of the School parcel, which shows Features 1 and 2 extending east beyond the eastern boundary of the parcel [...] Feature 1, the western boundary wall, also continues south beyond the juncture with Feature 7. The northern portion of Feature 1 has been impacted by the construction of the public parking lot that is now adjacent to the intact portion of the school site and by the Prince Hotel landscaper's baseyard. It is therefore possible that Feature 1 extended northward and defined the west boundary of Grant 1508:2. In this case, the walls would have predated construction of the school. Feature 1 continues southward along Mākena Road, beyond the juncture of the southern school lot boundary wall (Feature 7). Feature 2 continues eastward approximately 45 meters beyond the parcel 84 boundary; it then turns south and continues approximately 95 meters to a juncture with the Feature 7 wall. Feature 2 essentially encloses an area slightly under four acres; the western 2 acres comprises the school lot. The Feature 7 wall continues east from the east boundary of parcel 84 boundary for approximately 75 meters, where it junctures with the Feature 2 wall; from there, it continues approximately 105 meters east, then turns south for c. 80 meters and junctures with the Site 230 wall. The Site 230 wall corresponds with the *Aupuni* wall [...] which also defines the *mauka* boundary of Grant 1508:2 [...]

Structurally, there is considerable variation between and within the three walls, some of which could be attributable to modern impacts and reconstruction work. Feature 1 shows a stacked construction; however, the best-preserved sections of the wall appear to have been rebuilt during the modern era. These sections are just south of the school parcel and are 1.3 m high by 0.5 to 0.8 m wide. The west portion of Feature 2 appears to have been rebuilt as well, it is bifaced and core-filled, with neat vertical sides constructed from angular basalt boulders. The most intact portions of the wall are 0.4 meters high and 1.10 meters wide. To the east of the school parcel, this wall is 1.10 meter high and 0.5 to 0.6 meter wide. Feature 7 is in relatively poor condition at the west end, where it was probably affected by rock pillaging. The best-preserved sections are near the east edge of parcel 84, in the area of Site 5798, where the wall is 0.6 meter high and 0.9 to 1.0 meter wide. A section of Feature 7 was knocked out by machinery, apparently to allow installation of a water line. This wall is multiple-stacked, with boulders and cobbles of various sizes used throughout. (Donham 2006:29–31)

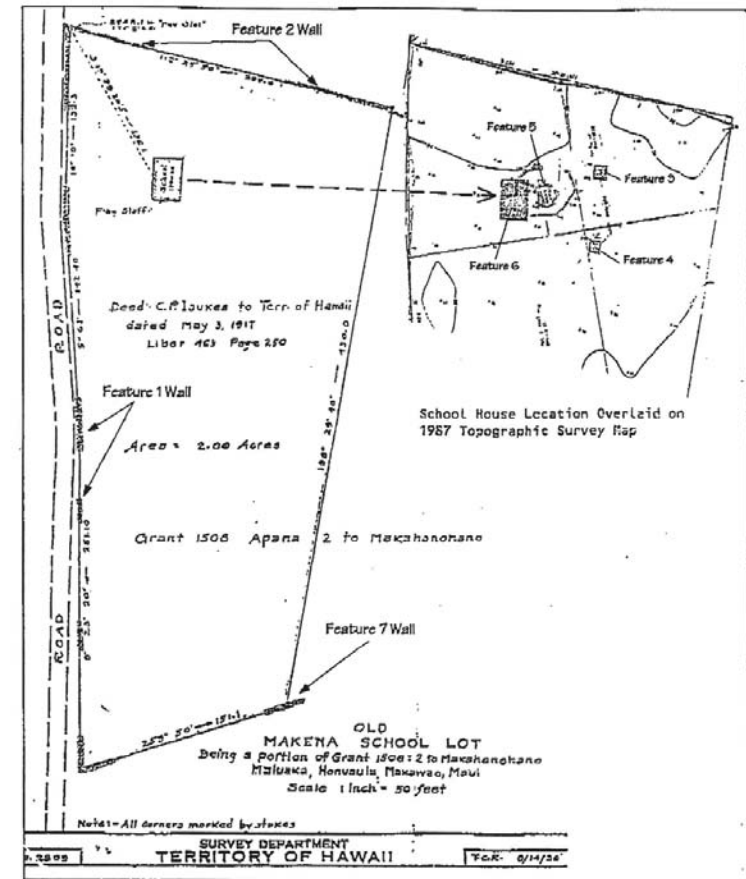


Figure 30. Map from Donham (2006:Figure 4.2) showing Features 1, 2, and 7 plotted on a Territorial Survey Map for the Old Mākena School (taken from Cleghorn et al. 1988).

Current Description

The Old Mākena School Site (SIHP 50-50-14-01007) currently includes three features, which include two wall segments (Features 2 and 7) and a stone and mortar cistern (Feature 5). All three features were previously recorded by Cleghorn et al. (1988) and Donham (2006).

Feature 2 is a low wall segment located in the central western portion of the H2 project area (Figure 31, Figure 32). The wall measures 7.0 m long (NW/SE) × 0.7 m wide (NE/SW) × 0.55 m in height. It is situated at the east end of a paved beach access parking lot (Figure 33). The wall segment is a remnant of the Feature 2 wall that formed the northern boundary of the Old Mākena School. The feature is in poor condition. The western portion of the wall appears to have been bulldozed during the construction of the paved parking lot. All that remains are the base stones.

Feature 5 is a circular stone and mortar cistern (Figure 34, Figure 35, Figure 36). The feature measures 5.3 m long (N/S) × 5.2 m wide (E/W) with a maximum interior height of 0.5 m, a maximum exterior height of 0.5 m, and a wall width of 0.45 m. The internal measurements are 4.3 m long × 4.3 m wide. The interior is filled with soil. Two slots where a wooden cover used to site are apparent on the northern side of the feature (Figure 37). Several medium to large basalt boulders are located at the northwestern edge of the cistern. These boulders are relatively level with the surrounding ground surface. A possible well head is located 1.5 m east of eastern edge of the feature (Figure 38). The feature is in fair condition overall. This feature is located along the western edge of H2 project area, situated immediately south of a paved beach access parking lot. The cistern stored water from adjacent well for Old Mākena School. There is a concentration of loose boulders near western edge.

Feature 7 consists of several low linear wall segments located in the southwestern portion of the H2 project area (Figure 39 through Figure 43). The overall dimensions of the feature are 59.0 m long (E/W) × 0.9 m wide (N/S), with a maximum height of 0.7 m and a wall width of 0.9 m. It is situated south and west of several bulldozed areas. A dirt road runs roughly N/S through the central portion of the feature, breaching it. The wall segments are in poor condition due to nearby bulldozing and wall tumble. These segments are the remnants of the Feature 7 wall that formed the southern boundary of Old Mākena School.

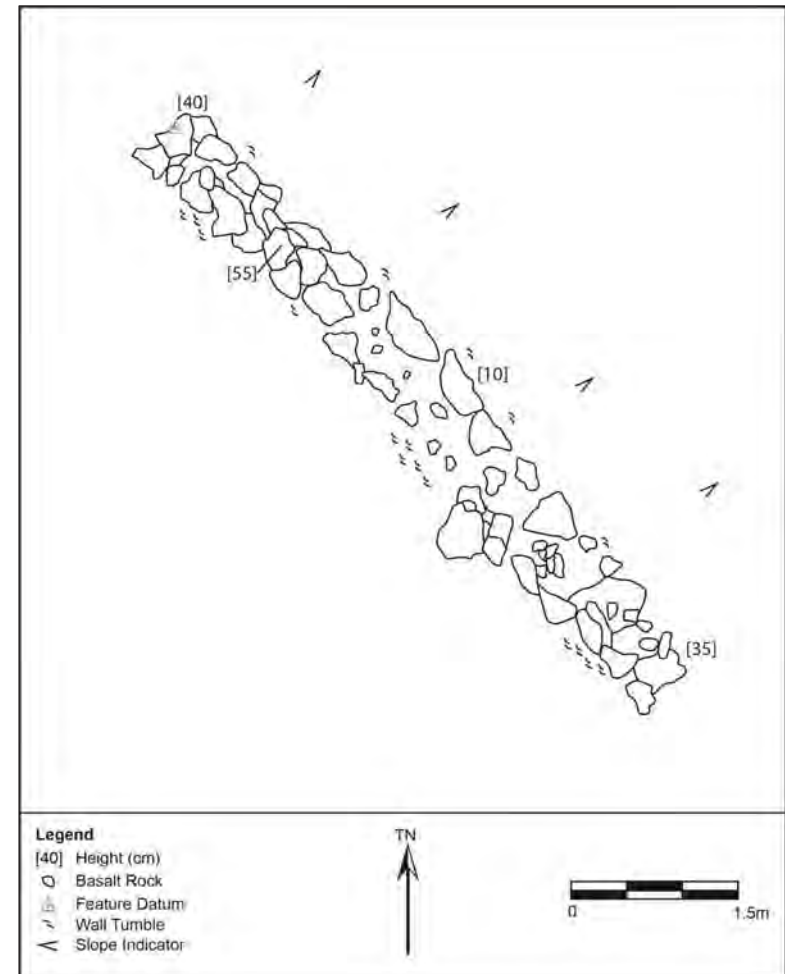


Figure 31. Plan-view map of SIHP 50-50-14-01007, Feature 2 wall segment.



Figure 32. SIHP 50-50-14-01007, Feature 2 wall segment (view to southeast).



Figure 33. SIHP 50-50-14-01007, Feature 2 wall segment with paved parking lot in background (view to northwest).

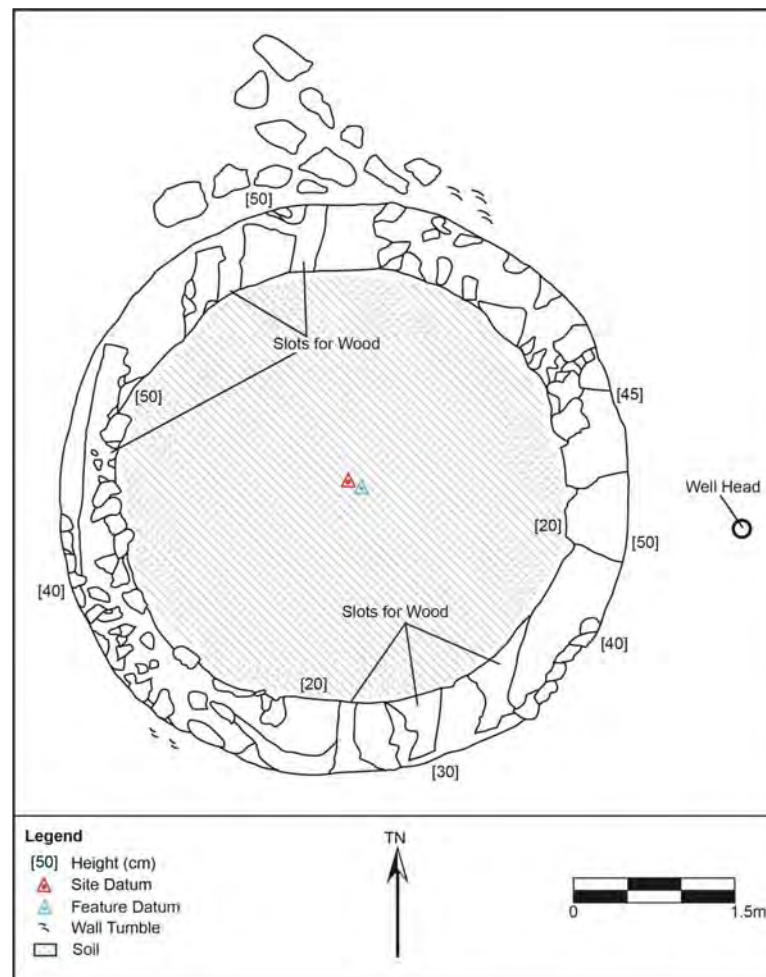


Figure 34. Plan-view map of SIHP 50-50-14-01007, Feature 5 cistern.



Figure 35. SIHP 50-50-14-01007, Feature 5 cistern (view to northeast).



Figure 36. SIHP 50-50-14-01007, Feature 5 cistern (view to northwest).



Figure 37. SIHP 50-50-14-01007, Feature 5 cistern showing slot for wood cover (view to west).



Figure 38. SIHP 50-50-14-01007, Feature 5 cistern showing well head (view to northeast).

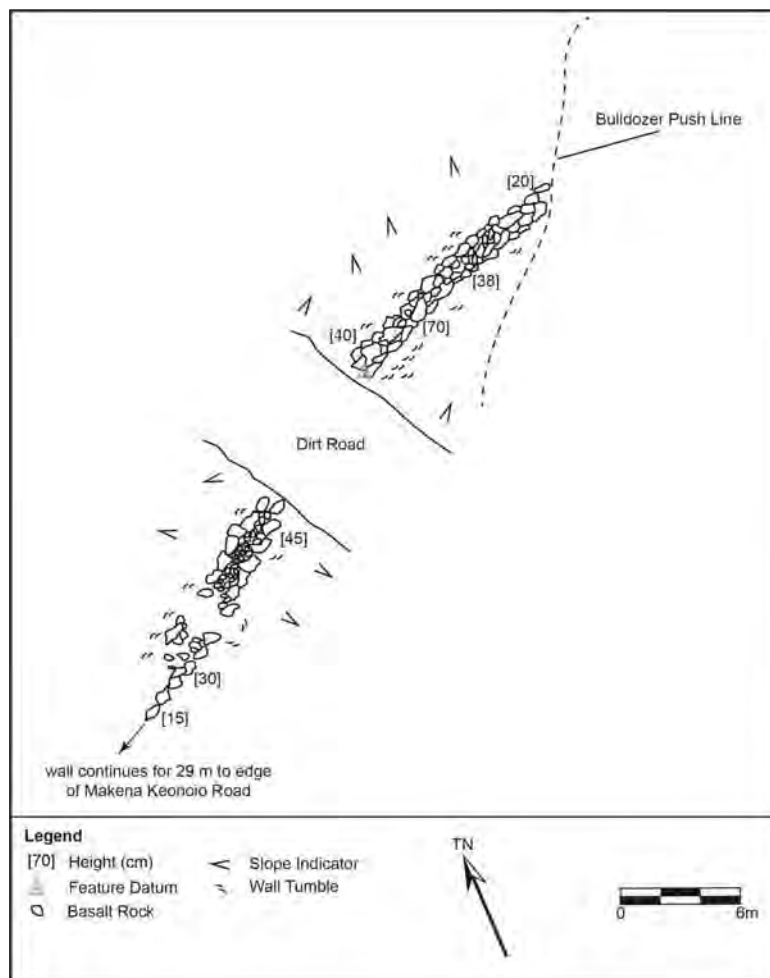


Figure 39. Plan-view map of SIHP 50-50-14-01007, Feature 7 wall segments.



Figure 40. SIHP 50-50-14-01007, Feature 7 wall segments, western portion (view to southwest).



Figure 41. SIHP 50-50-14-01007, Feature 7 wall segments, central portion (view to northeast).



Figure 42. SIHP 50-50-14-01007, Feature 7 wall segments, eastern portion (view to northeast).



Figure 43. SIHP 50-50-14-01007, Feature 7 wall segments, eastern portion of easternmost segment with push pile in background (view to northeast).

SIHP No.: 50-50-14-05798

Site Type: Complex

No. of Previously Identified Features: 4 (Cleghorn et al. 1988, Donham 2006)

No. of Features Identified during Current AIS: 1 (wall segment)

Overall Dimensions: 21 m L (NE/SW) × 0.9 m W (NW/SE) × 1.0 m H

Condition: Fair–Poor

Possible Age: Post-Contact (20th century)

Possible Function: Boundary

SIHP 50-50-14-05798 was originally recorded by Cleghorn et al. 1988 as being part of the Old Mākena School Complex. Donham (2006) resurveyed the area and identified four features including an L-shaped wall (Feature 1), the remains of a wooden structure (Feature 2), a collection of basalt stones interpreted as an *imu* (earth oven) (Feature 3), and a refuse pit (Feature 4) (Figure 44). The current investigation identified only a single wall (Feature 1).

Previous Description

This historic/modern habitation site is located in the southeastern corner of Parcel 84, the Makena School lot. It was briefly noted in Bishop Museum's reconnaissance survey report of the Makena School Site, where it was referred to as one of two "concentrations of modern material, one located just beyond the northeastern corner of the parcel and the other located within the southern third of the parcel" (Cleghorn et al. 1988:7). Cleghorn et al. assigned SIHP Site number 1007 to the entire two-acre school lot parcel; however, this site and Site 5799 are functionally and temporally distinct from the school, and it seems that separate site numbers are warranted.

Four features were identified at this site during the current survey, including an L-shaped stone wall (Feature 1), wooden structural remnants (Feature 2), a concentration of *imu* stones (Feature 3), and a refuse pit (Feature 4). Overall area of the site is 30.0 meters E-W by 19.0 meters N-S. The site is situated on a low knoll, and the southern perimeter is defined by the Site 1007 Feature 7 boundary wall, which is also the project area boundary.

Feature 1 is an L-shaped wall that appears to have been part of a larger boundary or enclosure wall. The long axis is 14.0 meters long and oriented NE-SW, at a slight angle to the Parcel 84 south boundary wall. The corner is at the west end of the long section, with the short section turning to the south; this section is 4.5 meters long. The eastern end of the wall shows evidence that it continued eastward, beyond the eastern boundary of Parcel 84. Rubble remnants are apparent for at least another 30.0 meters. Likewise, the west end of the wall was truncated, and an unknown length was removed, although there are no remains to suggest the extent of the wall toward the south. The wall is bifaced and core-filled, with the outer side defined by large stacked boulders and the interior filled with small cobbles and pebbles. Width of the wall ranges from 0.90 to 1.30 meters, and heights of intact portions range from 0.65 to 1.10 meters. The relationship between this wall section and the dwelling is uncertain, although it appears that the dwelling was uphill and to the south of the wall, which may have pre-dated the house.

Fragments of glass and metal are scattered on the ground along both sides of the wall, and on top of the wall. These materials are generally middle 20th century in age.

Feature 2. This feature includes two areas of structural lumber and remnants of a stone retaining wall, adjacent to the west side of Feature 1 ... Overall area of the feature is 10.0 by 10.0 meters. The primary lumber concentration is 1.0 meter west of the Feature 1 wall. It consists of a concentration of dimensional lumber with round (16D) nails in place. The lumber is within an area 2.2 by 2.3 meters and appears to represent a structural item that rotted in place, rather than a pile of relocated materials. The longest board present is 1.6 meters (5 feet) and dimensions are 1 by 6 inches. The size and amount of lumber present suggests a structure similar to a chicken coup or small animal shelter, or a platform of some sort.

A second area of lumber is located 6.0 meters to the southwest. Two heavy dimensional lumber planks and a concrete block are present at the base of a *kiawe* tree trunk. These items appear to

be in secondary context. Remnants of a stone retaining wall are present 3.0 meters west of Feature 1 and 3.0 meters north of the lumber concentration. This wall remnant is 7.0 meters long, with approximately 2.0 meters still intact at the eastern end. It is 1.0 meter wide where intact; height along the north (downhill) side is 1.0 meter, and height along the uphill side is 0.34 meter. The wall may have originally been bifaced; however, it is now generally rubble with one faced side at the east end. Broken glass and metal fragments are scattered on the ground in the general area of this feature; it appears that the area was impacted by machinery.

Feature 3 is located at the western edge of the Feature 2 area and 3.8 meters north from the Site 1007 south boundary wall. It consists of a concentration of rounded vesicular basalt cobbles, of the classic imu type, surrounding a depression in the ground that resembles an imu, or earth oven. The overall area of the concentration is 2.7 meters N-S by 2.5 meters E-W, and individual cobbles range in size from 0.10 to 0.25 meter in diameter. The stones are loosely piles one to three high in a roughly oval formation around a shallow depression in the soil that looks like an imu pit. The terrain at this feature is generally level, with a very gently slope to the northwest. No artifacts or portable remains other than the stones were observed in the immediate area of this feature.

Feature 4 is located at the southeastern corner of the site, against the north side of the Site 1007 south boundary wall (Feature 7). It consists of an excavated pit that contains modern era household refuse, including enamelware dishes and kettles, glass bottles, glass kitchenware, tin cans, porcelain tableware, and miscellaneous metal items. The refuse pit is 1.5 meters in diameter, and is filled to within 0.30 meters below surrounding ground surface. Refuse material is scattered from the pit to the north and east, down a gentle natural slope. There are indications that someone searched through the pit in the not too distant past; perhaps the Bishop Museum staff took a look at the material in 1988, or a bottle hunter did some digging. All observed items date to the modern era, *circa* 1940–1970.

The nature and distribution of structural remains and artifacts at Site 5798 suggests that the main dwelling may have been located to the south side of the parcel boundary wall, and outside of the project area. This location conforms with the location of a structure shown on the 1956 and 1983 USGS Makena Quadrangle maps, and with the home of the Poepeo family. (Donham 2006; 117–119)

Current Description

SIHP 50-50-14-05798, Feature 1 is a wall segment located in the southwestern portion of the H2 project area, situated east and south of a dirt/gravel road. Feature 1 (Figure 45 through Figure 47) measures 21.0 m L (NE/SW) × 0.9 m W (NW/SE) × 1.0 m H. The wall is in fair to poor condition and has seen some impacts from tumble and erosion. The SIHP 50-50-14-01007, Feature 7 wall segment is located 15 m south. The wall was originally recorded by Cleghorn et al. 1988 as part of the Old Mākena School Complex. It was recorded again by Donham 2006 as part of a historic house site. Only the Feature 1 wall remains. Three amber glass bottles were observed near the northeastern end of the wall. The wall segment appears to be the remnant of a historic boundary wall for a former historic homestead.

Figure 44. Map of Site 05798, Features 1 through 3, and Site 01007, Feature 7 (Donham 2006:118, Figure 4.72).



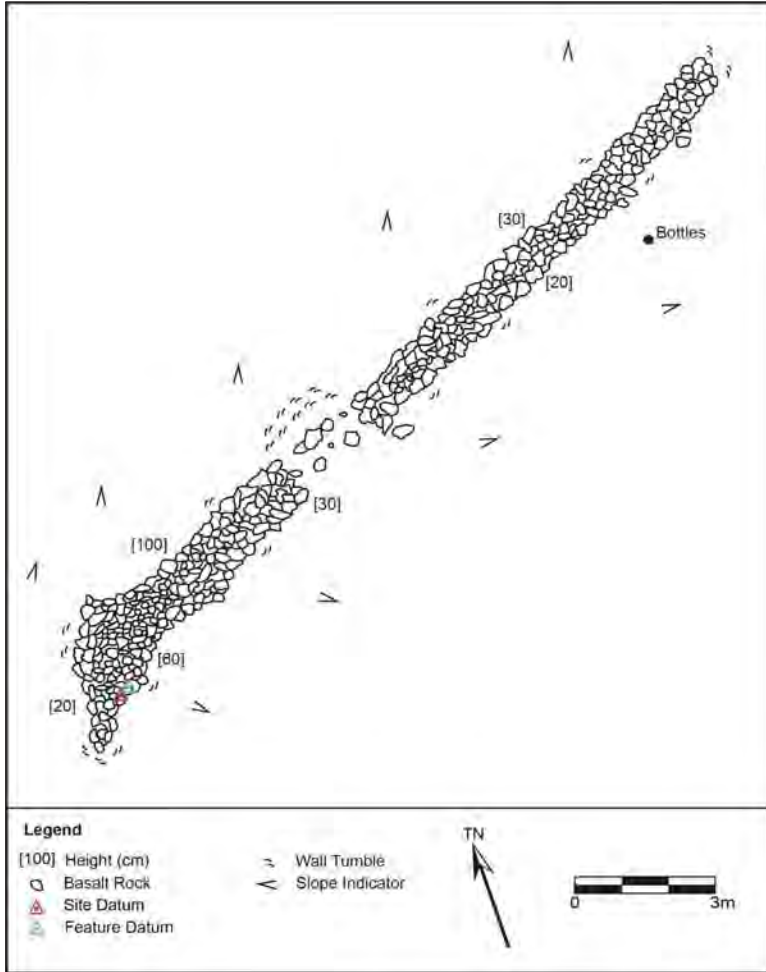


Figure 45. Plan-view map of SIHP 50-50-14-05798, Feature 1 wall segment.



Figure 46. SIHP 50-50-14-05798, Feature 1 wall segment, west end (view to northeast).



Figure 47. SIHP 50-50-14-05798, Feature 1 wall segments, central portion (view to southwest).

SIHP No.: 50-50-14-06366**Site Type:** Complex**No. of Previously Identified Features:** 15 (enclosure, remnant house foundation, concrete slabs, 2 refuse scatters, 9 mounds, 'ili'ili scatter; Rotunno-Hazuka et al. 2008a)**No. of Features Identified during Current AIS:** 12 (8 previously identified, 4 newly identified; wall segments, 2 artifact scatters, 7 mounds, remnant house structure, concrete piers)**Overall Dimensions:** 78 m L × 43 m W**Condition:** Good–Poor**Possible Age:** Post-Contact (20th century)**Possible Function:** Habitation

Site 50-50-14-06366 is a large site complex first recorded by Rotunno-Hazuka et al. (2008a). They identified a total of 15 features (Figure 48) associated with a historic homestead formerly located in the area. The current investigation determined that seven of the features are no longer present on the surface and recorded four additional features associated with the same homestead (Figure 49).

Previous Description

Site 50-50-14-6366, comprised of 15 features, consists of a trapezoidal walled enclosure with two wall segments, a remnant wooden house foundation, concrete slabs, two historic refuse scatters, nine small circular rock mounds, and a surface scatter of 'ili'ili ... All, except 4 features, occur within the central trapezoidal enclosure designated Feature A-1 with two associated wall segments designated A-2 and A-3. Feature A-2 is a short rock wall segment that adjoins the north perimeter wall at one end and the other end approaches the northwestern terminus of the Feature A-1 enclosure. Feature B is the remnant historic wooden house foundation and associated scatter of dimensional lumber; Feature C is two adjoining rectangular concrete slabs located in the break in the wall at the southwest side of the Feature A-1 enclosure, Feature D is the 'ili'ili scatter, Features E and F are historic refuse scatters located outside of enclosure A-1, Feature E is a refuse scatter, encompassing roughly 6 square meters, located 10m southwest of Feature A-1 south wall and south of the barbed wire fence that traverses across the southeast corner of Feature A-1. Feature F is a large refuse scatter, measuring roughly 50 square meters, located immediately east of and paralleling the east wall of Feature A-1. Features G-M are seven circular rock mounds situated near the center of the parcel together with Features B and D, and Feature N and O are two circular rock mounds situated outside of enclosure A-1 to the south. Test excavations were undertaken at 6 of the 15 features of Site 1 to aid in functional interpretations and better understand the construction of the features. Site 6366 was in fair to good condition and assessed a significance of Criterion D. (Rotunno-Hazuka et al. 2008b:16)

...Feature A-1 is comprised of a series of interconnected rock walls that are in good condition and form a rough trapezoidal enclosure measuring approximately 90–100 m long by 40–50 m wide. The height of the wall varies from 0.3 m to 1.5 m, but averages about 0.6 m high. The wall widths range between 0.8 m to 1.2 m. It is constructed of small to large basalt cobbles and boulders stacked up to 8 courses high. A barbed wire fence running west to east crosses the wall in two places. A concrete slab (Feature C) occupies a break in the southwestern wall with its long axis oriented parallel to the wall. Sections of this wall are collapsed due to deterioration, animal (cattle and deer) disturbance, and bulldozing. Cultural material observed on the surface of this feature and in the surrounding areas consists of glass bottles, glass fragments, metal items (tin cans, buckets, barrels, galvanized roofing sheets, and fragments), ceramic fragments, fragments of lumber, and marine shell. This feature was constructed on a fairly level ground surface that slopes gently from east to west. This feature is in good condition and appears to surround a historic house site and other features associated with the homestead. The interior soil area is relatively level and appears clear of loose rocks.

Feature A-2 is a low wall segment in good condition that extends approximately 28 m long in a roughly north/south orientation. Its northern end adjoins the northern parcel perimeter wall (Site

1007 Feature 7) near a bend and the southern end of this wall segment approaches the western terminus of the Feature A-1 south wall. This wall is constructed of small to large basalt cobbles and boulders stacked 2 to 3 courses high with a maximum height of 0.5 m and ranging 0.5 to 0.8 m width, comparatively smaller than the Feature A-1 walls. Cultural material observed on and around this feature consists of glass fragments, pieces of metal, and marine shell. This deteriorated condition of this feature can be attributed to modern activities and animal disturbances. It is located on a level soil surface, northwest of the Feature B house site and likely served in conjunction with the rest of Feature A-1 to form a boundary or barrier wall for the homestead. (Rotunno-Hazuka et al. 2008b:19)

Feature A-3 is a wall segment that continues northeastward from the northeast corner of the Feature A-1 enclosure for an approximate distance of 40 meters. The width, height, and construction of the wall remain consistent with the Feature A-1 walls.

Feature B is the remnant of an historic wooden house structure, a scatter of dimensional lumber, and other associated debris... The overall feature area measures 11.0 m (n/s) by 8.0 m (e/w). The original structure itself appears to have measured approximately 7.0 by 7.0 m. Three large floor beams remain supported off the ground with the long axis oriented in a north to south direction. These beams rest on posts sitting atop flat bases of basalt. With the ground-surface sloping gently from east to west, the heights above ground surface of the three floor beams are 35 cm, 55 cm, and 70 cm from east to west respectively. A two-course stacked rock wall, 0.30 m high by 0.50 m wide and 5.0 m long, is constructed parallel and just east of the easternmost floor beam. A debris pile measuring 0.25 m high, encompassing a roughly 2 by 3 m area, occurs to the northwest of the remnant structure and consists of dimensional lumber and corrugated metal roofing. Round wire nails were observed in many of the pieces of lumber. Other material observed within and surrounding this feature are metal buckets, glass bottles and fragments, metal roofing, and round ended nails. This feature is located centrally within the Feature A-1 enclosure.

Feature C is made up of two connected, rectangular concrete slab foundations and a rubble pile made up of rock and historic trash... The slabs measure 7.4 m long by 2.5 m wide by 0.2 m high. The southern slab measures 4.4 m long by 2.5 m wide and includes a raised edge along all its sides that measures 10 cm wide and is raised 10 cm from the interior of the slab. A crude concrete step located in the center, along the exterior western side appears to have a date inscribed into it that reads "11-47". The northern concrete slab connects to the north side of the southern slab and measures 3.0 m long by 2.5 m wide and appears to be older due to its more deteriorated condition. It also contains a similar raised edge along its sides. Both slabs exhibit rusted bolts that stick up along the edges, likely used for fastening a wooden frame. A large rubble pile, measuring 5.5 by 2.5 meters and .40 m high, possibly the remnant of the wall segment pushed by a dozer, is made up of piled basalt cobbles and boulders, broken concrete pieces, bottle glass fragments, pieces of wood, and pieces of metal. This rubble pile obscures the western edge of the northern concrete slab and continues in a northwest direction. This feature is situated on a level soil area in a break along the southern wall of the Feature A-1 enclosure. (Rotunno-Hazuka et al. 2008b:22)

Feature D is a medium-density surface scatter of water-worn basalt and coral pebbles and small cobbles in the area that measures 3.0 m long by 2.0 m wide. This feature is spread out over a surface of silt, sand, and loose rocks, that slopes gently from north to south... Feature I, a small rock mound, is situated 1 meter to the north. Some deterioration to this feature is evident, likely due to natural erosion and animal disturbance.

Feature E is a surface scatter of historic refuse that covers [an] area roughly measuring 3 m long by 2 m wide. It is located 5 m southeast of the Feature A-1 wall, just east of its junction with the barbed wire fence line. Curiously, the scatter is comprised primarily of the bottoms of bleach [Clorox] bottles, about twenty in clear, amber, and green glass. There are also a few beer bottles and some tin cans... The distinctive necks of the [Clorox] bottles with the small finger loop and the bodies of the bottles are markedly outnumbered by the bottoms in the scatter.

Feature F is a surface scatter of historic refuse that encompasses an area measuring roughly 23 m long by 6 m wide... It is comprised of discarded historic trash that includes glass bottles and fragments, metal buckets, barrels, wire, tin cans, ceramic fragments, wood, and marine shell. This

feature occurs paralleling the eastern wall of Feature A-1, on the eastern or exterior side, from the approximate intersection of the barbed wire fence and extends north along the wall for 23 meters. It is located on a level soil surface with some of the trash partially buried. It appears that the trash was discarded over the wall and accumulated over a period of time.

Based on an assessment of the bottle types (condiment, beverage, and bleach) and maker marks (Owens Illinois with the Duraglas trade mark [ca 1940 through 1950] and a maker mark MG with the date "45" Duraglas) represented at both Features E and F, a mid-twentieth century time period is indicated, most likely between 1940s and early 1960s. These features appear to be associated with the Site 6366 homestead.

Feature G is a small, circular rock mound measuring 0.9 m in diameter by 0.1 m high. It is comprised of small to large basalt cobbles and boulders piled on a level soil area. No artifacts or other cultural material was observed on the surface of this mound. This feature, most likely, represents another clearing mound associated with the occupation of the nearby historic house.

Feature H is a circular rock mound measuring 1.2 m in diameter by 0.1 m high... It is comprised of a single course of small to large cobbles and boulders piled on top of uneven bedrock. No artifacts or other cultural material was observed on the surface. This feature, similar in appearance to the other mounds nearby, appears to also have been a clearing mound.

Feature I is a circular rock mound measuring 1.4 m in diameter by 0.15 m high. It is comprised of small to large basalt cobbles and boulders piled on top of a level soil area. No artifacts or other cultural materials were observed on the surface of this mound. The form and dimensions of this mound again suggests a clearing function. With the house site located 7 meters to the northwest, this mound is the closest of the nine similar mounds.

Feature J is another circular rock mound measuring 1.4 m in diameter by 0.2 m high... It is comprised of small to large basalt cobbles piled 2 courses high, constructed on a level soil area. No artifacts or other cultural material were observed on the surface of this mound. Similar in construction and form to the similar features nearby, this feature also appears to have been a clearing mound associated with the occupation of the historic house site.

Feature K is a rock mound measuring 1.7 m long \times 1.4 m wide \times 0.35 m high. It is comprised of small to large basalt cobbles and boulders piled 2–3 courses high. On the surface of this mound are 3 rectangular pieces of corrugated metal roofing and chicken wire fencing. This feature is located on a gently sloping ground-surface and situated 3 meters to the northeast of a similar mound (Feature L). The location in the vicinity of the historic house site suggests that this and the other similar mounds were clearing mounds resulting from the clearing and gathering of loose rocks and trash in the yard area of the homestead during its occupation.

Feature L is a circular rock mound measuring 1.4 m in diameter and 0.3 m in height. It is comprised of small to large semi-angular basalt cobbles and boulders piled approximately 2–3 courses high with many of the larger boulders along the outside edge of the mound. No artifacts or other cultural material were observed on the surface of this feature. The ground surface which this feature is constructed on is level. A similar mound (Feature K) located 3 meters to the northeast of this feature contains metal roofing and other historic trash on its surface. This mound also appears to be a clearing mound.

Feature M is an oblong rock mound that measures 1.5 m long \times 0.9 m wide \times 0.2 m high. It is comprised of small to large, water-worn and semi-angular basalt cobbles, piled two courses high. Many of the water-worn cobbles are vesicular in nature, the type commonly used in *imu*. These rocks are different than the local material in the area and were likely transported here. No artifacts or other cultural materials were present on the surface in the vicinity of this feature. This feature is most likely associated with the occupation of the historic house site. It is situated in an area of level ground that appears markedly devoid of surface stones and boulders.

Feature N is a circular rock mound measuring 2.0 m in diameter and 0.35 m high. It is comprised of small to large basalt cobbles piled 2–4 courses high. Observed on the surface were two

fragments of bottle glass and a rusty tin can. This feature, another probable clearing mound, was constructed on a level, silty ground-surface approximately 1 meter to the north of another similar mound (Feature O). Features N and O are located outside of the Feature A-1 enclosure wall to the southwest. Of the nine mound features, these two are the only ones located beyond the enclosure walls.

Feature O is a circular rock mound measuring 1.4 m in diameter by 0.2 m high... It is comprised of small to large basalt cobbles piled 2–4 courses high. No artifacts or other cultural material was observed on the surface of this mound. This feature was constructed on a level soil area and situated 1 m to the south of a similar mound (Feature N). This feature is also most likely a clearing mound. (Rotunno-Hazuka et al. 2008b:22–31)

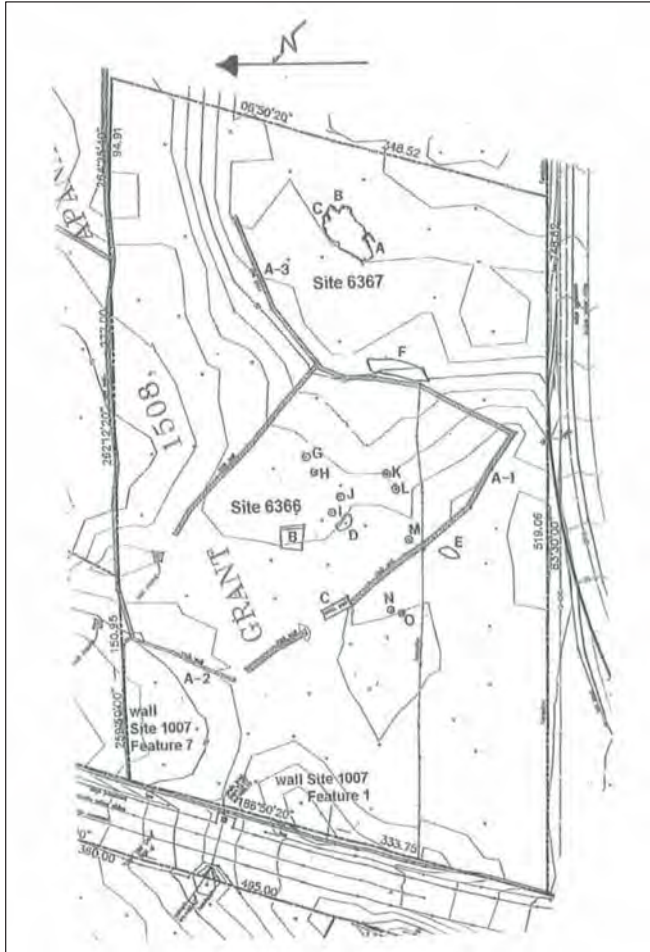


Figure 48. Map showing SIHP 50-50-14-06366 in association with SIHP 50-50-14-01007 and SIHP 50-50-14-06367 (Rotunno-Hazuka et al. 2008b:17, Figure 5).

Current Description

Feature A-1 (Figure 50) consists of the southern portion of the former historic homestead boundary wall that has been dismantled by hand. The feature measures 48 m long (NW/SE) \times 23 m wide (NE/SW) and has a height of 1.1 m and a wall width of 2 m. The southeastern portion has been dismantled and placed into large piles measuring roughly 3 m long \times 2 m wide \times 1 m high. Although the wall has been dismantled, the orientation of the mounds appears to represent the general orientation of the former Feature A-1 enclosing wall. Historic cultural material is scattered throughout the area and a historic fence runs roughly NE/SW through the area. The western and northern portions of the former A-1 wall appear to have been bulldozed. Feature A-1 formerly functioned as the boundary wall for the Site 06366 historic homestead, but the wall has been dismantled and the area has been graded since the site was recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in poor condition.

Feature A-2 (Figure 51) consists of the former historic homestead western boundary wall. The former wall has been pushed into a roughly linear push pile running along the western edge of a dirt road. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in poor condition.

Feature A-3 is a portion of the former historic homestead northeastern boundary wall located in the northeastern portion of the site. The remnant wall is badly tumbled and measures 10 m long (NE/SW) \times 1 m wide (NW/SE) \times 0.7 m high, with a maximum wall width of 1.0 m. Feature A-3 functioned as a wall segment spur that formerly extended northeast from the northeastern corner of the former Feature A-1 historic homestead boundary wall. Only a 10-m long section of the tumbled wall currently remains. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in poor condition.

Feature B (Figure 52) is the former historic wooden house structure. It is located in the central portion of the site in an area that has been graded. The feature is in poor condition and covers an area that is 10 m long (E/W) \times 4 m wide (N/S) and is 0.5 m high. Corrugated metal sheeting, lumber, and concrete fragments make up this feature. A larger push area is located immediately north of Feature B. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b).

Feature E consists of a surface artifact scatter covering an area that is 15 m long (E/W) \times 11 m wide (N/S). It is located south of the former Feature A-1 enclosure wall. The feature is south of a historic fence line that crosses the former A-1 wall. Numerous historic artifacts were observed on the surface, including metal artifacts (tin cans, metal straps, buckets, bowls), glass artifacts (bottles, jars, and jugs), and ceramics. *Opili*, *Drupa*, and cowry shells were also observed, as were waterworn basalt cobbles and pebbles. Some of the glass jars and bottles contain manufacturer's marks that correlate to between the 1940s and 1960s. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in poor condition.

Feature F (Figure 53) consists of a historic artifact scatter that measures 25 m long (NE/SW) \times 10 m wide (NW/SE). It is located along the northeastern portion of the site. It was originally recorded by Rotunno-Hazuka et al. (2008b) as being east of the eastern portion of the Feature A-1 wall. Feature A-1 is no longer present in this location. Most of the artifacts are now located in a push pile and include metal artifacts, glass bottles, jars, and jugs, as well as ceramics. Marine shell was also observed in the area. Immediately northwest of this push pile is a flat area with sand where a small wooden structure was recently located. This former structure does not appear to correspond with the 2008 site description (Rotunno-Hazuka et al. 2008b). Some of the glass jars and bottles contain manufacturer's marks that correlate to between the 1940s and 1960s. This feature is in poor condition.

Feature K (Figure 54) consists of a roughly rectangular stone mound located within the former Feature A-1 enclosure wall. The feature measures 1.6 m (NE/SW) × 1.4 m (NW/SE) with a height of 0.3 m. Feature K is located 2 m northeast of Feature L. Chicken wire and wood is located on the southwest edge of the mound. The mound appears to have functioned as a clearing mound associated with the historic homestead. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in fair condition.

Feature L (Figure 54) is a roughly rectangular stone mound located within the former Feature A-1 enclosure wall. The feature is made of subangular *pāhoehoe* and includes large cobbles and small to medium boulders. It measures 1.5 m long (N/S) × 1.2 m wide (E/W) with a height of 0.4 m. Feature L is located 2 m southwest of Feature K. A clear glass bottle fragment is located on top of the northwestern portion of the mound. The mound likely functioned as a clearing mound associated with the historic homestead. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in fair condition.

Feature N (Figure 55 and Figure 57) is a low, irregularly shaped stone mound located immediately south of the former Feature A-1 wall. The feature is made of subangular *pāhoehoe* and includes large cobbles and small to medium boulders. It measures 3.2 m (N/S) × 1.5 m (E/W) and has a height of 0.3 m. Historic cultural material is present on top of northern portion of the mound. This includes a tin can lid, glass bottles and jars, and concrete mortar fragments. Marine shell midden and *Porites* coral were also observed at this feature. The mound is located 2 m northeast of the Feature O mound. The mound appears to have functioned as a clearing mound associated with the historic homestead. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in fair to poor condition.

Feature O (Figure 56 and Figure 57) is a low, circular stone mound located 2 m southwest of Feature N and south of the former A-1 wall. The feature is made of subangular *pāhoehoe* and includes large cobbles and small to medium boulders. It measures 1.7 m (N/S) × 1.7 m (E/W) with a height of 0.26 m. The mound appears to have functioned as a clearing mound associated with the historic homestead. This feature was previously recorded in 2008 (Rotunno-Hazuka et al. 2008b). It is in poor condition.

Feature P (Figure 58 and Figure 60) is a low, irregularly shaped stone mound located east of the former Feature A-1 wall. The mound incorporates a bedrock outcrop along its southwestern edge and is made of subangular *pāhoehoe* and includes large cobbles and small to medium boulders. The feature measures 1.5 m long (N/S) × 1.5 m wide (E/W) and has a height of 0.5 m. The mound likely functioned as a clearing mound associated with the historic homestead. No cultural material was observed at this feature. Feature P does not appear to have been previously recorded by Rotunno-Hazuka et al. (2008b). It is in fair to poor condition.

Feature Q (Figure 59 and Figure 60) is a low, irregularly shaped stone mound. It is located east of the former Feature A-1 wall. The feature is made of subangular *pāhoehoe* and includes large cobbles and small to medium boulders. It measures 2.2 m long (N/S) × 2 m wide (E/W) and has a height of 0.4 m. The mound likely functioned as a clearing mound associated with the historic homestead. No cultural material was observed at this feature. Feature Q does not appear to have been previously recorded by Rotunno-Hazuka et al. (2008b). It is in fair to poor condition.

Feature R (Figure 60 and Figure 61) consists of a low, irregularly shaped stone mound located east of the former Feature A-1 wall. The feature is made of subangular *pāhoehoe* and includes large cobbles and small to medium boulders. It measures 1.9 m long (N/S) × 1.5 m wide (E/W) with a height of 0.4 m. The mound likely functioned as a clearing mound associated with the historic homestead. No cultural material was observed at this feature. Feature Q does not appear to have been previously recorded by Rotunno-Hazuka et al. (2008b). It is in fair to poor condition.

Feature S (Figure 62) consists of two rectangular concrete pier blocks located immediately west of the western portion of the former Feature A-1 wall. The blocks are 7 m apart from one another. The northern block measures 33 cm long × 29 cm wide × 6 cm high and appears to be in situ, partially embedded in the ground. It has "June 23, 1954" written on it twice. The southern block is sitting on the surface and may have been moved from its original location. It has a metal bolt with a square nut sticking out of the top. It measures 33 cm long × 29 cm wide × 18 cm high. Feature S does not appear to have been previously recorded by Rotunno-Hazuka et al. (2008b). The concrete pier blocks likely functioned as the foundation for a historic structure. The overall feature area measures 7 m (N/S) × 0.3 m (E/W) with a height of 0.06–0.18 m. Metal debris, broken glass bottles, and wooden board fragments with circular nails were observed in the immediate vicinity of the pier blocks. The feature is in fair condition.

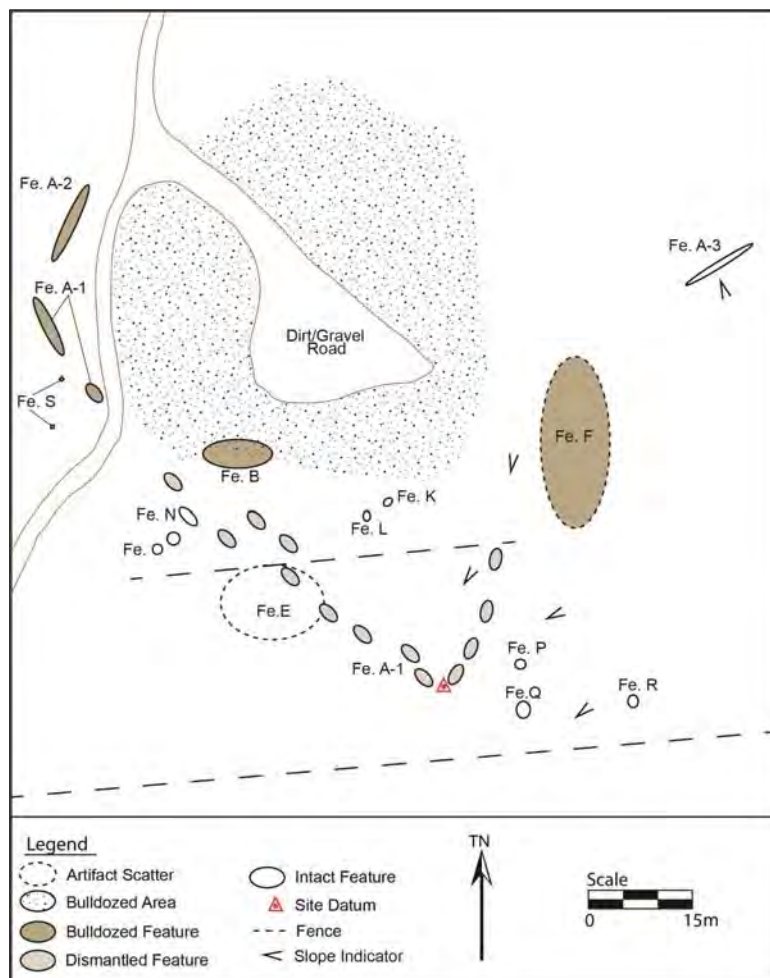


Figure 49. Plan-view map of SIHP 50-50-14-06366.



Figure 50. SIHP 50-50-14-06366, Feature A-1 former wall (view to north).



Figure 51. SIHP 50-50-14-06366, Feature A-2 push pile in former wall location (view to northwest).



Figure 52. SIHP 50-50-14-06366, Feature B former house structure (view to west).



Figure 53. SIHP 50-50-14-06366, Feature F artifact scatter (view to east).

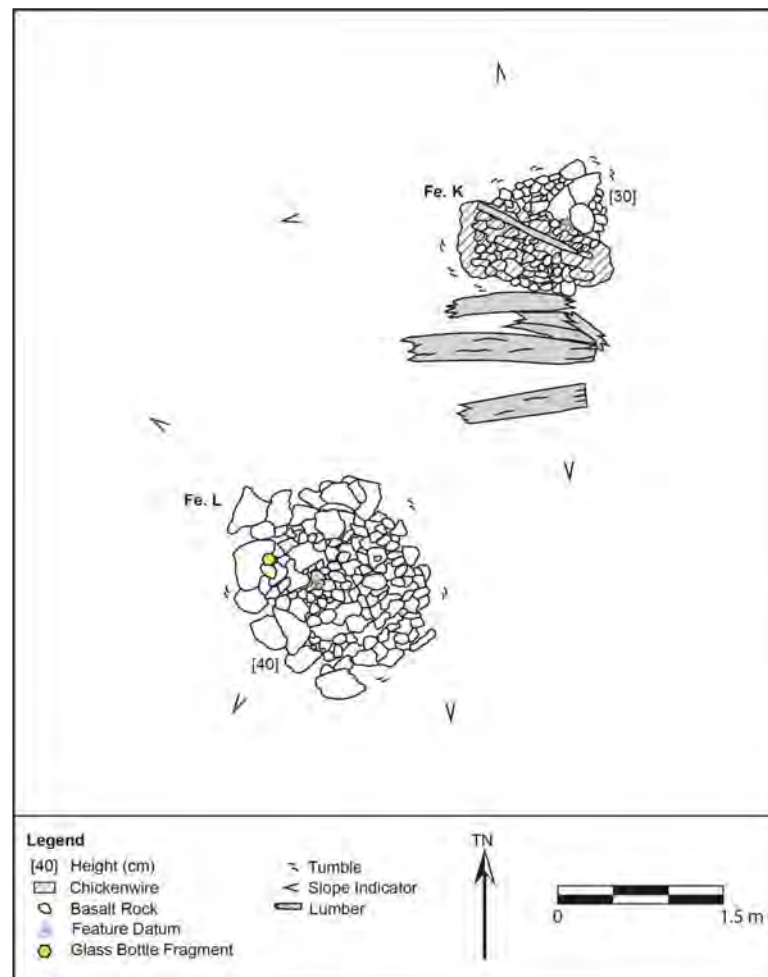


Figure 54. Plan-view map of SIHP 50-50-14-06366, Features K and L mounds.



Figure 55. SIHP 50-50-14-06366, Feature N mound (view to west).



Figure 56. SIHP 50-50-14-06366, Feature O mound (view to northwest).

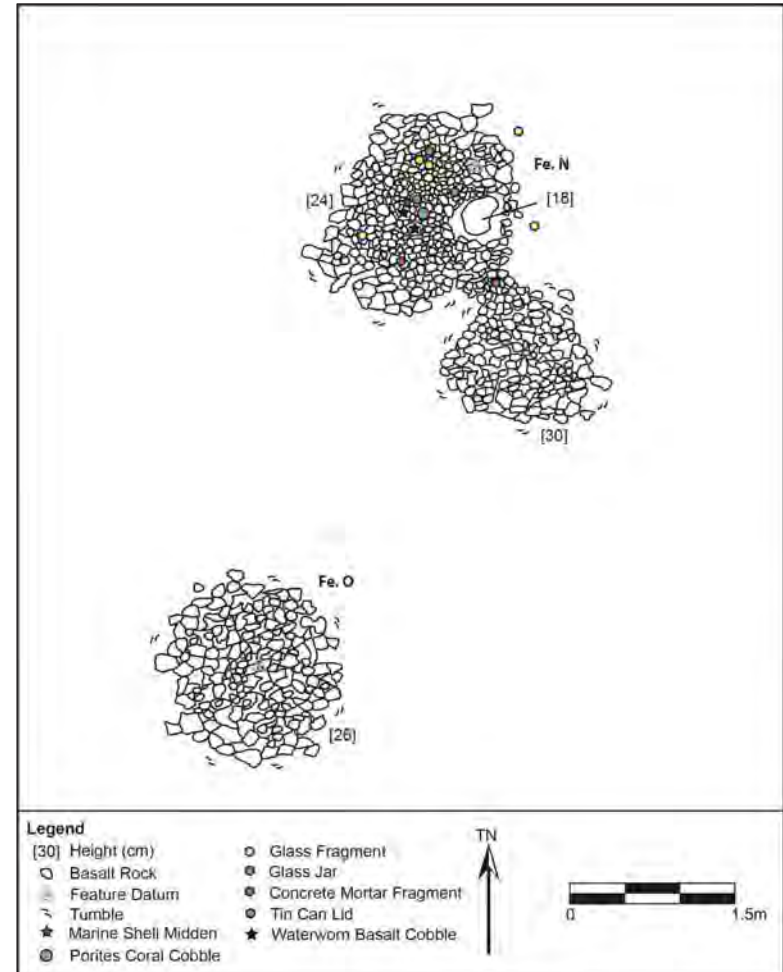


Figure 57. Plan-view map of SIHP 50-50-14-06366, Features N and O mounds.



Figure 58. SIHP 50-50-14-06366, Feature P mound (view to northeast).



Figure 59. SIHP 50-50-14-06366, Feature Q mound (view to east).

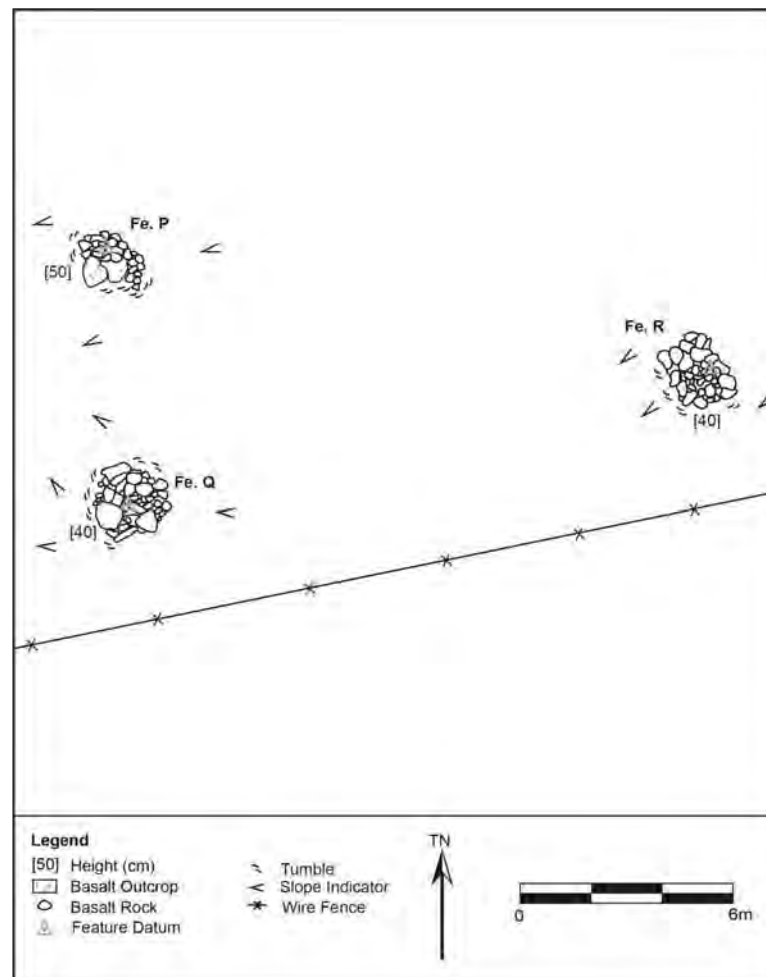


Figure 60. Plan-view map of SIHP 50-50-14-06366, Features P, Q, and R mounds.



Figure 61. SIHP 50-50-14-06366, Feature R mound (view to north).



Figure 62. SIHP 50-50-14-06366, Feature S concrete pier blocks (view to south).

SIHP No.: 50-50-14-06367

Site Type: Complex

No. of Previously Identified Features: 3 (U-shaped wall, L-shaped wall, terrace; Rotunno-Hazuka et al. 2008b)

No. of Features Identified during Current AIS: 5 (3 previously identified, 2 newly identified: U-shaped wall, L-shaped wall, terrace, cleared area, wall segment)

Overall Dimensions: 23.5 m L (NE/SW) × 11 m W (NW/SE) × 1.08 m H.

Condition: Fair-Poor

Possible Age: Pre-Contact to Early Post-Contact

Possible Function: Temporary habitation

Site 50-50-14-06367 is complex that includes five features: a U-shaped wall (Feature A), an L-shaped wall (Feature B), a terrace (Feature C), a cleared area (Feature D), and a wall segment (Feature E). Features A–C were first recorded and tested by Rotunno-Hazuka et al. (2008b). The current investigation added Features D and E to the site. The site is a temporary habitation complex, likely utilized during the pre-Contact to post-Contact periods.

Previous Description

Site 6367, in the central eastern portion of the subject parcel, is comprised of three features, incorporated into the sides of a basalt outcrop ridge located about 10 m east of the junction of the Feature A-3 wall and the northeast corner of Feature A-1. The outcrop, measuring 17 m in maximum length and 9 m at its widest point, is oriented northeast to southwest along its long axis. Its height ranges from 0.25 to 0.40 m along the eastern side and 0.50 to 1.20 m along its western side. Surface artifacts or other cultural materials were absent in the surrounding area.

Feature A, near the southern end of the ridge, is a small U-shaped enclosure, open to the southwest, measuring 3.5 m in length, 3.0 m in width with heights ranging from 0.30 to 0.60 m... Its walls are constructed of basalt boulders stacked up to 3 courses high and the interior floor is level and comprised of loose basalt cobbles and some soil.

Feature B, at the northern end of the ridge, is a short L-shaped section of stacked stone facing with each leg measuring about 3.0 m in length. The western leg is more deteriorated in appearance with smaller stones stacked 2–3 courses to a height of 0.35 m. The southern leg exhibits a more intact facing, up to 0.50 m high, with 4–5 courses of stone. The area defined by the L-shaped wall, below the level of the outcrop, consists of level soil with a scattering of rocks.

Feature C, located 2.0 m northwest of and paralleling the western leg of Feature B, is a short section of stacked stone facing. Measuring about 1.5 meters in length and ranging 0.50 to 1.0 m in height, 3-5 course facing retains a rock-filled area paralleling the western edge of the outcrop. (Rotunno-Hazuka et al. 2008b:31)

Current Description

Site 06367 (Figure 63) contains five features including a U-shaped wall (Feature A), an L-shaped wall (Feature B), a terrace (Feature C), a cleared area (Feature D), and a wall segment (Feature E). The site is situated along an exposed *pāhoehoe* ridge located in the south-central portion of the H2 project area. The site was recorded and tested by Rotunno-Hazuka et al. (2008b). Feature A was originally recorded as a U-shaped enclosure. Feature B was originally recorded as an L-shaped wall. Feature C was originally recorded as cobble fill. Feature D and Feature E are newly recorded features.

Feature A (Figure 64) is a U-shaped wall located at the southern end of the site. The feature measures 5 m long (NE/SW) × 3.5 m wide (NW/SE) with a height of 0.8 m. The wall opens to the southwest and is constructed with loosely stacked and partially piled walls that are 1 to 2 courses high and consist of subangular *pāhoehoe* large cobbles and small to medium boulders.

One small waterworn basalt cobble was observed within the northeastern end of the feature. The cobble measures ca. $7 \times 5 \times 4$ cm and does not appear to have been modified, and was not collected. Rotunno-Hazuka et al. (2008b) previously recorded this feature and excavated a 1×1 m (TU-1) test unit within the northeastern end of the interior. Their test excavation found only trace amounts of marine shell. The backdirt appears to be located at the south portion of the feature. The interior of the feature consists of relatively flat soil. Feature A is in fair to good condition due to wall tumble and previous archaeological testing.

Feature B (Figure 65) consists of an L-shaped wall located at the northeastern edge of the site. The wall is constructed with loosely stacked and partially piled walls that are 1 to 2 courses high and consist of subangular *pāhoehoe*. The exterior extent of the feature measures 4 m long (NW/SE) \times 4 m wide (NE/SW) and is 0.6 m high with a wall width of 1.2 m. The interior length of each wall is 3 m. The feature opens to the east. Rotunno-Hazuka et al. (2008b) excavated a 0.5×0.5 m unit (TU-1) in the corner of the feature; the backdirt is present on top of the northwestern wall. No cultural material was encountered. This feature is in fair to good condition due to wall tumble and previous archaeological testing.

Feature C (Figure 66) is a stone terrace located on the northern edge of the site. The feature is made of subangular *pāhoehoe* and measures 4 m long (NE/SW) \times 2 m wide (NW/SE) \times 1.08 m in height. The terrace consists of cobble fill next to a natural bedrock outcrop forming a relatively flat area of cobble fill. Rotunno-Hazuka et al. (2008b) excavated a 1.2×0.3 m area of cobble fill, exposing a small lava blister which did not yield any cultural material. Scattered backdirt from the excavation was observed on top of the feature. No cultural material was identified at this feature, which is in poor to fair condition due to tumble and previous archaeological testing.

Feature D (Figure 67) is a cleared area located in the central portion of the site that measures 3.5 m long (NE/SW) \times 3 m wide (NW/SE) \times 0.37 m high. The cleared area appears to have been formed when basalt cobbles and boulders were cleared and moved on top of the surrounding natural basalt cobbles and boulders. There is soil present in the feature, which is in poor to fair condition due to tumble. Feature D is a newly recorded feature.

Feature E (Figure 68) consists of a wall segment at the northeastern end of the site that measures 6 m long (E/W) \times 1.5 m wide (N/S) \times 0.45 m high. The wall is made of subangular *pāhoehoe* and contains large cobbles and small to medium boulders. The maximum wall width is 1.5 m. The wall segment is partially piled and partially loosely stacked with 1–2 courses. The feature is in poor to fair condition due to tumble. Feature E is a newly recorded feature.

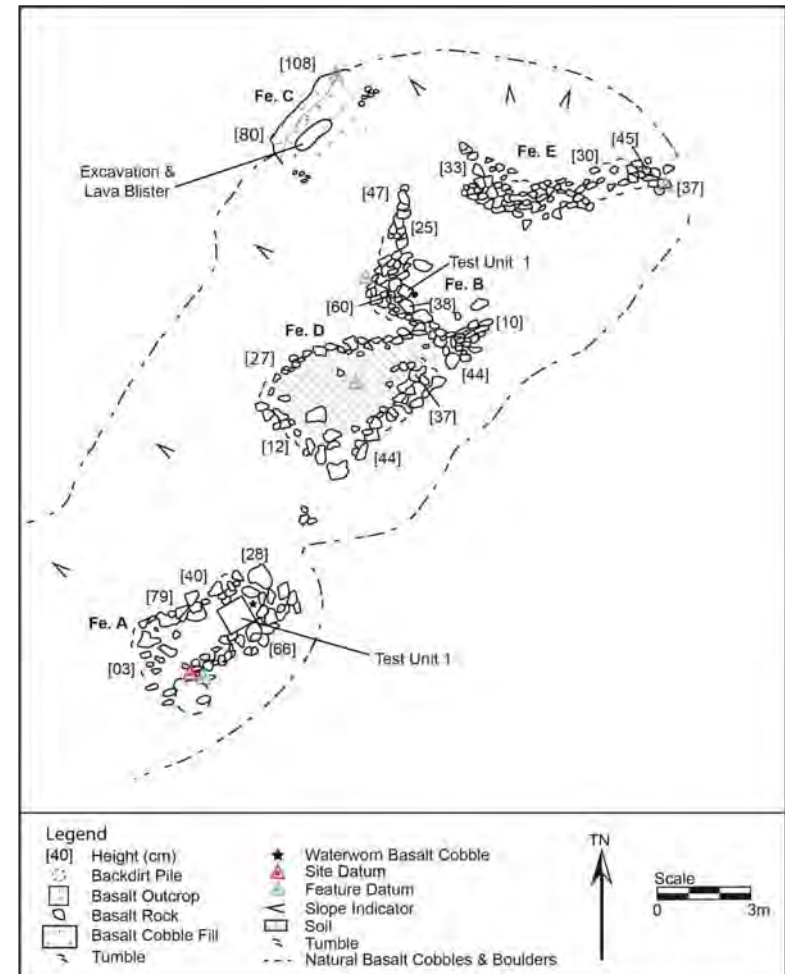


Figure 63. Plan-view map of SIHP 50-50-14-06367.



Figure 64. SIHP 50-50-14-06367, Feature A, U-shaped wall (view to northeast).



Figure 65. SIHP 50-50-14-06367, Feature B, L-shaped wall (view to northwest).



Figure 66. SIHP 50-50-14-06367, Feature C terrace (view to southeast).



Figure 67. SIHP 50-50-14-06367, Feature D cleared area (view to northeast).



Figure 68. SIHP 50-50-14-06367, Feature E wall segment (view to west).

SIHP No.: 50-50-14-06371 (formerly Site 218)

Site Type: Complex

No. of Previously Identified Features: 6 (Platform/enclosure, 5 walled pits, L-shaped alignment; Cordy 1978; Rotunno-Hazuka et al. 2008b)

No. of Features Identified during Current AIS: 7 (6 previously identified, 1 newly identified: terrace, 3 enclosures, U-shaped wall, alignment, modified depression)

Overall Dimensions: 16 m L (E/W) × 15.5 m W (N/S) × 0.9 m H

Condition: Good–Poor

Possible Age: Pre-Contact to Early Post-Contact

Possible Function: Temporary habitation

Site 50-50-14-06371 is a complex of seven features. First documented by Cordy (1978) as Site 50-Ma-B8-218, the site was subsequently re-recorded and tested by Rotunno-Hazuka et al. (2008b) as Site 06371, a temporary habitation site with pre-Contact features and traditional cultural material.

Previous Descriptions

Cordy (1978) interpreted this site (originally recorded as Site 218) as a permanent pre-Contact house site with agricultural features.

Platform and Five Walled Pits Immediately north of Site 217, the platform incorporates the natural, bare rock of the surface. It measures 7.3 by 5.8 meters (342 sq. m), and 1.0 meter high. A small cavity is in the north wall of the platform... Five faced or low walled pits are near the platform, and two abut it. These pits are very similar—3.0 to 3.8 meters in diameter, 0.6 meter deep inside, 0.6 to 0.7 meter high outside, with sparse soil inside. No midden was visible at this site, and no excavation was done (Cordy 1978:74).

In 2008, Rotunno-Hazuka et al. described the site as follows:

This site is composed of a platform for a sleeping house, and the walled pits [are presumed to be the agricultural function.] Cordy stated that he had a difficult time assigning a function of sleep house to the platform as it is an enclosure with a very rocky undulating surface.

Site 50-50-14-6371 is situated in the NE corner of the project area near Makena-Alanui Road. The site straddles the northern property line and extends into the adjoining golf course parcel. Cordy recorded the site as a platform with five faced pits in close proximity, two of which abut the platform. During the current reassessment, four walled pits (Features 2–5) were identified near Feature 1. Another walled pit is approximately 60 meters east of this site and has been incorporated into Site 6377. Site 6371 is now comprised of six features consisting of the platform/enclosure (Feature 1), circular walled pits (Features 2–5) and an L-shaped alignment (Feature 6). Site 6371 occupies an area measuring 21.0 m long by 20 m wide ... and is bounded by Site 6374 Feature 4, a low wavy wall.

Feature 1 appears as an enclosure which has been created by modifying the natural bedrock outcrop on the upslope side, and a lava flow on the down slope side... Specifically, this main feature (Feature 1) is comprised of two parallel terraces which are somewhat connected at their termini by piled rock wall alignments to form an enclosure. The southernmost terrace located just upslope of the smaller one, measures 12.5 m long by 9.4 m wide. It is composed primarily of natural bedrock and small boulders that forms a ledge measuring 1.0 m high. A small lava tube designated Feature 1a was observed in the northwest corner of the terrace ledge. It measures approximately 0.8 m long by 0.5 m wide by .35 m deep and was likely utilized for storage. The other terrace is located to the north of the bedrock terrace and it measures 7.5 m long by 4.0 m wide. It is irregular in shape and is composed of small to large basalt cobbles and boulders stacked three to five courses high to a maximum height of 0.90 m. A small lava tube, designated Feature 1b was observed at the northeast corner of this terrace. Feature 1b measures 1.2 m long by 0.5 m wide by .40 m deep and was probably utilized for storage. Feature 1 has a rocky interior

surface that is somewhat level but not paved. Adjacent to the northeast and northwest corners of Feature 1, as well as to the southeast of the enclosure are circular walled pits (Features 2–5). These walled pits are not deeply intrusive into the ground, rather they are small circular walls built into the natural depressions of the bedrock that encircle a rocky soil area. Cordy recorded five faced pits that were in close proximity to the main feature, two of which abut the structure. However during this survey only four walled pits (Features 2–5) were identified near Feature 1; another walled pit is approximately 60 meters east of Site 6371 and has been incorporated into Site 6377.

Feature 2 is the southern most [sic] pit and is a well constructed circular enclosure. The walls are wide and constructed of subangular cobbles that are stacked 2–6 courses high measuring 1.0 m thick and .50 m high on the interior and up to .70 m high along the exterior. Feature 2 has an interior soil area that is approximately 1.6 m in diameter. A dozer push pile butts up against the eastern side of this enclosure. Feature 2 was tested along with Feature 3...

Feature 3 is an oval shaped walled pit located on the northeast side of Feature 1. It measures 2.0 m long (n/s) by 1.0 m wide and ranged in height along the interior from .40–.65 m. The walls are from .30–.50 m wide and stacked 3–4 courses. Features 3–5 are contiguous to each other and abut Feature 1.

Feature 4 is near Feature 3 and is situated along the northwest corner of Feature 1. This feature is disturbed and not completely enclosed along its northern side. The interior height of Feature 4 ranges from .30–.90 m and would have had a diameter of about 3.0 meters. Currently, a *Na wiliwili* tree is growing out of the pit...

Feature 5 is located in between Features 3 and 4 and is an oval shaped walled pit. It has also been disturbed along its northern side from pushed rocks and tree fall. This disturbance is presumably from the golf course construction (recall this site was not slated for preservation during Cordy's survey, thus the golf course construction commenced). The feature measures 3.0 m long (nw/se) by 1.0 m wide and ranges in height from .30–.80 m.

Feature 6 is an L-shaped remnant alignment located north and adjacent to Feature 4. This Feature has also been disturbed by pushed rocks and tree fall as it is only a remnant feature. The interior is faced and similar to the interior of the walled pits. Feature 6 measures 1.0 m long by .50 m wide... (Rotunno-Hazuka et al 2008a: 38–41)

Site 6371 may be a temporary habitation site and the circular walled pits would have been utilized for agricultural purposes. It is composed of a primary feature, Feature 1, surrounded by smaller, ancillary structures (Features 2–6). Although the function of Feature 1 is still inconclusive, the recovered cultural materials and site type or architectural classification of Features 2 and 3, clearly represents and agricultural function. Site 6371 may have been part of a larger complex, perhaps Site 6377 (the U-shaped enclosure and walled pit) located approximately 45 meters west of this site, but such association is difficult to determine.

As previously discussed, Cordy postulated a set of criteria in which to categorized the documented features and or sites. Based on his classification system, Site 6371 (Site 218) was interpreted a permanent pre-Contact house site with agricultural features. The size of the interior floor and exterior floor area were the determining factors of permanence, and this hypothesis could have been further supported if multiple cultural layers and or additional permanent features were documented at the site. Based on the information collected to date, this site appears to have been intermittently occupied, although Feature 1 was not tested. Future excavations if they are to occur within this site should be undertaken at Feature 1 to determine its function and age. Although the previous surveys did not recommend preservation of Site 6371, the landowner has re-designed the development to avoid this historic property. Thus Site 6371 Features 1–6 will be preserved within the proposed development. (Rotunno-Hazuka et al 2008a: 46)

Current Description

Site 50-50-14-06371 (Figure 69) includes seven features including a terrace (Feature 1), three small enclosures (Feature 2, 3, 4), a U-shaped wall (Feature 5), an alignment (Feature 6), and a modified depression (Feature 7). The site is situated along a *pāhoehoe* slope on the north edge of a large flat bedrock outcrop located in the northeast portion of the H2 project area. The site was originally recorded by Cordy (1978) and then re-recorded and tested by Rotunno-Hazuka et al. (2008a). Cordy (1978) interpreted the site as a permanent pre-Contact house site with agricultural features and Rotunno-Hazuka et al. (2008b) interpreted it as a pre-Contact temporary habitation site with agricultural features. The site does appear to have functioned as a pre-Contact/early post-Contact temporary habitation site; however, none of the features appear to have functioned as agriculture features. The two features tested by Rotunno-Hazuka et al. (Features 2 and 3) both contained traditional cultural material which was not indicative of agricultural use. Instead, the features surrounding the Feature 1 terrace may have functioned as temporary habitation structures, possibly being utilized for storage.

Feature 1 (Figure 70) is a roughly rectangular soil terrace with a stone retaining wall located in the central portion of the site. The terrace measures 6.5 m long (E/W) × 4.5 m wide (N/S) and is 0.9 m high. It abuts and is constructed off the northern edge of a large flat bedrock outcrop and is made of large cobbles and small to medium subangular *pāhoehoe* boulders. The interior surface of the terrace is relatively flat soil with loose cobbles and small boulders. A small waterworn boulder is located at the western edge. A fragment of conch shell is located at the north edge. Feature 1a is a cupboard measuring 1.1 m long × 0.25 m wide × 0.45 m high. The cupboard is located at the north edge where Feature 5 abuts the Feature 1 terrace. The feature appears to be completely manufactured during the construction of the terrace with boulders and slabs forming the top of it. Boulder slabs and boulders partially block the opening. Feature 1b is a small natural overhang located in the face of the bedrock outcrop at the south edge of the terrace that measures 0.3 m deep × 0.25 m wide × 0.15 m high at the opening. The Feature 1 terrace is in fair to good condition due to tumble.

Feature 2 (Figure 71) is a small circular stone-walled enclosure located at the eastern edge of the site. The feature measures 4 m (N/S) × 3.5 m (E/W). It has an exterior height of 0.8 m and an interior height of 0.5 m. The wall width is 0.9 m. The intact portions of the wall are edged with small to medium boulders and filled with large cobbles and small boulders in between. The interior is relatively flat soil. A pushpile abuts the eastern edge of this feature. The feature was recorded and tested by Rotunno-Hazuka et al. (2008a) and they found traditional cultural material, including marine shell, coral, basalt scatter, and volcanic glass debitage. The small enclosure possibly functioned as a temporary habitation structure, possibly utilized for storage.

Feature 3 (Figure 72) consists of a small oval enclosure located at the northeastern corner of, and abutting, Feature 1 in the northern-central portion of the site. The interior is flat soil. The feature measures 2 m long (N/S) × 1 m wide (E/W) and is 0.4 m high. The feature was originally recorded by Cordy (1978) and was recorded and tested by Rotunno-Hazuka et al. (2008a). They found traditional cultural material, including marine shell and coral. The small enclosure possibly functioned as a temporary habitation structure, possibly utilized for storage.

Feature 4 (Figure 73) consists of a small oval enclosure located at the north edge and abutting Feature 1. The feature measures 2 m long (N/S) × 2 m wide (E/W). The interior height of the feature is 0.9 m and the exterior height is 0.3 m. The wall is 0.5 m wide and is constructed of subangular *pāhoehoe* that is piled and stacked 1 to 5 courses high. The interior contains relatively flat soil and tumble. The feature was originally recorded by Cordy (1978) and recorded again by Rotunno-Hazuka et al. (2008a). The small enclosure possibly functioned as a temporary habitation structure, possibly utilized for storage. Feature 4 is in poor to fair condition due to tumble and an adjacent *wiliwili* tree.

Feature 5 (Figure 74) is a small U-shaped wall located at the north edge of and abutting Feature 1 in the northern-central portion of the site. The feature measures 2 m long (N/S) × 1.5 m wide (E/W). It has an interior height of 0.7 m and an exterior height of 0.2 m. The wall is from 0.3 to 1 m wide. The walls are tumbled except for the area along the north edge of Feature 1. The interior is relatively flat soil and tumble. Feature 1a (cupboard) is located at the southern end of Feature 5. The feature was originally recorded by Rotunno-Hazuka et al. (2008b). The small U-shaped wall possibly functioned as a temporary habitation structure, possibly utilized for storage. Feature 5 is in poor to fair condition due to tumble.

Feature 6 (Figure 75) is a small linear alignment located at the northern edge of the site. It measures 1.6 m long (N/S) × 0.3 m wide (E/W) and is 0.25 m high. The wall is 0.3 m wide. The feature was originally recorded by Rotunno-Hazuka et al. (2008b). The alignment possibly functioned as part of a temporary habitation that is no longer present. The Site 06374, Feature 4 wall is located approximately 1 m north of the Feature 6 alignment. Feature 6 is in poor condition due to tumble.

Feature 7 (Figure 76) is a small rectangular modified depression located on the upper surface of the bedrock outcrop at the southern end of the site. The feature measures 0.5 m long (E/W) × 0.25 m wide (N/S) and is 0.4 m in depth. Several boulders have been placed near the edge of a small natural depression in the bedrock. This is a newly recorded feature. Rotunno-Hazuka et al. (2008b) noted this feature on their site map, but did not give it a feature designation. The modified depression possibly functioned as a small storage area or cupboard. It is in poor to fair condition due to tumble.

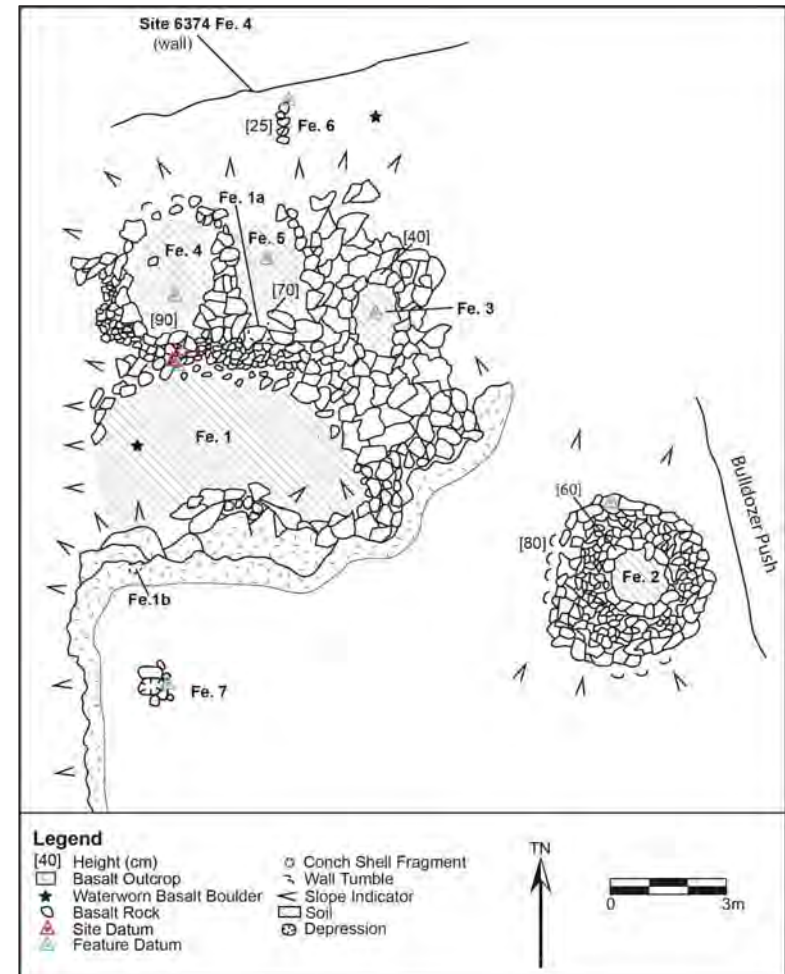


Figure 69. Plan-view map of SIHP 50-50-14-06371.



Figure 70. SIHP 50-50-14-06371, Feature 1 terrace (view to south).



Figure 71. SIHP 50-50-14-06371, Feature 2 enclosure (view to southeast).



Figure 72. SIHP 50-50-14-06371, Feature 3 enclosure (view to south).



Figure 73. SIHP 50-50-14-06371, Feature 4 enclosure (view to southeast).



Figure 74. SIHP 50-50-14-06371, Feature 5, U-shaped wall (view to south).



Figure 75. SIHP 50-50-14-06371, Feature 6 alignment (view to south).

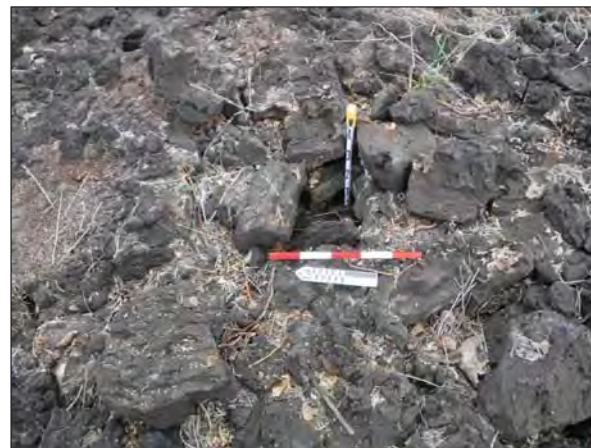


Figure 76. SIHP 50-50-14-06371, Feature 7 modified depression (view to east).

SIHP No.: 50-50-14-06373 (formerly Site 225)

Site Type: Complex

No. of Previously Identified Features: 8 (platform, 2 enclosures, C-shape, 2 remnant walls, alignment, modified depression; Rotunno-Hazuka et al. 2008b)

No. of Features Identified during Current AIS: 8 (platform, 2 enclosures, U-shaped wall, 2 wall segments, alignment, modified depression; all previously recorded)

Overall Dimensions: 31 m L (E/W) × 27 m W (N/S) × 1.8 m H

Condition: Good–Poor

Possible Age: Pre-Contact to Early Post-Contact

Possible Function: Ceremonial

Site 50-50-14-06373 was first recorded by Cordy (1978) as Site 50-Ma-B8-225 and interpreted as a non-permanent house-site with livestock structures. Rotunno-Hazuka et al. (2008b) recorded several additional features and interpreted the site as a traditional Hawaiian habitation complex or *kauhale* dating from the late pre-Contact to the early historic period. The current investigation suggests a pre-Contact/early post-Contact ceremonial function for the site, given the presence of large amounts of branch coral, the size of the enclosures, and the construction style of the walls.

Previous Site Descriptions

Cordy (1978) recorded this as Site 225, which he described as two enclosures and a platform. He interpreted the site as a historic (post-Contact), non-permanent house site with livestock structures.

This site is south of the 18th tee and inland of the bluff overlooking the coastal sand flat. The platform (225-1) is small (3.5 by 2.9 meters = 10 sq. m) and low (0.2 to 0.6 meters high), with no midden visible. Just south is one enclosure (225-2), built on bare pahoehoe with a few patches of soil. This enclosure is rectangular, 14.0 by 10.5 meters (147 sq. m), with walls 0.6 to 0.8 meter high inside and 0.6 to 1.0 meter high outside, and an entrance in the east wall. A few pieces of midden were visible. Abutted to the seaward side of 225-2 is the second enclosure (225-3), also rectangular (12.8 by 9.8 meters = 125 sq. m), with wider walls (1.0 vs. 0.7 meter) and higher walls (1.1 to 1.5 meter) and no entrances. One excavation square was dug in the enclosures (Cordy 1978:75).

In 2008, Rotunno-Hazuka et al. described the site as follows:

The current survey identified five additional features (Features 4–8) as part of this complex. Site 50-50-0-14-6373 [sic] is comprised of eight features consisting of a platform (Feature 1), two adjoining enclosures (Features 2 and 3), a C-shape (Feature 4), a remnant wall (Feature 5), an alignment (Feature 6), another remnant wall (Feature 7), and a depression (Feature 8). The total site area measures, in excess of 1000 square meters, 37.5 m long (n/s) by 27.0 m wide (e/w) and incorporates a natural outcrop within the site complex...

Feature 1 is a paved, platform; northernmost of the features... It is located approximately 3.0 meters north of Feature 2 the rectangular enclosure. Feature 1 measures approximately 4.0 m long by 4.0 m wide and .10–.60 m high. It is comprised of loosely fitted, basalt cobbles and boulders that form a roughly square level, raised area.

Features 2 and 3 are two adjoining rectangular enclosures sharing a common wall... Feature 2, measuring 10.8 m long (e/w) by 9.0 m wide (n/s) and approximately 1.0 m high, is a three-walled enclosure abutted onto the eastern wall of the Feature 3. Its walls are constructed of stacked basalt cobbles and boulders and range in width from .65 to .80 m and in height from 1.0–1.50 m (interior) to 1.0–1.30 m (exterior). Although several areas of wall collapse are present, a constructed entrance is located into the east wall about three meters from the southeast corner of the structure. This is evident from a finished facing on the south side of the opening, the north side is tumbled. Feature 2 occurs atop a bedrock outcrop that slopes from east to west.

Feature 3, measuring 12.2 m long (e/w) by 11.5 m wide (n/s), manifests much better construction than Feature 2. Its walls, comprised of small to large basalt cobbles and boulders stacked and faced up to eight courses high, are robust and range in width from 1.2 to 1.5 m and in height from 1.0 to 1.5 m on the interior and exterior. The walls are in good condition with the exception of a few partially collapsed sections. A possible constructed opening, with a walkway or ramp paved with *ilili*, occupies the central portion of the east wall and connects Feature 3 with the adjoining Feature 2. The interior consists of a level soil area. One piece of coral was observed atop the eastern wall of the enclosure.

[Feature 4] is the newly identified C-shaped structure [approximately 4.0 m south of Feature 3]. This feature, which opens to the northwest, measures 4.6 m long (e/w) by 4.2 m wide (n/s) and ranges in height .40–1.40 m high. Its walls are constructed of small to large basalt cobbles and boulders stacked two to four courses high around a small level interior area. The walls are partially collapsed on all sides and several pieces of coral were observed within and surrounding this feature. One test unit was placed within the interior of the C-shape which revealed a three-layer stratigraphic sequence and a remnant hearth feature designated Feature 4a. Approximately 2.5 m to the northwest is Feature 5, a V-shaped remnant.

Feature 5, a short wall with an acute bend, is the westernmost feature of Site 6373. The walls, measuring 3.7 m (n/s) and 2.7 m (nw/se) long, abut against a bedrock ledge at both ends to form a low enclosed area. The walls are 1.0 m wide and constructed of stacked and piled basalt cobbles and boulders to a height of 0.40 m.

[Feature 6 is a] short, single-course alignment of boulders... located just south of Feature 3 enclosure. It is oriented north-south and measures 3.0 m long by 0.50 m wide and ranges in height from 0.30 to 0.40 m.

[Feature 7 is a] disturbed wall remnant [that] occurs south of Features 2 and 3. It is built atop a bedrock bench and comprised of two sections that are stacked up to four courses high with a maximum height of 0.60 m. The heavily collapsed wall segment measures 3.0 m long by 1.2 m wide. Based on their proximity, Features 6 and 7 may represent the remnants of an older feature that was dismantled to construct portions of Site 6373.

Feature 8 is a 3.0 m wide depressed area located along the northwest corner of Feature 3. The depression is .50 m deep and is within the *a'a* flow. (Rotunno-Hazuka et al. 2008a:65–70)

Cordy interpreted this site as a historic, non-permanent house-site with livestock structures. The results of the current study indicate that a re-interpretation of this site as a traditional Hawaiian permanent habitation may be appropriate.

[Site 50-50-14-6373] is a habitation complex that appears to originate in the late pre-Contact to early historic period based on the construction of Feature 3 and the findings from the testing. The site is centrally located within the subject property and is comprised of a minimum of eight features. Since this site will be preserved and incorporated into the proposed development plan, minimal testing was conducted during the current investigations. The Feature 1 platform/ enclosure was not tested and its function has not been confirmed, but it may be the foundation for a sleeping house.

Feature 2, the rectangular enclosure is a structure that appears to have been a later addition based on its morphology and construction. The Feature 2 walls abut onto the east wall of Feature 3 to complete the rectangular enclosed area. Feature 2, thus post-dates Feature 3. It likely served as an animal pen being built on an uneven bedrock surface, containing little soil with a sloping interior floor area. Testing within this feature did not recover any materials to refute this interpretation.

Feature 3, the primary structure of the complex, appears to be a house site; however no formal entrance was identified during the survey. Testing within this feature recovered coral and *ilili* though it was not abundant. This lack of cultural materials may be a result of sampling error due to the placement of the unit near the western wall. However, as the stratigraphic profile... shows,

the *‘ilī‘ilī* may be a portion of a living floor. Additionally, Cordy’s testing within Feature 3 recovered 33.3 g of marine shell.

Within Feature 4, the C-shaped structure, a small rock-lined hearth was recorded that likely dates to the pre-Contact era. Feature 4a supports a habitation function, perhaps as a cooking house. Features 5 and 8 are ancillary features probably utilized as small planting areas or for storage. Features 6 and 7 the wall segment and alignment may represent remnants of an older feature that was dismantled and the rocks used for the construction of other features.

Cordy inferred this complex to be a temporary historic habitation site with livestock enclosures based a set of pre-determined criteria. It is important to note that no historic artifacts were recovered in or around the site. Based on the currently available data, this site is interpreted to be a traditional Hawaiian habitation complex or *kaūhale* originating sometime during the late prehistoric through the early historic periods; with some modifications that post-date the main components. Site 6373 is slated to be preserved in place with a protective buffer zone. (Rotunno-Hazuka et al. 2008a: 73–74)

Current Description

Site 50-50-14-06373 (Figure 77) includes eight features: a platform (Feature 1), two enclosures (Feature 2 and 3), a U-shaped wall (Feature 4), two wall segments (Feature 5 and Feature 7), an alignment (Feature 6), and a modified depression (Feature 8). The site is situated along a *pāhoehoe* ridge located in the north-central portion of the H2 Project Area. The site was originally recorded and tested by Cordy in 1978. It was re-recorded and selected features were tested by Rotunno-Hazuka et al. (2008b). Cordy interpreted the site as a historic, non-permanent house site with livestock structures. Rotunno-Hazuka et al. reinterpreted the site as a pre-Contact to early post-Contact habitation complex. The site appears to have functioned as a ceremonial complex that was built and used during the late pre-Contact to early post-Contact period. No historic material was observed. A ceremonial function, especially for Feature 3 and Feature 4, is based on the presence of large amounts of branch coral and the style of construction.

Feature 1 (Figure 78) is a roughly rectangular-shaped platform measuring 5 m long (E/W) × 4 m wide (N/S) × 0.65 m high. It is located in the northeastern portion of the site and is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 1 to 3 courses high. The platform is relatively low. It is level with the ground surface on the south and west sides and slightly raised on the north and east sides. It is edged with small to medium boulders. The interior is relatively level and consists of stone fill comprised of large cobbles and some small boulders. Two unmodified waterworn cobbles were observed on the surface. This feature was originally recorded as Site 225-1 by Cordy (1978) and was re-recorded by Rotunno-Hazuka et al. (2008a). It is in fair to good condition.

Feature 2 (Figure 79) is a roughly rectangular-shaped stone-walled enclosure measuring 14.5 m long (E/W) × 11 m wide (N/S). The walls of this feature are 0.5 m wide, have an interior height of 0.9 m, and have an exterior height of 1.25 m. Feature 2 abuts the eastern side of the Feature 3 enclosure and is located in the central-eastern portion of the site. The walls are core-filled with small to medium boulder fill in between. A 60 cm-wide entrance is located along the eastern wall. The south side of the entrance has partially collapsed. The interior of the feature consists of soil and bedrock outcrop. Walls are made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 8 to 9 courses high and vertically faced. The northeastern corner has collapsed along with small portions of the north and south walls. Based on the construction style and abutment configuration, this feature likely postdates Feature 3. It was originally recorded and tested by Cordy in 1978 (Site 225-2) and recorded again by Rotunno-Hazuka et al. (2008b). Two branch coral cobbles and one *Porites* coral cobble were observed in the westernmost portion of the enclosure near Feature 3. These coral pieces may have originated

from Feature 3. Feature 2 is in good condition, aside from areas with tumble, wall collapse, and impacts from previous archaeological testing.

Feature 3 (Figure 80) consists of a roughly square stone-walled enclosure measuring 12.6 m (N/S) × 11.8 m (E/W). Walls range from 1.0 to 1.4 m wide and are stacked 7 to 9 courses high. Walls are made of subangular *pāhoehoe* large cobbles and small to medium boulders that are vertically faced with an interior height of 1.8 m and an external height of 1.3 m. Feature 3 is located in the central-western portion of the site. Feature 2 is constructed off of and abutting the eastern wall. The walls are large and core-filled with medium boulders along edges and large cobble and small boulder fill in between. No formal entrance was observed. A low section of the northern wall has tumbled. This feature likely predates Feature 2. The interior of the feature consists of soil, and *‘ilī‘ilī* pebbles were observed inside the feature. In addition, one small *Conus* shell and more than 20 pieces of branch coral were observed on the surface, as well as *Porites* coral. Feature 3 was originally recorded and tested by Cordy (1978; Site 225-3) who found only small amounts of midden. It was re-recorded and tested by Rotunno-Hazuka et al. (2008b) and traditional cultural material was identified in the test excavation. The large size of the walls, lack of formal entrance, and presence of numerous branch coral (both waterworn and not waterworn) suggest that Feature 3 enclosure may have functioned as more than a habitation feature. The enclosure may have functioned as a ceremonial structure, possibly a *heiau*. Feature 3 is in good condition.

Feature 4 (Figure 81) consists of a U-shaped wall that opens to the northwest and measures 4.6 m long (N/S) × 4.2 m wide (E/W). The walls are 1.4 m wide and have an interior height of 0.4 m and exterior height of 0.6 m. The interior measures 1.7 m long × 1.7 m wide. Feature 4 is located in the southwestern portion of the site and is made of piled and stacked subangular *pāhoehoe* large cobbles and small to medium boulders that are 1 to 2 courses high. There is a small portion of wall at the northwestern edge that nearly closes off the feature and may have functioned as an entrance. The interior consists of soil and tumbled rock. Numerous fragments of branch coral and *Porites* coral are located on the wall. The site was originally recorded and tested by Rotunno-Hazuka et al. (2008b). They found a stone-lined hearth with charcoal, but no cultural material. The presence of branch coral and the hearth with no other cultural material suggests that it may have functioned as a ceremonial cooking structure. Feature 4 is in good condition.

Feature 5 (Figure 82) consists of a low wall segment measuring 3.7 m long (N/S) × 1.2 m wide (E/W) × 0.3 m high. It is located at the southwestern edge of the site and is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are piled and stacked 1 to 2 courses high. The wall is low and may be a portion of a previously impacted feature. No cultural material was observed on the wall, but two fragments of branch coral and two *Porites* coral cobbles are located immediately east of the feature. The site was originally recorded by Rotunno-Hazuka et al. (2008b). It is in poor condition.

Feature 6 (Figure 83) consists of a small single-course alignment measuring 1.9 m long (N/S) × 0.4 m wide (E/W) × 0.5 m high. The alignment is 0.4 m wide and is made of medium subangular *pāhoehoe* boulders. It extends south near the southwestern corner of Feature 3. The alignment may be a portion of a previously impacted feature. It was originally recorded by Rotunno-Hazuka et al. (2008a). No cultural material was observed on or around this feature. It is in poor condition due to tumble.

Feature 7 (Figure 84) consists of a low wall segment that measures 2 m long (E/W) × 1.1 m wide (N/S) × 0.4 m high. The wall is 1.1 m wide and is made of subangular *pāhoehoe* large cobbles and small boulders that are piled and stacked 1 to 3 courses high. Feature 7 is located south of the area where Features 2 and 3 abut each other. The alignment may be a portion of a previously impacted feature. It was originally recorded by Rotunno-Hazuka et al. (2008b). No cultural material was observed on or around this feature. It is in poor condition due to tumble.

Feature 8 (Figure 85) is a modified depression measuring 3 m long (NE/SW) × 2.5 m wide (NW/SE) with a depth at 0.7 m. It is located near the northwestern corner of Feature 3. This portion of the exposed bedrock outcrop forms a natural depression that has been filled with subangular *pāhoehoe* cobbles and boulders. The surface of the fill is uneven. This feature was originally recorded by Rotunno-Hazuka et al. (2008a). No cultural material was observed in or around this feature, which is in poor condition due to tumble.

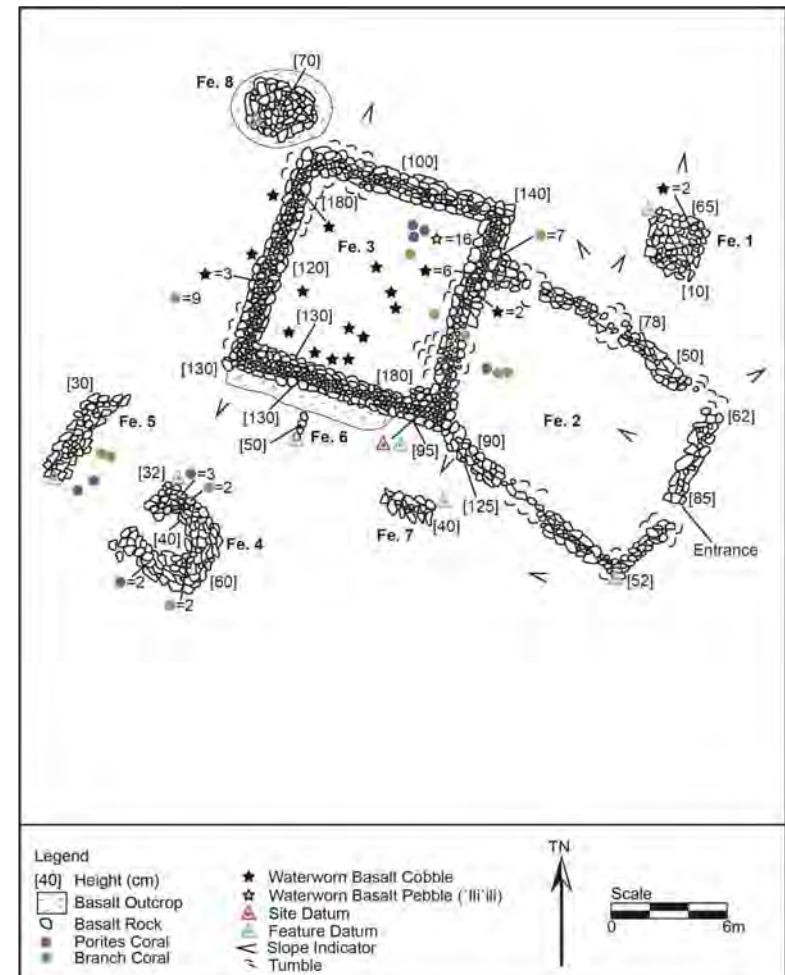


Figure 77. Plan-view map of SIHP 50-50-14-06373.



Figure 78. SIHP 50-50-14-06373, Feature 1 platform (view to south).



Figure 79. SIHP 50-50-14-06373, Feature 2 enclosure (view to west).



Figure 80. SIHP 50-50-14-06373, Feature 3 enclosure (view to west).



Figure 81. SIHP 50-50-14-06373, Feature 4, U-shaped wall, (view to southeast).

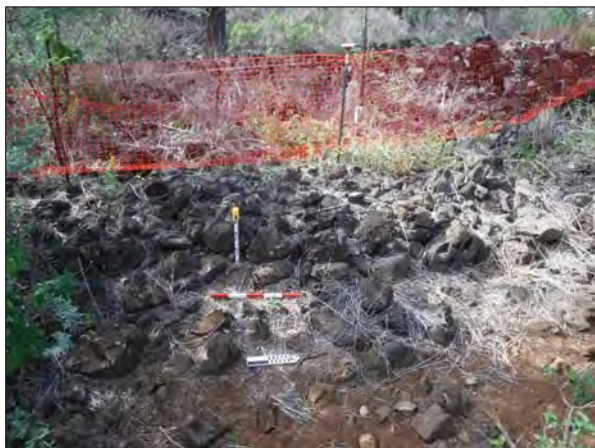


Figure 82. SIHP 50-50-14-06373, Feature 5 wall segment (view to west).



Figure 83. SIHP 50-50-14-06373, Feature 6 alignment (view to north).



Figure 84. SIHP 50-50-14-06373, Feature 7 wall segment (view to south).



Figure 85. SIHP 50-50-14-06373, Feature 8 modified depression (view to southwest).

SIHP No.: 50-50-14-06374 (formerly Site 230)**Site Type:** Complex**No. of Previously Identified Features:** 5 (wall segments; Cordy 1978; Rotunno-Hazuka et al. 2008a)**No. of Features Identified during Current AIS:** 4 (wall segments; Feature 1 wall segments removed from SIHP 50-50-14-06374 have been assigned new SIHP number, 50-50-14-08850)**Overall Dimensions:** 357 m L (E/W) × 163 m W (N/S) × 1.1 m H**Condition:** Good–Poor**Possible Age:** Post-Contact**Possible Function:** Boundary Maintenance

SIHP 50-50-14-06374 includes various wall segments throughout the project area. The site was recorded by Cordy (1978), who designated it as Site 50-Ma-B8-230. Five features were previously documented by Rotunno-Hazuka et al. (2008b), including four wall segments (Features 2 through 5) in the northern and central portion of the project area, which were likely associated with post-Contact ranching activities, as well as a more substantially built wall running north-south along the eastern boundary of the project area (Feature 1). During the current investigation, and following from research undertaken as part of the supplemental Cultural Impact Assessment (CIA) for the current project (Lee-Greig and Souza 2020), the wall segments that were previously designated as Feature 1 of this site have been assigned a new SIHP number.

Previous Site Description

Cordy (1978) recorded Site 50-Ma-B8-230 as a wall:

This large wall bounds the southern edge of the survey area near holes 8, 9, and 10, swings north seaward of hole 10, crosses hole 18, turns seaward and runs north of Site 227, and finally turns south again, running along the top of the bluff overlooking the coastal sand flat. The wall is high (1.4 meters), wide (c. 1.0 meter) and well built with square corners. (Cordy 1978)

Rotunno-Hazuka et al. (2008a) grouped all of the wall segments into a single site, designated as SIHP 50-50-14-06374, Features 1 through 5:

Site 6374 is a freestanding wall that meanders around the property primarily along the east and western portions of the project area. These large intact sections have been designated as Feature 1 of Site 6374. Smaller isolated segments, possibly from this original wall, are present throughout the project area and have been subsumed into this site. Along the central portion of the northern property boundary line, is Feature 2, Feature 3 is a short segment located within the central portion of the project area just east of Site 6372. Feature 4 is an east west trending low meandering wall located along the northern boundary line of the project area. This low wall segment may have been a portion of Cordys' Site 242. Feature 5 is a modified outcrop with an attached freestanding wall located in the northwest quadrant of the project area.

Feature 1, the wall within the larger sections is primarily double-faced and core-filled and ranges .85–1.55 m in height and... .48–1.28 m in width. It meanders in a zig-zag fashion following the eastern and portions of the southern boundary line.

Feature 2 is centrally located along the northern boundary line. It is a relaxed L-shaped wall that measures 5.5 m long in the north/south direction and curves to the east 4.0 m. The width of the wall ranges from 1.2 to 1.6 m and the heights range from 0.25 to 0.60 m. The wall is faced with cobbles and boulders and core-filled with smaller basalt cobbles. Although it is not definitive, this wall segment is likely a remnant of the long meandering wall originally recorded by Cordy, Site 230. This feature is in good condition except for the collapse along the northeastern section.

Feature 3 is centrally located within the subject parcel and is situated near the rectangular shaped wall (Site 1007-2) that encloses Site 6372. It measures 8.5 m long by .90 to 1.6 m wide and ranges in height from .25 to .50 m. The wall is straight and runs in an east to west direction. It is constructed of stacked small to large basalt cobbles and boulders that are core filled with small to medium basalt cobbles.

Feature 4 is a low meandering wall located along the northern boundary within the northeast corner of the project area. It is adjacent to and north of Site 6374. This wall is piled and badly disturbed probably during the golf course construction. Based on its location, Feature 4 appears to be a segment of the formerly recorded Site 242 by Cordy.

Feature 5 is located within the northwest quadrant of the project area where a former stable was situated. It is a large outcrop that has been modified by minimally stacking rocks upon the outcrop, and constructing a freestanding stacked wall to the southern terminus of the outcrop. Feature 5 measures 26.2 m long by .70–1.60 m wide and is oriented at 145 degrees.

Site 6374 is composed of a property boundary wall (Feature 1), and several sections of remnant walls assigned Features 2–5. Feature 1 is largely intact along the eastern and portions of the southern property line. Features 2–5 are scattered throughout the project area. Site 6374 Features 1–5 have been adequately documented. No further work is warranted for this site beyond construction monitoring. The rocks from Site 6374 will be reused to delineate the buffer zones around the five preservation areas.

Current Description

During the current investigation, the wall segments that were previously designated as Feature 1 of SIHP 50-50-14-06374 were split off from the other wall segments (see site description for SIHP 50-50-14-08850) based on the likely interpretation of this feature as a portion of the Old Aupuni Wall (also see Lee-Greig and Souza 2020). Features 2 through 5 are located in the northern and central portions of the project area (Figure 86) and are interpreted as remnants of post-Contact ranching walls and are described in detail below.

Feature 2 (Figure 87 and Figure 88) is a low L-shaped wall segment that measures 7 m long (NE/SW) × 1 m wide (NW/SE) and is 0.4 m high. The wall width ranges from 0.7 to 1 m and the wall is core-filled. The wall segment is located along the northern boundary of the H2 project area. It incorporates bedrock outcrop along the western edge and is constructed of subangular *pāhoehoe* large cobbles and small to medium boulders that are piled and stacked 1 to 2 courses high. The feature was originally recorded by Rotunno-Hazuka et al. (2008a), who suggested the wall segment had been impacted by relatively recent bulldozing in the lot to the north. A pushpile is immediately north of the feature and an east-to-west-running construction fence is 2 m north of it. A modern concrete slab fragment was observed near the southern end of the wall segment. The wall segment likely represents a corner of a former historic boundary wall that has been impacted. Feature 2 is interpreted as a ranching boundary wall that likely predates the Feature 1 wall segments based on height and condition style. It is in poor condition.

Feature 3 (Figure 89 and Figure 90) is a low linear wall segment located in a flat soil area in the central portion of the H2 project area. The wall segment measures 10 m long (NW/SE) × 0.9 m wide (NE/SW) with a height of 0.5 m and a wall width of 0.8–0.9 m. The feature is made of subangular *pāhoehoe* large cobbles and small to medium boulders, which was stacked 1–2 courses high with core-filled construction. The feature was originally recorded by Rotunno-Hazuka et al. (2008a). The wall segment appears to be the remnant of a historic boundary wall based on the style of construction. It does not appear to be associated with any of the other features of Site 06374. No cultural materials were observed on or near this feature. A larger *kiaue* tree is growing over the feature, which is in fair to poor condition due to tumble.

Feature 4 (Figure 92 through Figure 91) is a low meandering linear stone wall located in the northeastern corner of the project area, fronting the adjacent lot located to the north. Overall, the wall measures 45 m long (E/W) \times 0.5–1.0 m wide (N/S) \times 0.8 m high. The wall runs roughly east-west near the northern edges of Sites 06371; 06377; and 06374, Feature 1.1. It is made of subangular *pāhoehoe* boulder slabs, large cobbles, and small to medium boulders that are core-filled and stacked 1 to 4 courses high. The wall was recorded by Rotunno-Hazuka et al. (2008b) as part of Site 06374. They suggested the wall may be a segment of the previously recorded Site 242 (Cordy 1978). Feature 4 does not appear to be associated with any of the other features of Site 06374. It likely functioned as a boundary wall based on the length, but the age is undetermined. The wall segment may predate Site 06374, Feature 1 (possible Aupuni wall) based on style of construction and general condition. No cultural materials were documented in the vicinity of this wall segment, which is in poor condition due to tumble.

Feature 5 (Figure 94 and Figure 95) is a linear wall segment situated on a sandy slope along a natural bedrock outcrop located in the northwestern portion of the project area. The wall is partially constructed on top of, and extending off of, the southeastern end of a natural bedrock outcrop. Overall, the wall measures 19 m long (NW/SE) \times 0.7–1.8 m wide (NE/SW) \times 1.1 m high. It is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 1 to 2 courses high. The feature was originally recorded by Rotunno-Hazuka et al. (2008a) as part of Site 06374. Feature 5 does not appear to be associated with any of the other features of Site 06374. It may be a remnant of a ranching wall associated with a former stable in the area that was noted by Rotunno-Hazuka et al. (2008a). Based on the style of construction, the wall appears to be historic in age and possibly functioned as part of the noted former stable. The area to the west of the wall segment is currently a gravel parking lot. Several fragments of *Porites* coral and modern trash debris are located near the wall, but do not appear to be directly associated with it. The Feature 5 wall segment is in fair condition due to tumble.

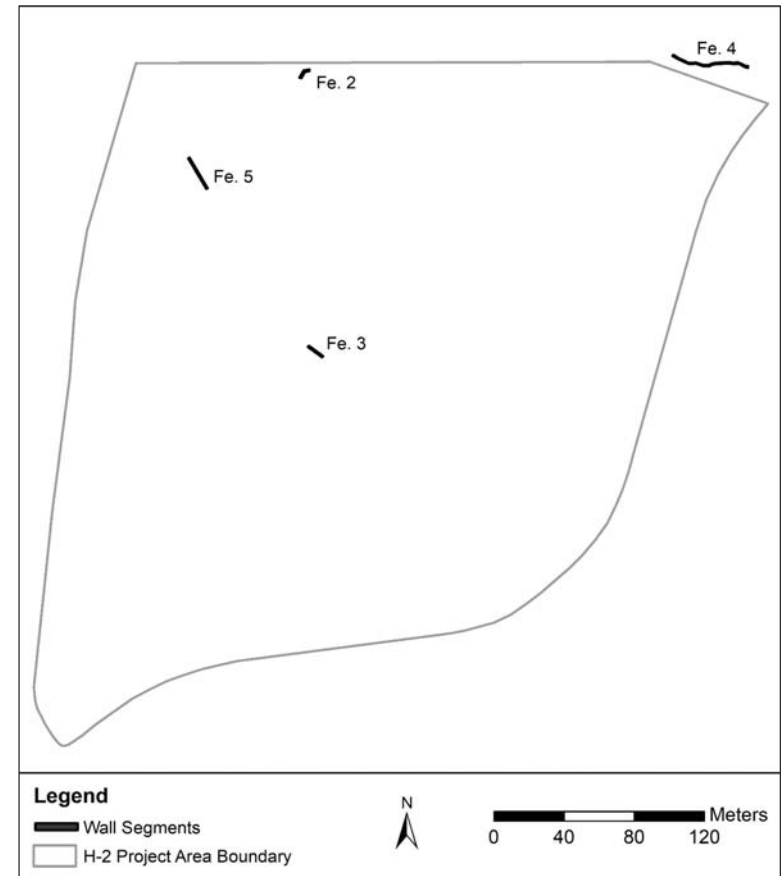


Figure 86. Overall plan map of SIHP 50-50-14-06374, Features 2 through 5.

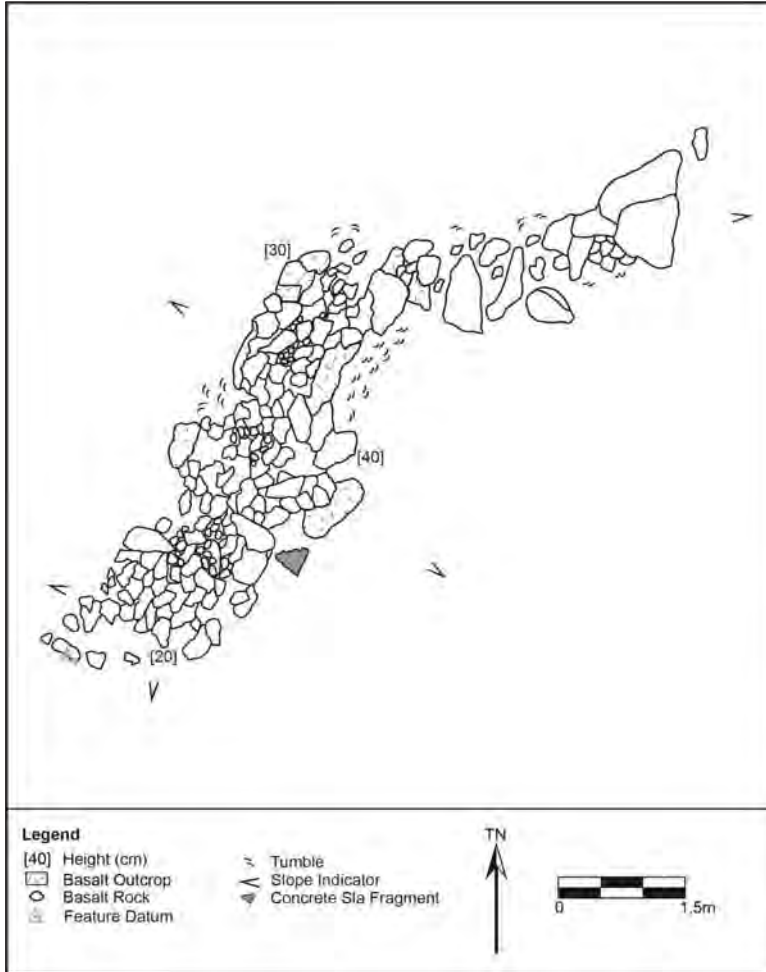


Figure 87. Plan-view map of SIHP 50-50-14-06374, Feature 2 wall segment.



Figure 88. SIHP 50-50-14-06374, Feature 2 wall segment (view to northeast).



Figure 89. SIHP 50-50-14-06374, Feature 3, southeast end (view to northeast).

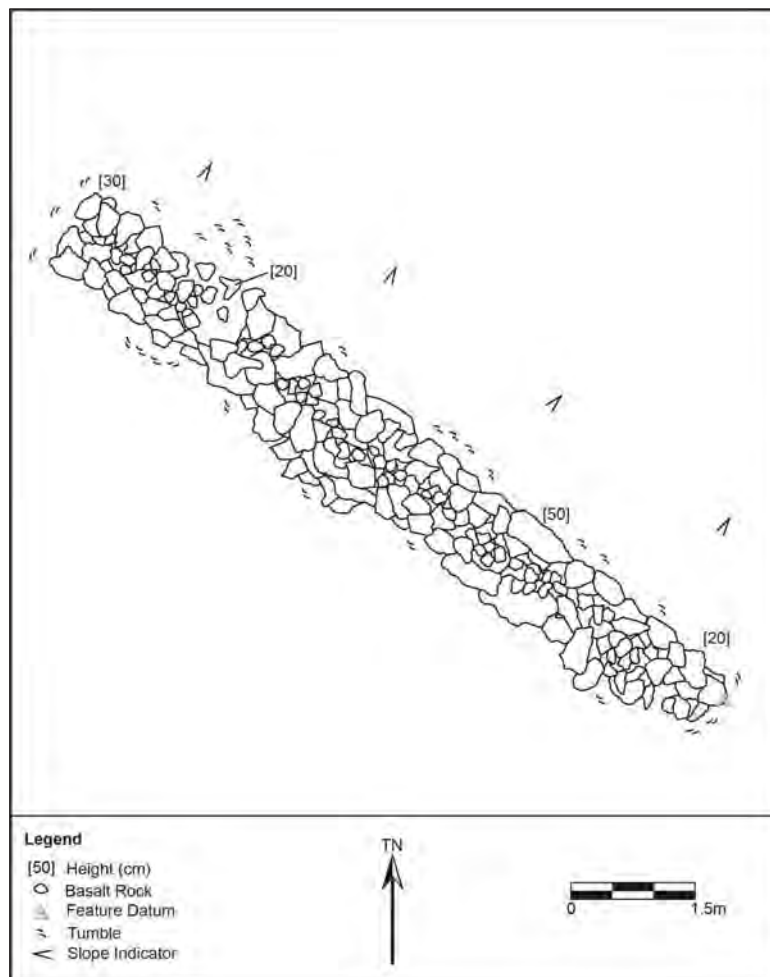


Figure 90. Plan-view map of SIHP 50-50-14-06374, Feature 3 wall segment.

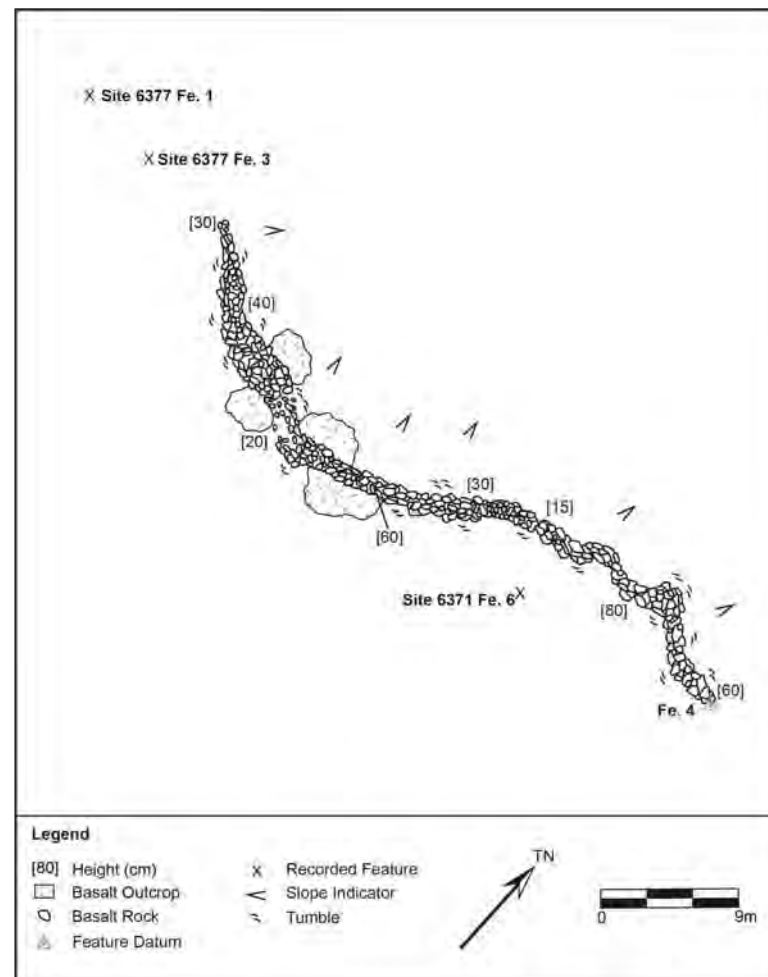


Figure 91. Plan-view map of SIHP 50-50-14-06374, Feature 4 wall segment.



Figure 92. SIHP 50-50-14-06374, Feature 4 wall segment (view to west).



Figure 93. SIHP 50-50-14-06374, Feature 4 wall segment, east end (view to east).

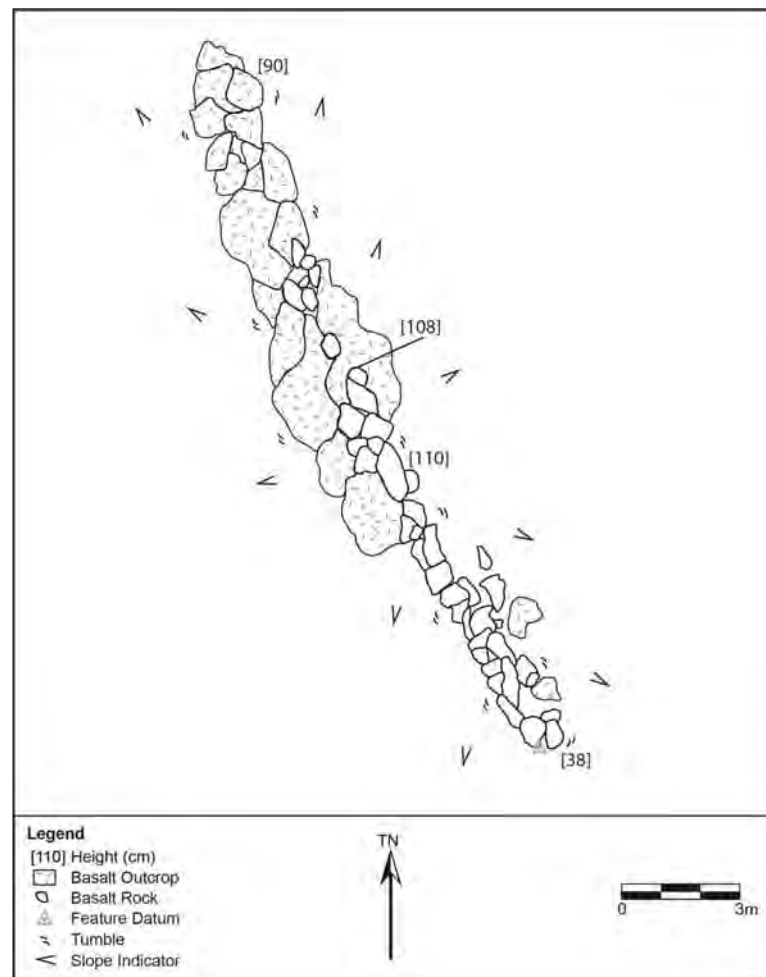


Figure 94. Plan-view map of SIHP 50-50-14-06374, Feature 5 wall segment.



Figure 95. Plan-view map of SIHP 50-50-14-06374, Feature 5 wall (view to northwest).

SIHP No.: 50-50-14-06376

Site Type: Complex

No. of Previously Identified Features: 4 (wall segment, U-shaped wall, modified outcrop with 5 modified crevasses, alignment; Rotunno-Hazuka et al. 2008a)

No. of Features Identified during Current AIS: 4 (wall segment, U-shaped wall, modified outcrop with 5 modified depressions, enclosure)

Overall Dimensions: 14 m L (NE/SW) × 13 m W (NW/SE) × 0.5 m H

Condition: Good–Poor

Possible Age: Pre-Contact to Early Post-Contact

Possible Function: Temporary habitation, agriculture

Site 50-50-14-06376 was originally recorded by Rotunno-Hazuka et al. (2008a) as an agricultural and habitation area used intermittently during the pre-Contact and early post-Contact periods. The current investigation identified two walls, a small enclosure, and five modified depressions.

Previous Description

Rotunno-Hazuka et al. (2008a) described Site 50-50-14-06376 as follows:

Site 50-50-14-6376 was recorded during the current undertaking. It is located within the northeast quadrant of the project area near Makena-Alanui Road. It is a large modified bedrock outcrop that measures 19.0 m long by 17.0 m wide and is comprised of four primary features with five subfeatures. Feature 1 is located on the extreme north side of the outcrop. It consists of an elongated section of soil bounded to the north by stacked cobbles upon the outcrop. Feature 2 is a U-shaped feature that is located along the central east side. Feature 3 is comprised of five possible modified crevasses or lava blister designated as Features 3.1–3.5. Feature 4 is situated along the southwest corner and is a remnant alignment of stacked cobbles and boulders bordering a cleared soil area. Testing throughout the outcrop was conducted utilizing controlled test units, shovel test pits (STP) and shovel test trenches (STR).

Feature 1 is an elongated section of intermittently low stacked cobbles upon an outcrop associated with a linear soil area. It is located along the northern section of the... This modified area measures approximately 9.5 m long (e/w) by .15–.65 m (n/s) wide and ranges in height from .14–.45 m high. It appears as a low wall however some sections are flush with the rock and resemble a rock terrace. Adjacent and south of the stacked wall is a linear section of soil which measures approximately 11.0 m long (e/w) by 2.0 m wide. Within this elongated soil area, seven shovel test pits (STP 1–7) were executed to assess the soil composition.

Feature 2 is the most well constructed feature at this site. It is comprised of a U-shaped structure that measures 3.0 m long (e/w) by 4.0 m wide (n/s) and bounds a rocky soil interior that measures approximately 2.1 m long (e/w) by 1.40 wide (n/s)... The interior of Feature 2 is faced and averages .48 m high. The exterior is stacked along all sides (.32–.48 high), except for the southern side which is faced with large blocky basalt boulders and averages 2–3 courses high. Two test units (TU 1 and 2) were placed inside Feature 2 to aid in determining function and chronology. Testing recovered a three layer stratigraphic sequence and an ashy grey charcoal deposit, designated Feature 2a.

Features 3.1–3.5 are located within the central portion of the outcrop that is dominated by a raised pahoe-hoe lava flow. These features are natural crevasses and or lava blister that have been partially modified.

Feature 3.1 is located west of Feature 2 within the south central portion of the outcrop. This small lava blister is rectangular shaped, measuring approximately .80 m long by .50 m wide and ranging in depth .45–.65 m. The opening appears to have been modified by removing rocks along the eastern side to form a straight edge. A .40 m slab is situated along the west side, a boulder appears to create the south wall and the north is the natural overhang from the lava blister.

Feature 3.2 (c-2) Feature 3.2 is a depression within a small lava blister which measures approximately 1.10 by .50 and ranges in depth from .40–.52 m. The north and west sides are rubble bedrock descending to the floor. The eastern side may be deliberately stacked but is only 1–2 courses (.20–.40 m) high with broken and decomposing lava.

Feature 3.3 (c-3) Feature 3.3 is a very small cavity within the outcrop that may have been modified. It measures .60 m wide and approximately .60 deep and is a depression or sunk into the raised central pahoehoe portion the outcrop... Possible piling of rock, 1–2 courses high, was observed along the west side. Feature 3.3 is not as formally modified as Features 3.1 and 3.2.

Feature 3.4 (c-4) is similar in construction to Feature 3.3 as it is sunk into the pahoehoe lava measuring .80 m long by .50 m wide and averages .55 m deep.

Feature 3.5 is a circular depression in the rocks which measures approximately .45 m in diameter. It appears to be a purposeful construction that is .19 m deep.

Feature 4 is a crude alignment possibly associated with a soil area. The alignment is oriented roughly 50 degrees and measures 2.2 m long [by] .55 m wide. The soil area bounded to the east of the alignment is approximately 1.2 m long by 1.0 m wide. A 1.0 by .50 m shovel test trench (STR 13) was placed within the soil area to determine presence/absence of cultural materials. (Rotunno-Hazuka et al. 2008a:80–85)

Site 6376 is a modified outcrop comprised of four main feature areas (Features 1–4) and five possible subfeatures (Features 3.1–3.5). Feature 1 is a modified outcrop associated with a linear soil area. The soil area was systematically tested with 7 STP's and all were negative for cultural materials. Testing within the U-shaped feature, Feature 2, identified a cultural layer within Layer II which was comprised of sparse marine shell, echinodermata, coral fragments (possible tools) and 1 piece each volcanic glass and basalt debitage. Also within Layer II was a charcoal deposit (Feature 2a) which returned a radiometric date of 190+/-40 BP. The interior soil area of Feature 2 measures 2.10 sq. m., the two test units covered 2.20 sq. m. and extended over the rock construction. Thus, almost the entire interior of this feature was tested during this undertaking. Feature 3 was comprised of five component sub-features (Features 3.1–3.5) which were natural crevasses and or lava blisters that had been partially modified. Features 3.1 and 3.2 were likely cupboard and or storage areas. Features 3.3 and 3.4 may have been modified and utilized for storage. Feature 3.5 appears to be a mulch or planting pit. Feature 4 is a crude alignment which bounds a level soil area. Testing within this soil area was negative for cultural materials, however the soil area was probably utilized for agricultural purposes.

Site 6376 is interpreted as a habitation and agricultural area that was used intermittently during the pre-Contact to early historic periods. The presence of a charcoal deposit and cupboards supports a habitation function; however the fire pit is not lined and or formally constructed. Modifications to the outcrop and the presence of several soil pockets and or areas would be ideal for planting purposes.

Site 6376 been thoroughly tested and no further work beyond construction monitoring is warranted for this area. This site is very similar to Site 6379 which has been slated for preservation. Site 6379 is also a modified outcrop that contains similar but more formally constructed features. Furthermore, an earlier date (290+/-40 BP) was retrieved from a rock lined fire pit at Site 6379 (Rotunno-Hazuka et al. 2008b:99–100).

Current Description

Site 50-50-14-06376 (Figure 96) has 4 features: a low wall (Feature 1), a U-shaped wall (Feature 2), a modified outcrop with 5 modified depressions (Features 3.1–3.5), and a small enclosure (Feature 4) situated on a low *pāhoehoe* knoll in the central portion of the project area. The site was originally recorded and tested by Rotunno-Hazuka et al. (2008a) who only found traditional cultural material at Feature 2. Site 06376 likely served several functions. Feature 2 was likely utilized as a temporary habitation structure. Features 1 and 4 likely functioned as agricultural planting areas. Features 3.1–3.5 possibly functioned as small storage areas.

Feature 1 (Figure 97) consists of a low linear stone wall running roughly east-west along the northern edge of the site. The feature measures 9 m long (E/W) × 0.8 m wide (N/S) with a height of 0.3 m. A cleared soil area to the south measures 11 m long (E/W) × 1.5 m (N/S). The wall is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are piled and stacked 1 to 2 courses high. The wall was originally recorded by Rotunno-Hazuka et al. (2008a), who tested the soil area (STP 1–7) with no finds. The wall likely served an agricultural function. Stones appear to have been cleared from the soil area and piled/stacked along the wall to create a cleared soil area for planting. No cultural materials were observed on or near the feature, which is in poor condition with a large amount of tumble.

Feature 2 (Figure 98) is a low U-shaped wall located in the southeastern portion of the site. It measures 3.7 m long (N/S) × 3.5 m wide (E/W) and has a maximum height of 0.4 m on the interior side and 0.5 m on the exterior side. The wall width is 0.9 m. The wall is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 1 to 2 courses high. The interior measures 2 m long × 1.9 m wide and is soil. The northern portion of the wall is the most intact portion of the feature, which was originally recorded by Rotunno-Hazuka et al. (2008b). They excavated two test units (TU-1, TU-2) within the soil interior and found ash, charcoal, and fire-cracked rock (Feature 2a) and small amounts of traditional cultural material. The U-shaped wall likely functioned as a temporary habitation feature. During the current investigation, a single medium-grain grey basalt secondary flake was observed on the top of the southern portion of the wall. The flake measures 7.5 cm long × 7 cm wide × 3 cm thick and was not collected. Feature 2 is in fair condition due to tumble and previous testing.

Feature 3 is a modified outcrop with five small modified depressions (Features 3.1–3.5), each of which consists of small boulders and cobbles piled along the edges and filling in natural lava blisters (Figure 99 through Figure 103) in the western portion of the site. Feature 3.1 measures 1.5 m long (NW/SE) × 0.7 m wide (NE/SW) × 0.4 m high and 0.3 m deep. Feature 3.2 measures 1.1 m long (NE/SW) × 1.0 m wide (NW/SE) × 0.2 m high and 0.5 m deep. Feature 3.3 measures 1.2 m wide (E/W) × 0.8 m wide (N/S) × 0.3 m high and 0.6 m deep. Feature 3.4 measures 0.9 m long (NW/SE) × 0.8 m wide (NE/SW) × 0.2 m high and 0.5 m deep. Feature 3.5 measures 0.8 m long (E/W) × 0.5 m wide (N/S) × 0.2 m high and 0.4 m deep. Feature 3 was originally recorded by Rotunno-Hazuka et al. (2008a). The modified depressions possibly functioned as small storage areas. They are in poor condition due to tumble.

Feature 4 (Figure 104) is a small, low, oval stone-walled enclosure located in the southwestern corner of site that measures 3 m long (NW/SE) × 2.5 m wide (NE/SW) × 0.4 m high. The wall is 0.6 m wide and is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 1 to 2 courses high. The interior measures 2 m long × 1 m wide and consists of soil. The feature was recorded as an alignment and tested (STP 12, STP 13) by Rotunno-Hazuka et al. (2008a), who found no cultural materials. The enclosure likely functioned as a small planting area. Feature 4 is in poor condition due to tumble and previous testing.

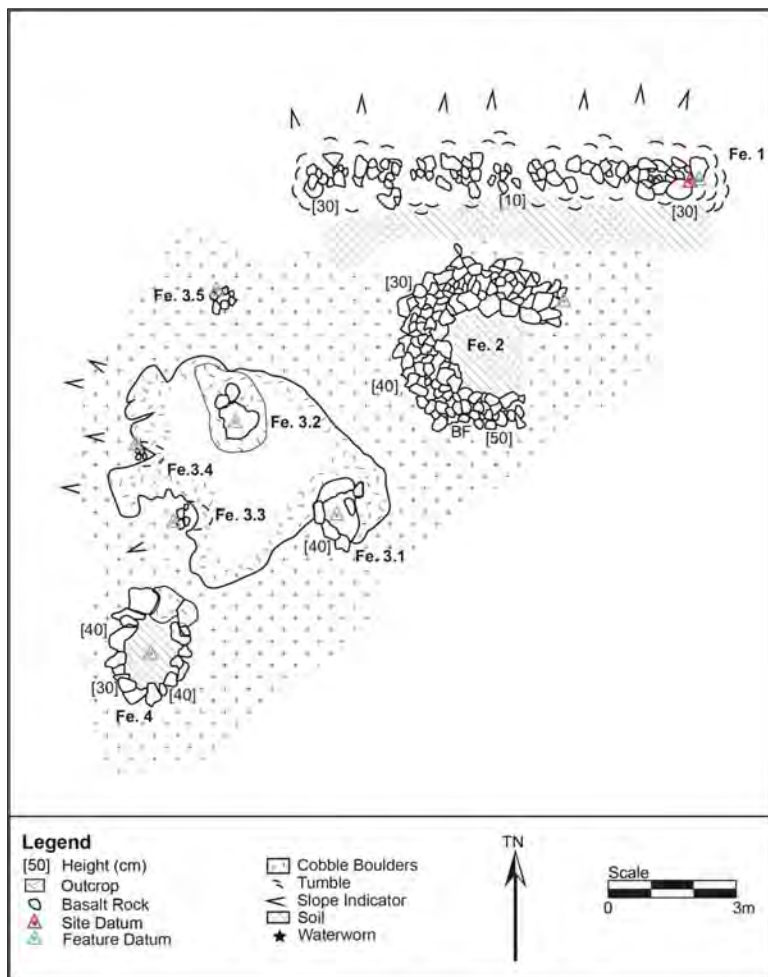


Figure 96. Plan-view map of SIHP 50-50-14-06376.



Figure 97. SIHP 50-50-14-06376, Feature 1 wall (view to west).



Figure 98. SIHP 50-50-14-06376, Feature 2, U-shaped wall (view to north).



Figure 99. SIHP 50-50-14-06376, Feature 3.1 modified depression (view to northwest).



Figure 100. SIHP 50-50-14-06376, Feature 3.2 modified depression (view to northwest).



Figure 101. SIHP 50-50-14-06376, Feature 3.3 modified depression (view to east).



Figure 102. SIHP 50-50-14-06376, Feature 3.4 modified depression (view to southeast).



Figure 103. SIHP 50-50-14-06376, Feature 3.5 modified depression (view to west).



Figure 104. SIHP 50-50-14-06376, Feature 4 enclosure (view to northeast).

SIHP No.: 50-50-14-06377

Site Type: Complex

No. of Previously Identified Features: 2 (U-shaped wall, walled pit; Rotunno-Hazuka et al. 2008a)

No. of Features Identified during Current AIS: 4 (U-shaped wall, walled pit, wall, terrace; 2 previously identified, 2 newly identified)

Overall Dimensions: 38 m L × 28 m W × 1.05 m H

Condition: Good–Poor

Possible Age: Pre-Contact to Early Post-Contact

Possible Function: Temporary habitation, boundary, possibly ceremonial

Site 50-50-14-06377 was originally recorded and tested by Rotunno-Hazuka et al. (2008b), who recorded Features 1 (U-shaped wall) and 2 (walled pit), and tested Feature 2 and interpreted the site function as temporary habitation and agricultural site. The current investigation identified two additional features (Feature 3, a low wall and Feature 4, a small terrace) at the site. The current investigation also noted the presence of waterworn cobbles and branch coral at Feature 1, which may represent a ceremonial function for this site.

Previous Site Description

Rotunno-Hazuka et al. (2008a) described the site as follows:

Site 50-50-14-6377 was recorded during the current undertaking. It is located within the northeast corner of the project area near Site 6371 and 6374 Feature 5. It measures 14.20 m (northeast) long by 9.0 m wide (southwest) and consists of two features, a well constructed three-sided structure designated Feature 1 (TS 7) and a circular walled pit assigned Feature 2 (TS 28). The site partially straddles the northern property line extending into the adjoining golf course property.

Feature 1 consists of a relaxed U-shaped structure which is 2.8 m east of Site 6374 Feature 1 boundary wall. It measures 6.5 m long (n/s) by 4.3 m wide (e/w) and is oriented east west... The walls are constructed of basalt cobbles and boulders stacked three to five courses high and measure 1.2 m wide with a maximum height of 0.9 m. Feature 1 opens to the west and is partially collapsed along its ends. The interior of this structure is comprised of a level soil area. Near the northeastern corner of this feature is an irregular shaped wall/alignment that has been created by incorporating the natural outcrop. It measures 11.5 m long by 0.6 m wide and is constructed of loosely stacked and aligned basalt boulders with heights ranging from 0.30 to 0.50 m. This site is in a rocky area that slopes downward from east to west. No testing was performed at Feature 1 as it will be preserved within the proposed development. Further to the north is Feature 2 a circular walled pit.

Feature 2 is an oval shaped walled pit located west of Site 6374 Feature 1 boundary wall and approximately 38.0 m to the southwest from Feature 1. It is 5.0 m long by 3.0 m wide and comprised of stacked subangular cobbles ranging in height from .36–.70 m. This walled pit feature is similar to the walled pits identified at Site 6371 however it was grouped with this Site 6377 due to its close proximity to Feature 1. A .50 by .50 m test unit was excavated inside Feature 2 to determine presence/absence of cultural materials, and to record the stratigraphic sequence. (Rotunno-Hazuka et al. 2008a:100–103)

Site 6377 is comprised of two features. Feature 1 a U-shaped structure, and Feature 2 a walled pit. This site possibly functioned as a temporary habitation enclosure with an agricultural planting pit. Although this site is in close proximity to Site 6371, a permanent pre-Contact habitation and agricultural site, and that it contained a similar walled pit as those identified at Site 6371, the relationship of these two sites was indeterminate and they were assigned discrete site numbers. (Rotunno-Hazuka et al. 2008a:105)

Current Description

Site 50-50-14-06377 (Figure 105) includes four features: a U-shaped wall (Feature 1), a small enclosure (Feature 2), a low wall (Feature 3), and a small terrace (Feature 4) located in the northeastern portion of the site. The site is situated on a *pāhoehoe* slope. The Site 06374, Feature 1.1 historic wall runs roughly north-south through the center of the site. The site was originally recorded and tested by Rotunno-Hazuka et al. (2008a), who recorded Features 1 and 2, and tested Feature 2. The features likely served a variety of functions and appear to represent multiple phases of construction.

Feature 1 (Figure 106) consists of a U-shaped wall located in the northeastern portion of the site. It measures 6.5 m long (N/S) × 5 m wide (E/W) and has an interior height of 1.05 m and an exterior height of 0.5 m. The wall is 1.3 m wide and is made of subangular *pāhoehoe* large cobbles, small to medium boulders, and boulder slabs. The interior of the feature is soil and measures 4 m long × 4 m wide. The southern portion of the wall is the most substantial and best preserved. The eastern portion of the wall is constructed on top of a portion of the Feature 3 low wall that likely predates the U-shape. It is likely that some of the rocks used to build the U-shaped wall were taken from the Feature 3 wall. The Site 06374, Feature 1.1 historic wall is located 2 m west of Feature 1. Three waterworn basalt cobbles are within the southeastern corner of the feature and one waterworn cobble is located 1 m west of the U-shape. One fragment of branch coral was observed on the surface in the center of the feature. The feature was originally recorded by Rotunno-Hazuka et al. (2008a). The U-shaped wall likely functioned as a temporary habitation structure. The presence of branch coral may indicate that the feature also had a ceremonial component.

Feature 2 (Figure 107) is a small oval enclosure located in the southwestern corner of the site. The feature measures 3.5 m long (NE/SW) × 2.5 m wide (NW/SE) and has an interior height of 0.5 m and an exterior height of 0.6 m. The enclosing wall is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are piled and stacked 1 to 3 courses high. It has interior dimensions of 2 m long × 1.1 m wide and is situated at the western edge of the *pāhoehoe* slope. To the west is a relatively flat soil area. The enclosure is constructed off the western edge of a low exposed portion of bedrock outcrop. The interior is filled with jumbled small boulders. The feature was originally recorded and tested by Rotunno-Hazuka et al. (2008a). Testing revealed no cultural materials. The small enclosure appears to have served an agricultural function, possibly utilized as a planting area; the interior is filled with rocks and no soil is visible. Alternatively, it may have been utilized for storage. Feature 2 is in poor condition due to tumble and previous testing.

Feature 3 (Figure 108) is a low linear stone wall running roughly north-south along the eastern edge of the site. It measures 34 m long (N/S) × 0.7–1 m wide (E/W) with a height of 0.6 m. The feature is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are piled and stacked 1 to 2 courses high. The wall is low, tumbled, and some of the stones appear to have been taken to build the Feature 1, U-shaped wall and even possibly the nearby Site 06374, Feature 1 historic wall. Rotunno-Hazuka et al. (2008b) noted the wall in their Feature 1 description and documented the complete length. The wall likely functioned as a pre-Contact/early post-Contact boundary wall. The wall likely predates the Site 06377, Feature 1, U-shaped wall, which was likely added to it at a later date. No cultural materials were observed on or near this feature. Feature 3 is in fair to poor condition due to tumble and potential dismantling of the feature for the construction of other nearby features.

Feature 4 (Figure 109) is a small terrace located in the western portion of the site. The terrace measures 2.5 m long (E/W) × 2 m wide (N/S) × 0.5 m high. It is constructed of several subangular *pāhoehoe* cobbles and boulders piled near a natural bedrock outcrop to form a small terrace on a gradual slope. The interior surface is soil and measures 1.5 m long × 1.1 m wide.

This is a newly recorded feature. The terrace likely functioned as a small agricultural feature that was possibly utilized as a planting area. No cultural materials were observed on or near this feature, which is in poor condition due to tumble.

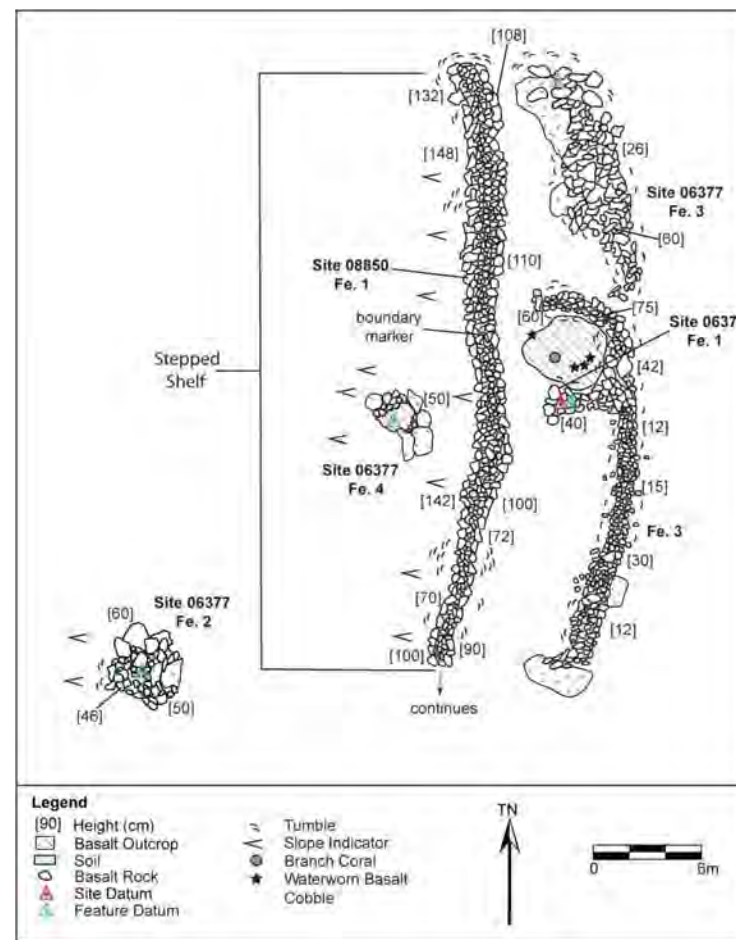


Figure 105. Plan-view map of SIHP 50-50-14-06377.



Figure 106. SIHP 50-50-14-06377, Feature 1, U-shaped wall (view to south).



Figure 107. SIHP 50-50-14-06377, Feature 2 enclosure (view to east).

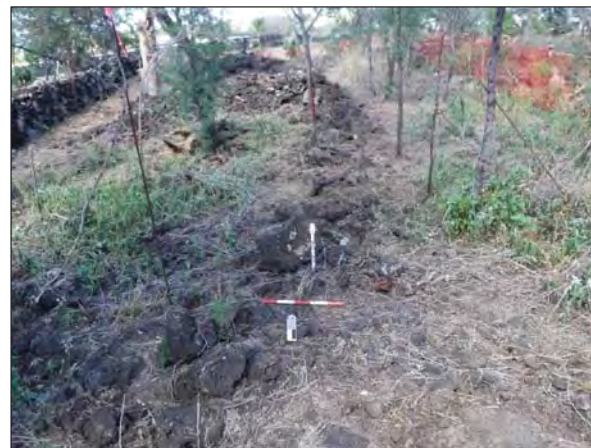


Figure 108. SIHP 50-50-14-06377, Feature 3 wall, with Feature 1 in background (view to north).



Figure 109. SIHP 50-50-14-06377, Feature 4 terrace (view to southeast).

SIHP No.: 50-50-14-06378**Site Type:** Complex**No. of Previously Identified Features:** 4 (enclosure, 2 pit features, cupboard; Rotunno-Hazuka et al. 2008a)**No. of Features Identified during Current AIS:** 4 (enclosure, modified depression, small enclosure, overhang)**Overall Dimensions:** 19 m L (N/S) × 18 m W (E/W) × 1.2 m H**Condition:** Fair**Possible Age:** Pre-Contact, Early Post-Contact**Possible Function:** Habitation, Agriculture, Ceremonial

Site 50-50-14-06378 was recorded and tested by Rotunno-Hazuka et al. (2008a). It was interpreted as a site used for permanent habitation (Feature 1, enclosure) with an agricultural component (Features 2 and 3, circular pits and Feature 4, cupboard). The current survey re-located the features and noted the presence of branch coral at Feature 1 (enclosure) suggesting there may also be a ceremonial component to the site.

Previous Site Description

Site 50-50-14-06378 was recorded as follows by Rotunno-Hazuka et al. (2008a):

This site was located during the current survey and is situated in the southeast portion of the project area and is comprised of a square enclosure, Feature 1, associated with a modified outcrop, Features 2–4... It is situated near Makena-Alanui Road and the imported sand fill area...

Feature 1

Feature 1 enclosure measures approximately 16.0 m long by 16.0 m wide with walls ranging in height from .56–.96 m and 1.0–1.8 m in width. It is constructed of boulder-faced, core-filled walls that bound a level soil area. One large piece of branch coral, rounded basalt, echinodermata, and mammal bone were observed on the surface of the interior. Two water-worn basalt cobbles are located outside the northeast corner of the enclosure, and one water-worn boulder outside the northwestern corner of the feature. The southern wall and the NW corner are disturbed due to Panini cactus and deer. Extending from the southwestern corner is a linear wall measuring 4.5 m long by 1.0 m wide. It is similarly constructed as the enclosure walls and its height ranges from 0.20 m on the south faced side to 1.0 m on the north faced side. Some collapse is evident at the southwestern end of this wall. One test unit measuring 1.0 by .5 meters was excavated in the NE corner and the results of this test excavation are described below. Feature 1 is surrounded by a natural outcrop along its northern side. The outcrop has been modified with circular pits (Features 2 and 3), and a cupboard (Feature 4).

Features 2 and 3

Two circular pits have been built into the outcrop north of the enclosure. Feature 2 measures 1.7 m in diameter forming a 'hole' or planting area in the lava field approximately 0.60 m deep. Feature 3 measures 2.5 m in diameter, is similarly constructed, and measures 0.55 m in the center. Both appear to have likely functioned as planting pits or perhaps small storage areas.

Feature 4

The last feature in this complex is a natural cupboard in the lava field to the southwest of the enclosure feature. The cupboard measures 1.0 m long by 0.6 m wide and was probably used for storage. (Rotunno-Hazuka et al. 2008a:106)

Site 6378 appears to be a pre-Contact permanent habitation enclosure (based on the architectural type and substantive construction of Feature 1) associated with small agricultural planting pits (Features 2 and 3) and possible cupboard or storage area (Feature 4). One test unit was placed

inside the enclosure abutting the east wall. A charcoal pocket (Feature 1a) with sparse cultural remains (echinodermata, unidentifiable animal bone and coral was documented from this feature). As this feature is located along the extreme eastern portion of the unit, it is possible that a formal subsurface hearth is in close proximity to this test unit. Site 6378 will be preserved and incorporated within the proposed development. No additional testing was performed within this feature. (Rotunno-Hazuka et al. 2008a:109)

Current Description

Site 50-50-14-06378 (Figure 110) includes six features: a square enclosure (Feature 1), a modified depression (Feature 2), a small enclosure (Feature 3), another modified depression (Feature 4), another enclosure (Feature 5), and a modified outcrop (Feature 6). Feature 1 is situated on a *pāhoehoe* knoll and Features 2 through 6 are situated on a *pāhoehoe* slope located in the southeast portion of the H2 project area. The site was originally recorded and tested by Rotunno-Hazuka et al. (2008a). Feature 1 likely functioned as a pre-Contact/early post-Contact habitation structure. The presence of branch coral may suggest that the enclosure also had a ceremonial component. Feature 2 may have functioned as a small storage area (habitation) or a small planting area, although no soil is visible. Feature 3 may have functioned as a small planting area. Feature 4 possibly functioned as a small planting feature. Feature 5

Feature 1 (Figure 111 and Figure 112) consists of a roughly square-shaped stone-walled enclosure located in the southeast portion of the site. Feature 1 measures 8.5 m long (NE/SW) × 8.5 m wide (NW/SE) × 1.0 m high (interior) and 1.2 m high (exterior) with a wall width of 1.3 m. The walls are made of subangular *pāhoehoe* large cobbles, small to medium boulders, and boulder slabs that are stacked 1 to 6 courses high with vertical facing. The walls are edged with small to medium boulders and boulder slabs and filled with small, medium, and large cobbles in between. The interior surface is relatively flat and consist of soil along the northwest half of an area of cobble paving that is 6.5 m long (NE/SW) × 2.5 m wide (NW/SE) along the southeast half of the enclosure. Several fragments of branch coral are located within the northeast portion of the enclosure and at the north corner, suggesting a ceremonial component to this permanent habitation feature. Several waterworn basalt cobbles are located within the enclosure as well. One small waterworn boulder is located at the north corner. A short wall segment forming a rough terrace extends 4 m to the southwest from the exterior west corner of the enclosure. The feature was recorded and tested by Rotunno-Hazuka et al. (2008a). Traditional cultural material was encountered during testing. Several large *panini* are currently growing within the interior of the enclosure. Feature 1 is in good to fair condition with impacts of rock tumble, archaeological testing, and vegetation.

Feature 2 (Figure 113) is a modified depression located northwest of the north corner of the Feature 1 enclosure in the northern portion of the site. It measures 2.5 m long (E/W) × 2.0 m wide (N/S) × 0.5 m high. Small to medium subangular *pāhoehoe* boulders have been placed and partially stacked 1 to 4 courses high along the edge of what appears to be a natural depression in the bedrock outcrop. The interior of the depression has been filled with large cobbles and small to medium boulders. A *haole koa* tree is growing out of the center of the feature. The feature was originally recorded by Rotunno-Hazuka et al. (2008a) as a circular pit. The depression may have function as a small storage area or a small planting area, although no soil is visible. Feature 2 is in fair to poor condition with impacts of rock tumble and vegetation. Feature 3 (Figure 114) is a small oval-shaped enclosure located at the northwestern edge of the site. Feature 3 measures 2 m long (N/S) × 1.5 m wide (E/W) × 0.7 m deep. Small to medium subangular *pāhoehoe* boulders have been placed partially stacked 1 to 3 courses high along the northwest edge of the bedrock outcrop forming a roughly oval shape. The interior is soil with rock tumble. The feature was originally recorded by Rotunno-Hazuka et al. (2008b) as a circular pit. The enclosed depression may have functioned as a small planting area. Feature 3 is in fair condition due to impacts of rock tumble.

Feature 4 (Figure 115) is an oval-shaped modified depression located at the western edge of the site. The feature measures 3.3 m long (N/S) \times 2 m wide (E/W) \times 0.05 m high. The interior portion measures 1.6 \times 1 m and 0.05 m deep and is a depression lined by subangular *pāhoehoe* medium to large boulders and filled with large cobbles. At the north end is a small natural overhang that is 1 m deep (N/S) \times 0.6 m wide (E/W) \times 0.4 m high. The overhang is located under the northern edge of an uplifted portion of *pāhoehoe* bedrock outcrop. No modifications or cultural material are visible. The feature was originally recorded by Rotunno-Hazuka et al. (2008a) as a natural cupboard. The small overhang possibly functioned as a cupboard or small storage area. Several other small natural overhangs are located along the slope northwest of the Feature 1 enclosure. The depression may have functioned as a small planting feature. Feature 4 is in fair condition.

Feature 5 is an oval-shaped enclosure/modified outcrop located at the western edge of the site. The feature measures 2.9 m long (NE/SW) \times 2.0 m wide (NW/SE) and a maximum of 0.9 m high. The enclosure has some piled cobbles on the outcrop on the west side, with loosely piled stones on the outcrop. An alignment of small to large boulders are on the north and east sides. The south side has some piling. The interior measures 2.9 m long \times 2 m wide and consists of soil and subangular *pāhoehoe* large cobbles and small to large boulders. It is surrounded by subtle modifications on the outcrop designated as Feature 6. The enclosure/modified outcrop may have functioned as a small planting feature. Feature 5 is in fair condition due to tumble.

Feature 6 is an irregularly shaped modified outcrop located at the northern edge of the site. The large *pāhoehoe* outcrop has multiple areas with subtle modifications, and extends *makai* from Feature 1 enclosure and includes Features 2 to 5, which are the most modified portions of the outcrop. *Panini* and *koa haole* grow in the area. There is a large graded area to the southeast, and impacts to the area southwest of Feature 5, which may have been a wall at some point. The possible function is agricultural or habitation due to the nature of the modifications. Feature 6 is in fair condition due to tumble and nearby grading.

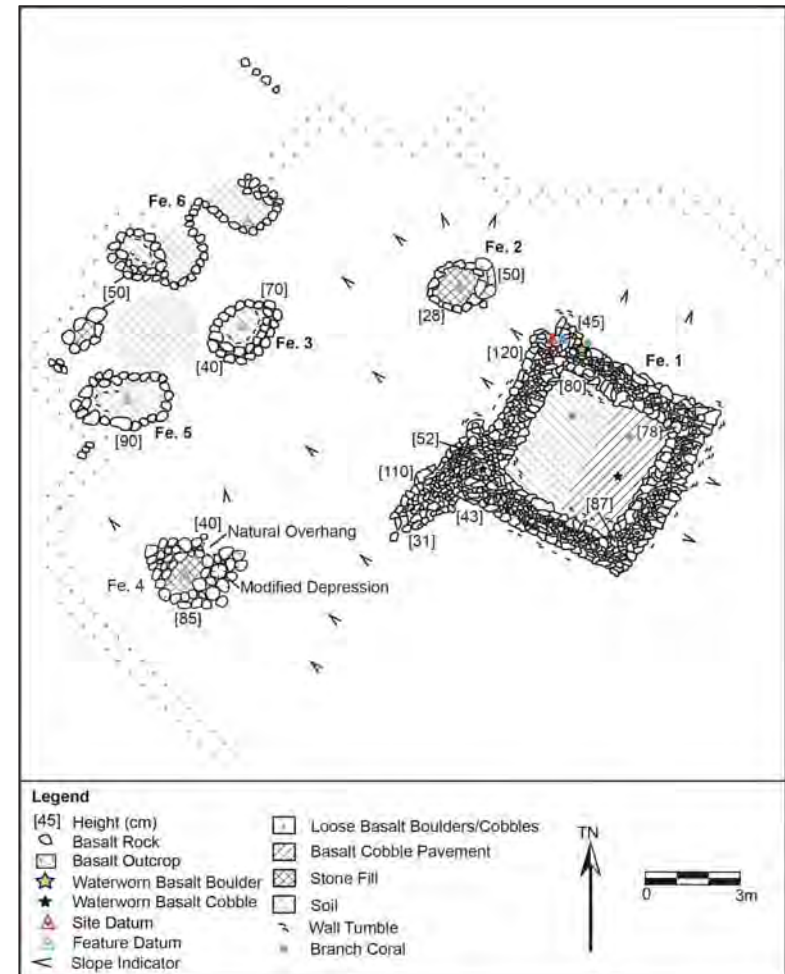


Figure 110. Plan-view map of SIHP 50-50-14-06378.



Figure 111. SIHP 50-50-14-06378, Feature 1 enclosure (view to southwest).

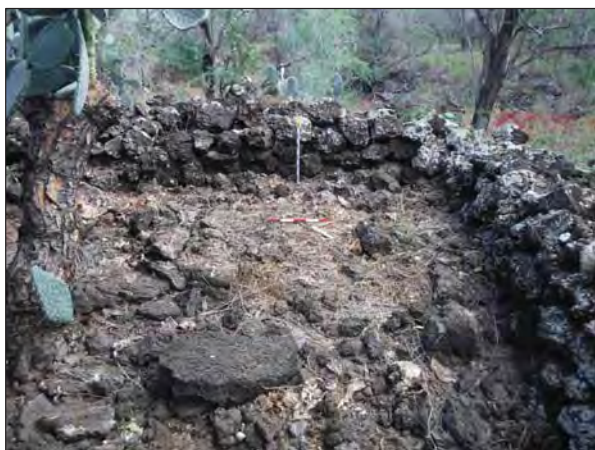


Figure 112. SIHP 50-50-14-06378, Feature 1 enclosure interior with cobble paving (view to northeast).



Figure 113. SIHP 50-50-14-06378, Feature 2 modified depression (view to east).



Figure 114. SIHP 50-50-14-06378, Feature 3 enclosure (view to east).

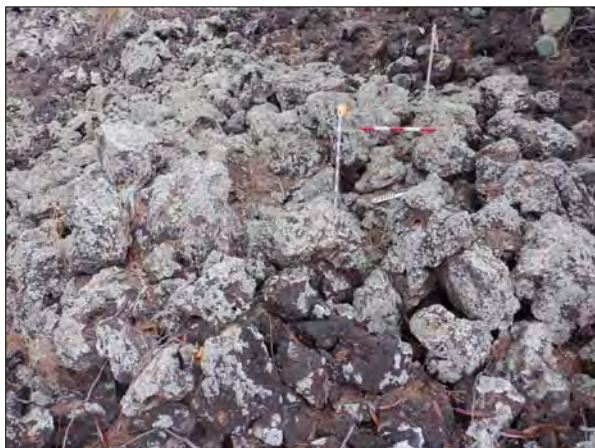


Figure 115. SIHP 50-50-14-06378, Feature 4 modified depression (view to east).



Figure 116. SIHP 50-50-14-06378, Feature 5 modified outcrop (view to northwest).



Figure 117. SIHP 50-50-14-06378, Feature 6 modified outcrop (view to east).



Figure 118. SIHP 50-50-14-06378, Feature 6 modified outcrop (view to southeast).

SIHP No.: 50-50-14-06379 (formerly Site 231)

Site Type: Complex

No. of Previously Identified Features: 3 (pavement, terrace, L-shaped wall; Rotunno-Hazuka et al. 2008a)

No. of Features Identified during Current AIS: 4 (platform, 2 L-shaped walls, U-shaped wall)

Overall Dimensions: 13.5 m L (E/W) × 12.5 m W (N/S) × 0.97 m H

Condition: Good–Poor

Possible Age: Pre-Contact to Early Post-Contact

Possible Function: Temporary Habitation

Cordy (1978) first recorded this site as 50-Ma-B8-231, which he described as a complex of two enclosures and two platforms. Rotunno-Hazuka et al. (2008a) noted that the site had undergone significant change since Cordy's investigation, from mechanical equipment and possibly removal of rock for wall construction. The current investigation recorded four features, adding Feature 4, a U-shaped wall, that may have been obscured by vegetation during Rotunno-Hazuka et al.'s fieldwork.

Previous Site Description

Cordy (1978) first described this site, which he assigned number 50-Ma-B8-231, as the following:

Two Enclosures and Two Platforms Site 231 is just behind Site 225, south of the 18th tee. All structures are contiguous. One enclosure (231-1) is rectangular, with the north end open. It is 5.0 by 6.0 meters with low walls (.3–.6 m high). Platform (231-2) is abutted on the south and is small (2.0–4.0 m and .6 m high). Platform (231-3) is abutted to the inland side of 231-1, and also is small (6.0 by 2.0 m) and rectangular. Enclosure (231-4) is a rectangular enclosure with the inland side open. It is small (2.0 by 5.0 m) and low (.4–.7 m high). Midden [and a piece of volcanic glass] was visible only in 231-1, and one square was excavated. (Cordy 1978)

Rotunno-Hazuka et al. re-recorded the site in 2008:

Site 50-50-14-6379 consists of an extensively modified outcrop that is located within the central portion of the project area. It is east (*mauka*) of Site 6373 and measures approximately 15.0 m long (e/w) × 10.0 (n/s) m wide and is oriented at 178 degrees. The outcrop is comprised of a fairly level paved area situated across its central portion. The pavement, assigned Feature 1, has been created by filling the surface with cobbles. Extending from north side of the outcrop is a freestanding curved wall segment that forms somewhat of a U shaped enclosed area designated Feature 2. Along the southern side of the outcrop, an L-shaped faced alignment has been created by stacking basalt against the exterior edge of the outcrop. This L-shaped alignment has been designated Feature 3...

Site 6379 has been adversely affected by dense vegetation growth, mechanical equipment and possibly from the removal and dismantling of the rocks to build historic ranch walls in the area. Although there is some resemblance, what was recorded by Cordy is not clearly represented today, and this discrepancy is likely due to the above mentioned impacts. Presented below are detailed descriptions of Site 6379 Features 1–3, as well as two subsurface features (Features 2a and 3a) documented during testing.

Feature 1

Feature 1 appears to be a fairly level paved or filled surface area along the central portion of the outcrop... It extends approximately 7.0 m long (e/w) by 3.0 m wide (n/s) within this central area. The filled area is slightly depressed and may cover a *puka* or natural crevasse. It was indeterminate if the paving was a purposeful construction and if an interior chamber/*puka* was present under the cobble filling. Thus two units, TU 4 and 5 were placed within the paved area to

ascertain presence/absence of an interior chamber and to assess the construction of the cobble pavement. Feature 1 may coincide with Cordy's Site 231-2 platform...

Feature 2

Along the north face of the outcrop are crudely stacked sub-angular rocks which have been placed atop natural boulders to create a terrace/bench like area. This terraced area creates the back (south) wall of Feature 2. Extending from the northwest side of the outcrop is a freestanding wall that eventually curves to the east at its northern terminus. The freestanding wall is... boulder-faced and core-filled measuring 5.0 m long by 1.25 m wide, and ranging in height from .25–.50 m. In plan view, the curvilinear nature of this wall together with the stacked north face of the outcrop forms a U-shaped enclosed area designated Feature 2. The enclosed area is fairly level and contains a rocky soil within its interior. During the current survey, a 1.0 by 1.0 m test unit (TU 1) was placed upon the rocky soil.

In 1978, one volcanic glass fragment was identified on the surface of this rocky soil area, and a 1.0 by 1.0 m test unit was placed adjacent to the fragment. According to the report, no cultural materials were recovered from the test unit. Feature 2 appears to correlate to Site 231-1 during Cordy's survey...

Feature 3 is situated on the south side of the modified outcrop and is comprised of an L-shaped faced wall that bounds a level soil area. The L-shape is formed by stacking large and small cobbles against the outcrop producing two perpendicular faced sections. The wall segments of Feature 3 are stacked 2–3 courses and measure .40–.55 m high. The eastern wall, oriented at 250 degrees, measures approximately 2.5 m long and is .80 m wide. The northern wall measures 2.0 m long by .50 m wide and is oriented at 340 degrees. Feature 3 appears to be near the south side of Cordy's site areas 231-1 and 231-4. A 1.0 m long (n/s) by .50 m wide (e/w) test unit (TU 2) was situated within the level soil area to determine presence/absence of cultural remains. During testing, a subsurface hearth feature designated Feature 3a was observed within the southern portion of the test unit. In order to fully document Feature 3a, another test unit, TU 3, was placed across and encompassing the southern half of TU 2. (Rotunno-Hazuka et al. 2008a:111–114)

Site 6379 is comprised of three distinct features. Feature 1 was a deliberate paved portion of the natural outcrop. Testing within this area identified at least two sections of purposeful rock fill, as well as sparse cultural materials (marine shell, basalt debitage) and a subsurface alignment designated Feature 1a. This alignment was located along the southern edge of TU 4 and appeared near the base of Layer I (.06–.10 m bs). At this same location sparse cultural materials were recovered. Although the purpose of the internal alignment is indeterminate at this time, it would likely be correlated with the cultural materials, and may be an earlier component of this temporary habitation feature. No additional testing was conducted at Feature 1 as it is slated for preservation.

Feature 2, the U-shaped area, may have been utilized for temporary habitation due its formal site type, size, and the presence of sparse cultural materials consisting of volcanic glass fragments and marine shell. The sparse collection of shellfish and artifacts may be due to the placement of the test unit. Since this site will be preserved, no additional testing was warranted.

Feature 3 contained a well defined subsurface hearth (Feature 3a) that was just below the organic humic layer. Based on the presence of Feature 3a, the L-shaped alignment functioned as the cooking area for the overall site complex. A charcoal sample was submitted from the hearth feature which returned an age range of AD 1480–1660.

Site 6379 is very similar to Site 6376, an elongated modified outcrop which contains three features, and appears to have been utilized for temporary habitation during traditional times. Site 6379 also appears to be a temporary habitation complex from the pre-Contact period. The chronology is based on the charcoal sample collected from the hearth feature, as well as the overall feature types represented. Site 6379 is clearly a better site type example and older structure and thus will be preserved.

Also of interest is that Site 6379 is in close proximity to Site 6373, a possible permanent pre-Contact habitation site associated with agricultural and animal husbandry features. Due to the close proximity of these sites, it would seem that the two sites are related however no conclusive evidence was collected during the current undertaking. Fortunately, both sites will be preserved within the proposed development plans. (Rotunno-Hazuka et al. 2008a:125)

Current Description

Site 50-50-14-06379 (Figure 119) includes four features: a platform (Feature 1), two L-shaped walls (Features 2 and 3), and a U-shaped wall (Feature 4). The site is situated on a small *pāhoehoe* knoll located in the north central portion of the H2 project area. The site was recorded by Cordy (1978; Site 231) and recorded and tested by Rotunno-Hazuka et al. (2008a). Feature 1 was recorded as a pavement. Features 2 and 3 were recorded as L-shaped walls. Feature 4, a U-shaped wall, is a newly recorded feature.

Feature 1 (Figure 120) is an irregularly shaped stone-filled platform located in the central portion of the site. The feature measures 12.5 m long (E/W) × 5.5 m wide (N/S) and is 0.97 m high. The platform is constructed using subangular *pāhoehoe* large cobbles and small to large boulders that are piled and stacked 1 to 2 courses high. The pavement's surface is fill. Two waterworn cobbles were present. The first is located near the west end of the platform and measures 8 cm long × 6 cm wide × 3 cm thick. The second is located just north of the northern edge of the platform and measures 9 cm long × 5 cm wide × 5 cm thick. Rotunno-Hazuka et al. (2008a) re-recorded this feature and excavated TU-4, a 1 × 1 m test unit, and TU-5, a 2 × 1 m test unit. They also recorded Feature 1a, an alignment that was not observed during the current investigation. The backdirt from the test excavations was noted on top of the feature and to the south of the feature. Feature 1 is in fair to poor condition due to wall tumble and previous testing.

Feature 2 (Figure 121) consists of an L-shaped wall extending north from the northwestern corner of the Feature 1 platform. The wall measures 5.5 m long (N/S) × 1.5 m wide (E/W) × 0.58 m high. The wall is 1.5 m wide and is constructed using subangular *pāhoehoe* large cobbles and small to large boulders that are piled and stacked 1 to 2 courses high. The interior consists of relatively flat soil with loose cobbles. One unmodified *Porites* coral cobble measuring 8 cm long × 8 cm wide × 6 cm thick was observed approximately 1 m west of the northern end of Feature 2. Rotunno-Hazuka et al. (2008a) excavated TU-1, a 1 × 1 m test excavation unit, at this feature and found traditional cultural material. The backdirt pile was observed on the northeastern side of the unit. Feature 2 is in fair to good condition due to tumble and previous testing.

Feature 3 (Figure 122) consists of an L-shaped wall extending east from the southeastern edge of the Feature 1 platform. The feature measures 2.5 m long (N/S) × 2.5 m wide (E/W) with a height of 0.69 m. The wall is 0.8 m wide and is constructed using subangular *pāhoehoe* large cobbles and small to large boulders that are piled and stacked 1 to 2 courses high. The interior consists of relatively flat soil with loose cobbles and boulders. A stone-lined hearth (Feature 3a) is present on surface and below the surface. Rotunno-Hazuka et al. (2008a) excavated TU-2, a 1 × 0.5 m test excavation unit, and TU-3, a 1.5 × 1 m test unit, at this feature and found only charcoal in the hearth. A backdirt pile was observed on the east side of the Feature 3a hearth. Feature 3 is in fair to good condition due to tumble and previous testing.

Feature 4 (Figure 123) is a U-shaped wall extending south from the southwestern corner of the Feature 1 platform. The feature measures 4.5 m long (N/S) × 4 m wide (E/W) and 0.36 m high. The wall is 1.2 m wide and is constructed using subangular *pāhoehoe* large cobbles and small to large boulders that are piled and stacked 1 to 2 courses high. The interior consists of relatively flat soil with loose cobbles. Feature 4 was not previously recorded. Rotunno-Hazuka et al.'s

(2008a) site map shows a large cactus obscuring the feature. Feature 4 was likely used for temporary habitation, along with the other features at the site. It is in fair condition due to wall tumble.

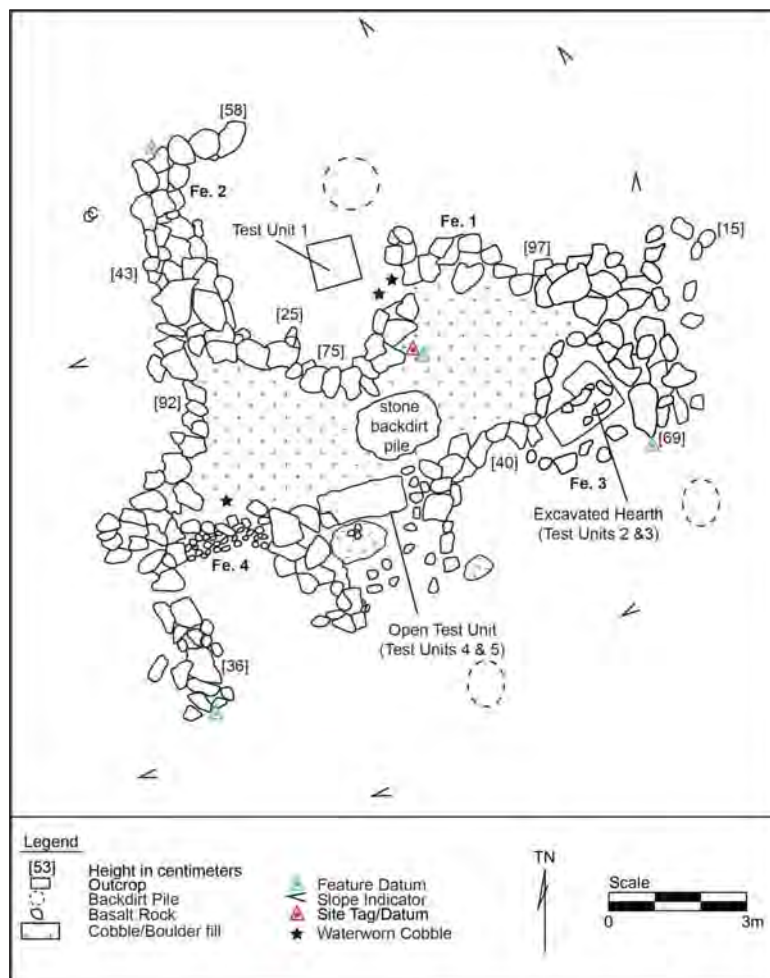


Figure 119. Plan-view map of SIHP 50-50-14-06379.



Figure 120. SIHP 50-50-14-06379, Feature 1 platform (view to east)



Figure 121. SIHP 50-50-14-06379, Feature 2, L-shaped wall (view to west).



Figure 122. SIHP 50-50-14-06379, Feature 3, L-shaped wall (view to northeast).



Figure 123. SIHP 50-50-14-06379, Feature 4, U-shaped wall (view to north).

SIHP No.: 50-50-14-08850 (formerly Site 230; SIHP 50-50-14-06374, Feature 1)
Site Type: Complex
No. of Previously Identified Features: 1 (wall segments; Cordy 1978; Rotunno-Hazuka et al. 2008a)
No. of Features Identified during Current AIS: 6 (wall segments)
Overall Dimensions: 415 m L (N/S) × 163 m W (N/S) × 1.1 m H
Condition: Good–Poor
Possible Age: Pre-Contact to Early Post-Contact
Possible Function: Boundary Maintenance

SIHP 50-50-14-08850 was previously recorded as a portion of a larger complex consisting of various wall segments throughout the project area. The site was recorded by Cordy (1978), who designated it as Site 50-Ma-B8-230. Five features were previously documented by Rotunno-Hazuka et al. (2008a), including four wall segments (Features 2 through 5) in the northern and central portion of the project area, which were likely associated with post-Contact ranching activities, as well as a more substantially built wall running north-south along the eastern boundary of the project area (Feature 1). During the current investigation, and following from research undertaken as part of the supplemental CIA for the current project (Lee-Greig and Souza 2020), the wall segments that were previously designated as Feature 1 of this site have been assigned a new SIHP number, 50-50-14-08850, Features 1 through 6.

Previous Site Description

Cordy (1978) recorded Site 50-Ma-B8-230 as a wall:

This large wall bounds the southern edge of the survey area near holes 8, 9, and 10, swings north seaward of hole 10, crosses hole 18, turns seaward and runs north of Site 227, and finally turns south again, running along the top of the bluff overlooking the coastal sand flat. The wall is high (1.4 meters), wide (c. 1.0 meter) and well built with square corners. (Cordy 1978)

Rotunno-Hazuka et al. (2008a) grouped these wall segments, together with Features 2 through 5, into a single site, designated as SIHP 50-50-14-06374, Features 1 through 5. The Feature 1 wall segments were interpreted as a largely intact post-Contact boundary wall.

Site 6374 is a freestanding wall that meanders around the property primarily along the east and western portions of the project area. These large intact sections have been designated as Feature 1 of Site 6374... [Feature 1, the] wall within the larger sections is primarily double-faced and core-filled and ranges .85–1.55m in height and... .48–1.28 m in width. It meanders in a zig-zag fashion following the eastern and portions of the southern boundary line. (Rotunno-Hazuka et al. 2008a:74)

Current Description

During the current investigation, the wall segments that were previously designated as Feature 1 of SIHP 50-50-14-06374 were split off from the other wall segments (Features 2 through 5). This was done following the interpretation of the Feature 1 wall segments as a possible Aupuni (government) wall. In the supplemental CIA for the current project, Lee-Greig and Souza (2020) noted a wall in the same general vicinity of Site 06374, Feature 1. The wall is described as the “Old Aupuni Wall” depicted on Registered Map 170 by Linton Torbert in 1850, Figure 21 in this report (Lee-Greig and Souza 2020:52, Figure 2-17). This cartographic analysis, coupled with the physical description of what appears to be a continuous wall that runs parallel to the coastline in the Land Grants awarded in 1854, there appears to be a strong possibility that the *pā pōhaku* and the Old Aupuni Wall are one and the same. In the CIA, Lee-Greig and Souza compare the possible function of this wall to that of the Kuakini Wall in Kona on the island of Hawai'i, which

was built to keep feral cattle in the *mauka* areas and away from the coastal settlement and did not simply function as a boundary wall (Lee-Greig and Souza 2020:51).

Feature 1 (Figure 125 through Figure 127) is a linear stone wall located in the northeastern portion of the project area. The feature measures 106 m long (N/S) \times 1.2 m wide (E/W) with a height of 1.1 m and a wall width of 0.8–1.2 m. The wall is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 1 to 8 courses high. It is core-filled. The northernmost portion runs north-south through Site 06377. The northernmost 42 m of the wall has a stepped shelf style of construction along the western edge, similar to Feature 4. An aluminum boundary marker is located just south of the northern end of the wall. Feature 1 is in good condition overall, although the northern and southern ends have been disturbed by bulldozing or dismantling of the wall.

Feature 2 (Figure 128 and Figure 129) is a wall segment that measures 16.2 m long (NW/SE) \times 1.2 m wide (NE/SW) and 1.6 m high. The wall width ranges from 0.7 to 1.2 m. It is stacked 1 to 7 courses high. The wall segment is located immediately north of a culvert under Makena-Alanui Road. The southern section drops off approximately 5 m north of the swale with culvert. The southern portion of the wall measures up to 1.2 m high and has some sections of vertical facing, and a large pile of stones on the east side. The northern portion of the feature is piled and stacked 5 courses high (0.7 m tall) with minimal vertical facing intact. The wall is blown out in the center and graded on the north and south ends. It is believed to be part of the Aupuni wall based on background information from the CIA, the location, and the construction style. Feature 2 is in fair condition due to prior disturbance.

Feature 3 (Figure 130 and Figure 131) is a wall segment measuring 8.5 m long (N/S) \times 0.8 m wide (E/W) \times 0.7 m maximum height. The wall width is 0.8 m. This linear wall segment has been impacted by grading, especially on the south end near the culvert under Makena-Alanui Road. The wall is built of large boulders. There is a tumble area with large boulders that measures approximately 20 m directly adjacent to the north end. A barbed-wire fenceline runs along the course of the intact wall segment, with green metal posts with white painted tips. The fenceline was likely used to mark the tax map key boundaries between former Parcels 108 and 083. Feature 3 is in poor condition due to tumble.

Feature 4 (Figure 132 through Figure 134) is located in the central-eastern portion of the H2 project area, running roughly north-south along the western edge of Makena-Alanui Road. The feature measures 48 m long (N/S) \times 0.9 m wide (E/W) with a maximum height of 2 m and a wall width of 0.5–0.9 m. The wall is made of subangular *pāhoehoe* large cobbles and small to medium boulders that are stacked 1 to 9 courses high. It is core-filled. This section appears to have been partially disturbed at the north and south ends. The northern portion of this section has a 90-degree bend where the wall is constructed on top of a portion of raised bedrock outcrop, and together, the wall and outcrop measure 2 m high. An aluminum boundary marker and metal fence post are located at the 90-degree bend. The northern end has a stepped shelf style of construction, similar to Feature 1. It is in fair to good condition.

Feature 5 (Figure 135 through Figure 139) is a curved wall segment in the southeastern portion of the project area. It measures 30 m long (E/W) \times 0.9 m wide (N/S) \times 1.4 m high. The wall is constructed of subangular *pāhoehoe* basalt cobbles and boulders that are stacked 1 to 6 courses high. It is core-filled. The wall segment is situated at the northern edge of a large sand pile that has adversely impacted the feature. This large sand pile appears to have been dredged. Two portions along the northern edge exhibit the step shelf construction style also observed on Features 1 and 4. There are several sections of wall that were likely dismantled by hand southwest of this intact portion of wall. The wall is in fair to poor condition due to impacts from the sand pile and wall tumble. Modern trash debris was observed in the area.

Feature 6 (Figure 140 through Figure 142) is a linear wall segment in the southeastern portion of the project area, immediately north of Makena-Alanui Road. The wall measures 18 m long (N/S) \times 1.5 m wide (E/W) \times 1.5 m high. The wall is constructed of subangular *pāhoehoe* basalt cobbles and boulders that are stacked 1 to 5 courses high. It is core-filled and the wall width ranges from 1 to 1.5 m. The western portion of the wall is most intact. An aluminum boundary marker is located at the southern end of the wall. A historic aqua glass bottle is located 3.5 m east of the wall and Site 50-50-14-08846. Feature 2 is immediately adjacent to Feature 6. Several sections of the wall were likely dismantled by hand to the north of the wall segment. Numerous agave/century plants are growing in this area and a historic aqua glass bottle was observed near the feature. Feature 6 is in poor condition due to tumble.

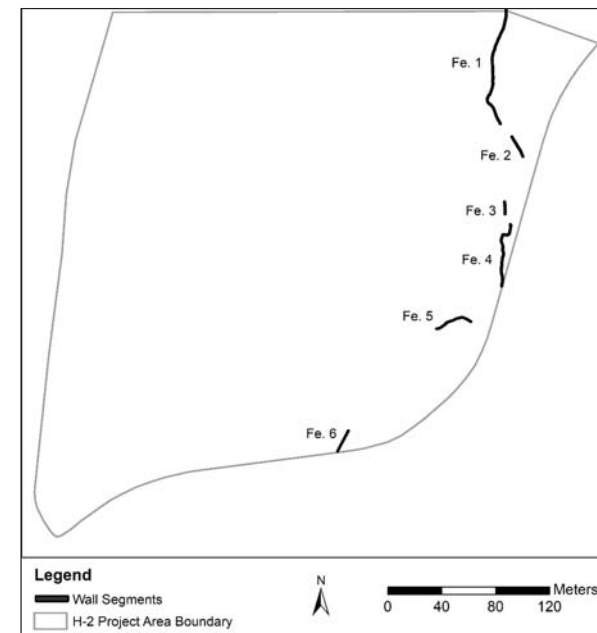


Figure 124. Plan-view map of SIHP 50-50-14-08850, Features 1 through 6.

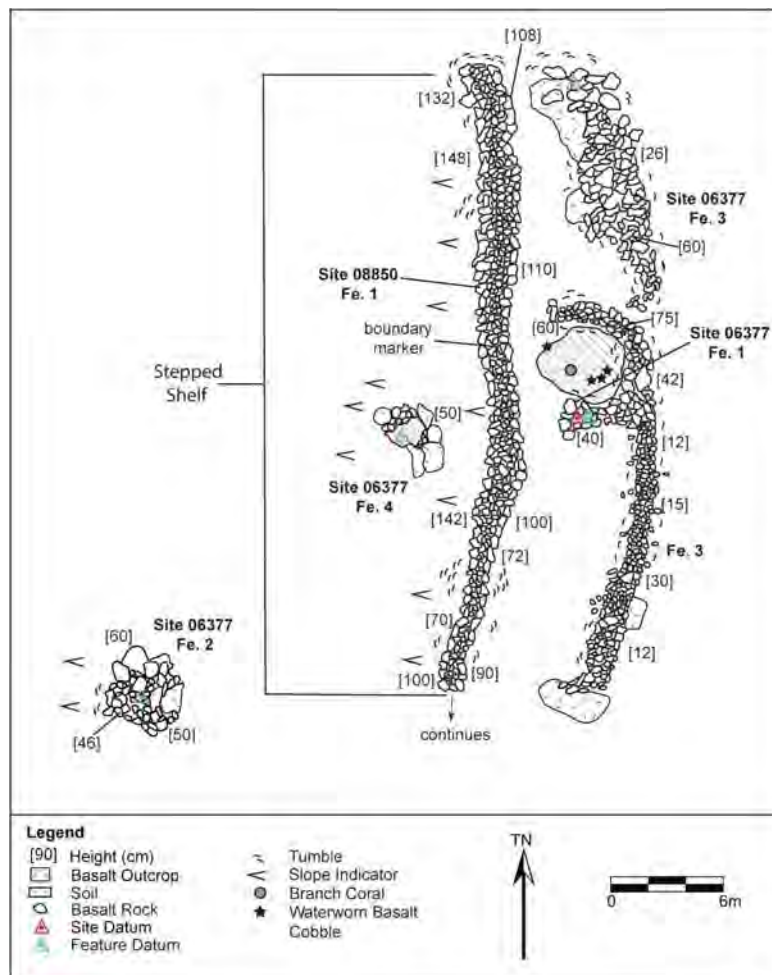


Figure 125. Plan-view map of SIHP 50-50-14-08850, section of Feature 1 wall segment in proximity to SIHP 50-50-14-06377, Features 1 through 4.



Figure 126. SIHP 50-50-14-08850, Feature 1, northern portion of wall segment (view to south).



Figure 127. SIHP 50-50-14-08850, Feature 1, northern portion of wall segment (view to south).



Figure 128. SIHP 50-50-14-08850, Feature 2, southeastern portion of wall segment (view to northeast).



Figure 129. SIHP 50-50-14-08850, Feature 2, northwestern portion of wall segment (view to southwest).



Figure 130. SIHP 50-50-14-08850, Feature 3 wall segment, showing barbed-wire fenceline along wall (view to north).



Figure 131. SIHP 50-50-14-08850, Feature 3 wall segment (view to southwest).

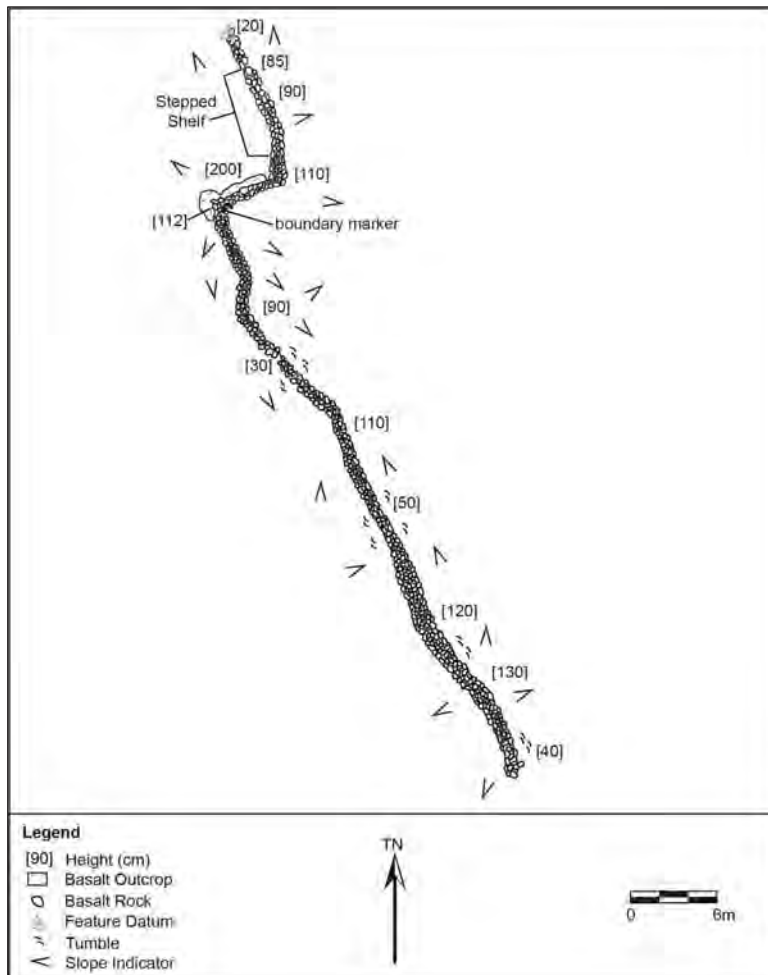


Figure 132. Plan-view map of SIHP 50-50-14-08850, Feature 4 wall segment.



Figure 133. SIHP 50-50-14-08850, Feature 4 wall segment, central portion (view to south).



Figure 134. SIHP 50-50-14-08850, Feature 4 wall segment, central portion (view to south).

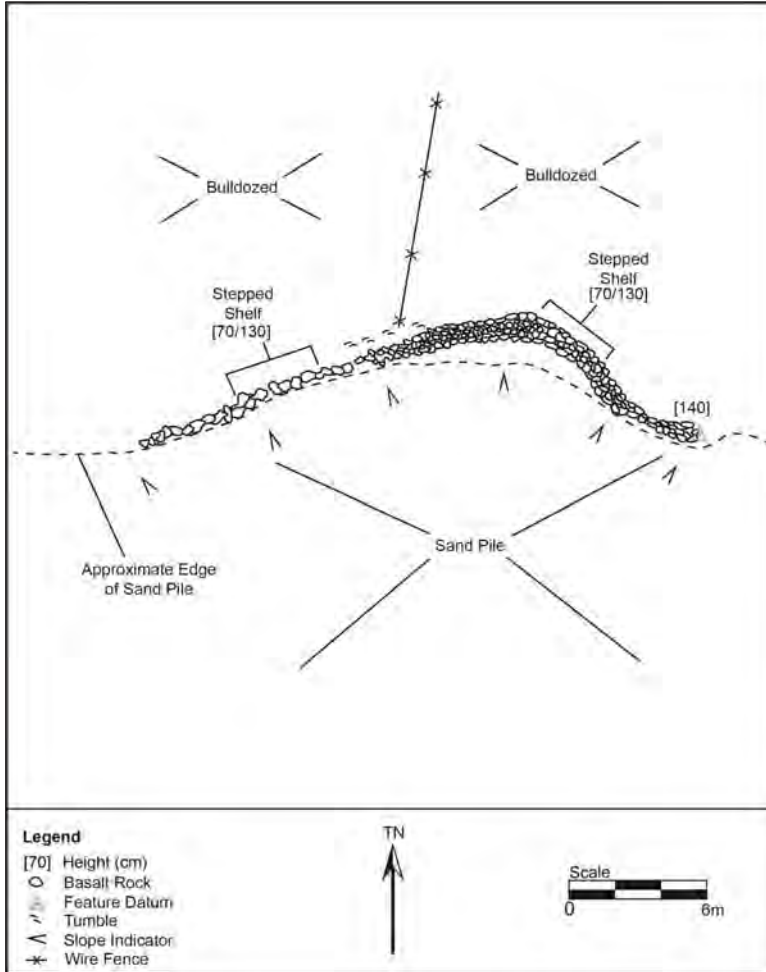


Figure 135. Plan-view map of SIHP 50-50-14-08850, Feature 5 wall segment.



Figure 136. SIHP 50-50-14-08850, Feature 5, east end of wall segment (view to southwest).



Figure 137. SIHP 50-50-14-08850, Feature 5, central portion of wall segment (view to southeast).



Figure 138. SIHP 50-50-14-08850, Feature 5, southwest portion of wall segment showing stepped construction (view to southeast).



Figure 139. SIHP 50-50-14-08850, Feature 5, west end of wall segment, dismantled (view to east).

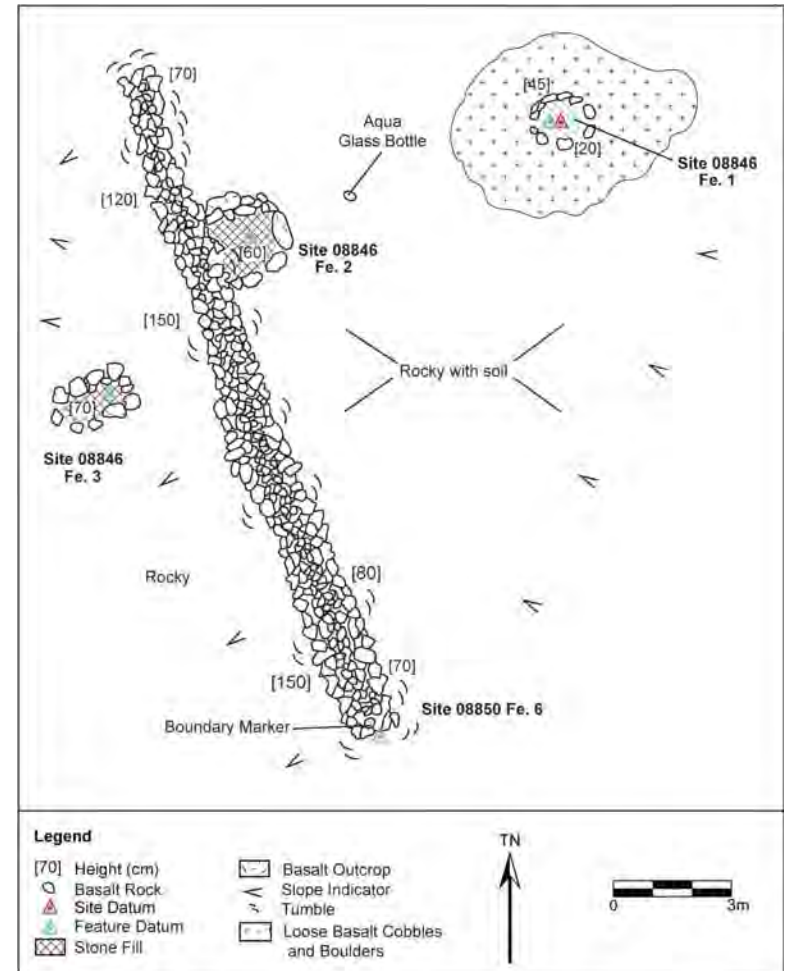


Figure 140. Plan-view map of SIHP 50-50-14-08850, Feature 6 wall segment.



Figure 141. SIHP 50-50-14-08850, Feature 6, southern portion of wall (view to southeast).

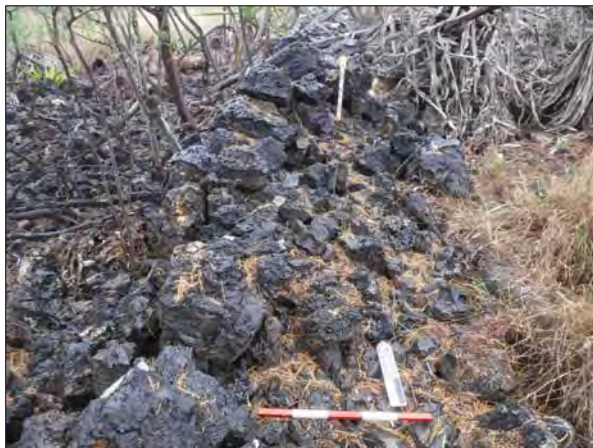


Figure 142. SIHP 50-50-14-08850, Feature 6, south end of wall (view to north).

SIHP No.: 50-50-14-08846

Temporary Site No: T-001

Site Type: Complex

No. of Features: 3 (enclosure, 2 modified depressions)

Overall Dimensions: 17.5 m L (E/W) × 6 m W (N/S) × 0.7 m H

Condition: Good–Fair

Possible Age: Post-Contact

Possible Function: Agricultural, Temporary Habitation

Site 50-50-14-08846 (Figure 143) is a small complex of three features: a small oval-shaped enclosure (Feature 1), an irregularly shaped depression (Feature 2), and a roughly rectangular-shaped depression (Feature 3). This site was likely utilized for temporary habitation and agriculture or storage. This site is interpreted as a post-Contact site given the adjacency of Feature 2 to the Site 08850 Feature 6 wall segment.

Description

Feature 1 (Figure 144) consists of a low, small oval-shaped enclosure located in the southeastern portion of the project area. It is situated 8.5 m east of the Site 08850, Feature 6 wall segment. The enclosure has been constructed by clearing a small oval area of loose rock and piling the subangular *pāhoehoe* pebbles, cobbles, and boulders along the perimeter of the enclosure in 1 to 3 courses. The northern edge of the enclosure is the most intact. The surrounding area consists of loose rock. A historic aqua glass bottle is located 5 m west of the enclosure. The enclosure does not appear to have been previously recorded. This feature may have functioned as a small temporary habitation structure. It may have been constructed during the historic or modern period based on the proximity to Mākena-Alanui Road. The road is only 10 m south of the enclosure. Numerous agave/century plants are growing in the area. The feature is in fair to good condition.

Feature 2 (Figure 145) is an irregularly shaped modified depression located between Feature 1 and Site 08850, Feature 6 wall segment, which it abuts on its western side. Overall, the modified depression measures 1.9 m long (NW/SE) × 1.5 m wide (NE/SW) × 0.4 m high. Internally the depression measures 1.2 m long × 0.7 m wide × 0.6 m deep. The depression appears to have been used for storage. A glass bottle is located 2 m to the east. A couple of subangular *pāhoehoe* boulders have been placed along the edge of a natural depression forming the modification. Feature 2 is in poor condition due to tumble.

Feature 3 (Figure 146) consists of a roughly rectangular modified depression located 2 m west of the Site 08850, Feature 6 wall segment. Overall, the feature measures 2.5 m long (E/W) × 3 m wide (N/S) × 0.5 m high. The interior of the feature measures 1.7 m long × 0.8 m wide × 0.7 m deep. Several subangular *pāhoehoe* boulders have been placed along the edge of a natural depression. The depression appears to have been used for storage. Feature 3 is in poor condition due to tumble.

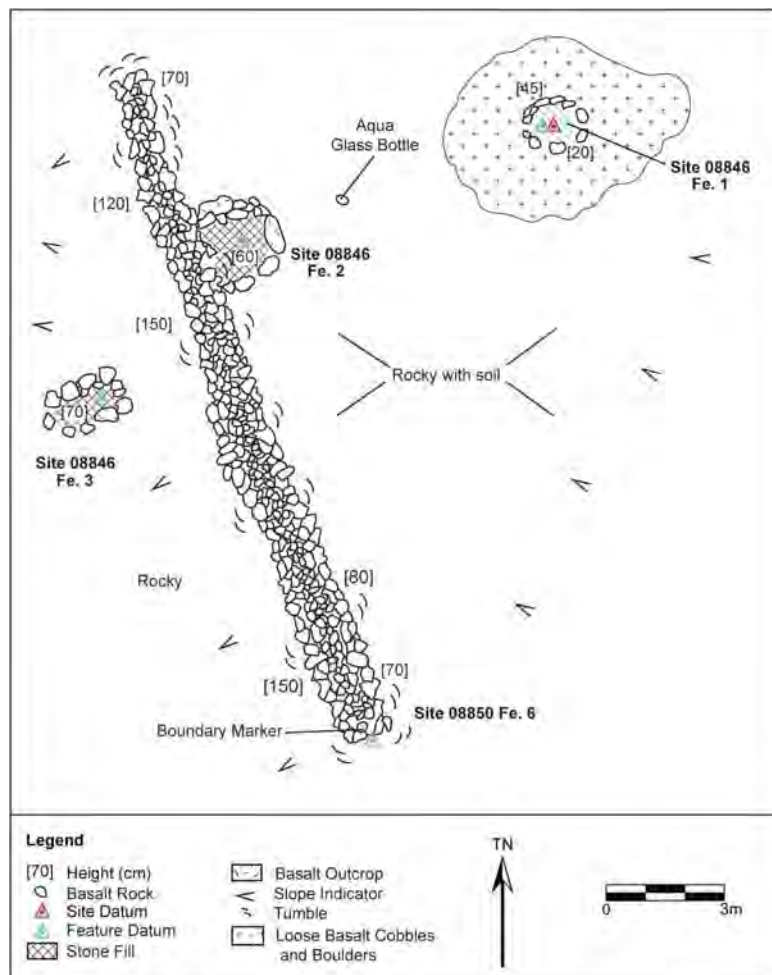


Figure 143. Plan-view map of SIHP 50-50-14-08846.



Figure 144. SIHP 50-50-14-08846, Feature 1 enclosure (view to northeast).



Figure 145. SIHP 50-50-14-08846, Feature 2, exterior view of modified depression (view to northwest).



Figure 146. SIHP 50-50-14-08846, Feature 3 modified depression (view to north).

SIHP No.: 50-50-14-08847

Temporary Site No: T-002

Site Type: Complex

No. of Features: 3 (modified depression, terrace, cleared area)

Overall Dimensions: 15 m L (N/S) × 5 m W (E/W) × 1.4 m H

Condition: Poor

Possible Age: Pre-Contact

Possible Function: Temporary Habitation

Site 50-50-14-08847 (Figure 147) is a complex of three associated features including a modified depression (Feature 1), a terrace (Feature 2), and a cleared area (Feature 3). The site is located near the southern project boundary, east of Site 06366. The features are located on a small knoll with a raised natural vertical bedrock outcrop in the center surrounded by a concentration of loose *pāhoehoe* boulders and cobbles. The site does not appear to have been previously recorded. The site probably functioned as a temporary habitation complex. No cultural material was identified at the site, which is interpreted as a pre-Contact site, but its proximity to the Site 06366 historic homestead and Mākena Alanui Road suggest that it may also have been constructed and/or utilized during the 20th century.

Description

Feature 1 (Figure 148) consists of an irregularly shaped modified depression located in the central portion of the site. The feature measures 3.5 m long (E/W) × 2.5 m wide (N/S) × 1.0 m high (exterior) and 1.4 m deep (interior). The feature consists of a natural depression in the center of a raised portion of natural vertical bedrock outcrop. The modifications are minimal and consist of several small boulders that have been loosely stacked at the southern exterior edge of the depression to fill in a small gap. The depression appears to have possibly been used for storage. Feature 1 has minimal modifications and is in poor condition.

Feature 2 (Figure 149) consists of an irregularly shaped terrace located in the central portion of the site immediately east of the Feature 1 modified depression. The feature measures 3 m long (N/S) × 1.9 m wide (E/W) × 0.4 m high. The wall is 0.7 m wide. The feature consists of a low terrace constructed adjacent to the east edge of the raised portion of the natural bedrock outcrop. The terrace appears to have been possibly used for temporary habitation based on the size and style of construction. The natural vertical outcrop rises 1.26 m above the rear surface of the terrace and the interior of the surface is relatively level. The interior measurements of the terrace are 2 m long × 1.5 m wide × 0.4 m high. It is in poor condition due to tumble.

Feature 3 (Figure 150) is a roughly U-shaped cleared area located at the southern edge of the site. The feature measures 7 m long (NW/SE) × 5 m wide (NE/SW) × 0.2 m high. Site 06366 Feature R (mound) is located immediately to the south. Loose boulders and cobbles appear to have been cleared from the U-shaped area and moved to the west, east, and north sides of the area. The surface slopes gently to the southeast. The cleared area may have been used for temporary habitation. The stones from the cleared area may have been used to construct the nearby Site 06366, Feature R mound. Feature 3 is in poor condition due to tumble.

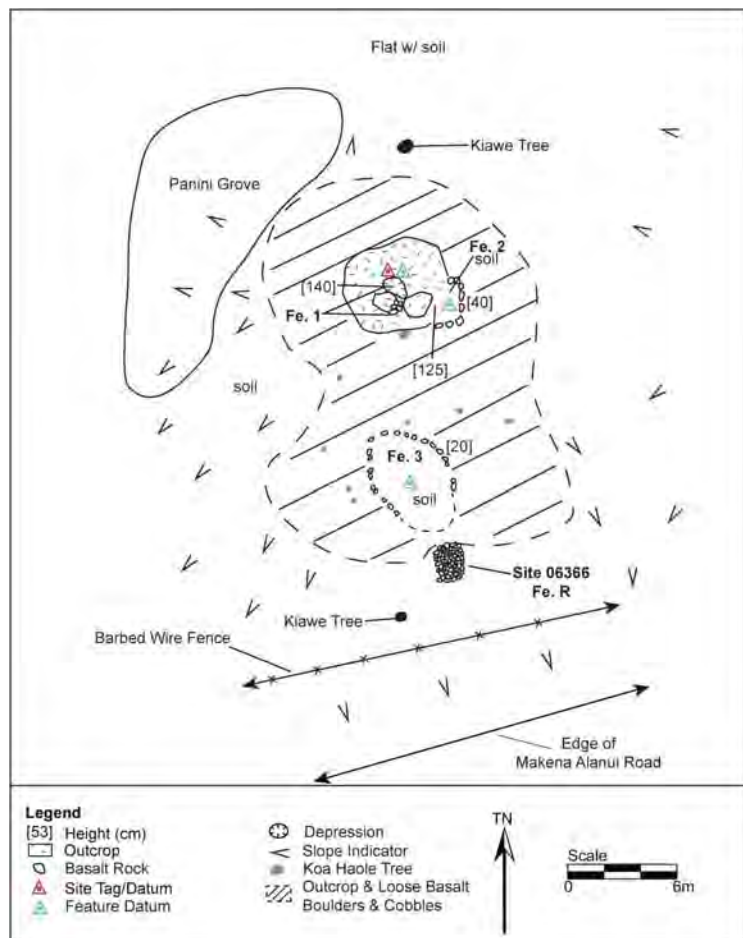


Figure 147. Plan-view map of SIHP 50-50-14-08847.



Figure 148. SIHP 50-50-14-08847, Feature 1 modified depression (view to southeast).



Figure 149. SIHP 50-50-14-08847, Feature 2 terrace (view to west).



Figure 150. SIHP 50-50-14-08847, Feature 3 cleared area (view to southeast).

SIHP No.: 50-50-14-08848

Temporary Site No: T-003

Site Type: Complex

No. of Features: 4 (2 low walls, 2 terraces)

Overall Dimensions: 23 m L (E/W) × 5 m W (N/S) × 0.7 m H

Condition: Poor

Possible Age: Pre-Contact

Possible Function: Agricultural

Site 50-50-14-08848 (Figure 151) is a complex with four associated features: two low walls (Features 1 and 2) and two low terraces (Feature 3 and 4). The site is in the northern-central portion of the project area. The features are situated along the southern edge of a small swale which runs roughly east-west near the northern project area boundary. The site does not appear to have been previously recorded. One *Porites* coral cobble is located 1.5 m north of Feature 1. The site may have functioned as an agricultural clearing area. A relatively clear area of soil is located immediately north of Feature 1 and south of Features 3 and 4. The site possibly dates to the pre-Contact to early post-Contact period.

Description

Feature 1 (Figure 152 and Figure 153) is a low linear wall along the northern edge of the site. It measures 19.0 m long (E/W) × 2.0 m wide (N/S) × 0.6 m high, and forms the northern downslope edge of a sloped area with loose cobbles and boulders on a natural bedrock outcrop. A relatively cleared area of flat soil is north of the wall. A single *Porites* coral cobble was observed 1.5 m north of the wall. Feature 1 was probably an agricultural clearing feature. It is in poor condition from tumble.

Feature 2 (Figure 154) is a low linear wall in the central portion of the site. The wall measures 6.0 m long (E/W) × 0.7 m wide (N/S) × 0.4 m high. The wall forms the northern downslope edge of a sloped area with loose cobbles, boulders, and bedrock outcrop. Feature 1 is immediately to the north and roughly parallels Feature 2. The low wall probably functioned as an agricultural clearing feature forming the edge of an area with loose rocks and outcrop. The feature is in poor condition from tumble.

Feature 3 (Figure 155) is a low linear terrace located in the southeast portion of the site. The terrace measures 25 m long (E/W) × 1.5 m wide (N/S) × 0.3 m high. The terrace forms the northern upslope edge of a sloped area with loose cobbles boulders and bedrock outcrop. A relatively cleared area of flat soil is located to the south and southwest. Feature 3 likely functioned as an agricultural clearing feature. The terrace is in poor condition due to tumble.

Feature 4 (Figure 156) is a low terrace located in the southwest portion of the site. The terrace forms the northern upslope edge of a sloped area with loose cobbles boulders and bedrock outcrop. The terrace measures 2 m long (E/W) × 1.6 m wide (N/S) × 0.7 m high. A relatively clear area of flat soil is located to the south. The low terrace likely functioned as an agricultural clearing feature. The terrace is in poor condition due to tumble.

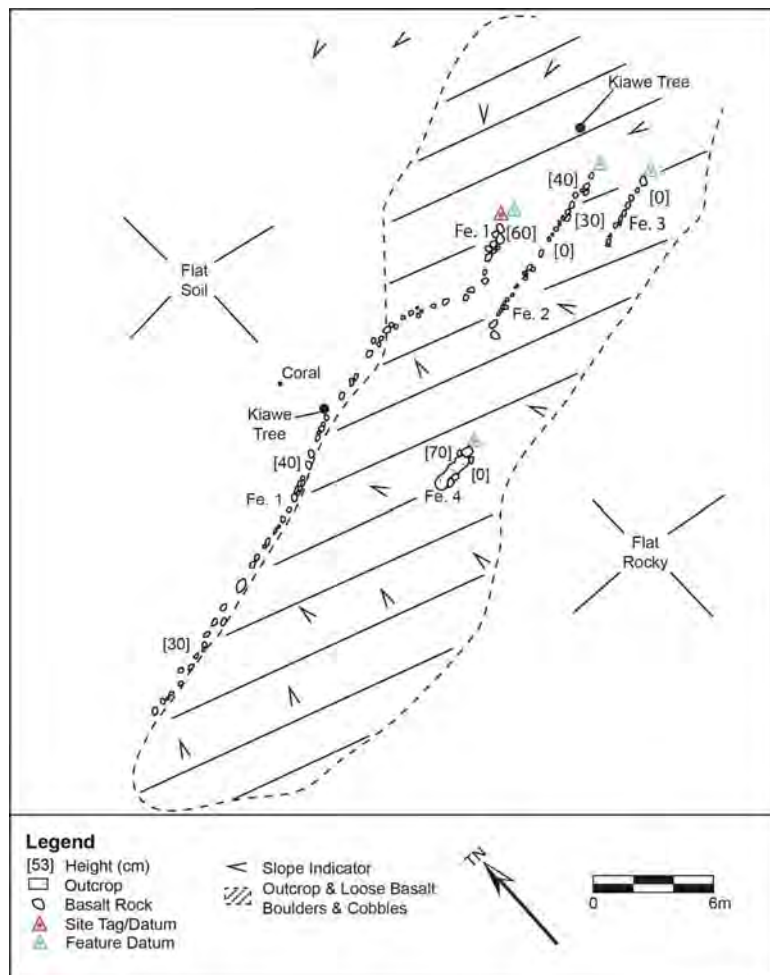


Figure 151. Plan-view map of SIHP 50-50-14-08848.



Figure 152. SIHP 50-50-14-08848, Feature 1 wall (view to south).



Figure 153. Closeup view of SIHP 50-50-14-08848, Feature 1 wall (view to south).



Figure 154. SIHP 50-50-14-08848, Feature 2 wall (view to east).



Figure 155. SIHP 50-50-14-08848, Feature 3 terrace (view to west).

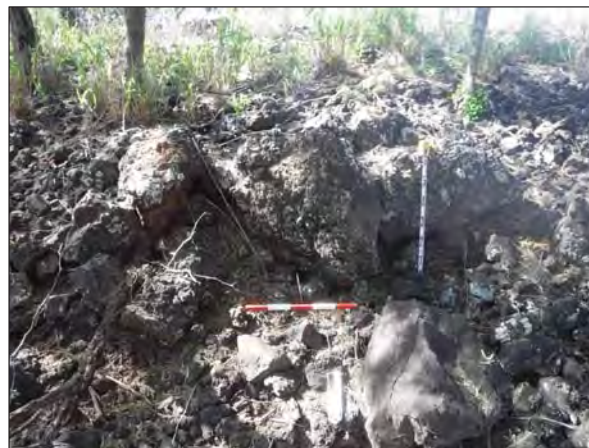


Figure 156. SIHP 50-50-14-08848, Feature 4 terrace (view to south).

SIHP No.: 50-50-14-08849

Temporary Site No: T-004

Site Type: Complex

No. of Features: 2 (mounds)

Overall Dimensions: 7.5 m L (NE/SW) × 3 m W (NW/SE) × 0.8 m H

Condition: Poor

Possible Age: Post-Contact

Possible Function: Agricultural

Site 50-50-14-08849 (Figure 157 and Figure 158) is a small complex of two agricultural clearing mounds located at the base of a low natural outcrop swale composed of loose basalt boulders and cobbles. A cleared area of soil is located to the north-northwest of both features. This site was likely utilized for agriculture during the post-Contact period, given its proximity to the area that once had stables.

Description

Feature 1 (Figure 159) is a low, roughly rectangular stone mound located 1 m northeast of Feature 2. The feature measures 3 m long (NE/SW) × 2 m wide (NW/SE) × 0.45 m high. No cultural material was observed in the area. A relatively clear soil area is located to the west. The mound likely functioned as an agricultural clearing feature. The feature is in fair condition with minimal impacts from rock tumble.

Feature 2 (Figure 160) is a low, roughly rectangular stone mound located 1 m southwest of Feature 1. The feature measures 3 m long (NE/SW) × 2 m wide (NW/SE) × 0.8 m high. No cultural material was observed in the area. A relatively clear soil area is located to the west. The mound likely functioned as an agricultural clearing feature. The mound is in fair to poor condition with impacts from rock tumble.

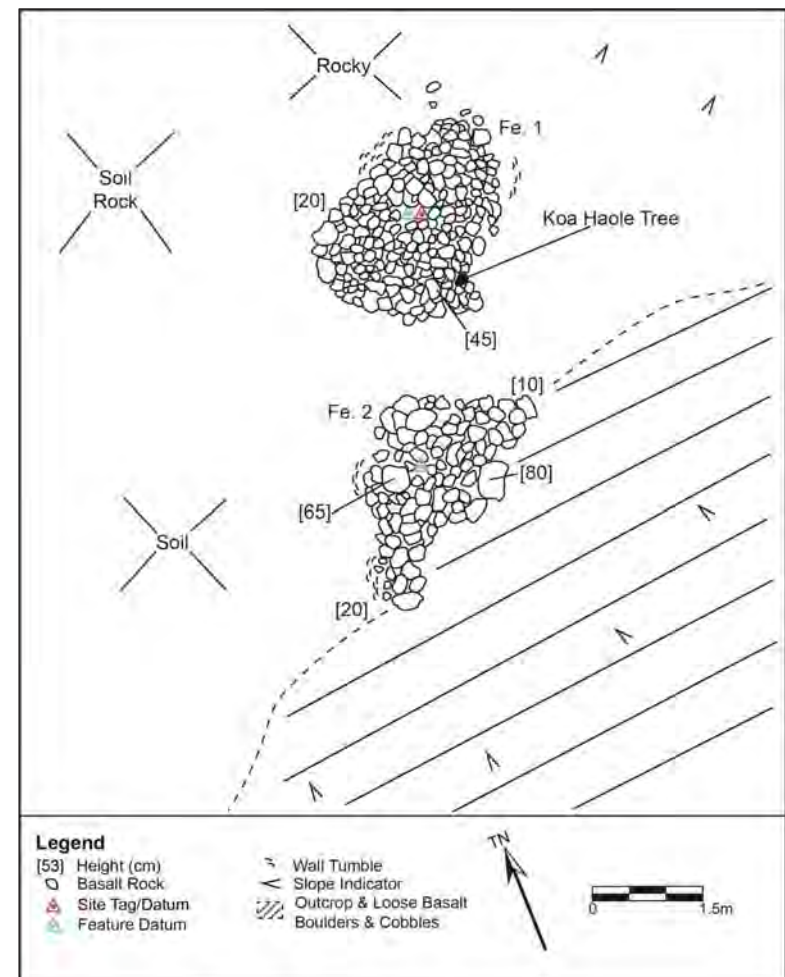


Figure 157. Plan-view map of SIHP 50-50-14-08849.



Figure 158. SIHP 50-50-14-08849, overview (view to south).



Figure 159. SIHP 50-50-14-08849, Feature 1 mound (view to southwest).



Figure 160. SIHP 50-50-14-08849, Feature 2 mound (view to south).

5.0 RESULTS OF TESTING

Twelve (12) trenches were excavated in the project area to identify potential subsurface archaeological deposits and features in the H2 Project Area (Figure 161). Trenches were concentrated to the western (*makai*) portion of the project area, where geotechnical testing revealed more substantial soil development than in the eastern (*mauka*) portion of the project area, which contains more exposed basalt bedrock.

No significant archaeological deposits or features were identified as a result of the mechanical testing. The excavations did, however, produce substantial data regarding the nature of stratigraphy in the project area. All trench descriptions, profiles, and soil descriptions are included in Appendix A. The soils and sediments of the trenches are mainly derived from volcanic deposits that include silty loam, cinder, and sand in some areas.

All trenches measured 5.0 m long × 0.75 m wide and were excavated to depths of 0.4 to 2.4 m below surface. No archaeological deposits or features were identified in the test trenches.



Figure 161. Test trench locations in the H2 Residential Project Area.

6.0 SUMMARY AND INTERPRETATION

The H2 Project Area, situated in coastal Mākena, is slightly sloping and includes numerous natural rises and areas with exposed outcrops. Background research indicates that this area was settled during the pre-Contact period, when larger settlements were based in the coastal areas of Honua'ula, near marine resources. Within the project area, temporary and permanent habitation features with associated agricultural features attest to the ingenuity of inhabitants of this region. Some pre-Contact features may have been altered or destroyed during the post-Contact period, when the area was used for ranching and educational activities, and a number of boundary maintenance features and homesteads were built and used into the mid-20th century.

Fieldwork included 100% pedestrian survey of the project area, detailed documentation of surface historic properties, and subsurface testing throughout the western portion of project area. The 16 historic properties identified and recorded during the current AIS include features related to habitation, ranching, educational, agricultural, ceremonial, and boundary maintenance activities. These historic properties illustrate the dramatic transformations of this area during the pre-Contact and post-Contact period up to and including the 20th century. The archaeological survey also documented the extent of disturbance in the project area that has occurred since the 1970s. Modern debris were also noted in various areas of the project area.

6.1 PRE-CONTACT SETTLEMENT AND LAND USE

Traditional Hawaiian archaeological sites reflect the broader patterns of settlement in the coastal Mākena region of Honua'ula. Within the H2 Project Area, the pre-Contact historic properties that have been identified through previous studies as well as the current AIS include numerous complexes with temporary habitation and dryland agricultural features (SIHP 50-50-14-06367, -06376, -06377, -06379, -08847), dryland agricultural features (-08846, -08848) permanent habitation features with associated agricultural features (SIHP 50-50-14-06371, 06378) and ceremonial features (SIHP 50-50-14-06373). Many of these structures incorporate natural outcrops that dominate the landscape in this area, and are built in elevated areas that would have had commanding views to the neighboring coastline. Previous excavations in the area indicate that it was inhabited from approximately 1400 onward and it is likely that the traditional features that have been identified in the H2 Project Area continued to be used continuously through at least the early post-Contact period.

6.2 POST-CONTACT SETTLEMENT AND LAND USE

During the post-Contact period, the sociocultural landscape of Mākena experienced dramatic changes. Public works in the Hawaiian Kingdom just prior to the Māhele, consisting of the Aupuni Wall as noted by Linton Torbert in his sketch map of the region, are also possibly represented by SIHP 50-50-14-08850 [formerly designated as SIHP 50-50-14-06374, Feature 1] along the eastern boundary of the current project area. During the late 19th and early 20th century, the western portion of the project area included Mākena School, remnant features of which were identified as SIHP 50-50-14-01007. Ranching walls and linear alignments (SIHP 50-50-14-06374) and clearing mounds (-08848) echo *paniolo* traditions that are grounded in the ranching economy that became prevalent in the Honua'ula during the 19th century. Remnants of historic-era homesteads occupied by the Poepoe family dating from the 1920s to 1960s in the parcel speak to the continued use of this area by Native Hawaiian inhabitants of the region.

7.0 CONSULTATION RESULTS AND SIGNIFICANCE ASSESSMENTS

7.1 CONSULTATIONS

Hawai'i Administrative Rule §13-276-5(g) states that an Archaeological Inventory Survey report, "shall contain information on the consultation process with individuals knowledgeable about the project area's history, if discussions with the SHPD, background research or public input indicate a need to consult with knowledgeable individuals." Consultation with local individuals and families knowledgeable about the H2 Project Area (as specified in HAR §13-276-5(g)) was undertaken through various stakeholder meetings. In addition, 'Āina Archaeology completed a supplemental Cultural Impact Assessment for the project area, which included a substantial consultation effort (Lee-Greig et al. 2019).

Key consultation in relation to archaeological, cultural, and Native Hawaiian concerns involved lineal and cultural descendants, SHPD, the Office of Hawaiian Affairs (OHA), the Maui County archaeologist, and the Maui County Cultural Resources Commission.

A total of 17 lineal and cultural descendants were contacted via email when the project was initiated. Throughout the course of the project, this list grew to 25 individuals, who were contacted via email or telephone. In addition, 10 individuals representing Maui County, OHA, SHPD, and the Maui and Lana'i Island Burial Council were contacted via email and invited to participate.

Stakeholder Meetings

The consultation process included three stakeholder meetings, which were held in an online format via Zoom.

The first meeting took place on December 17, 2020, prior to the initiation of fieldwork for the project. During this meeting, the project team (Mara Mulrooney, Pacific Legacy; Tanya Lee-Greig, 'Āina Archaeology; and Leilani Pulmano, H2R) presented a project overview, provided an overview of previous archaeological studies in the project area, and discussed the AIS testing strategy. There were 10 participants, including Clare Apana, Ashford DeLima, Colleen DeLima, Kaniloa Kamaunu, Carol Lee Kamekona, Manuel Kuloloia, Doreen LaBatte, Ka'ono'hi Lee, Andrew McCallister (SHPD), and Janet Six (Maui County).

During the meeting on December 17, 2020, the following feedback was received:

- Concerns about subsurface waterways.
- Desire to create a traditional cultural preserve.
- *Wiliwili* tree conservation.
- Questions about preservation buffer distances.
- Preservation of walls.
- Concerns about Poepoe infant burial.

The second meeting was held on April 8, 2021, following the completion of fieldwork for the project. During this meeting, the project team (Mara Mulrooney, Pacific Legacy; Tanya Lee-Greig, 'Āina Archaeology; and Leilani Pulmano, H2R) presented a project overview, provided an overview of previous archaeological studies in the project area, discussed the methodology for the AIS, and discussed the results of fieldwork including site descriptions and a summary of testing. There were 9 participants: Betsy Arakaki-Poepoe, Makalapua Kanuha, Manny Kuloloia, Doreen LaBatte, Ka'ono'hi Lee, Leinaala Napoka, Jeanne Schaaf, Leinaala Vedder, and Kamakana Ferreira (OHA).

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During the April 8, 2021 meeting, the following feedback was received:

- Site 06376, Feature 2 findings – request to think further about this site.
- Desire to talk about mitigation [discussed in subsequent meeting].
- Poepoe family members offered to provide more information about George Poepoe and Kealohaaina Poepoe's homes on the property, discussed the possibility of a site visit.

The third and final meeting was held on April 29, 2021 via Zoom. During this meeting, the project team (Mara Mulrooney, Pacific Legacy; Tanya Lee-Greig, 'Āina Archaeology; and Leilani Pulmano, H2R) presented a project overview, provided an overview of previous archaeology, methodology, and results, discussed the analysis of the county LiDAR dataset, and discussed significance assessments and proposed mitigation recommendations for each of the 16 sites identified during the AIS. This meeting had 7 participants: Makalapua Kanuha, Manny Kuloloia, Ka'ono'hi Lee, Robert Luuwai, Leinaala Vedder, Andrew McCallister (SHPD), and Kamakana Ferreira (OHA).

Feedback received during this meeting included the following:

- OHA advocating for broadly applying Criterion e.
- Distinction needs to be made between lineal descendants and cultural descendants.
- Site 06373 buffer: possibility of extending it out more than five feet in the context of the plan, nature of cultural activities, possibility of restoration.
- Mitigation plans, including data recovery, need to be approved by OHA.
- Site 05798: possible to preserve part of that wall.
- Site 06366: recollection of a well located adjacent to this home.
- SHPD requested that a note be made in the AMP about potential for a well near -06366.
- Site 06374, Fe. 4: review the mitigation for preservation of that portion of wall.
- Conservation of *panini* in preservation areas.

Additional Meeting

An additional meeting was held at the request of representatives from Maui Tomorrow Foundation. This meeting included Tanya Lee-Greig ('Āina Archaeology) and Leilani Pulmano (H2R) and took place via Zoom on February 10, 2021. The meeting included 4 participants: Clare Apana, Lucienne de Naie, Carol Lee Kamekona, and Albert Perez. The following feedback was received during this meeting:

- Concerns about trenching plan, possible burials in area.
- Comments about connectivity of sites.
- Concerns about adequacy of consultation effort during original AIS studies.
- Request for site visit.

Site Visits

A total of three site visits were requested during the course of the AIS.

On November 20, 2020, a site visit with Andrew McCallister (SHPD) was held to discuss methodology, especially the trenching plan. The site visit included Tanya Lee-Greig ('Āina Archaeology), Mara Mulrooney (Pacific Legacy), Darren Okimoto (H2R), and Leilani Pulmano (H2R). In consultation with Mr. McCallister, the team developed a plan that would focus on the

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makai (western) portion of project area with adequate soil development, in areas with proposed infrastructure, as well as outside former surrounding walls from historic homesteads.

On March 8, 2021, a site visit with Maui Tomorrow Foundation took place. The site visit was facilitated by Tanya Lee-Greig (‘Āina Archaeology), Mara Mulrooney (Pacific Legacy), and Leilani Pulmano (H2R). There were 6 participants: Clare Apana, Lucienne de Naie, Kaniloa Kamaunu, Carol Lee Kamekona, Albert Perez, and Jeanne Schaaf. During the site visit, an overview of the AIS methodology was shared and a site walk included some of the documented sites in the H2 Project Area. The following feedback was received:

- Questions about burials in area, where project will get water from.
- Ms. de Naie relayed that Ashford DeLima (lineal descendant who was not in attendance) requested that remnant walls be preserved.
- Concerns about rock mounds in areas of historic homesteads.
- Questions about various features and preservation areas.

On June 2, 2021, a site visit with Leina‘ala Vedder took place. The site visit was facilitated by Tanya Lee-Greig (‘Āina Archaeology), Mara Mulrooney (Pacific Legacy), Caleb Fechner (Pacific Legacy), and Leilani Pulmano (H2R). During the visit, various documented sites were included in a site walk, including many of the remnant wall features. The site visit included preliminary discussions regarding preservation of selected sites, including Sites 50-50-14-06373 and -06378.

Other Consultation

SHPD and Maui County archaeologists were consulted throughout the project, and additional information was sent to individuals via email by request. A consultation summary, a summary site table with significance assessments and proposed mitigation, and the PowerPoint presentations that were delivered during the consultation meetings on December 20, 2020; April 8, 2021; and April 29, 2021 were distributed to all consulting parties via email on May 17, 2021. Consulting parties were asked to provide feedback by May 30, 2021. The following feedback was received:

- Manny Kuloloia requested a correction to the previous mitigation table [which has been updated in this report] and a clarification on the consultation site visit summary for March 8, 2021 [updated as well].
- Sam Garcia thought that the findings presented adequately address all of the areas of concern, thought the recommended treatments were consistent, and noted that he wished there were more to preserve from the Mākena School site.
- Kamakana Ferreira (OHA) provided additional detailed notes from the meeting held on April 29, 2021.
- Ka‘onohi Lee provided additional information about the historical alignments of roadways in the area and noted that Auntie Kealohaaina Poepoe’s house (Site 50-50-14-06366) was closer to the Mākena-Keonoio Road, placing it in the area of a large push pile. She asked what the mitigation recommendation is for that site.
- Ka‘onohi Lee provided additional information about the correlation between Uncle George Poepoe’s house (Site 50-50-14-05798) and the Mākena School Site (Site 50-50-14-01007).

Additional consultation with key stakeholders, including lineal descendants of the Poepoe ‘ohana, cultural descendants, and OHA is ongoing throughout the project development phase.

7.2 ASSESSED INTEGRITY AND SIGNIFICANCE OF HISTORIC PROPERTIES

7.2.1 Integrity

There are seven aspects of integrity. **Location** is the place where historic properties were constructed and **association** speaks to their relationship to one another and the physical environment, or **setting**. **Design, materials, and workmanship** refer to the built structures that comprise historic properties. **Feeling** is the historic properties’ historic sense of a particular period of time.

All of the identified historic properties exhibit a high degree of integrity in all aspects: location, design, setting, materials, workmanship, feeling, and association. The project area is situated within an area that was occupied by Native Hawaiian communities during the pre-Contact period and continued to be used by Hawaiian families during the post-Contact era. The area was transformed in post-Contact times, especially through the use of the area for ranching activities, educational activities centered on the Old Mākena School site, and homesteads that were built in the early to mid-20th century. The location, association, and setting of the historic properties in the project area provide information about how this area was used during the pre-Contact and post-Contact periods. The design, materials, and workmanship of each identified historic property demonstrate a high level of ingenuity in this setting. The historic properties convey a feeling and appreciation of properties that were constructed during both the pre- and post-Contact periods. These historic properties are significant for their association, especially with domestic, agricultural, and ceremonial activities in the area and wider Honua‘ula region during the pre-Contact period, as well as educational and domestic activities during the 19th and early to mid-20th century. The interpretation of the SIHP 50-50-14-08850 [formerly 06374, Fe. 1] wall as a possible Aupuni, or government, wall is also significant.

7.2.2 Significance

The State of Hawai‘i has developed a system for evaluating significance of historic properties under Hawai‘i Administrative Rules Title 13 Chapter 284 (HAR §13-284-6, Rules Governing Procedures for Historic Preservation Review to Comment on projects subject to review pursuant to Hawai‘i Revised Statutes [HRS] Section 6E-42). This system is patterned after Federal Regulations 36 CFR §60.4 and is meant to provide a framework for the evaluation of significance.

To be significant, a historic property shall possess integrity of location, design, setting, materials, workmanship, feeling, and association and shall meet one or more of the following criteria as defined in HAR §13-284-6:

Criterion “a” Be associated with events that have made an important contribution to the broad patterns of our history;

Criterion “b” Be associated with the lives of persons important in our past;

Criterion “c” Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;

Criterion “d” Have yielded, or is likely to yield, information important for research on prehistory or history; or

Criterion “e” Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

Table 6. Previous and Updated Significance Assessments and Mitigation Recommendations for Historic Properties Documented during the AIS

Site No. (50-50-14-)	Prev. No. of Fe.	Type	Prev. Recorded Function	Age	Prev. Testing	Prev. Significance	Prev. Mitigation rec.	No. of Fe.	Updated Function	Updated Significance	Updated Mitigation Rec.	Study
01007	7	Building, privies, cistem, walls	Old Mākena School	Late 19th - early 20th century	Yes	a, d	Data Recovery	3	Old Mākena School	a, d	Data Recovery, Preservation (Fe. 5)	2006 AIS
05788	4	House, wall, imu, trash pit	Habitation	Early to mid-20th century	No	d	No Further Work	1	Habitation	d	Data Recovery	2006 AIS
05799	2	Remnants of house, wall	Habitation	Early to mid-20th century	No	d	No Further Work	0	N/A – no longer present	N/A	No Further Work (no longer present)	2006 AIS
06366	15	House frame, artifact, scatters, clearing mounds, boundary walls	Habitation	1920s-1960s	Yes	d	No Further Work	12	Habitation	d	No Further Work	2008a AIS
06367	3	U-shaped wall, L-shaped terrace	Habitation/ Agricultural	Late Pre-Contact/ Early Post-Contact	Yes	d	No Further Work	5	Habitation/ Agricultural	d	Data Recovery	2008a AIS
06371	6	Terrace, enclosures, U-shaped wall, linear alignment, modified depression	Habitation/ Agricultural	Pre-Contact	Yes	d	Preservation	7	Habitation/ Agricultural	d, e	Preservation	2008b AIS
06372	3	House site, clearing mound, trash pit	Habitation/ Agricultural	Post-Contact	Yes	d	No Further Work	0	N/A – no longer present	N/A	No Further Work (no longer present)	2008b AIS

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The 16 historic properties that were identified during the AIS have been assessed for significance based upon one or more of the listing criteria as defined in 36 CFR §60.4 and Hawai'i Revised Statute §13-284-6. All 16 of the identified historic properties were assessed as being significant based on these criteria.

All 16 historic properties identified within the survey area have been assessed as significant for their information content (Criterion d; Table 6). For previously identified sites, this is consistent with significance assessments put forth in previous AIS studies in the project area.

One site, the Mākena School site (50-50-14-01007), had been previously assessed as significant due to its association with broad patterns of history (Criterion a) in addition to its information content (Criterion d). Following additional consultation conducted by H2R with cultural descendants Ka'onohi Lee and Justin Kekiwi prior to the initiation of the current study, the mitigation recommendation for the cistem (Fe. 5) at this site was changed from No Further Work to Preservation (see Table 6 and Section 8). The current study agreed with the previous significance assessment, and assessed this historic property as significant under Criteria a and d.

Three identified historic properties (50-50-14-06373, -06378, and -06379) that had previously been assessed as significant for distinctive characteristics or high artistic value (Criterion c) were assessed as significant under Criterion c during the current study as well. During the current study, six historic properties (50-50-14-06371, -06373, -06376, -06377, -06378, and -06379) were additionally assessed as significant due to their importance to Native Hawaiian culture because of association with traditional beliefs (Criterion e). During the current study, Criterion e was added to each of these six sites in consultation with lineal and cultural descendants. In addition, mitigation recommendations were updated from No Further Work to Data Recovery and/or Preservation for five historic properties in consultation with lineal and cultural descendants (see Section 8).

Each of the identified historic properties inform us about how people utilized this particular setting during various points in time throughout the past 600 years.

Site No. (50-50-14-)	Prev. No. of Fe.	Type	Prev. Recorded Function	Age	Prev. Testing	Prev. Significance	Prev. Mitigation rec.	No. of Fe.	Updated Function	Updated Significance	Updated Mitigation Rec.	Study
08850	1	Wall segments	Boundary Maintenance	Post-Contact	No	d	Partial Preservation ; No Further Work	1 [6 segments]	Boundary Maintenance – possible Aupuni Wall	d	Preservation (Fe. 1, 4, 6); Data Recovery	2008b AIS
08846	N/A	Enclosure, modified depressions	N/A	Post-Contact	N/A	N/A	N/A	3	Storage/Uncertain	d	Preservation	Current Study
08847	N/A	Modified outcrop, terrace, cleared area	N/A	Pre-Contact	N/A	N/A	N/A	3	Temporary habitation	d	Data Recovery	Current Study
08848	N/A	Walls/alignments, terraces	N/A	Pre-Contact	N/A	N/A	N/A	4	Agriculture	d	Data Recovery	Current Study
08849	N/A	Mounds	N/A	Post-Contact	N/A	N/A	N/A	2	Agriculture	d	Data Recovery	Current Study

Site No. (50-50-14-)	Prev. No. of Fe.	Type	Prev. Recorded Function	Age	Prev. Testing	Prev. Significance	Prev. Mitigation rec.	No. of Fe.	Updated Function	Updated Significance	Updated Mitigation Rec.	Study
06373	8	double enclosure, platform, U-shaped wall, wall segments, linear alignment, modified depression	Habitation/Agricultural	Pre-Contact	Yes	c, d	Preservation	8	Ceremonial	c, d, e	Preservation	2008b AIS
06374	5	Walls	Boundary Maintenance	Post-Contact	No	d	No Further Work	4	Boundary Maintenance	d	Data Recovery; Preservation (Fe. 4)	2008b AIS
06376	4	U-shaped wall, low wall, modified depressions, small enclosure	Temporary Habitation/Agricultural	Pre-Contact (14C date range AD 1663-1949)	Yes	d	No Further Work	4	Temporary Habitation/Agricultural	d, e	Preservation	2008b AIS
06377	2	Enclosure, linear wall, U-shaped wall	Temporary Habitation/Agricultural	Pre-Contact	Yes	d	Preservation	4	Temporary Habitation/Agricultural	d, e	Preservation	2008b AIS
06378	4	Enclosures, modified depression, natural overhang	Habitation/Agricultural	Pre-Contact	Yes	c, d	Preservation	4	Habitation/Agricultural/Ceremonial	c, d, e	Preservation	2008b AIS
06379	3	Platform L-shaped walls, U-shaped wall	Habitation/Agricultural	Pre-Contact (14C date range AD 1480-1660)	Yes	c, d	Preservation	4	Habitation/Agricultural	c, d, e	Preservation	2008b AIS

8.0 PROJECT EFFECT AND MITIGATION RECOMMENDATIONS

8.1 PROJECT EFFECT

HAR §13-284-7 identifies two possible effect determinations, “no historic properties affected” and “effect, with proposed mitigation commitments.” The purpose of this Archaeological Inventory Survey is to identify and document all historic properties and assess their integrity and significance. Further, it identifies potential for the project to impact significant historic properties and provides agreed-upon mitigation commitments to address the identified adverse impacts. Additionally, this report may assist H2R, LLC in managing the archaeological resources present within its landholdings. It provides detailed information on the location, character, and relative significance of the archaeological remains present within the survey area.

The present program of site recording was undertaken to gather information about the sites, not to mitigate any adverse impacts to these archaeological resources. Significance assessments and mitigation commitments have been made to meet AIS requirements and are based on the integrity and significance of each property. Each of the 16 sites that were identified during the Archaeological Inventory Survey of the H2 Residential Project Area has been recommended for treatment. Treatment recommendations are included in Table 6, above, and include the following:

Preservation (HAR §13-284-8 [a][1][A])

This category involves the preservation of a site and its features in their entirety. It is most often applied to sites which have been determined to be significant for more than simply their informational content (that have been assessed as significant under Criterion a, b, c, or e). A detailed Preservation Plan outlining how these sites are to be protected will be prepared and submitted to the State Historic Preservation Division for review and approval prior to initiation of any ground-disturbing activities related to the development of the survey area.

Data Recovery (HAR §13-278-2)

Archaeological data recovery is a form of mitigation that archaeologically records or recovers a reasonable and adequate amount of information from a historic property.

Archaeological Monitoring (HAR §13-279-3)

Archaeological monitoring entails the archaeological observation of, and possible intervention with, ongoing activities which may adversely affect historic properties. Archaeological monitoring is recommended for all areas outside preservation areas.

8.2 MITIGATION RECOMMENDATIONS

A total of 75 features comprise the 16 sites identified and recorded within the project area. Recommendations for the treatment of each of these sites are presented below and are shown in Figure 162.

Seven sites are recommended for preservation. This includes five sites that were previously recommended for preservation (-06371, -06373, -06377, -06379, and -06376) had previously been recommended for no further work, and this recommendation was updated to preservation following the consultation meeting held on April 8, 2021. One newly identified site (-08846) has also been recommended for preservation.

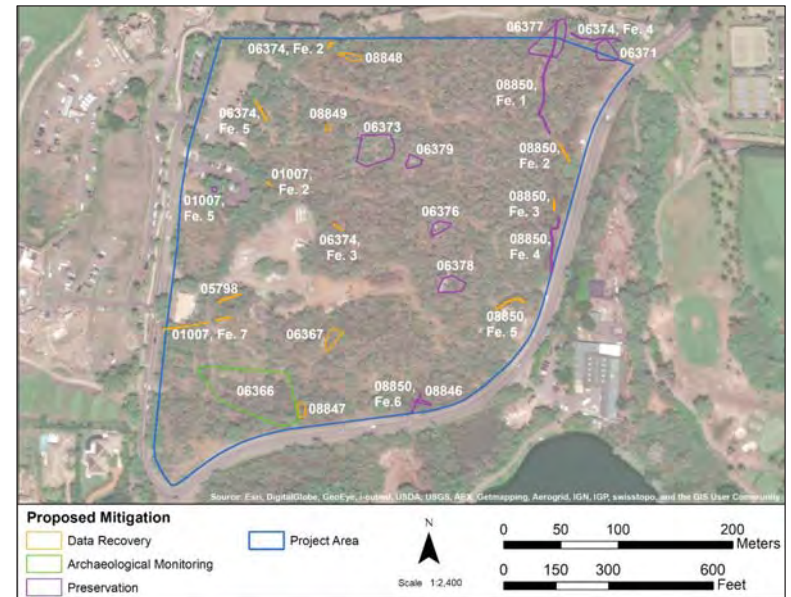


Figure 162. Proposed mitigation for identified historic properties in the H2 Residential Project Area.

Three sites are recommended for partial preservation and data recovery. One of these is the Mākena School site (-01007), which had previously been recommended for data recovery. The mitigation recommendation for the Fe. 5 cistern has been updated to preservation following additional consultation with cultural descendants. Similarly, the recommendation for the Site -06374, Fe. 4 wall segment was updated from no further work to preservation following consultation, and the mitigation recommendations for the other features included in this site (Fe. 2, 3, and 5) were updated from no further work to data recovery in consultation with SHPD staff. The mitigation recommendations for the possible Aupuni wall (-08850) were updated to include data recovery instead of no further work for some sections of the wall (Fe. 2, 3, and 5), as well as preservation for the segments that had previously been recommended for preservation (Fe. 1, 4, and 6).

Five sites are recommended for data recovery. These include two sites that were previously recommended for no further work (-05798, -06367); the mitigation recommendations for these sites were updated to data recovery in consultation with SHPD and other consulting parties. Three newly identified sites (-08847, -08848, -08849) are also recommended for data recovery. One site (-06366) is recommended for no further work. The detailed recording undertaken during the present survey, as well as the previous testing undertaken at this site adequately

documents the informational content of it. Archaeological monitoring is recommended in the vicinity of this historic property, especially given the feedback received from lineal descendants who recalled there being a well at this property. Archaeological monitoring is also recommended for the areas where sites were previously recorded and are no longer present (i.e., -05799, -06372). An archaeological monitoring plan should be developed for all areas outside the preservation areas.

8.3 DISPOSITION OF MATERIALS

All field records (descriptions, notes, and photographs) resulting from the archaeological inventory survey have been temporarily housed in the Pacific Legacy Kailua, O'ahu office. These will be provided to the landowner (H2R, LLC) once all analysis and write-up has been completed. Long-term curation specifics will be determined by the landowner, per HAR 13-276-6(a).



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APPENDIX A
Test trench soil descriptions and profiles.

Trench 1

Trench 1 was excavated in sandy deposits in the northwestern corner of the project area. The trench was located immediately east of the area that had previously been investigated using ground penetrating radar (GPR) (Figure 163, Figure 164, and Figure 165). Three stratigraphic layers were observed (Table 7). Layers I and II were sand and Layer II was a silty loam. Layer I contained small amounts of surface vegetation and organics. Layer II contained some roots and several basalt cobbles and small boulders at the base of the layer. Layer III contained several basalt cobbles and small boulders. No archaeological materials were observed. Trench 1 terminated in top of decomposing bedrock.

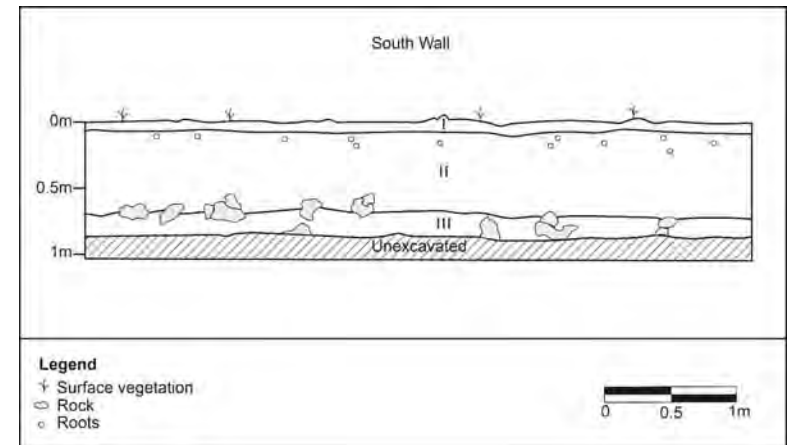


Figure 163. Profile of Trench 1 south wall.

Table 7. Soil Descriptions, Trench 1

*cmbs=centimeters below surface

Layer	Depth (cmbs)*	Description
Layer I	0–10	Brown (7.5YR 5/4). Fine sand; loose, non-sticky, non-plastic, abrupt smooth boundary. Contained small amounts of organics including leaves, twigs, and small roots. No cultural material was observed.
Layer II	10–70	Light brown (5YR 6/4). Fine sand; loose, non-sticky, non-plastic with an abrupt smooth boundary. Contained some roots, subangular basal cobbles at base of layer. Uncertain if sand is a natural deposit or a sand stockpile area. No cultural material was observed.
Layer III	70–90	Brown (7.5YR 4/4). Fine silty loam; Very friable, slightly sticky, slightly plastic. Contained subangular basalt cobbles and boulders. Lays directly on top of decomposing basalt rocks. No cultural material was observed.



Figure 164. Trench 1 south wall profile, oblique view (view to southwest).



Figure 165. Trench 1, close-up of a portion of the south wall profile (view to south).

Trench 2

Trench 2 was near the NW corner of the project area on the NW edge of a gravel parking lot in a proposed retention basin (Figure 166, Figure 167, and Figure 168). Six stratigraphic layers were observed (Table 8). Layer I contained gravel and modern trash debris. Layer II, a fine sand, may be a natural deposit or from a sand stockpile area. Layer III, a fine loamy sand, contained modern trash debris, land snail, and small amounts of charcoal flecking. It may represent a previous disturbance. Layer IV, a fine loamy sand, contained some roots. Layer IV may be a previous disturbance, although no cultural material was observed. Layer V consisted of a silty clay loam. Layer VI consisted of cinder near the base of excavation (BOE). Trench 2 terminated on top of decomposing bedrock.

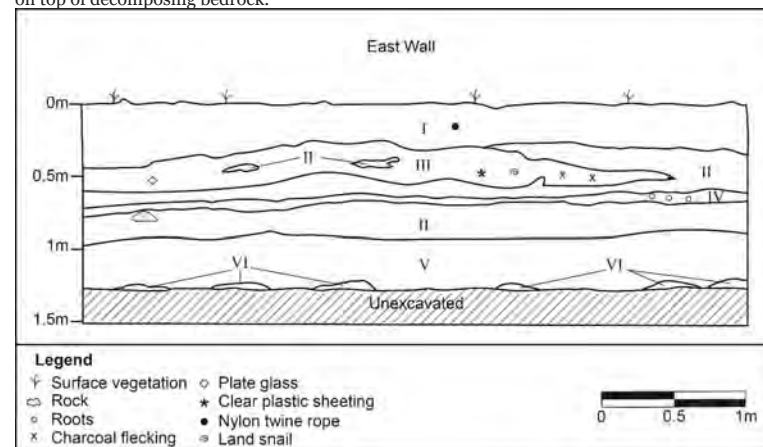


Figure 166. Profile of Trench 2 east wall.

Table 8. Soil Descriptions, Trench 2

Layer	Depth (cmbs)	Description
Layer I	0-47	Brown (10YR 4/3). Gravelly silty loam; moderately medium sided crumb structure, friable, slightly sticky, non-plastic, with an abrupt smooth boundary. Contained modern trash debris: nylon twine rope. Small amount of vegetation on surface: leaves, twigs, branches.
Layer II	40-65; 80-100	Light brown (7.5YR 6/4). Fine sand; weak single grain structure, very friable, non-sticky, non-plastic, with an abrupt and smooth boundary. Uncertain if sand is a natural deposit or a sand stockpile area. No cultural material was observed.
Layer III	40-60	Brown (7.5YR 4/4). Fine loamy sand; weak single grain structure, very friable, non-sticky, non-plastic, with a smooth abrupt boundary. Modern trash debris: clear plastic, plate glass (possibly mirror), land snail, small amounts of charcoal flecking. Located within layer II.
Layer IV	70-74	Brown (7.5YR 4/4). Fine loamy sand; weak single grain structure, very friable, non-sticky, non-plastic, with an abrupt smooth boundary. Contained some roots, located within layer II. No cultural material observed.
Layer V	100- BOE	Strong Brown (7.5YR 4/6). Silty clay loam; moderate crumb structure, firm, slightly sticky, slightly plastic, with an abrupt broken boundary. No cultural material observed.
Layer VI	BOE	Dark brown (7.5YR 3/2). Cinder; structureless, firm, non-sticky, non-plastic. No cultural material observed.



Figure 167. Trench 2 east wall profile, oblique view (view to east).



Figure 168. Trench 2, close-up of a portion of the east wall profile (view to east).

Trench 3

Trench 3 was in the NW portion of the project area. It is situated in the southern portion of a proposed retention basin that currently is a gravel parking lot (Figure 169, Figure 170, and Figure 171). Five stratigraphic layers were observed (Table 9). They consisted of Layer I, a gravelly silt loam with gravel on the surface. Layer II is fine sand; it is uncertain if the sand is from a natural deposit or if the sand is from a sand stockpile area. Layer III, a loamy sand, is within Layer II; no cultural material was observed. Layer IV, a silty clay loam, contained several basalt cobbles and small boulders. Layer V is cinder located at the base of excavation and within a pocket located between Layer I and II. Layer III and the small pocket of Layer V in between Layers I and II appeared to represent a previous disturbance, although no cultural material was observed. Trench 3 terminated on top of decomposing bedrock.

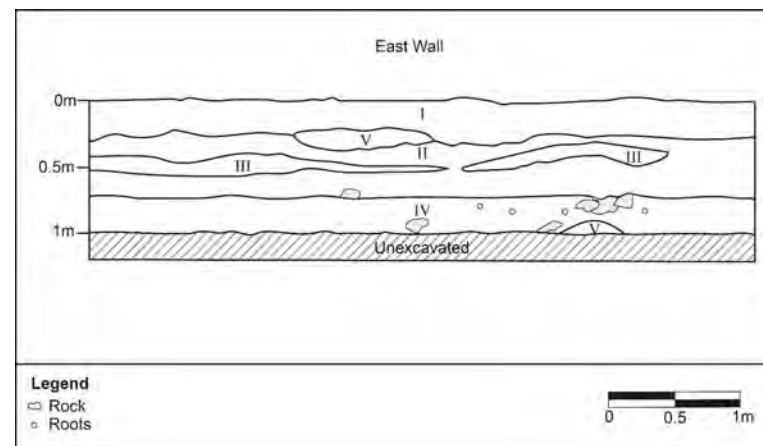


Figure 169. Profile of Trench 3 east wall.

Table 9. Soil Descriptions, Trench 3

Layer	Depth (cmbs)	Description
Layer I	0–35	Dark brown (10YR 3/3). Gravelly silty loam; moderate medium crumb structure, firm, slightly sticky, non-plastic; clear, smooth boundary. Surface is a gravel parking lot. No cultural material observed.
Layer II	35–70	Light brown (7.5YR 6/4). Fine sand; weak single grain structure, loose, non-sticky, non-plastic, with an abrupt smooth boundary. Uncertain if sand is a natural deposit of a sand stockpile area. No cultural material observed.
Layer III	40–53	Brown (7.5YR 4/4). Fine loamy sand; weak fine crumb structure, friable, non-sticky, non-plastic, with an abrupt broken boundary. Within Layer II. No cultural material observed.
Layer IV	70–100	Strong brown (7.5YR 4/6). Silty clay loam; moderate fine crumb structure, firm, slightly sticky, slightly plastic, with an abrupt broken boundary. Contained several basalt cobbles and small boulders. No cultural material observed.
Layer V	40–45; 100	Dark brown (7.5YR 3/2). Cinder; firm, non-sticky, and non-plastic. Located at base of excavation and within a pocket in between Layer I and Layer II.



Figure 170. Trench 3, east wall profile, oblique view (view to east).



Figure 171. Trench 3, close-up of a portion of the east wall profile (view to east).

Trench 4

Trench 4 was excavated in the NW portion of the project area. It is in the northern portion of a proposed retention basin, north of the SIHP 50-50-14-06374, Feature 5 wall segment (Figure 172, Figure 173, Figure 174). Five stratigraphic layers were observed (Table 10). Layer I, a sandy loam, had small amounts of vegetation and organics on the surface. Layer II, a fine sand, contained some roots, and basalt cobbles and small boulders at the base of the layer; it is uncertain if the sand is a natural deposit or is sand from stockpile area. Layer III, a silty clay loam, also contained several basalt cobbles and small boulders. Layer IV, a silty loam was only encountered in the northern portion of the trench. No cultural material was observed. Trench 4 was terminated on top of decomposing bedrock.

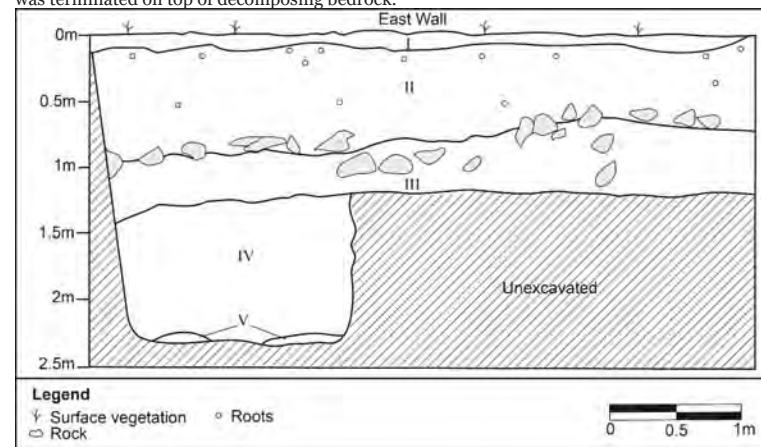


Figure 172. Profile of Trench 4 east wall.

Table 10. Soil Descriptions, Trench 4

Layer	Depth (cmbs)	Description
Layer I	0–10	Brown (7.5YR 4/3). Sandy loam; moderate medium crumb structure, friable, slightly sticky, non-plastic; abrupt, smooth boundary. Surface contains small amount of vegetation and organics including leaves, twigs, and branches. No cultural material observed.
Layer II	10–100	Light brown (7.5YR 5/4). Fine sand; weak single grain structure, loose, non-sticky, non-plastic, with an abrupt smooth boundary. Contains some roots at the base of layer. Uncertain if sand is a natural deposit of a sand stockpile area. No cultural material observed.
Layer III	90–147	Brown (7.5YR 4/4). Silty clay loam; moderate fine crumb structure, friable, slightly sticky, slightly plastic, with an abrupt smooth boundary. Contained several basalt cobble and boulders within the layer. No cultural material observed.
Layer IV	147–240	Yellowish brown (7.5YR 5/4). Silty loam; moderate fine crumb structure, friable, slightly sticky, non-plastic, with an abrupt broken boundary. No cultural material observed.
Layer V	240–BOE	Dark brown (7.5YR 3/2). Cinder; firm, non-sticky, and non-plastic. No cultural material observed.



Figure 173. Trench 4 east wall profile, oblique view (view to east).



Figure 174. Trench 4 close-up of a portion of the east wall profile (view to northeast).

Trench 5

Trench 5 is located in the NW portion of the project area. It is in the southern portion of a proposed retention basin to the south of the SIHP 50-50-14-06374, Fe. 5 wall segment (Figure 175, Figure 176, and Figure 177). Five stratigraphic layers were observed (Table 11). Layer I, a gravelly silt loam, had small amounts of surface vegetation and organics, and some gravel. Layer II, a fine loamy sand, had some roots. Layer III, a fine sand, may be a natural deposit or represent a sand stockpile area. Layer IV, a fine loamy sand, contained some roots. Layer V, a fine silt, contained some roots and several basalt cobbles. No cultural material was observed. Trench 5 was terminated on top of decomposing bedrock.

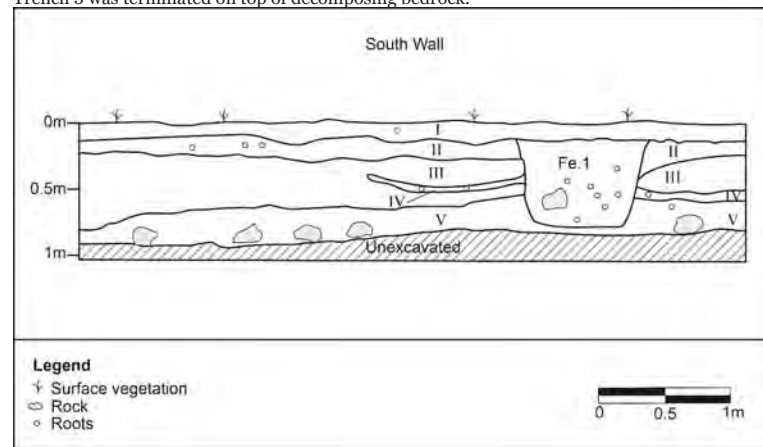


Figure 175. Profile of Trench 5 south wall.

Table 11. Soil Descriptions, Trench 5

Layer	Depth (cmbs)	Description
Layer I	0–10	Dark brown (10YR 3/4). Gravelly silty loam; moderate medium crumb structure, firm, slightly sticky, non-plastic; with an abrupt, smooth boundary. Contained small amount of surface vegetation and organics including leaves, twigs, and branches. Contained some gravel. No cultural material observed.
Layer II	10–46	Brown (7.5YR 5/4). Fine loamy sand; weak single grain structure, loose, non-sticky, non-plastic, with an abrupt broken boundary. Some roots. No cultural material observed.
Layer III	25–70	Light brown (7.5YR 6/4). Fine sand; weak fine single grain structure, loose, non-sticky, non-plastic, with an abrupt broken boundary. Uncertain if sand is a natural deposit of a sand stockpile area. No cultural material observed.
Layer IV	50–60	Brown (7.5YR 4/3). Fine loamy sand; weak single grain structure, very friable, non-sticky, non-plastic, with an abrupt broken boundary. Some roots. No cultural material observed.
Layer V	50–90	Strong brown (7.5YR 4/6). Fine silt; weak single grain structure, loose, non-sticky, non-plastic, with an abrupt broken boundary. Contained some roots and basalt cobbles. No cultural material observed.
Feature 1	10–88	Brown (7.5YR 4/4). Fine sandy loam; weak crumb structure, very friable, non-sticky, non-plastic, with an abrupt broken boundary. Contained some roots and a few basalt cobbles. Pit feature with no cultural material observed.



Figure 176. Trench 5 south wall profile, oblique view (view to southwest).



Figure 177. Trench 5, close-up of a portion of the south wall profile (view to south) with Feature 1.

Trench 6

Trench 6 is located in the NW portion of the project area. It is situated in the central portion of a proposed parking lot. It is located in the eastern edge of a gravel parking lot (Figure 178, Figure 179, and Figure 180). Six stratigraphic layers were observed during the excavation (Table 12). Layer I, a gravelly silt loam, contained a small amount of surface vegetation and some gravel. Layer II consisted of gravel fill. Layer III consisted of a fine loamy sand. Layer IV consisted of a fine sand. Layer V consisted of a fine silty clay loam. Layer VI consisted of cinder located at the base of excavation. No cultural material was observed. Trench 6 terminated on top of decomposing bedrock.

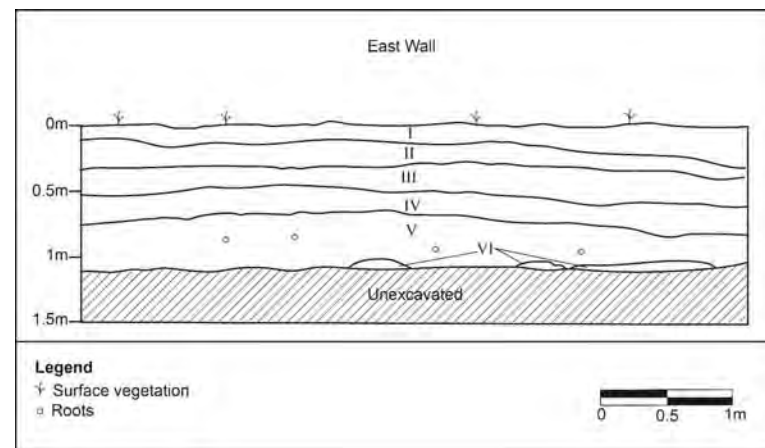


Figure 178. Profile of Trench 6 east wall.

Table 12. Soil Descriptions, Trench 6

Layer	Depth (cmbs)	Description
Layer I	0-30	Dark brown (10YR 3/3). Gravelly silty loam; moderate medium crumb structure, firm, slightly sticky, non-plastic; abrupt, smooth boundary. Contained small amount of surface vegetation. No cultural material observed.
Layer II	10-35	Grey (10YR 4/3). Gravel; with an abrupt smooth boundary. Layer of gravel fill. No cultural material observed.
Layer III	35-55	Brown (7.5YR 4/4). Fine loamy sand; weak fine crumb structure, friable, non-sticky, non-plastic, with an abrupt smooth boundary. No cultural material observed.
Layer IV	50-60	Light brown (7.5YR 6/4). Fine sand; weak single grain structure, loose, non-sticky, non-plastic, with an abrupt smooth boundary. Uncertain if sand is a natural deposit of a sand stockpile area. No cultural material observed.
Layer V	60-110	Strong brown (7.5YR 4/6). Silty clay loam; moderate fine crumb structure, firm, slightly sticky, slightly plastic, with an abrupt broken boundary. No cultural material observed.
Layer VI	105-BOE	Dark brown (7.5YR 3/2). Cinder; firm, non-sticky, and non-plastic. No cultural material observed.



Figure 179. Trench 6 east wall profile, oblique view (view to northeast).



Figure 180. Trench 6, close-up of a portion of the east wall profile (view to east).

Trench 7

Trench 7 was located at the NW portion of the project area. It is situated on the northern edge of a proposed road. It is currently north of a paved beach access parking lot. An abandoned 1½" and a 2" PVC irrigation pipe were encountered and cut into. Following excavation, the 2" pipe was repaired because it appeared to feed into several sprinkler heads located at the NE corner of the parking lot (Figure 181, Figure 182, and Figure 183). Six stratigraphic layers were observed (Table 13). Layer I, a silty clay loam, contained small amounts of surface vegetation and organics. Layer II, a gravel fill, possibly represented the base course for the parking lot. Layer III was a silty clay fill. Layer IV, a fine sand, contained the PVC pipes and some roots, and may be from a natural deposit or from a sand stockpile area. Layer V was a fine silty clay loam. Layer VI was cinder at the base of the excavation. No cultural material was observed except for the PVC pipes. Trench 7 terminated on top of decomposing bedrock.

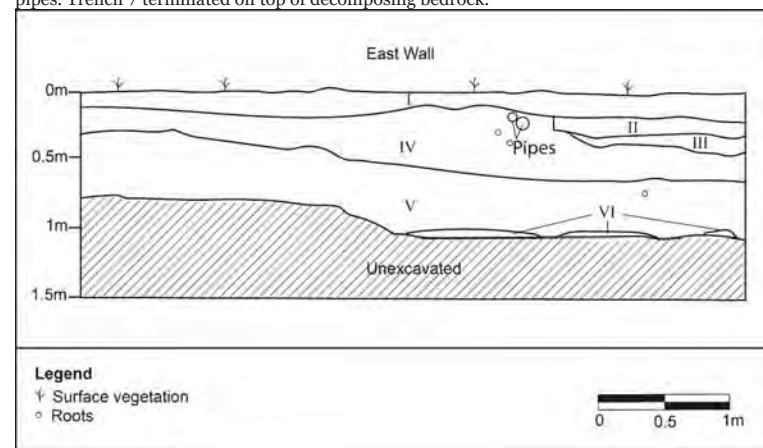


Figure 181. Profile of Trench 7 east wall.

Table 13. Soil Descriptions, Trench 7

Layer	Depth (cmbs)	Description
Layer I	0–20	Very dark brown (7.5YR 2.5/2). Silty clay loam; moderate medium crumb structure, friable, slightly sticky, slightly plastic; abrupt, smooth boundary. Small amount of surface vegetation and organics: leaves, twigs, and branches. No cultural material observed.
Layer II	20–30	Grey (10YR 5/1). Gravel; with an abrupt broken boundary. Layer of gravel fill. Possible base course for parking lot to the south of the trench. No cultural material observed.
Layer III	30–40	Brown (7.5YR 4/4). Silty clay; moderate medium crumb structure, firm, slightly sticky, slightly plastic, with an abrupt broken boundary. No cultural material observed.
Layer IV	20–60	Light brown (7.5YR 6/4). Fine sand; weak single grain structure, loose, non-sticky, non-plastic, with an abrupt smooth boundary. Sand may be a natural deposit or a sand stockpile area. No cultural material observed.
Layer V	40–105	Strong brown (7.5YR 4/6). Fine silty clay loam; weak fine crumb structure, friable, slightly sticky, slightly plastic, with an abrupt broken boundary. No cultural material observed.
Layer VI	105–BOE	Dark brown (7.5YR 3/2). Cinder; firm, non-sticky, and non-plastic. No cultural material observed.



Figure 182. Trench 7 east wall profile, oblique view (view to northeast).



Figure 183. Trench 7, close-up of a portion of the east wall profile (view to east).

Trench 8

Trench 8 is located in the NW portion of the project area. It is situated in the western portion of a proposed retention basin, north of the area where SIHP 50-50-14-06372 was previously documented. The current surrounding area contains moderate vegetation (Figure 184, Figure 185, and Figure 186). Three stratigraphic layers were observed (Table 14). Layer I consisted of a fine sandy loam that contained small amounts of vegetation and organics including leaves, twigs, and branches on the surface. Layer II consisted of a silty clay loam that contained some roots. Layer III consisted of a cinder located at the base of excavation. No cultural material was observed. No sand deposits were observed. Trench 8 terminated on top of decomposing bedrock.

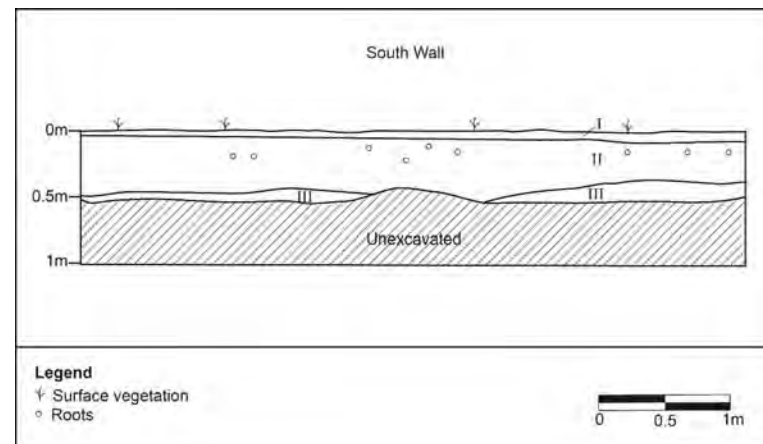


Figure 184. Profile of Trench 8 south wall.

Table 14. Soil Descriptions, Trench 8

Layer	Depth (cmbs)	Description
Layer I	0-10	Yellowish brown (10YR 3/4). Fine sandy loam; weak fine crumb structure, very friable, non-sticky, non-plastic, with an abrupt smooth boundary. Surface contained small amount of vegetation and organics including leaves, twigs, and branches. No cultural material observed.
Layer II	10-50	Strong brown (7.5YR 4/6). Silty clay loam; moderate fine crumb structure, firm, slightly sticky, slightly plastic, with an abrupt broken boundary. Contained some roots. No cultural material observed.
Layer III	50-BOE	Dark brown (7.5YR 3/2). Cinder; firm, non-sticky, and non-plastic. No cultural material observed



Figure 185. Trench 8 south wall profile, oblique view (view to southeast).



Figure 186. Trench 8, close-up of a portion of the south wall profile (view to south).

Trench 9

Trench 9 was located in the SW portion of the project area. It was situated 2 m south of the SIHP 50-50-14-01004, Feature 7 wall and near the NW end of the SIHP 50-50-14-06366, Feature A-1 wall (bulldozed). Historic material, including shell midden (*opihi*, *pipipi*, *Drupa*, and land snail), was present on the surface of the trench and the surrounding area. Historic plate glass and bottle glass was present in the surrounding area. Numerous basalt cobbles were encountered during excavation (Figure 187, Figure 188, and Figure 189). Three stratigraphic layers were observed (Table 15). Layer I is a gravelly fine loamy sand that contained numerous basalt cobbles. No cultural material was observed below the surface. This sand appears to be naturally deposited sand and is different from sand found throughout the NW portion of the project area. Layer II consisted of a gravelly silt loam that contained numerous basalt cobbles. Layer III consisted of a gravelly silt that also contained numerous basalt cobbles. Trench 9 was terminated on top of decomposing bedrock.

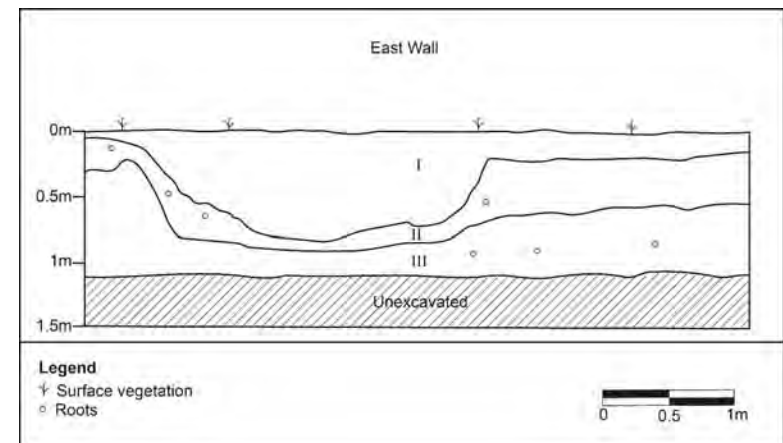


Figure 187. Profile of Trench 9 east wall.

Table 15. Soil Descriptions, Trench 9

Layer	Depth (cmbs)	Description
Layer I	0–70	Brown (7.5YR 5/4). Gravelly fine loamy sand; weak fine single grain structure, loose, non-sticky, non-plastic, with a clear wavy boundary. Contained historic marine shell midden on surface. Historic plate glass and bottle glass present. Contained numerous basalt cobbles. Surface contains small amount of vegetation including leaves, twigs, and branches.
Layer II	10–75	Dark brown (7.5YR 3/3). Gravelly, silty loam; weak fine crumb structure, friable, slightly sticky, non-plastic, with a clear wavy boundary. Contained numerous basalt cobbles. No cultural material observed.
Layer III	35–108	Dark yellowish brown (10YR 4/4). Gravelly silty; friable, slightly sticky, and non-plastic. Contained numerous basalt cobbles. No cultural material observed.



Figure 188. Trench 9 east wall profile, oblique view (view to southeast).



Figure 189. Trench 9, close-up of a portion of the east wall profile (view to south).

Trench 10

Trench 10 is located in the southwestern portion of the project area. It is situated immediately south of the SIHP 50-50-14-06366, Feature A-1 wall and near the Feature E historic refuse scatter. Historic refuse debris were present on the surface of the surrounding area, but no cultural material was present on the surface in the location of the trench (Figure 190, Figure 191, and Figure 192). Two stratigraphic layers were observed (Table 16). Layer I is a silt loam that contained some basalt cobbles, vegetation, and organics on the surface. Layer II consisted of a fine silty clay loam that contained numerous basalt cobbles. No cultural material was observed. Trench 10 terminated on top of decomposing bedrock.

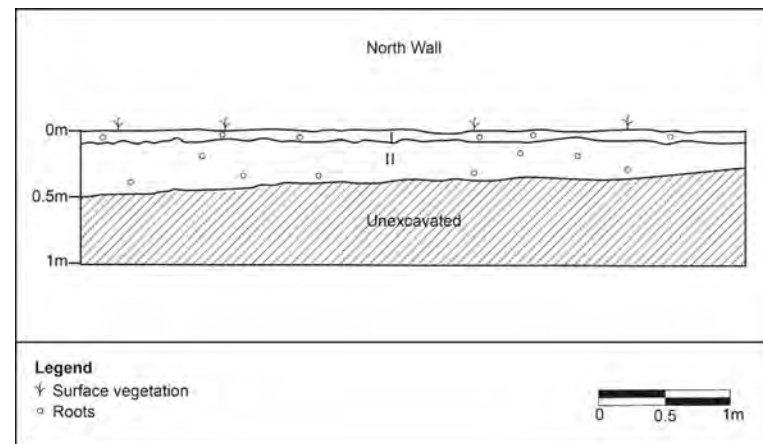


Figure 190. Profile of Trench 10 north wall.

Table 16. Soil Descriptions, Trench 10

Layer	Depth (cmbs)	Description
Layer I	0-10	Brown (7.5YR 3/3). Fine silty loam; moderate fine crumb structure, very friable, slightly sticky, non-plastic, with an abrupt smooth boundary. Contained some basalt cobbles. Surface contains small amount of vegetation including leaves, twigs, and branches.
Layer II	10-BOE	Strong brown (7.5YR 4/6). Fine silty clay loam; weak fine crumb structure, very friable, slightly sticky, slightly plastic. Contained numerous basalt cobbles. No cultural material observed.



Figure 191. Trench 10 north wall profile, oblique view (view to northwest).



Figure 192. Trench 10, close-up of a portion of the north wall profile (view to north).

Trench 11

Trench 11 was located in the SW corner of the project area (Figure 193, Figure 194, and Figure 195). Two stratigraphic layers were observed (Table 17). Layer I consisted of a fine silt that contained some basalt gravel and a small amount of vegetation on the surface. Layer II consisted of a cinder located at the base of excavation. No cultural material was observed. Trench 11 terminated on top of decomposing bedrock.

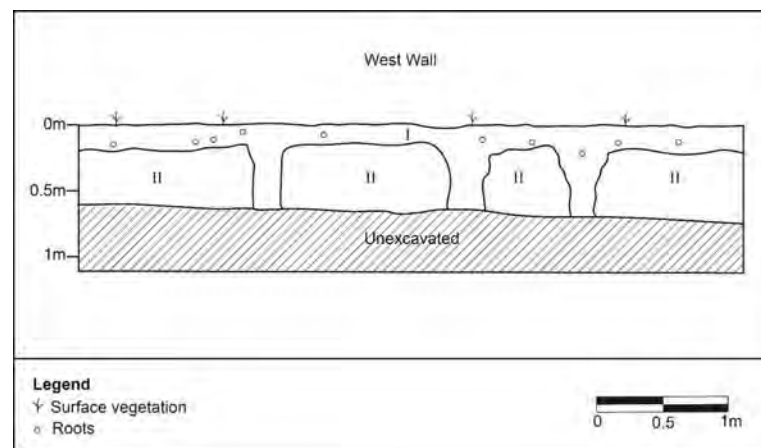


Figure 193. Profile of Trench 11 west wall.

Table 17. Soil Descriptions, Trench 11

Layer	Depth (cmbs)	Description
Layer I	0-BOE	Strong brown (7.5YR 4/6). Fine silt; weak fine crumb structure, very friable, slightly sticky, slightly plastic, with an abrupt broken boundary. Surface contains small amount of vegetation including leaves, twigs, and branches. No cultural material observed.
Layer II	20-BOE	Dark brown (7.5YR 3/2). Cinder; firm, non-sticky, non-plastic. No cultural material observed.



Figure 194. Trench 11 west wall profile, oblique view (view to northwest).



Figure 195. Trench 11, close-up of a portion of the west wall profile (view to west).

Trench 12

Trench 12 was located in the SW corner of the project area (Figure 196, Figure 197, and Figure 198). Three stratigraphic layers were observed (Table 18). Layer I was a gravelly silt that contained some basalt gravel and a small amount of vegetation and organics on the surface, as well as basalt cobbles throughout the layer. Layer II consisted of a gravelly silt located in pockets of the east and west ends of the trench. Layer III consisted of a cinder located at the base of the excavation. No cultural material was observed. No sand deposit was observed. Trench 12 terminated on top of decomposing basalt rock.

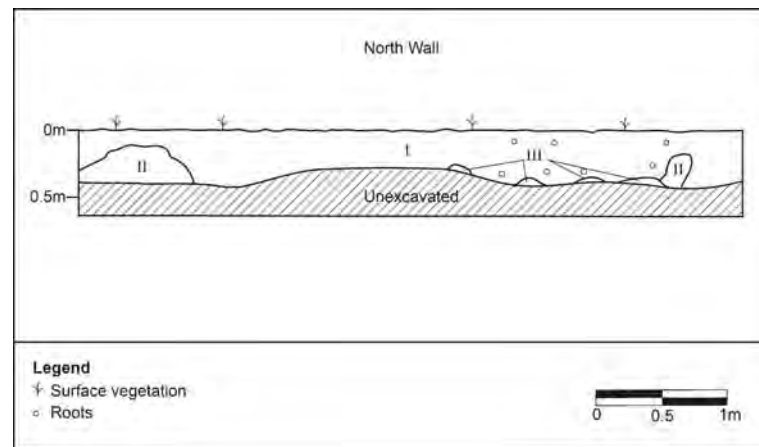


Figure 196. Profile of Trench 12 north wall.

Table 18. Soil Descriptions, Trench 12

Layer	Depth (cmbs)	Description
Layer I	0-BOE	Brown (7.5YR 4/4). Gravelly silt; moderate medium crumb structure, friable, slightly sticky, non-plastic, with an abrupt broken boundary. Contained some basalt gravel. Surface contains small amount of vegetation including leaves, twigs, and branches.
Layer II	20-BOE	Dark brown (7.5YR 3/3). Gravelly silt; moderate fine crumb structure, friable, non-sticky, non-plastic. No cultural material observed.
Layer III	45-BOE	Brown (7.5YR 4/4). Cinder; firm, non-sticky, and non-plastic. No cultural material observed.



Figure 197. Trench 12 north wall profile, oblique view (view to northwest).

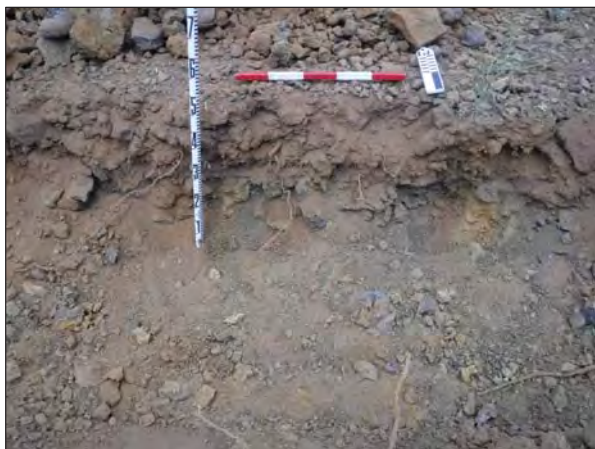


Figure 198. Trench 12, close-up of a portion of the north wall profile (view to north).

EXHIBIT E-1.

**State Historic Preservation Division
Acceptance Letter Dated August 30, 2021**

DAVID Y. IGE
GOVERNOR OF
HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHewa BUILDING
601 KAMOKILA BLVD., STE 555
KAPOLEI, HI 96707

August 30, 2021

Michele Chouteau McLean, Director
County of Maui Planning Department
2200 Main Street
One Main Plaza, Suite 315
Wailuku, HI 96793
c/o kurt.wollenhaupt@co.maui.hi.us

Dear Michele Chouteau McLean:

SUBJECT: **Chapter 6E-42 Historic Preservation Review – Revised**
County of Maui Permit Applications SM1 2019/0008 and EA 2020/0001
H2R LLC H-2 Residential Project at Mākena
Mohopilo Ahupua'a, Honua'ula District, Island of Maui
TMK: (2) 2-1-005:085 and 120 por. [Formerly TMK: (2) 2-1-005:083, 084, 085, 108 por., 120 por.]

This letter provides the State Historic Preservation Division's (SHPD's) review of County of Maui Permit Applications SM1 2019/0008 and EA 2020/0001 for the H2R LLC H-2 Residential Project at Mākena and the associated draft archaeological inventory survey (AIS) report titled *Archaeological Inventory Survey of the Proposed H2 Residential Development in the Ahupua'a of Maluaka, District of Honua'ula (Modern Tax District of Makawao), Island of Maui, [TMK: (2) 2-1-005:085 and 120 (por.), formerly including TMK: (2) 2-1-005:083, 084, 108 (por.)]* (Mulrooney et al., July 2021). SHPD previously reviewed the project and requested an AIS in a letter dated November 9, 2020 (Log No. 2020.01122, Doc No. 2011AM04) and recommend the County of Maui proceed with the permitting process for the permit application SMX 2020/0379 for technical studies within the project area in a letter dated December 31, 2020 (Submission No. 2020PR34905.001, Log No. 2020.02706, Doc. No. 2012AM09). Subsequently, SHPD received the submissions summarized in Table 1 below:

Table 1: Project Related Submissions

Submission Date	Submission No.	Submission Documents
01/07/21	2020PR34905.002	AIS testing strategy from Pacific Legacy, Inc.
02/16/21	2020PR34905.003	Letter from Munekiyo Hiraga Letter from H2R, LLC
02/18/21	2020PR34905.004	Construction designs for offsite work
05/11/21	2020PR34905.005	Construction designs for parking lot improvements
05/21/21	2020PR34905.006	Letter from the County of Maui
07/06/21	2020PR34905.007	Construction designs for mass grading Transmittal letter from the County of Maui
07/16/21	2020PR34905.008	SIHP number request HRS 6E Submittal Form Transmittal letter from Pacific Legacy, Inc. Draft AIS report
07/21/21	2020PR34905.009	Draft AIS report Transmittal letter from Pacific Legacy, Inc.

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUREL
DEPUTY DIRECTOR – WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAROLAEWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

IN REPLY REFER TO:
Project No.: 2020PR34905
Submission No.: 2020PR34905.002
through 2020PR34699.009
Doc. No.: 2107AM23
Archaeology

Michele Chouteau McLean
08/30/2021
Page 2

H2R, LLC proposes the H-2 Residential Project at Mākena project within a 28-acre project area on the subject property. The project will create 53 residential lots, beach parking and related infrastructure improvements including a roadway and electrical improvements along Makena Alanui and Makena-Keone'o'io Roads. The residential project will be located entirely with Parcel 85 and the work within Parcel 120 is limited to utility improvements and archaeological preservation work. The project will include mass grading of Parcel 85 for the residential lots and utility infrastructure. The proposed grading will involve cut and fill with utility line trenching measuring 7 feet wide and ranging from 12 feet to 16 feet deep. H2R, LLC indicates the property was previously graded and grubbed for beach parking and construction staging areas for a development occurring off-site. Portions of the north boundary area were graded during golf course and cart path development and portions of the east and south boundary areas were graded and filled during construction of Makena-Alanui. The southeastern portion of the property contains an imported sand stockpile and rocky soil fill. The northwest portion of the property was graded for a former stable.

Six previous archaeological investigation have been conducted within the current project area including a large-scale survey that was conducted by the Bishop Museum (Cordy 1978) followed by a reconnaissance survey (Cleghorn 1988) and investigations at the Old Mākena School Site (Site 50-50-14-01007) which included a historical document and literature search (Hurst and Cleghorn 1991) and data recovery investigations in 1991 (Mulrooney et al. 2020). AIS investigations within and adjacent to the project area were conducted in the early 2000s. The first of these included a portion of the current project area (TMK: (2) 2-1-005:084) and the H-1 project area (TMK: (2) 2-1-006:037 and 056) makai of Makena Keonoio Road (Rotunno-Hazuka et al. 2005; Donham 2006). The remainder of the H2 project area was subsequently subjected to two AIS investigations, one of which was conducted in the parcel previously designated as TMK: (2) 2-1-008:083 (Rotunno-Hazuka et al. 2008a) and the other was conducted on the parcel previously designated as TMK: (2) 2-1-008:085 and a portion of TMK: (2) 2-1-008:120 (Rotunno-Hazuka et al. 2008b).

Pacific Legacy, Inc. and 'Āina Archaeology conducted the current AIS in support of the current H-2 Residential Project. The AIS field work included a pedestrian survey of the project area using transects spaced 5 meters apart and excavation of 12 backhoe trenches (5 by 0.75 meters) using a Komatsu 55MR mini track excavator with a 2-foot-wide bucket. The AIS report (Mulrooney et al., July 2021) includes a scope of work, summaries of previous land use in Mohopilo Ahupua'a, previous archaeological investigations in the area, and consultation conducted for the project, and the results of the AIS field work. The consultation indicates a total of 25 descendants were contacted via email or telephone regarding the project. Additionally, 10 individuals representing Maui County, OHA, SHPD, and the Maui and Lana'i Island Burial Council were contacted via email and invited to participate and comment on the project. The results section includes drawn to scale representative soil profiles for each of the test trenches with photographs and soil descriptions; drawn to scale plan view maps of the historic properties identified during the survey; an updated description with significance assessments for each of the previously identified historic properties still present in the project area; and mitigation recommendations for each significant historic property (Table 2).

Table 2: Significant Historic properties identified in the project area

SIHP # 50-50-14	Formal Type	Function	Temporal Association	Significance	Mitigation
-01007	Building, privies, cistern, walls	Old Mākena School	Late 19th to early 20th century	a, d	Data Recovery; Preservation (Fe. 5)
-05798	House, wall, imu, trash pit	Habitation	Early to mid-20th century	d	Data Recovery
-05799	Remnants of house, wall	Habitation	Early to mid-20th century	d	No Further Work (no longer present)
-06366	House frame, artifact scatters, clearing mounds, boundary walls	Habitation	1920s to 1960s	d	No Further Work

SIHP # 50-50-14	Formal Type	Function	Temporal Association	Significance	Mitigation
-06367	U-shaped wall, L-shaped wall, terrace	Habitation / Agricultural	Late Pre-Contact / Early Post-Contact	d	Data Recovery
-06371	Terrace, enclosures, U-shaped wall, linear alignment, modified depression	Habitation / Agricultural	Pre-Contact	d, e	Preservation
-06372	House site, clearing mound, trash pit	Habitation / Agricultural	Pre-Contact	d	No Further Work (no longer present)
-06373	Double enclosure, platform, U-shaped wall, wall segments, linear alignment, modified depression	Habitation / Agricultural	Pre-Contact	c, d, e	Preservation
-06374	Walls	Boundary Maintenance	Post-Contact	d	Data Recovery; Preservation (Fe. 4)
-06376	U-shaped wall, low wall, modified depressions, small enclosure	Temporary Habitation / Agricultural	Pre-Contact (14C date range AD 1663-1949)	d, e	Preservation
-06377	Enclosure, linear wall, U-shaped wall	Temporary Habitation / Agricultural	Pre-Contact	d, e	Preservation
-06378	Enclosures, modified depression, natural overhang	Habitation / Agricultural	Pre-Contact	c, d, e	Preservation
-06379	Platform L-shaped walls, U-shaped wall	Habitation / Agricultural	Pre-Contact (14C date range AD 1480-1660)	c, d, e	Preservation
-08850	Wall Segments	Boundary Maintenance	Post-Contact	d	Data Recovery; Preservation (Fe. 1, 4, 6)
-08846	Enclosure, modified depressions	Storage	Post-Contact	d	Preservation
-08847	Modified outcrop, terrace, cleared area	Temporary Habitation	Pre-Contact	d	Data Recovery
-08848	Walls / alignments, terraces	Agriculture	Pre-Contact	d	Data Recovery
-08849	Mounds	Agriculture	Post-Contact	d	Data Recovery

The AIS report meets the requirements of HAR §13-276-5. **It is accepted.** Please send two hard copies of the document, clearly marked FINAL, along with a text-searchable PDF copy of the report and a copy of this acceptance letter, to the Kapolei SHPD office, attention SHPD Library. Also submit a text-searchable PDF copy of the final AIS report to HICRIS Project 2020PR34905 using the Project Supplement option in HICRIS, and a text-searchable PDF copy to lehua.k.soares@hawaii.gov.

SHPD agrees with the significance assessments and mitigation recommendations. SHPD's determination is **"Effect, with agreed upon mitigation commitments"** and with mitigation in the form of archaeological preservation and archaeological data recovery excavations, as summarized in the above table, and with archaeological monitoring for all ground disturbing activities during project development.

SHPD looks forward to receiving for review and acceptance of a preservation plan meeting the requirements of HAR §13-277, an archaeological monitoring plan meeting the requirements of HAR §13-279-4, and a data recovery plan meeting the requirements of HAR §13-278-3.

SHPD shall notify the County when the required mitigations plans have been accepted, and the data recovery excavations and associated reporting is accepted, and the permit issuance process may proceed.

Please submit the required plans to SHPD HICRIS Project No. 2020PR34905 using the project supplement option.

Please contact Andrew McCallister, Maui Archaeologist IV, at andrew.mccallister@hawaii.gov for matters regarding archaeological resources or this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Ann Cua, County of Maui, ann.cua@co.maui.hi.us
Janet Six, County of Maui, janet.six@co.maui.hi.us
Leilani Pulmano, Pacific Rim Land, Inc., leilanip@pacificrimland.com
Erin Mukai, Pacific Rim Land, Inc., erinm@pacificrimland.com
Mara Mulrooney, Pacific Legacy, Inc., mulrooney@pacificlegacy.com
Krickette Pacubas, Pacific Legacy, Inc., pacubas@pacificlegacy.com
Tanya Lee-Greig, 'Āina Archaeology, Tanya@ainaarch.com
Darren Okimoto, Dowling Co., darren@dowlingco.com
Allison Ichikawa, Planning Consultants Hawaii, LLC, aichikawa@atahawaii.com
Garrett Tokuoka, Planning Consultants Hawaii, LLC, gtokuoka@atahawaii.com

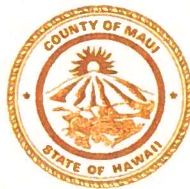
EXHIBIT F.

**Letter from Department of Planning
Regarding Compliance with
Condition No. 27 of Ordinance No. 3613**

MICHAEL P. VICTORINO
Mayor

MICHELE CHOUTEAU MCLEAN, AICP
Director

JORDAN E. HART
Deputy Director



DEPARTMENT OF PLANNING

COUNTY OF MAUI
ONE MAIN PLAZA
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HAWAII 96793
October 20, 2021



RECEIVED

NOV 16 2021

PACIFIC RIM LAND, INC.
MAUI MAIN

Ms. Leilani Pulmano
Pacific Rim Land Inc.
1300 N. Holopono Street, Suite 201
Kihei, Hawaii 96753

Dear Ms. Pulmano:

**SUBJECT: H2R, LLC COMPLIANCE WITH CONDITION NO. 27 OF
ORDINANCE NO. 3613 GRANTING A CHANGE IN
ZONING FOR PARCEL H-2 (LOT 19), RELATING TO A
WATER CONSERVATION PLAN FOR MAKENA RESORT,
MAKENA, ISLAND OF MAUI, HAWAII;
TMK: (2) 2-1-005:085 and 120 (CIZ 99/0015)**

The Department of Planning (Department) is in receipt of the Water Conservation Plan (Plan) dated July 2009, and the July 27, 2009 letter from the Department of Water Supply (DWS) indicating that the Plan is satisfactory and fulfills the applicable requirement of Condition No. 27 of Ordinance No. 3613. It is noted that both the Plan and DWS letter were submitted as part of the 2010 Change in Zoning annual compliance report prepared by Makena Resort.

Condition No. 27 of Ordinance No. 3613 states, "The developer shall provide a water conservation plan for the Makena Resort Area, approved by the Department of Water Supply (DWS), prior to the issuance of any SMA permits. For each project, the developer shall construct a dual waterline system to accommodate the use of non-potable water for landscaping and irrigation purposes prior to the issuance of any building permits."

It is noted that lands owned by H2R, specifically TMK (2) 2-1-005:085, represents approximately 5% of the total lands zoned by Ordinance No. 3613. The remaining 95% of the lands are owned by a separate entity, Makena Golf & Beach Club Owners and are part of a separate project, Makena Resort.

Inasmuch as H2R is developing the first project that is subject to Ordinance No. 3613, the Department finds that the Plan and approval letter from DWS satisfy the first part of Condition No. 27 for the proposed development of Parcel 085. The Department understands the Special Management Area (SMA) permit for H2R's H-2 Residential Project includes language and plans that a dual waterline system must be installed. Upon installation of the dual waterline system the Department will be able to find that the second part of Condition No. 27 and the SMA permit condition for the proposed development of Parcel 085 has been fulfilled.

Ms. Leilani Pulmano
October 17, 2021
Page 2

Thank you for your attention to this matter. Should you require further clarification, please contact Current Planning Supervisor Ann Cua by email at ann.cua@mauicounty.gov or by phone at (808) 270-7521.

Sincerely,



CLAYTON I. YOSHIDA
Planning Program Administrator

for MICHELE MCLEAN, AICP
Planning Director

xc: Ann T. Cua, Current Planning Supervisor (PDF)
Project File

MCM:CIY:ATC:th

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EXHIBIT G.

**Supplemental Information for Biological
Resources Survey Dated April 2020**

SUPPLEMENTAL INFORMATION FOR THE
BIOLOGICAL RESOURCES SURVEY

For the
H-2 RESIDENTIAL PROJECT
MĀKENA, MAUI, HAWAII

By

ROBERT W. HOB DY
ENVIRONMENTAL CONSULTANT
Kokomo, Maui
April 2020

Prepared for: H2R, LLC

I would like to clarify the involvement of the U.S. Fish and Wildlife Service (USFWS) in the protection of plant and animal species and their role in the planning process.

The Endangered Species Act of 1973 was created by the U.S. Congress and was placed under the jurisdiction of USFWS. This law gave broad federal powers to identify rare plant and animal species, legislatively create an official list of endangered and threatened species, and to provide protections for these species. This federal mandate gave authoritative powers over States and Counties which would incorporate the guidance and requirements into the planning and implementation of new projects. They have trained biologists who study each endangered plant or animal species, ascertain their environmental requirements and reproductive needs, determine what threats are causing their populations to decline, and then prescribe management actions that will counteract the threats and reinvigorate their populations. In serious situations where extinction is imminent, they may establish Critical Habitat areas as well to increase management focus and actions. During the review process for new projects they provide their mitigating guidelines that must be followed. These guidelines are different for each species and are tailored to produce the best biological results by preventing and avoiding negative impacts. Each mitigation is deemed to be sufficient by USFWS for each species and situation.

The USFWS has not designated any Critical Habitat areas within, in or around this project area, but it has addressed several endangered species individually. Each of these is discussed:

‘Ōpe‘ape‘a or Hawaiian hoary bat

This bat is found on all islands in Hawaii, but its numbers are hard to determine because they are only active at night and they don’t make sounds that humans can hear. They are strong fliers and range widely in many habitats. They are solitary bats and do not roost in communal colonies. They roost in trees wherever they end up each dawn and they don’t seem to prefer any particular tree species. They breed during the summer months and raise their young in late summer until the end of September when they are able to fly. It is during the June through September months that the young are vulnerable should the trees they are in be destroyed. Once they can fly, they are, like the adults, quite capable of getting out of harms way. The acceptable mitigation USFWS prescribes is to curtail tree removal during June through September and deems that to be sufficient.

Waterbirds - ae’o or Hawaiian stilt and ‘alae ke’oke’o or Hawaiian coot

These two endangered species are both obligate water birds. They only occur in or on the edges of open ponds or lakes where they feed, breed and raise their young. They do not occur in dry habitat where water does not pond. The project area is entirely a dry forested habitat that will not attract these water birds even though there are ponds that these birds do regularly frequent that are not too distant. They may be seen in flight transiting between wetland habitat but this is as close as they will get. These birds will not be adversely affected by this project.

Turtles – honu or green turtle and ‘ea or hawksbill turtle

These two endangered turtles occur in Hawaiian waters and are known to make nests and lay their eggs on sandy beaches during the summer months. These nests are located at the hightide line or just above in the fringe of the vegetation and are thus close to the ocean. The hatchlings emerge in November and December and make their way to the ocean. The lower edge of the project area is mostly 400 feet to 800 feet from the ocean across a golf course fairway and above a paved road at an elevation of about 50 feet. There is no way that these turtles would nest in this area. The USFWS concerns regarding these turtles mostly centers around their presence on the shoreline and their nests, and on issues such as harassment, injury and killing. USFWS has strict laws against such behaviors with substantial fines and punishments. Potential infractions would not occur within the project area.

Hawaiian monk seal

The endangered monk seal has the same habitat, shoreline presence, potential shoreline threats and protections as do the turtles. They would not be adversely affected by this project.

Sea birds - `ua`u or Hawaiian petrel and `a`o or Newells Shearwater

The endangered `ua`u and the threatened `a`o both spend most their time at sea but breed and nest on high mountain ridges between March and December. During the breeding season these birds fly in from the ocean at dusk and then fly back out to the ocean at dawn. They don't frequent the lower elevations but do fly over them twice a day. Since it is dark when they arrive and leave, they can be distracted by bright lights and crash into structures and be injured or killed. Young birds, making their first fledging flights in November and December are particularly vulnerable. To prevent this from occurring USFWS recommends shielded outdoor lighting so that it can only shine downward. The County of Maui has incorporated this requirement into its building codes so that is already covered.

Blackburn's sphinx moth

The Blackburn's sphinx moth is a large endangered moth that lives in dry leeward forest habitats. Its larvae feed on members of the tobacco family which have toxins that when ingested by the larvae protect them from predators. They originally fed on native `aiea trees which have this toxin. But, as `aiea trees started to die off from native forests, the moths population also began to decline. The moths were able to find another related non-native plant with similar toxins, the tree tobacco, which is a large shrub or small tree. The tree tobacco is an invasive weed, but, it has now become a species that is positively contributing to the survival and gradual recovery of the Blackburn's sphinx moth.

The adult moths emerge from underground pupae with the soaking of the first winter rains. They mate and then lay their eggs on suitable host plants (now primarily tree tobacco). The eggs hatch and feed on the host plants until they mature around the end of March whereupon they crawl down in the surrounding soils and begin the next pupation cycle.

The USFWS was faced with an unusual situation where a rare native moth is now depending on a non-native invasive weed for its survival. Their solution was novel. The tree tobacco now carries collateral federal protections when actively associated with the eggs and larvae of the sphinx moth but reverts to being an invasive when no longer having this association and is now legally open to being eradicated. The USFWS now allows the removal of tree tobacco during the dry summer and fall months. They just require it to be done by hand (no use of heavy equipment) so as not to destroy any pupae that may be dormant in the soil. This protects the sphinx moths lifestyle while allowing other activities. When the pupae next emerge they can then fly elsewhere to find other host plants which are now plentiful.

`Āwikiwiki seed banks in the soil

`Āwikiwiki (*Canavalia pubescens*) is an endangered vine that grows in dry lowland leeward habitats on Ni'ihau, Kaua'i, Lāna'i and southern east Maui. Three small populations occur 2 and 5 miles to the north and 5 miles to the south of the project area, but, in the course of several surveys over the last 50 years none have been found on or near the project area. Herds of deer have extirpated most of the native plant species in south Maui during the past 40 years. To claim that a seed bank of `āwikiwiki occurs in the soil in the project area after at least 40 of 50 years in an area in which it has never been documented from is an unreasonable assumption.

EXHIBIT H.

**Email from Hawaii Wildlife Fund Regarding
Condition No. 38 of Ordinance No. 3613**

Erin Mukai

From: Erin Mukai
Sent: Thursday, November 11, 2021 3:02 PM
To: 'Hannah Bernard'
Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
Thank you for your email and totally understand your busy schedule.

Please know that the USFWS provided us with mitigation measures that will be incorporated into the Project for protection of the Hawaiian hoary bat. We are also concerned about the nearshore water quality in regards to the marine ecosystem. (As a friendly reminder, the project area is not a shoreline property.) The Project will be retaining 100% of pre- and post-development stormwater runoff, exceeding County standards.

Please feel free to contact me in the future if you have any further questions or additional comments.
I really appreciate your time corresponding with me.

Many thanks again,
Erin Mukai | PACIFIC RIM LAND, INC.
Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Hannah Bernard <bernardhannah@icloud.com>
Sent: Wednesday, November 10, 2021 11:01 PM
To: Erin Mukai <erinm@pacificrimland.com>
Subject: Re: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Aloha Erin,
Mahalo for your persistence. I apologize as I have been so preoccupied with our new Center that I have been unable to attend to this matter. I simply don't have the time to respond to this, but am concerned about the presence of our endemic Hawaiian hoary bat (*Lasiurus cinereus semotus*), and the thriving reef ecosystem just below this site. Thanks for reaching out, and once again, I apologize I will be unable to respond.

Aloha
Hannah
Hannah Bernard
Executive Director
Hawai'i Wildlife Fund
P.O. Box 790637
Paia, HI 96779
(808)280-8124
wild@aloha.net
www.wildhawaii.org



On Nov 9, 2021, at 4:54 PM, Erin Mukai <erinm@pacificrimland.com> wrote:

Hi Hannah,
It's been a while – I hope you are well!

I'm hoping we can close the loop on this correspondence.

A while back, in July of last year, I provided a letter to the Hawaii Wildlife Fund (HWF) requesting comments related to the H-2 Residential Project's flora & fauna.

Just about a year ago, I believe HWF was intending to provide comments, but I know things were a bit hectic at the time and we did not receive any correspondence thereafter.

I wanted to reach out again to connect with you on this.

Could you please let me know if we can expect comments in the near future or if HWF is not intending to provide comments.

We'd really appreciate tying this up given the timespan.

Much appreciated, Hannah.

Please let me know.

Looking forward to hearing from you,

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Erin Mukai

Sent: Thursday, January 14, 2021 9:10 AM

To: 'Hannah Bernard' <bernardhannah@icloud.com>

Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
Happy New Year!

Hope all is well and 2021 is off to a good start for you.

I thought I'd reach out regarding our correspondence below and comments from the HWF. Ann Cua from the Planning Department may be contacting you in the near future. We recently had a meeting with the Planning Department to discuss project updates as it relates to the SMA Use Permit and EA.

If HWF is still intending to provide comments, it would be appreciated if those could be completed soon. Please let me know.

Thank you, Hannah!

Erin Mukai | PACIFIC RIM LAND, INC.
Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Erin Mukai
Sent: Monday, November 16, 2020 9:52 AM
To: Hannah Bernard <bernardhannah@icloud.com>
Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
I appreciate your response.
Thank you for getting in touch.
We have not sent a request for comments to the Maui Nui Seabird Recovery Project.

Are you able to tie up your comments in a week or two?
Would that be enough time?

Erin Mukai | PACIFIC RIM LAND, INC.
Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Hannah Bernard <bernardhannah@icloud.com>
Sent: Friday, November 13, 2020 2:23 PM
To: Erin Mukai <erinm@pacificrimland.com>
Subject: Re: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Please forgive me Erin. I have been buried by our sea turtle project and more duties with less help due to COVID-19 - what a year! I would still like to provide comments about sea turtles, also wondering did you happen to pass this to the Maui Nui Seabird Recovery Project? Jay Penniman: jayfp@hawaii.edu
I wanted to include them too, but just too busy to even ask you about that.

Mahalo nui

Hannah

Hannah Bernard
Executive Director
Hawai'i Wildlife Fund
P.O. Box 790637
Paia, HI 96779
(808)280-8124
wild@aloha.net
www.wildhawaii.org

<image001.png>

On Nov 12, 2020, at 11:18 AM, Erin Mukai <erinm@pacificrimland.com> wrote:

Hi Hannah,

Hope all is well.

How are the Hawaii Wildlife Fund's comments coming along (re flora/fauna survey for the H-2 Residential Project)? Please see attached.

You mentioned a while back that you would provide some comments regarding the sea turtles of the area.

Are you still intending to provide comments?

If you could let me know either way, that would be great.

Thanks so much for your time, Hannah.

Please let me know.

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940

E-mail: erinm@pacificrimland.com

From: Erin Mukai

Sent: Thursday, October 1, 2020 8:47 AM

To: Hannah Bernard <bernardhannah@icloud.com>; wild@aloha.net

Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,

Hope you're having a good week and all is well.

I'm reaching out to check on the status of Hawaii Wildlife Fund's comments on the flora and fauna survey for the project, which we sent out in early July for comments.

If your organization is intending to provide comments, could you please send my way?

Alternatively, if you are not intending to provide comments, it would be appreciated if you could let me know.

We'd like to tie this up soon.
Thanks so much, Hannah.
Looking forward to hearing from you either way.

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Erin Mukai
Sent: Monday, September 14, 2020 10:35 AM
To: Hannah Bernard <bernardhannah@icloud.com>
Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
Thank you for the work you do.
I thought I'd reach out to check if you're still intending to provide comments on the flora fauna survey for the H-2 Residential Project.
Any chance you could tie those up?
For ease of locating the original request letter, I'm reattaching the PDF file to this email.

If you could keep me posted, that would be much appreciated.
Thank you, Hannah.

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Erin Mukai
Sent: Thursday, August 27, 2020 12:57 PM
To: Hannah Bernard <bernardhannah@icloud.com>
Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
Thank you for your email last week.
I'm just checking in on your comments.
Are you able to provide those sometime soon?

Thanks so much for your time!

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940
E-mail: erinm@pacificrimland.com

From: Hannah Bernard <bernardhannah@icloud.com>

Sent: Wednesday, August 19, 2020 5:17 PM

To: Erin Mukai <erinm@pacificrimland.com>

Subject: Re: Proposed H-2 Residential Project at Makena, Maui, Hawaii (TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Aloha Erin,

So sorry for my delay, I am just buried with sea turtle nesting season. If you could give me til Monday, perhaps I can add in my thoughts about the sea turtles of that area.

Mahalo

Hannah

Hannah Bernard

Executive Director

Hawai'i Wildlife Fund

P.O. Box 790637

Paia, HI 96779

(808)280-8124

wild@aloha.net

www.wildhawaii.org

<image001.png>

On Aug 19, 2020, at 3:55 PM, Erin Mukai <erinm@pacificrimland.com> wrote:

Hi Hannah,

Attached, please find a copy of a letter that was mailed and emailed to the Hawaii Wildlife Fund (HWF).

I am following up to check if HWF has any comments to provide on the Proposed H-2 Residential Project's flora fauna survey.

If HWF is not intending to provide comments, we would appreciate a response noting such.

Thanks so much for your attention to this,

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | **Direct: 808-270-5940**
E-mail: erinm@pacificrimland.com

From: Erin Mukai
Sent: Thursday, August 6, 2020 11:40 AM
To: wild@aloha.net
Subject: RE: Proposed H-2 Residential Project at Makena, Maui, Hawaii
(TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
Hope all is well.
I thought I'd check in on the attached letter regarding the Proposed H-2 Residential Project, which requested comments on the project's flora fauna survey by July 28th.
A hard copy was mailed to the Hawaii Wildlife Fund's PO Box and a PDF was emailed, below.

Does the Hawaii Wildlife Fund have any comments to provide?
Or, if there are none at this time, we'd appreciate acknowledgement of such.

Looking forward to hearing from you.

Thank you,
Erin Mukai | PACIFIC RIM LAND, INC.
Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | **Direct: 808-270-5940**
E-mail: erinm@pacificrimland.com

From: Erin Mukai
Sent: Tuesday, July 7, 2020 12:32 PM
To: wild@aloha.net
Subject: Proposed H-2 Residential Project at Makena, Maui, Hawaii
(TMK Nos.: (2) 2-1-005:085 and 120 (por.))

Hi Hannah,
Attached, please find a letter regarding the Proposed H-2 Residential Project at Makena, Maui.
The original hard copy is being sent to you by USPS.

We would appreciate your attention and comments.
Should you have any questions, please feel free to reach me.

Thank you,

Erin Mukai | PACIFIC RIM LAND, INC.

Project Coordinator

1300 N. Holopono Street, Suite 201
P.O. Box 220, Kihei, Maui, Hawaii 96753

Office: 808-874-5263 | Direct: 808-270-5940

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