

**STATE OF HAWAII**  
**CONTRACT FOR GOODS OR SERVICES**  
**BASED UPON**  
**COMPETITIVE SEALED BIDS**

This Contract, executed on the respective dates indicated below, is effective as of \_\_\_\_\_, \_\_\_\_\_, between \_\_\_\_\_ Department of Hawaiian Home Lands \_\_\_\_\_,  
(Insert name of state department, agency, board or commission)  
State of Hawaii ("STATE"), by its \_\_\_\_\_ Chairman, Hawaiian Homes Commission \_\_\_\_\_,  
(Insert title of person signing for State)  
(hereafter also referred to as the HEAD OF THE PURCHASING AGENCY or designee ("HOPA")),  
whose address is 91-5420 Kapolei Parkway, Kapolei, Hawaii 96707 \_\_\_\_\_  
\_\_\_\_\_ and \_\_\_\_\_  
("CONTRACTOR"), a \_\_\_\_\_  
(Insert corporation, partnership, joint venture, sole proprietorship, or other legal form of the Contractor)  
under the laws of the State of \_\_\_\_\_, whose business address and federal  
and state taxpayer identification numbers are as follows: \_\_\_\_\_  
\_\_\_\_\_

**RECITALS**

A. The STATE desires to retain and engage the CONTRACTOR to provide the goods or services, or both, described in this Contract and its attachments, and the CONTRACTOR is agreeable to providing said goods or services, or both.

B. The STATE has issued an invitation for competitive sealed bids, and has received and reviewed bids submitted in response to the invitation.

C. The solicitation for bids and the selection of the CONTRACTOR were made in accordance with section 103D-302, Hawaii Revised Statutes ("HRS"), Hawaii Administrative Rules, Title 3, Department of Accounting and General Services, Subtitle 11 ("HAR"), Chapter 122, Subchapter 5, and applicable procedures established by the appropriate Chief Procurement Officer ("CPO").

D. The CONTRACTOR has been identified as the lowest responsible and responsive bidder whose bid meets the requirements and criteria set forth in the invitation.

E. Pursuant to \_\_\_\_\_ HHCA of 1920, as amended \_\_\_\_\_, the STATE  
(Legal authority to enter into this Contract)  
is authorized to enter into this Contract.

F. Money is available to fund this Contract pursuant to:

(1) Hawaiian Homes Trust Fund

(Identify state sources)

or (2) \_\_\_\_\_

(Identify federal sources)

or both, in the following amounts: State \$ \_\_\_\_\_

Federal \$ \_\_\_\_\_

NOW, THEREFORE, in consideration of the promises contained in this Contract, the STATE and the CONTRACTOR agree as follows:

1. Scope of Services. The CONTRACTOR shall, in a proper and satisfactory manner as determined by the STATE, provide all the goods or services, or both, set forth in the

Invitation for Bids number IFB-23-HHL-003 ("IFB") \* and the CONTRACTOR'S accepted bid ("Bid"), both of which, even if not physically attached to this Contract, are made a part of this Contract.

2. Compensation. The CONTRACTOR shall be compensated for goods supplied or services performed, or both, under this Contract in a total amount not to exceed

\* and summarized in Attachment S-1

TBD \_\_\_\_\_ DOLLARS

(\$ TBD ), including approved costs incurred and taxes, at the time and in the manner set forth in the IFB and CONTRACTOR'S Bid. And generally described in Attachment S-2.

3. Time of Performance. The services or goods required of the CONTRACTOR under this Contract shall be performed and completed in accordance with the Time of Performance set forth in Attachment-S3, which is made a part of this Contract.

4. Bonds. The CONTRACTOR ☒ is required to provide or ☐ is not required to provide: ☒ a performance bond, ☒ a payment bond, ☐ a performance and payment bond each in the amount of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_).

5. Standards of Conduct Declaration. The Standards of Conduct Declaration of the CONTRACTOR is attached to and made a part of this Contract.

6. Other Terms and Conditions. The General Conditions, Construction General Conditions, and any Special Conditions are attached to and made a part of this Contract. In the event of a conflict between the General Conditions, Construction General Conditions, and the Special Conditions, the Special Conditions shall control. In the event of a conflict among the documents, the order of precedence shall be as follows: (1) this Contract, including all attachments and addenda; (2) the IFB, including all attachments and addenda; and (3) the CONTRACTOR'S Bid.

7. Liquidated Damages. Liquidated damages shall be assessed in the amount of ONE THOUSAND and 00/100 DOLLARS (\$ 1,000.00 ) per day, in accordance with the terms of paragraph 9 of the General Conditions.

8. Notices. Any written notice required to be given by a party to this Contract shall be (a) delivered personally, or (b) sent by United States first class mail, postage prepaid. Notice to the STATE shall be sent to the HOPA'S address indicated in the Contract. Notice to the CONTRACTOR shall be sent to the CONTRACTOR'S address indicated in the Contract. A notice shall be deemed to have been received three (3) days after mailing or at the time of actual receipt, whichever is earlier. The CONTRACTOR is responsible for notifying the STATE in writing of any change of address.

IN VIEW OF THE ABOVE, the parties execute this Contract by their signatures, on the dates below, to be effective as of the date first above written.

### STATE

\_\_\_\_\_  
(Signature)

William J. Aila, Jr.

\_\_\_\_\_  
(Print Name)

Chairman, Hawaiian Homes Commission

\_\_\_\_\_  
(Print Title)

\_\_\_\_\_  
(Date)

### CONTRACTOR

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Print Title)

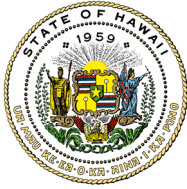
\_\_\_\_\_  
(Date)

CORPORATE SEAL  
(If available)

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Deputy Attorney General

\*Evidence of authority of the CONTRACTOR'S representative to sign this Contract for the CONTRACTOR must be attached.



# STATE OF HAWAII

## CONTRACTOR'S STANDARDS OF CONDUCT DECLARATION

For the purposes of this declaration:

"Agency" means and includes the State, the legislature and its committees, all executive departments, boards, commissions, committees, bureaus, offices; and all independent commissions and other establishments of the state government but excluding the courts.

"Controlling interest" means an interest in a business or other undertaking which is sufficient in fact to control, whether the interest is greater or less than fifty per cent (50%).

"Employee" means any nominated, appointed, or elected officer or employee of the State, including members of boards, commissions, and committees, and employees under contract to the State or of the constitutional convention, but excluding legislators, delegates to the constitutional convention, justices, and judges. (Section 84-3, HRS).

On behalf of \_\_\_\_\_, CONTRACTOR, the undersigned does declare as follows:

1. CONTRACTOR ☐ is\* ☐ is not a legislator or an employee or a business in which a legislator or an employee has a controlling interest. (Section 84-15(a), HRS).
2. CONTRACTOR has not been represented or assisted personally in the matter by an individual who has been an employee of the agency awarding this Contract within the preceding two years and who participated while so employed in the matter with which the Contract is directly concerned. (Section 84-15(b), HRS).
3. CONTRACTOR has not been assisted or represented by a legislator or employee for a fee or other compensation to obtain this Contract and will not be assisted or represented by a legislator or employee for a fee or other compensation in the performance of this Contract, if the legislator or employee had been involved in the development or award of the Contract. (Section 84-14 (d), HRS).
4. CONTRACTOR has not been represented on matters related to this Contract, for a fee or other consideration by an individual who, within the past twelve (12) months, has been an agency employee, or in the case of the Legislature, a legislator, and participated while an employee or legislator on matters related to this Contract. (Sections 84-18(b) and (c), HRS).

CONTRACTOR understands that the Contract to which this document is attached is voidable on behalf of the STATE if this Contract was entered into in violation of any provision of chapter 84, Hawaii Revised Statutes, commonly referred to as the Code of Ethics, including the provisions which are the source of the declarations above. Additionally, any fee, compensation, gift, or profit received by any person as a result of a violation of the Code of Ethics may be recovered by the STATE.

\* Reminder to Agency: If the "is" block is checked and if the Contract involves goods or services of a value in excess of \$10,000, the Contract must be awarded by competitive sealed bidding under section 103D-302, HRS, or a competitive sealed proposal under section 103D-303, HRS. Otherwise, the Agency may not award the Contract unless it posts a notice of its intent to award it and files a copy of the notice with the State Ethics Commission. (Section 84-15(a), HRS).

### CONTRACTOR

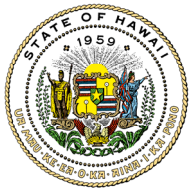
By \_\_\_\_\_  
(Signature)

Print Name \_\_\_\_\_

Print Title \_\_\_\_\_

Name of Contractor \_\_\_\_\_

Date \_\_\_\_\_



## STATE OF HAWAII

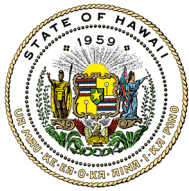
# SCOPE OF SERVICES

**Project:** Site and Infrastructure Improvements for Pu'unani Homestead Subdivision  
**Location:** Waikapū, Island of Maui, Hawaii  
**Contractor:** TBD

Pursuant to 103D, Hawaii Revised Statutes, the CONTRACTOR shall perform and provide the Scope of Services listed below and detailed in Invitation for Bids IFB-23-HHL-003 and in CONTRACTOR's proposal submitted on \_\_\_\_\_, in a proper and satisfactory manner as determined by the STATE and in accordance with all Federal, State and local laws, both of which are incorporated by reference.

The prices herein for the following items shall include all materials, labor, tools, equipment, machinery and all incidentals necessary, including excavation and backfill, to install or to construct these items in place complete and in accordance with the plans and specifications.

- I General Requirements, Overhead, and Fees (Items 1 and 2)
- II Sitework Improvements (Items 3 to 13, inclusive)
- III Sewer System Incl. Offsite (Items 14 to 24, inclusive)
- IV Storm Drain System (Items 25 to 43, inclusive)
- V Water System (Items 44 to 57, inclusive)
- VI Elec/Tel/TV Improvements (Items 58 to 65, inclusive)
- VII Roadway & Highway Imp. (Items 66 to 85, inclusive)
- VIII Landscape Irrigation Imp. (Items 86 to 88, inclusive)
- IX Landscape Planting Imp. (Items 89 to 103, inclusive)
- X Contingency- Unforeseen Site Conditions (Item 104)



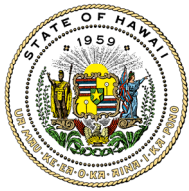
## STATE OF HAWAII

**COMPENSATION AND PAYMENT SCHEDULE**

**Project:** Site and Infrastructure Improvements for Pu'unani Homestead Subdivision  
**Location:** Waikapū, Island of Maui, Hawaii  
**Contractor:** TBD

The State shall pay the CONTRACTOR a sum not to exceed \_\_\_\_\_  
AND /100 DOLLARS (\$ \_\_\_\_\_)  
for the satisfactory completion of the work under this contract.

I	General requirements, Overhead, and Fees (Items 1 and 2)	\$
II	Sitework Improvements (Items 3 to 13, inclusive)	\$
III	Sewer System Incl. Offsite (Items 14 to 24, inclusive)	\$
IV	Storm Drain System (Items 25 to 43, inclusive)	\$
V	Water System (Items 44 to 57, inclusive)	\$
VI	Elec/Tel/TV Improvements (Items 58 to 65, inclusive)	\$
VII	Roadway & Highway Imp. (Items 66 to 85, inclusive)	\$
VIII	Landscape Irrigation Imp. (Items 86 to 88, inclusive)	\$
IX	Landscape Planting Imp. (Items 89 to 103, inclusive)	\$
X	Contingency- Unforeseen Site Conditions (Item 104)	\$
TOTAL		\$

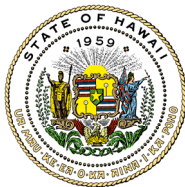


STATE OF HAWAII

**TIME OF PERFORMANCE**

**Project:** Site and Infrastructure Improvements for Pu'unani Homestead Subdivision  
**Location:** Waikapū, Island of Maui, Hawaii  
**Contractor:** TBD

1. The Time of Performance for this Contract shall be Four Hundred and Fifty (450) Calendar Days from the effective date specified in the Notice to Proceed, unless extended by delays excused by the STATE as documented in writing. The Notice to Proceed shall be issued by the STATE separately to the CONTRACTOR.
2. This Contract shall expire on the date on which the later of the following occurs:
  - (a) the State makes final payment to the CONTRACTOR in accordance with (1) paragraph 17(d) of the General Conditions (AG-008 103D General Conditions) and (2) no dispute between the parties hereto as to the Work or other obligations of the CONTRACTOR hereunder is outstanding, or
  - (b) the STATE issues a Final Acceptance letter to the CONTRACTOR.
3. The Contract expiration date is for administrative purposes only and not to be confused with the Time of Performance which refers to the time in which the CONTRACTOR is required to complete the work, or with any continuing obligations on the part of the CONTRACTOR.



## STATE OF HAWAII

**CERTIFICATE OF EXEMPTION  
FROM CIVIL SERVICE****1. By Heads of Departments Delegated by the Director of the Department of Human Resources Development (“DHRD”).\***

Pursuant to a delegation of the authority by the Director of DHRD, I certify that the services to be provided under this Contract, and the person(s) providing the services under this Contract are exempt from the civil service, pursuant to § 76-16, Hawaii Revised Statutes (HRS).

(Signature)

William J. Aila, Jr.

(Print Name)

Chairman, Hawaiian Homes Commission

(Print Title)

(Date)

\* This part of the form may be used by all department heads and the heads of attached agencies to whom the Director of DHRD expressly has delegated authority to certify § 76-16, HRS, civil service exemptions. The specific paragraph(s) of § 76-16, HRS, upon which an exemption is based should be noted in the contract file. If an exemption is based on § 76-16(b)(15), the contract must meet the following conditions:

- (1) It involves the delivery of completed work or product by or during a specific time;
- (2) There is no employee-employer relationship; and
- (3) The authorized funding for the service is from other than the "A" or personal services cost element.

**NOTE:** Not all attached agencies have received a delegation under § 76-16(b)(15). If in doubt, attached agencies should check with the Director of DHRD prior to certifying an exemption under § 76-16(b)(15). Authority to certify exemptions under §§ 76-16(b)(2), and 76-16(b)(12), HRS, has not been delegated; only the Director of DHRD may certify §§ 76-16(b)(2), and 76-16(b)(12) exemptions.

**2. By the Director of DHRD, State of Hawaii.**

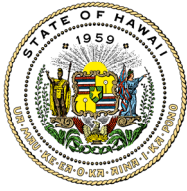
I certify that the services to be provided under this Contract, and the person(s) providing the services under this Contract are exempt from the civil service, pursuant to § 76-16, HRS.

(Signature)

(Date)

(Print Name)

(Print Title, if designee of the Director of DHRD)



**STATE OF HAWAII**  
**SPECIAL CONDITIONS**

**Project:** Site and Infrastructure Improvements for Pu‘unani Homestead Subdivision  
**Location:** Waikapū, Island of Maui, Hawaii  
**Contractor:** TBD

**SC-01 INTERCHANGEABLE TERMS**

The following terms are one and the same:

- a. “Contract” and “Agreement”.
- b. “Department of Hawaiian Home Lands” “Department” “DHHL” and “STATE”.
- c. “DDC LLC” “DEVELOPER” and “Construction Manager”.

**SC-02 INSURANCE COVERAGE**

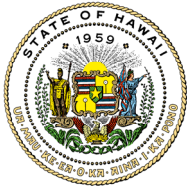
The CONTRACTOR shall obtain separate insurance coverage for this project that complies with the requirements set forth in the DHHL Construction General Conditions, Article 7, Section 7.3, as amended, and Exhibit A – Insurance Requirements. In the event of a conflict in insurance requirements, Exhibit A shall prevail unless the DHHL Construction General Conditions or these Special Conditions contain greater coverage, limits, terms, or policy types, then those specific greater coverage, limits, terms, or policy types shall apply in addition to Exhibit A. Payment for all work required to comply with this item will not be paid for separately but shall be considered incidental to the various contract items.

INSURANCE REQUIREMENTS are as follows:

CONTRACTOR shall maintain insurance acceptable to the STATE in full force and effect throughout the term of this Contract. The policies of insurance maintained by CONTRACTOR shall provide the following minimum coverage:

<u>Coverage</u>	<u>Limit</u>
<b>General Liability Insurance</b> (occurrence form)	Bodily Injury and Property Damage (combined single limit): <u>\$1,000,000</u> per occurrence and <u>\$2,000,000</u> aggregate  Personal Injury: <u>\$1,000,000</u> per occurrence and <u>\$2,000,000</u> aggregate
<b>Automobile Insurance</b> (covering all owned, non-owned and hired automobiles)	Bodily Injury: <u>\$1,000,000</u> per person and <u>\$1,000,000</u> per occurrence.  Property Damage: <u>\$1,000,000</u> per accident or combined single limit of <u>\$2,000,000</u> .
<b>Workers Compensation</b> (statutory limit is required by laws of the State of Hawaii)	Insurance to include Employer’s Liability. Both such coverages shall apply to all employees of the CONTRACTOR and, in case any subcontractor fails to provide adequate similar





**STATE OF HAWAII**  
**SPECIAL CONDITIONS**

protection for all his employees, to all employees of subcontractors and anyone performing work on their behalf, subject to statutory requirements.

**Builder's Risk covering the  
CONTRACTOR and all  
Subcontractors**

100% Replacement Value the general contractor and all subcontractors

**Fire and extended coverage and  
Flood insurance**

100% Replacement Value the general contractor and all subcontractors

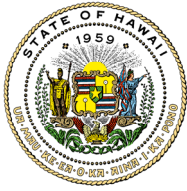
**Malicious Mischief**

100% Replacement Value

**Flood Insurance, if applicable**

Maximum Coverage available

- a. The State of Hawaii, Department of Hawaiian Home Lands, its elected and appointed officials, officers, employees, and agents shall be named as additional insured with respect to operations, services or products provided to the State of Hawaii; DDC LLC, Dowling Company, Inc.; Offsite Project Owners where work is being performed; Project Lender(s); and all of their direct and indirect parents and subsidiaries, affiliates entities, and all of their respective current or future officers, directors, managers, members, partners, shareholders, employees, agents, successors and assigns, and any additional entities as required by DEVELOPER (collectively, the "Additional Insureds") shall be named as additional insured. CONTRACTOR agrees to provide to the DHHL and DEVELOPER, before the effective date of the Contract, certificate(s) of insurance necessary to evidence compliance with insurance provisions of this Contract. CONTRACTOR shall keep such insurance in effect and the certificate(s) on deposit with DHHL during the entire term of this Contract. Upon request by the STATE or DEVELOPER, CONTRACTOR shall furnish a copy of the policy or policies.
- b. Failure of CONTRACTOR to provide and keep in force such insurance shall be regarded as a material default under this Contract. The STATE and DEVELOPER shall be entitled to exercise any or all of the remedies provided in this Contract for default of CONTRACTOR.
- c. The procuring of such required policy or policies of insurance shall not be construed to limit CONTRACTOR's liability under this Contract or to fulfill the indemnification provisions and requirements of this Contract. Notwithstanding said policy or policies of insurance, CONTRACTOR shall be obliged for the full and total amount of any damage, injury, or loss caused by negligence or neglect connected with this Contract.
- d. CONTRACTOR shall immediately provide written notice to the contracting department or agency (no less than (30) days prior) should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.



## STATE OF HAWAII

### SPECIAL CONDITIONS

- e. DHHL is a self- insured State agency. CONTRACTOR's insurance shall be primary. Any insurance maintained by the State of Hawaii shall apply in excess of, and shall not contribute with, insurance provided by CONTRACTOR.
- f. The CONTRACTOR shall require all subcontractors to have in full force and effect the same insurance coverage as required of the CONTRACTOR. Such insurance shall name the State of Hawaii, Department of Hawaiian Home Lands, its elected and appointed officials, officers, employees, and agents as additional insured with respect to operations, services or products provided to the State of Hawaii; DDC LLC, Dowling Company, Inc.; Offsite Project Owners where work is being performed; Project Lender(s); and all of their direct and indirect parents and subsidiaries, affiliates entities, and all of their respective current or future officers, directors, managers, members, partners, shareholders, employees, agents, successors and assigns, and any additional entities as required by DEVELOPER (collectively, the "Additional Insureds") shall be named as additional insured. The CONTRACTOR shall be responsible to enforce its subcontractors' compliance with these insurance requirements and CONTRACTOR shall, upon request, provide the STATE and DEVELOPER a copy of the policy or policies of insurance for any subcontractor.

#### SC-03 COMPLETION SCHEDULE AND LIQUIDATED DAMAGES

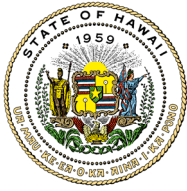
The CONTRACTOR shall complete all work as specified or indicated in the Contract Documents on or before four hundred and fifty (450) calendar days after receiving written Notice to Proceed, subject to extensions, as may be granted.

In case of failure on the part of the CONTRACTOR to complete the work within the time specified, the CONTRACTOR shall pay to DHHL as liquidated damages, and not as a penalty, \$1,000.00 per calendar day for each day that the project, in its entirety, remains incomplete.

#### SC-04 PROCESS THROUGH DEVELOPER

Any and all submittals, reports, requests, claims and notices under the contract shall be processed through DDC LLC Construction Manager ("DEVELOPER") at 2005 Main Street, Wailuku, Hawaii 96793 with copy to Land Development Division Project Manager, at Hale Kalaniana'ole, 91-5420 Kapolei Parkway, Kapolei, Hawaii 96707. Unless otherwise indicated or required by the DEVELOPER or DHHL, Contractor shall submit all copies of the required submissions in electronic format.

The DEVELOPER will administer and manage the construction as the Construction Manager on behalf of DHHL. The DEVELOPER is developing the Project pursuant to a Development Agreement dated November 15, 2019 (the "Development Agreement") between DHHL, as owner of the land, and DEVELOPER, as developer of the Project. Many of the provisions of these Special Conditions are required by the Development



## STATE OF HAWAII

# SPECIAL CONDITIONS

Agreement or are necessitated by the terms of the Development Agreement in order to enable DEVELOPER to perform its own obligations under the Development Agreement. The CONTRACTOR agrees to cooperate with DEVELOPER as may be reasonably requested by DEVELOPER from time to time to enable DEVELOPER to meet its obligations to DHHL, including but not limited to facilitating communications with DHHL and responses to questions, conforming to procedures reasonably requested and negotiating in good faith with respect to any requested changes to the Documents as may be necessitated by DHHL.

### **SC-05 SURVEYING SERVICES**

Any surveying services required shall be the responsibility of the CONTRACTOR and considered incidental to the scope of work under this contract and therefore covered under the terms of this contract. No separate payment shall be made.

Upon completion, the CONTRACTOR shall prepare an as-built plan for the project site in which the finished grades are certified by a Registered Licensed Land Surveyor. Six (6) copies of the as-built plan shall be submitted to the Construction Manager and Engineer. The cost of the as-built plan shall be incidental to the contract. No separate payment shall be made.

### **SC-06 ALLOWANCES**

The proposal may contain payment items designated as allowances. Funds listed in allowance items are to be spent at the direction of DHHL. The allowance is an estimate only and is subject to increase or decrease depending on the actual cost of the item. The funds are for the direct costs of an item and all pricing, submittal and review, overhead, installation, profit, insurance, surety, processing of the issuance of checks for payment to other parties, and all other costs will be included. No payment will be made for incidental costs.

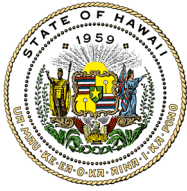
Allowances specifically set aside for construction work and materials will be negotiated when the scope of work is determined. Any unspent allowance costs will be deducted from the contract by change order prior to final payment.

### **SC-07 PERMITS AND FEES**

CONTRACTOR shall apply and pay for all permits and inspection fees as required by all governmental agencies having jurisdiction over this project.

### **SC-08 COORDINATION WITH OTHER PARTIES**

The CONTRACTOR shall coordinate and pay for all the necessary work for temporary utility services, storm water management issues, and appurtenances with the appropriate agencies, including but not limited to the Maui County, Departments of Water Supply, Environmental Management, and Public Works; Hawaiian Electric; Sandwich Isle



## STATE OF HAWAII

### SPECIAL CONDITIONS

Communications (SIC) (or other telecommunications provider); and State of Hawaii, Department of Transportation and Department of Health.

#### **SC-09 CONTRACTOR'S LICENSING**

It is the CONTRACTOR's sole responsibility to review the requirements of this project and determine the appropriate CONTRACTOR's licenses that are required to complete the project. If the CONTRACTOR does not hold all of the licenses required to perform a particular item of work on this project with its own workers, when bidding, he must list subcontractors that hold the appropriate licenses in its proposal.

#### **SC-10 WATER CHARGES AND REQUIREMENTS**

The CONTRACTOR shall be solely responsible for obtaining water to meet any requirements of the contract. Unless otherwise indicated or provided for, any work, costs, charges and fees necessary to obtain water for this contract shall not be paid for separately but shall be considered incidental to the various contract items; no separate or additional payment will be made therefore.

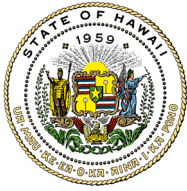
#### **SC-11 SOIL AND DUST CONTROL**

To control the dust during construction, the CONTRACTOR shall have an adequate supply of water for dust control and if necessary, moisture conditioning of fill material at all times. The CONTRACTOR shall institute an erosion control program and dust control program to minimize soil erosion and wind erosion and airborne fugitive dust nuisance, respectively for the entire duration of this project. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health and any supplementary measures from the County of Maui as necessary.

The CONTRACTOR in addition to any fencing for dust and erosion mitigation, shall install any required fencing, and to implement any other measures, to provide a safe and secure construction site.

#### **SC-12 FINAL INSPECTION**

Throughout the construction period, the work may be subject to periodic inspection by the Department, DEVELOPER, designated Construction Inspector, the County of Maui, State of Hawaii, and other applicable government and utility agencies. Once work has been satisfactorily completed, the County and the State, accompanied by the Department, DEVELOPER, and Construction Inspector, will make the final inspection of the work to determine whether all work has been done in complete compliance with the requirements of the plans and these specifications. The CONTRACTOR shall schedule the final inspection with the County of Maui, Department of Public Works, Department of Environmental Management, Department of Water Supply and the State of Hawaii, Department of Transportation, and notify the Department's Project Manager and DEVELOPER.



## STATE OF HAWAII

# SPECIAL CONDITIONS

The CONTRACTOR shall therefore schedule the final inspection with DHHL, its Project Manager, and the DEVELOPER two (2) weeks prior to said inspection.

Neither the scheduling nor the conduct of the aforementioned final inspection shall be deemed a waiver of the Department's right to subsequently require CONTRACTOR to complete all unfinished or defective work to the satisfaction of the Department.

### SC-13 GENERAL CONDITIONS

In the event of conflicts and/or discrepancies, the DHHL Construction General Conditions shall govern over Form AG-008, 103D General Conditions (eff. 10/17/13)

### SC-14 CAMPAIGN CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS

CONTRACTORS are hereby notified of the applicability of Section 11-355, HRS, which states that campaign contributions from specified State or County government CONTRACTORS during the term of the contract is unlawful if the CONTRACTORS are paid with funds appropriated by a legislative body.

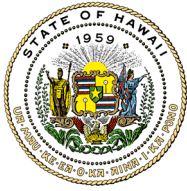
### SC-15 AGREEMENT COUNTERPARTS

This agreement may be executed in multiple counterparts, each of which shall be deemed an original agreement and both of which shall constitute one and the same agreement. The counterparts of this agreement may be executed and delivered by facsimile or other electronic signature (including portable document format) by either of the parties and the receiving party may rely on the receipt of such document so executed and delivered electronically or by facsimile as if the original had been received.

### SC-16 CONTRACTOR'S DAILY REPORT

The Contractor shall submit a daily report electronically, for DHHL and DEVELOPER review. The report shall include:

1. Date
2. Weather
3. Activity at the site for the Contractor
  - a. Labor – who and what classification, i.e., carpenter, laborer, supervisor, etc.
  - b. Equipment
  - c. Materials delivered
  - d. Work performed
4. Activity at the site for subcontractors
  - a. Labor – who and what classification, i.e., carpenter, laborer, supervisor, etc.
  - b. Equipment
  - c. Materials delivered
  - d. Work performed



## STATE OF HAWAII

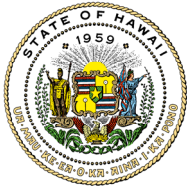
### SPECIAL CONDITIONS

5. Visitors to the site – Construction Manager, Inspectors, etc.
6. Problems or Questions (including suggested resolutions, if any)
7. Safety report status
8. Quality control report status
9. NPDES SWPPP inspection report status, as needed

#### SC-17 APPRENTICESHIP AGREEMENT PREFERENCE – CONTRACTOR'S RESPONSIBILITY

1. For the duration of the contract awarded utilizing the Hawai'i Apprenticeship Preference, the CONTRACTOR shall certify each month that work is being conducted on the project, that it continues to be a participant in the relevant apprenticeship program for each trade it employs.
2. Monthly certification shall be made on *MONTHLY REPORT OF CONTRACTOR'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Monthly Certification Form 2)* prepared and made available by the DLIR. *Monthly Certification Form 2* shall be a signed original by the respective apprenticeship program sponsor's authorized official, and submitted by the Contractor with its monthly payment requests. *Monthly Certification Form 2* is available on the DLIR website at: <http://hawaii.gov/labor/wdd>
3. Should the Contractor fail or refuse to submit its monthly certification forms, or at any time during the construction of the project, cease to be a party to a registered apprenticeship agreement for each apprenticeable trade the Contractor employs, the Contractor will be subject to the following sanctions:
  - a. Withholding of the requested payment until the required form(s) are submitted;
  - b. Temporary or permanent cessation of work on the project, without recourse to breach of contract claims by the Contractor; provided the DHHL shall be entitled to restitution for nonperformance or liquidated damages claims; or
  - c. Proceed to debar pursuant to HRS §103D-702.
4. If events such as "acts of God," acts of a public enemy, acts of the State or any other governmental body in its sovereign or contractual capacity, fires, floods, epidemics, freight embargoes, unusually severe weather, or strikes or other labor disputes prevent the Contractor from submitting the certification forms, the Contractor shall not be penalized as provided herein, provided the Contractor completely and expeditiously complies with the certification process when the event is over.





## STATE OF HAWAII

### SPECIAL CONDITIONS

#### SC-18 COORDINATION WITH AND ACCESS TO MAUKA AG LOTS

The CONTRACTOR shall provide continued access to Puunani Ag Subdivision Lots 2 thru 7 during construction. The CONTRACTOR is responsible for communicating with all responsible owners of the subject properties from the beginning to the end of the project term.

#### SC-19 ENERGY EFFICIENCY

The CONTRACTOR shall comply with the Energy Policy and Conservation Act (P.L. 94-163). Mandatory standards and policies relating to energy efficiency, contained in any applicable State Energy Conservation Plan, shall be utilized.

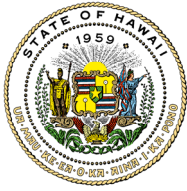
#### SC-20 ARCHAEOLOGICAL REPORT & MONITORING

Archaeological surveys covering the project areas were conducted as part of the Environmental Assessment completed and no archaeological sites were found within the project limits. The CONTRACTOR should be aware that archaeological sites may be encountered during the construction of this project. The CONTRACTOR is required to engage the services of an archaeological firm at its own cost. The CONTRACTOR'S archaeological firm shall be on the State Historic Preservation Division's (SHPD) list of permitted archaeological firms for the respective calendar year. Any archaeology costs shall be incidental to the contract. No separate payment shall be made.

The CONTRACTOR shall comply with the project Archaeological Monitoring Plan (AMP) and work with the archaeological firm to follow the monitoring procedures and program in the AMP (see Exhibit B). Prior to the commencement of construction, the CONTRACTOR shall conduct a coordination meeting with all pertinent parties, including but not limited to construction and archaeological personnel, to inform of the monitoring procedures and provisions stipulated in the AMP, as well as the archaeological monitor's authority to temporarily suspend construction activities in the vicinity of the find. The CONTRACTOR shall work with the archaeological firm to prepare the final archaeological monitoring report upon completion of the project and secure acceptance from SHPD. If the CONTRACTOR encounters a potential archaeological site during construction, he shall immediately cease all operations in the area and contact the Construction Manager, DHHL, DEVELOPER, and the State Historic Preservation Division at (808) 243-5169.

A copy of the Final Environmental Assessment (EA) for the Pu'unani Homestead Subdivision containing information on the archaeological studies, dated November 2020, is available on the following link to the Office of Environmental Quality Control Website~ [http://oeqc2.doh.hawaii.gov/Doc\\_Library/2020-11-08-MA-FEA-Puunani-Homestead-Subdivision.pdf](http://oeqc2.doh.hawaii.gov/Doc_Library/2020-11-08-MA-FEA-Puunani-Homestead-Subdivision.pdf)

CONTRACTOR shall comply with the recommendations in the EA as part of the construction method.



## STATE OF HAWAII

### SPECIAL CONDITIONS

#### SC-21 INADVERTENT DISCOVERY OF HUMAN BURIALS

Although not expected, in the event human burials are inadvertently discovered, the CONTRACTOR shall immediately stop work in the vicinity of the burial and contact the following parties and agencies immediately: State Historic Preservation Division, DHHL, DEVELOPER, Office of Hawaiian Affairs and the Maui – Lanai Islands Burial Council.

DHHL shall provide the CONTRACTOR with a Supplemental Agreement for additional time added to the CONTRACTOR's performance schedule for the mitigation of any inadvertent discovery of human remains.

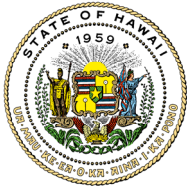
#### SC-22 GEOTECHNICAL ENGINEER AND GEOTECHNICAL INVESTIGATION REPORT

The services of a geotechnical engineering firm will be retained by DHHL or the DEVELOPER. The CONTRACTOR shall work with the project geotechnical engineer, per the project's Specifications. The CONTRACTOR is responsible for coordinating with the geotechnical engineer and scheduling in advance whenever the geotechnical engineer is needed at the site for any required inspections or testing. The geotechnical engineer shall be present to observe site grading and other work concerning excavation, placing and compacting soil materials, and to take field density tests. Also, the geotechnical engineer shall perform laboratory testing of all imported soils or on-site soils to determine its acceptability for its intended use as select material or general fill material. The geotechnical engineer shall compile the daily observations, test data, test results and recommendations into a weekly submittal to the Construction Manager. The geotechnical engineer shall ensure that the geotechnical work complies with the specifications and drawings. Any additional testing or geotechnical costs required by the CONTRACTOR shall be at the CONTRACTOR'S sole expense and incidental to the contract. No separate payment shall be made. The CONTRACTOR is responsible to provide all closing documentation required by the geotechnical engineer to complete the project and close all applicable permits.

Subsurface geotechnical investigations have been made at the project site. A copy of the complete geotechnical investigation report entitled "Geotechnical Investigation Report, Puunani Homestead, Wailuku, Maui, Hawaii", dated July 17, 2019 and "Additional Seepage Recommendations for Pu'unani Subdivision", dated August 8, 2019 prepared by Hawaii Geotechnical Consulting, Inc., is available with these bid documents. The soils report and its recommendations are made part of the project specifications except where expressly modified herein.

Contract specifications shall control over soils report on contradictory requirements.





## STATE OF HAWAII

# SPECIAL CONDITIONS

### SC-23 PLAN APPROVALS

Bidders are notified that the construction plans are still being processed for approvals and may change. Notice to Proceed will not be issued until the plans have been approved. In the event the Notice to Proceed is not issued within hundred eighty (180) after the date the contract has been executed by all parties, the Contractor may submit a claim for increased labor and material costs (but not overhead costs) which are directly attributable to the delay beyond hundred eighty (180) after the opening of the bids. Such claims shall be accompanied with the necessary documentation to justify the claim. No payment will be made for assumed escalation costs. This Special Condition shall supersede DHHL Construction General Condition 3.1.4. All other conditions that pertain to the issuance of the Notice to Proceed as specified under DHHL Construction General Condition 3.1.1 through 3.1.3 shall remain unchanged.

### SC-24 FIRE PREVENTION PLAN

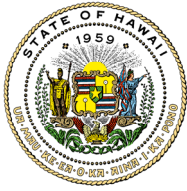
The site is dry and subject to fires. As such, the CONTRACTOR shall prepare a Comprehensive Fire Prevention Plan, submit a copy to the Construction Manager, comply with any requirements from the Fire Department, inform all workers, including subcontractor personnel assigned, post the regulations clearly at the site and enforce the plan.

### SC-25 FIELD OFFICE

A field office for exclusive use of DHHL personnel or their representatives is not required. CONTRACTOR shall provide and maintain an onsite field office at their own expense. Onsite OEC meetings will be held at the CONTRACTOR'S onsite field office, unless otherwise specified by the Construction Manager.

### SC-26 STANDARD SPECIFICATIONS AND STANDARD DETAILS

The "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986," of the Departments of Public Works, County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii, of the State of Hawaii, and the "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984," of the Departments of Public Works, County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii, of the State of Hawaii, and all subsequent amendments and additions, are by reference incorporated herein and made a part of these specifications. The term "DPW Standard Specifications" used hereinafter refers to "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986," and the term "DPW Standard Details" used hereinafter refers to "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984", and all subsequent amendments and additions. Copies of the DPW Standard Specifications and DPW Standard Details may be purchased at the Division of Purchasing during regular business hours of the County of Maui.



## STATE OF HAWAII

# SPECIAL CONDITIONS

The work embraced herein shall be done in accordance with the DPW Standard Specifications and DPW Standard Details, insofar as they may apply.

### **SC-27 STATE STANDARD SPECIFICATIONS**

The “Hawaii Standard Specifications for Road, Bridge and Public Works Construction,” Highways Division, Department of Transportation, State of Hawaii, 2005, as amended, and hereinafter referred to as the “State Standard Specifications” is by reference incorporated herein and made a part of these contract documents.

### **SC-28 WATER SYSTEM SPECIFICATIONS**

The “WATER SYSTEM STANDARDS” of the Department of Water Supply, County of Maui, dated 2002, and all subsequent amendments and additions, are by reference incorporated herein and made a part of these contract documents. The work embraced herein shall be performed by the CONTRACTOR in accordance with the “WATER SYSTEM STANDARDS” and the various sections of the State of Hawaii Special Conditions.

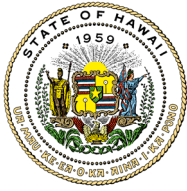
The term “Water System Standards” used in these contract documents refers to the “WATER SYSTEM STANDARDS” of the Department of Water Supply, County of Maui, dated 2002, and all subsequent amendments and additions.

### **SC-29 CONTINGENT ITEMS**

Depending upon the site and soil conditions, and other factors, the Construction Manager may decide to delete the contingent items in its entirety. A Change Order may be issued to delete the work and the contract amount shall be reduced by subtracting the entire corresponding bid amount. If part of the work is done, or if the work exceeds the estimated quantities, payment shall be made on the actual progress of the work at the lump sum bid.

### **SC-30 EARTHWORK**

The CONTRACTOR is responsible for proper disposal of all unsuitable material, debris, and excavated material offsite unless otherwise approved by the Construction Manager. Borrow material may be imported prior to completion of all excavation work; however, the CONTRACTOR is responsible to ensure that the imported material meets the project specifications and testing results are provided to the Construction Manager and geotechnical engineer, then authorized by the Construction Manager and geotechnical engineer. The CONTRACTOR is responsible to ensure that there is adequate site area to properly store imported materials and to secure and pay for any stockpiling or other permits. The CONTRACTOR is responsible to restore the area used to store imported materials to similar or better condition.



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### SPECIAL CONDITIONS

#### **SC-31 CONSTRUCTION YARD AND RIGHT-OF-ENTRY**

Contractor shall be responsible for determining the staging area. Contractor's staging area may be located within the project limits, as approved by the Construction Manager. Should the staging area be located outside the project limits and measure more than 1 acre, the Contractor will be responsible to apply for and obtain a National General Permit Coverage (NGPC) for Stormwater Associated with Construction Activities from the State Department of Health, Clean Water Branch, including associated fees and any other required permits and associated fees, before starting any work.

Access to the project site will be from Honoapiilani Highway.

#### **SC-32 COUNTY OF MAUI & STATE OF HAWAII INSPECTION**

All work within the project sites and any private, County or State maintained easements and roadways shall be inspected and approved by the applicable utilities and the agencies of the County of Maui and/or State of Hawaii. The CONTRACTOR shall make arrangements directly with the appropriate agencies to arrange for inspection of work. All work and/or fees necessary to comply with this item shall be considered incidental to the various contract items. No separate payment shall be made.

#### **SC-33 ENGINEERING WORK**

The DHHL or DEVELOPER may engage the Consultants for limited construction observations to supplement the inspections performed by the State and respective Counties. The Consultant's authority shall be as described in the DHHL Construction General Conditions 5.4.

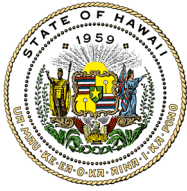
#### **SC-34 STATE GENERAL EXCISE TAX**

This project is not exempt from the State of Hawaii General Excise Tax. The CONTRACTOR's prices shall include the General Excise Tax for all work.

#### **SC-35 ACCEPTANCE**

The term "acceptance" as used in the Contract Documents means that the work of improvement is acceptable to Owner and shall occur when each and all of the following events have been accomplished:

1. All labor has been performed and all materials supplied and incorporated into the work of improvement as provided in the Contract Documents in a good and workmanlike manner.
2. The project and the job site are in a "clean" condition completely free of all trash, rubbish, debris, dirt, smudges, etc., and all of CONTRACTOR's and subcontractors' tools and equipment, as well as any leftover materials and inventory, have been removed from the project and the job site.



## STATE OF HAWAII

### SPECIAL CONDITIONS

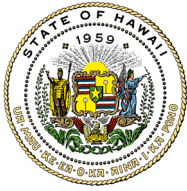
3. All persons, firms and corporations, including all laborers, materialmen, suppliers and subcontractors who have furnished equipment, supplied materials or performed work for or in connection with the construction, including, but not limited to, all persons who could file a claim of lien, have been paid in full and have submitted their final statements (Final CONTRACTOR's, Subcontractor's, and/or Materialmen's Voucher Release and Waiver of Lien) with a waiver of all rights to mechanic's lien, stop notice or recourse against the surety on the bond, if any, in form and substance acceptable to the Owner in its sole discretion.
4. CONTRACTOR submits to the Department an affidavit that such waiver of lien rights or releases includes all of the labor and materials for which any lien could be filed.
5. All work requiring inspection by any governmental authority or utility has been duly inspected and written approval by such authority is received by the Construction Manager.
6. All requisite certificates of occupancy and other governmental approvals, letters of acceptance, licenses and permits have been issued and received by the Construction Manager.
7. The Department has received one complete set of "as-built" drawings and CONTRACTOR's certification.
8. The Department and/or Construction Manager have certified the completion of the project is in accordance with the plans and specifications.
9. Submit Final Archaeological Monitoring Report to SHPD for acceptance.

#### SC-36 FINAL SETTLEMENT OF CONTRACT

The following shall be made additional conditions of compliance with DHHL Construction General Condition 7.33:

1. The CONTRACTOR shall coordinate with all government agencies and utility companies on behalf of DHHL to obtain letter(s) from each respective government agency or utility company indicating that acceptance of the contract work for the project has been granted to DHHL. Copies of the letters shall be submitted to DHHL and DEVELOPER.
2. Signature, execution, and return of the "Record Drawing" Title tracings.

Payment for all work required to comply with the above items will not be paid for separately but shall be considered incidental to the various contract items.



## STATE OF HAWAII

### SPECIAL CONDITIONS

#### SC-37 PROJECT SIGN

The CONTRACTOR shall furnish, erect, maintain and remove one project sign.

The project signboard shall be 3/4 inch thick, “AC” exterior grade fir plywood, 4 feet in height and 7 feet long each. All lettering type and size and color selection shall be as specified by DHHL (refer to Exhibit “C”).

All paints used shall be exterior enamel paints manufactured either by Ameritone-Devoe, Boysen, DuPont, Dutch Boy Fuller-O’Brien, Glidden, Pittsburg, Sherwin—Williams, Sinclair, or approved equal, and made primarily for the purpose for which they are used, and shall be prepared and applied strictly in accordance with the manufacturer’s directions. Signs shall be painted with one prime coat and two finish coats.

Final layout shall be based upon sign plans submitted by the CONTRACTOR and approved by the DHHL.

The Project Sign shall be erected at a location directed by the DHHL and shall be adequately braced in such a way that does not interfere with the viewing of the signs. The sign shall be maintained in good condition throughout the progress of the work until final completion of the project. The project sign shall be erected within five (5) days after approval of the sign layout. After the final approval of the construction work by the DHHL, the project sign shall be removed from the site and shall become the property of the CONTRACTOR.

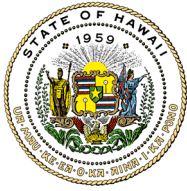
Payment will be made for one project sign painted, with lettering specified by DHHL, in place complete (see attachment). Payment for sign removal shall be incidental to said item.

#### SC-38 ENDANGERED SPECIES

The CONTRACTOR shall abide by the Endangered Species Act of 1973. Correspondence from the U.S. Fish and Wildlife Service (USFWS) suggests that federally listed species including the endangered Hawaiian hoary bat, Hawaiian goose, Hawaiian stilt, Blackburn’s sphinx moth, Hawaiian petrel, band-rumped storm-petrel, and the threatened Newell’s shearwater have the potential to either be in or fly through the vicinity of the construction site. In the event that the CONTRACTOR encounters any of the species listed above, the following avoidance measures are proposed based on USFWS suggestions:

*Hawaiian hoary bat:*

1. No trees greater than 15 feet tall shall be removed or trimmed during the bat birthing and pup-rearing season of June 1 to September 15, to the extent practicable.
2. Barbed wire shall not be used for new fencing.



## STATE OF HAWAII

### SPECIAL CONDITIONS

#### *Hawaiian goose:*

1. Do not approach, feed, or disturb the Hawaiian goose.
2. If a Hawaiian goose is observed within the project area during the breeding season (September through April), CONTRACTOR shall contact the project biologist to survey for nests in and around the project area prior to the resumption of any work. If a nest is discovered within a radius of 150 feet of proposed construction activity, or a previously undiscovered nest is found within said radius after work has begun, all work shall cease and the CONTRACTOR shall contact the project biologist to coordinate with USFWS for further guidance.
3. In areas where Hawaiian geese are known to be present, post and implement reduced speed limits, and educate project personnel and contractors about the presence of endangered species on-site.

#### *Hawaiian stilt:*

1. If Hawaiian stilt are noted on the project site, work with USFWS in developing and implementing mitigation measures to avoid potential project-related impacts to species (e.g. fencing, vegetation control, predator management).

#### *Blackburn's sphinx moth:*

1. Remove any tree tobacco less than 3 feet tall.
2. Monitor the site every 4-6 weeks for new tobacco growth before, during and after the proposed ground-disturbing activity. Upon soil disturbance, the site shall be kept clear of host plants, with particular attention to ensuring that the non-native tree tobacco does not colonize the site.

#### *Hawaiian petrel (seabirds) & Newell's shearwater*

1. Any outdoor lighting shall utilize systems which employ the lowest possible wattage for the application and be constructed in a manner that fully shields lighting sources and directs lighting completely downwards.
2. Nighttime construction during the seabird fledging period (September 15 through December 15) shall be avoided to the extent feasible.

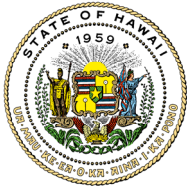
#### **SC-39 SOLID WASTE DISPOSAL/RECYCLING**

The CONTRACTOR shall properly dispose of all solid waste generated during construction.

#### **SC-40 CERTIFICATION**

The CONTRACTOR and the CONTRACTOR's Hawaii Licensed Professional Land Surveyor shall jointly certify that the road grading and lot grading and installation of utilities, ditches, and swales were built to the lines and grades shown on the project plans.





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# SPECIAL CONDITIONS

The CONTRACTOR shall soils test and certify the building pads a second time (after the original testing with the mass grading of the building pads) for proper compaction and moisture content to the satisfaction of the geotechnical consultant immediately prior to building pad turn-over for the home construction.

### SC-41 RECORD DRAWINGS

Field Posted As-Built Drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be prepared and submitted by the CONTRACTOR. To accomplish this, the following procedure shall be followed by the CONTRACTOR:

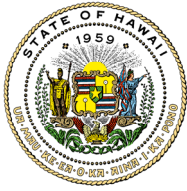
1. A full-size set of field posted as-built drawings shall be neatly maintained at the job site. All deviations from alignments, elevations and dimensions which are stipulated on the drawings and authorizations given by the Engineer to deviate from the drawings shall be clearly and accurately recorded by the CONTRACTOR on this set of record drawings.
2. Changes shall be recorded immediately after they are constructed in place to assure they are not forgotten. Record the changes using erasable colored pencil and refer to the authorizing document (RFI, Shop Drawing, Field Modification) or Change Order. The following color codes shall be used to document these changes on the drawings:

Additions	-	RED
Deletions	-	GREEN
Comments	-	BLUE
Dimensions	-	GRAPHITE*

\* Legibly mark to record actual depths, horizontal and vertical location of utilities and structures relative to permanent surface improvements.

The field posted as-built drawings shall be made available to the Construction Manager and Engineer during normal working hours at the CONTRACTOR's field office so that its clarity and accuracy can be monitored.

A monthly log of all the record changes shall be submitted with each progress payment request. The CONTRACTOR shall not be entitled to any progress payment until he has provided a completed log which accurately reflects the work that was done. The log shall identify each revision by drawing number and a description of the revision. The CONTRACTOR and Construction Manager shall schedule a day each month to meet and review the log and drawings together.



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3. The words “FIELD POSTED AS-BUILT” shall be labeled on the title sheet and certified by the CONTRACTOR as to accuracy and completeness as shown below:

#### FIELD POSTED AS-BUILT

Certified By: \_\_\_\_\_ Date: \_\_\_\_\_  
Contractor (Include name and company)

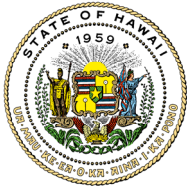
4. The words “FIELD POSTED AS-BUILT” shall be labeled on all sheets in the margin space to the right of the sheet number written from the bottom upward.
5. The Index to Drawings shall be revised with the label “FIELD POSTED AS-BUILT” for each sheet. The index shall conclude with the following note: “A COMPLETE SET CONTAINS \_\_\_\_ SHEETS” with the total number of sheets comprising the set to be placed in the blank.
6. Any “FIELD POSTED AS-BUILT” drawing which the Construction Manager or Engineer determines does not accurately record the deviation, or is not legible, will be rejected and returned to the CONTRACTOR for corrections. Drawings that are ripped or have excessive eraser marks from changes shall be replaced with a clean set of drawings.
7. Submit the set of approved “FIELD POSTED AS-BUILT” drawings to the Engineer no later than five (5) calendar days prior to the date of final inspection.
8. “RECORD DRAWINGS” will be prepared by the design consultant using the “FIELD POSTED AS-BUILT.” Both sets of drawings will be sent to the CONTRACTOR for review and approval. The CONTRACTOR will have one (1) week to review and approve the drawings. After the CONTRACTOR is satisfied the Record Drawings are correct, the CONTRACTOR shall certify changes by signing the tracings.

#### SC-42

#### NPDES & SWPPP

The CONTRACTOR shall obtain a copy and comply with the project’s National Pollutant Discharge Elimination System (NPDES) Permit. The CONTRACTOR shall prepare and submit a site-specific Storm Water Pollution Prevention Plan (SWPPP) within 10 calendar days of the award of contract that fully complies with the requirements of Hawaii Administrative Rules (HAR) 11-55, Appendix C and the State Department of Health (DOH). The CONTRACTOR shall promptly update and modify the SWPPP as needed during the course of construction, complete and include any required signed inspection reports and maintenance checklists, and implement and maintain a copy of the current SWPPP that is certified, signed, dated, and easily accessible on the project site so that it





## STATE OF HAWAII

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can be made available at the time of an on-site inspection or upon request. The CONTRACTOR shall be responsible for any citations or fines that may be levied as related to the NPDES program on this permit, whether directly levied against the CONTRACTOR, DEVELOPER, or DHHL.

#### SC-43 RETAINAGE

The STATE will retain ten percent (10%) of the total amount of progress and / or partial payments until after completion of the entire Contract in an acceptable manner at which time this balance, less any previous payments, will be certified and paid to the Contractor.

#### SC-44 ALLOWANCES FOR OVERHEAD AND PROFIT

The allowances for overhead and profit for wages of construction workers including welfare, unemployment compensation, social security and other standard benefits, and the costs of all general contractors in the performance of the work, are as follows:

For the CONTRACTOR for any work performed by its own labor forces, fifteen percent (15%) of the direct costs;

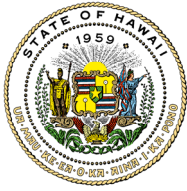
For each subcontractor to the CONTRACTOR, for any work performed by its own forces, fifteen percent (15%) of the direct costs;

For the CONTRACTOR for work performed by their subcontractors or consultants, seven percent (7%) of the amount due to the performing subcontractor or consultant; and

Not more than three (3) mark-up allowance line item additions not exceeding the maximum percentage shown above shall be allowed for a CONTRACTOR's profit and overhead, regardless of the number of tier subcontractors.

#### SC-45 LUMP SUM CONSTRUCTION PRICING

1. The project's construction pricing is based off of lump sum pricing that was submitted by the CONTRACTOR for STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS BID OFFER FORM FOR PU'UNANI HOMESTEAD (IFB No.: IFB-23-HHL-003). The estimated quantities shown for items for which a UNIT PRICE is asked in this bid are only for the purpose of comparing on a uniform basis bids offered for the work under this contract. No claim shall be filed for anticipated profit or loss because of any difference between the quantities of the various classes of work done or the materials and equipment actually installed and the said estimated quantities. Payments will be made on the actual progress incorporated into the finished project at the contract LUMP SUM PRICE.
2. DHHL Construction General Conditions sections listed below are terminated and/or amended as project's construction pricing is based off of lump sum pricing;
  - a. 4.4.1.2. PRICE ADJUSTMENT by unit prices does not apply to this project.
  - b. 4.7.1. VARIATIONS IN ESTIMATED QUANTITIES does not apply to this project.



## STATE OF HAWAII

### SPECIAL CONDITIONS

- c. 8.1.1. and 8.1.2. MEASUREMENT OF QUANTITIES does not apply to this project.
- d. 8.2. NO WAIVER OF LEGAL RIGHTS does not apply to this project.
- e. 8.4.1. PROGRESS PAYMENTS is amended to read as follows: The Contractor will be allowed progress payments on a monthly basis upon preparing the Monthly Payment Application forms and submitting the originals to the Project Manager. The monthly payment shall be based on the items of work satisfactorily completed and the value thereof at unit prices and/or at lump sum prices set forth in the contract as determined by the Project Manager and will be subject to compliance with Section 7.9, PAYROLLS AND PAYROLL RECORDS.

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## **EXHIBIT “A”**

### **INSURANCE REQUIREMENTS**

1. Contractor shall obtain and maintain, and shall require each of its subcontractors of all tiers to obtain and maintain, the insurance coverage specified in this Exhibit for the duration of the Project or as otherwise required by this Exhibit, from insurance companies authorized to do business in the state where the Project is located or any other state, if applicable, reasonably acceptable to DDC LLC (herein referred to as “Developer”) and having a current A.M. Best Rating of A, VII or better and with policy limits not less than those indicated, unless otherwise noted. The insurance limits may be provided through a combination of primary and excess policies, including the umbrella form of policy. **The insurance coverages, policy limits and other policy provisions described in this Exhibit are minimums only and are not intended to restrict the liability imposed on Contractor for Work performed under the Contract Documents. Contractor and Subcontractors of any tier shall have the obligation to provide the minimum coverages and limits stated in the provisions below. In the event that any of Contractor’s insurance policy states that the coverage provided to an additional insured shall be no broader than that required by the contract or agreement, or words of similar meaning, Contractor agrees that nothing in this Exhibit and the Contract Documents is intended to restrict or limit the breath of such coverage, Contractor’s full policy limits are to apply.**

1.1 **Additional Insureds:** To the fullest extent allowable by law, Contractor shall ensure that each policy required under this Exhibit, except the Workers’ Compensation and Professional Liability policies, shall name **State of Hawaii, Department of Hawaiian Home Lands, its elected and appointed officials, officers, and employees, with respect to operations, services, or products provided to the State of Hawaii; DDC LLC; Dowling Company, Inc.; Project lenders(s); and all of their direct and indirect partners and subsidiaries, affiliated entities, and all of their respective current or future officers, directors, managers, members, partners, shareholders, employees, agents, successors and assigns**, and any additional entities as required by Developer (collectively, the “Additional Insureds”) as additional insured.

1.2 **Commercial Automobile Liability** insurance covering all owned, non-owned, and hired automobiles, trucks, and trailers with a combined single limit of not less than \$1,000,000. If Contractor’s scope of services includes the transportation of hazardous materials to or from the Project site, Contractor shall be required to include pollution coverage by procuring and continuously maintaining current editions of endorsements MCS-90 and CA 9948, or their equivalents.

1.3 **Workers’ Compensation** insurance with statutory limits as required by law, and **Employer’s Liability** insurance with limits of not less than \$1,000,000 each accident / \$1,000,000 each employee / \$1,000,000 policy limit, and including Maritime coverage, if appropriate. If any employer or employee is not subject to workers’ compensation laws of the governing state, then insurance shall be obtained voluntarily to extend to the employer and/or employee to the same extent as though the employer or employee were subject to the workers’ compensation laws.

1.4 **Commercial General Liability** insurance written on an “occurrence” form providing coverage not less broad than the standard ISO form CG 0001 and with an additional insured endorsement no less broad than ISO CG 20 10 04 13 and CG 20 37 04 13, providing the Additional Insureds coverage for Contractor’s ongoing and completed operations during the course of

construction and maintained for 10 years after completion of the Project or through the Hawaii statute of repose for construction defects, whichever longer. **Such coverage shall provide contractual liability no less broad than available in ISO CG 00 01, include an amended definition of "occurrence" that provides for construction defect coverage, and shall not exclude explosion, collapse, underground hazards, subsidence or claims for indemnity arising out of injury to your employees.** The limits minimum limits shall be:

Each Occurrence	\$1,000,000
Personal & Advertising Injury	\$1,000,000
Per Project General Aggregate	\$2,000,000
Products & Completed Operations Aggregate	\$2,000,000

1.5 Contractor is required to have **Excess Liability** insurance with limit not less than \$10,000,000 per occurrence and \$10,000,000 aggregate which shall apply solely for this project, excess of Commercial General Liability, Commercial Automobile Liability, and Employers Liability, which must be kept in force during the course of construction and maintained for 10 years after completion of the Project or through the Hawaii state of repose for construction defects, whichever longer.

1.6 In addition to Contractor's customary annual **Commercial General Liability** and **Excess Liability** insurance, Contractor shall obtain and maintain **Project Specific General Liability** and **Excess Liability** with the same limits and coverage requirements as required by sections 1.4 and 1.5, all required limits of liability including products & completed operations aggregate shall be specifically dedicated to the work under this Agreement, shall cover all work and locations of work under this Agreement including but not limited to on-site and off-site real property improvements, include Contractor (first named insured), DDC LLC, State of Hawaii, Department of Hawaiian Home Lands as named insureds. Additionally, **Property Specific General Liability** and **Excess Liability** insurance policy term shall be no less than start of any construction activities under this Agreement until final acceptance of Contractor's work under this Agreement and shall contain a products and completed operations hazard extension (commonly referred to as tail coverage) that shall be in effect until 10 years after final completion or throughout the Hawaii statute of repose for construction defects, whichever longer. Such coverage shall provide for contractual liability no less broad than available in ISO CG 00 01, include an amended definition of "occurrence" that provides for construction defect coverage, contain a cross-suits exception for Contractor and DDC LLC, shall not exclude explosion, collapse, underground hazards, subsidence, claims for indemnity arising out of injury to your employees, residential construction including but not limited to work that is or will become part of single family homes, tract homes, or subdivision, or OCIP or wrap exclusion (Developer may procure an OCIP intended for vertical construction and will not be extended to Contractor under this Agreement).

1.7 Builder's Risk insurance no less than 100% of the completed value of this Agreement on an all-risk policy form including flood, earth movement, collapse, underground hazards, with no limitation for perils of rain, runoff, theft, windstorm (named or unnamed), and malicious mischief. DDC LLC, State of Hawaii, and Department of Hawaiian Home Lands shall be included as additional insureds, State of Hawaii and Department of Hawaiian Home Lands shall be included as loss payee.

1.8 All Contractors are advised to arrange their own **Property Insurance**. Contractors are solely responsible for any loss or damage to their personal property, including owned and leased equipment and materials, whether such equipment is located at the Project site or in transit. If uninsured, Contractor will hold harmless the Additional Insureds.

1.9 Notwithstanding the Pollution Liability insurance that may be purchased by Developer, Contractor and all hazardous materials remediation, removal, and/or transport contractors of all tiers must provide and maintain **Contractor's Pollution Liability** insurance with limit no less than \$1,000,000 per occurrence. **Contractor's Pollution Liability** insurance policy procured by Contractor or its subcontractors shall be kept in force for the duration of the Project and maintained for 10 years after completion of the Project or through the Hawaii statute of repose for construction defects, whichever longer.

1.10 **Aviation and/or Watercraft Liability** insurance if applicable to cover any work involving the use of marine vessels or aircraft of any kind including but not limited to barges, dredging equipment, helicopters, unmanned aircraft, drones, etc. Contractor shall maintain or cause the operator of the marine vessel or aircraft to maintain public liability insurance with limits of not less than \$10,000,000 per occurrence and in the aggregate.

1.11 **Professional Liability** insurance with a minimum limit of \$1,000,000 per claim and \$2,000,000 policy aggregate shall be provided by Contractor's with operations/activities that involve professional services including but not limited to architectural design, engineering, construction management, surveying, design, design-build, design-assist, and delegated design to cover its wrongful acts, errors or omissions. The coverage terms must not exclude damages from bodily injury or property damage and Contractor warrants that any retroactive date applicable to coverage under the policy is equal to or precedes the effective date of this Exhibit and that continuous coverage will be maintained or an extended discovery period will be exercised for 10 years after completion of the Project or through the applicable statute of limitation / repose periods, whichever longer.

1.12 **Primary & Non-Contributory**. All insurance coverages required by this Exhibit, shall be primary with respects to insurance policies where the Additional Insured is a named insured, and such policies required shall not seek contribution from insurance policies where the Additional Insured is a named insured.

1.13 **Waiver of Subrogation**. Contractor hereby agrees to waive and shall require all of its contractors and subcontractors of all tiers to waive any rights of recovery in favor of the Additional Insureds, to all loss covered or not covered by insurance policies, whether required herein or not, and shall cause all insurance policies carried by Contractor (except where prohibited by law) to contain a waiver of subrogation clause or endorsement to be provided in favor of the Additional Insureds. The parties intend for the foregoing waivers of subrogation to be effective through the running of applicable statute of limitations or statute of repose. The waiver shall apply to the fullest extent allowable by law and shall be effective as to any individual or entity even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

1.14 Contractor and its subcontractors shall carry additional coverages and/or limits as required by Developer.

1.15 Any deductibles in place for the insurances required in this Exhibit will be the sole responsibility of the Contractor. Contractor acknowledges that such deductibles shall not be reimbursable expenses under this Agreement.

## 2. **Certificates of insurance and Other Requirements Applicable to Insurance.**

2.1 Contractor shall, before the Construction Documents are executed, and at any time where required by this Exhibit when policies are renewed or changed, furnish Developer with (a) a certificate of insurance that the aforementioned insurance policies have been provided or the actual insurance coverages and full per occurrence limits of Contractor's insurance policies, if greater, and (b) copies of all additional insured endorsements, each policy's primary and non-contributory language, each waiver of subrogation endorsement and evidence of other policy provisions as requested by Developer. Such certificate of insurance or policy endorsement(s) shall also bear an agreement that if the insurance is canceled or reduced for any reason during the period of coverage as stated on the certificate so as to affect the certificate, Certificate Holder shall be given at least thirty (30) days prior written notice by all insurance companies affording coverage required by this Exhibit (ten [10] days' notice is acceptable for non-payment of premium). Failure of Contractor to maintain the required insurance shall constitute a default under the Contract Documents and, at Developer's option, shall allow Developer to terminate the Contract Documents for cause, withhold payment and/or purchase the required insurance at Contractor's expense. Contractor's **Certificates of Insurance shall be addressed to the Certificate Holder(s) noted below**. Contractor shall not, however, be deemed to waive these requirements if the Work begins without Contractor furnishing, or Developer requesting, such certificates. Failure to identify deficiencies in coverage shall in no way limit or relieve Contractor of its obligations to maintain such insurance.

### 2.1.1 Certificate Holder(s):

(1) DDC LLC  
2005 Main Street  
Wailuku, HI 96793

(2) Department of Hawaiian Home Lands  
Attn: William J. Aila, Jr., Chairman  
PO Box 1879  
Honolulu, HI 96805

2.2 If any policy is canceled or the insurance is subject to expiration during the performance of the Work, Contractor shall submit evidence of replacement or renewal of the insurance before the cancellation or expiration date, or if insurance is not in effect, Contractor shall discontinue the Work until the insurance has been provided.

2.3 Except with respect to the limits of insurance, all required insurance shall apply separately to each insured or additional insured. The insurance coverages required herein are intended to stand alone and not to solely support any indemnity obligation between the parties.

3. To the fullest extent permitted by law, the insurance coverages and requirements set forth in this Exhibit shall not be construed to relieve liability in excess of insurance coverage maintained by Contractor or its subcontractors, nor shall it preclude Developer from taking such other actions as is available to it under any other provision of the Contract Documents or other contract documents.
4. Developer may purchase Contractor's Pollution Liability insurance for this Project, which provides limited coverage for pollution conditions arising out of the Work on this Project. In the event of an occurrence or claim attributed to the negligence of Contractor that requires Developer to satisfy any self-insured retention or deductibles on such Contractor's Pollution Liability policy, Contractor shall reimburse Developer the amount of such self-insured retention or deductible. Contractor is solely responsible for allocating deductible payments to its subcontractors. Contractor acknowledges that deductible payments to Developer are not reimbursable expenses.
5. **OCIP.** Developer plans to purchase an OCIP program, Contractor will not be a part of such OCIP, however prior to the start of construction, Developer reserves the right at its sole discretion to require Contractor to enroll in such OCIP and if so, these insurance requirements will be amended as appropriate.
6. **Withholding Payments.** Developer may withhold from any payment owed to Contractor deductible reimbursements specified in this Exhibit. If Contractor or its subcontractors of any tier fail to timely comply with the provisions of this Exhibit, Developer may withhold any payments due to Contractor and its subcontractors of all tiers until such time they have performed the requirements of this Exhibit.
7. **Materiality.** The failure of Contractor or its subcontractors of any tier to strictly comply with the terms of this Exhibit shall constitute a material breach of the Contract Documents under which Developer may immediately suspend or terminate the Contract Documents or, at its discretion, procure or renew such insurance to protect Developer's interests, pay any and all premiums in connection therewith, and withhold or recover all monies so paid from the Contractor.

**ARCHAEOLOGICAL MONITORING PLAN FOR THE  
PU‘UNANI HOMESTEAD SUBDIVISION,  
WAIKAPŪ AHUPUA‘A,  
WAILUKU DISTRICT,  
ISLAND OF MAUI, HAWAI‘I  
[TMK (2) 3-5-002:002 por. and 3-5-001:064 por.]**

Prepared by  
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November 2020

**Revised**  
May 2021

**FINAL**

**Prepared for  
Department of Hawaiian Home Lands**

**SCIENTIFIC CONSULTANT SERVICES Inc.**



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## **INTRODUCTION**

At the request of DDC LLC, Scientific Consultant Services, Inc. (SCS) has prepared this archaeological monitoring plan (AMP) for the projected Department of Hawaiian Home Lands Pu‘unani Homesteads development. It is projected to take place over about 51 acres of vacant land between Old Waikapu Road and Honoapi‘ilani Highway in Waikapū, Waikapū Ahupua‘a, Wailuku (Pū‘ali Komohana) District, Maui Island, Hawaii [TMK: (2) 3-5-002:002 por. and 3-5-001:064 por.]. The property is owned by the State of Hawai‘i, Department of Hawaiian Home Lands (DHHL), and is located on the isthmus of Maui between the town of Wailuku to the north and Mā‘alaia Bay to the south. The project area is shown on a portion of the 2017 U.S. Geological Survey map, a TMK map, and a 2020 Google aerial photograph (Figures 1 through 3).

The proposed project will include up to 161 lots (137 turn-key single-family residences and 24 vacant single-family improved lots) in addition to appurtenances and improvements such as construction of internal roadways, sidewalks, drainage detention basin, frontage road upgrades, and sewer line improvements. The main ground disturbances anticipated include (approximate area and depth of disturbance): grubbing and grading for roadways, lots, and drainage detention basin (47 acres; 14 ft depth), excavation and trenching for utilities and related appurtenances (16 acres; 18 ft depth), and excavation for house footings (9 acres; 3 ft depth). These areas may overlap.

The State Historic Preservation Division (SHPD) concurred with DHHL’s determination of “No Historic Properties Affected” in a letter dated March 27, 2020 (Appendix A). SHPD has accepted the earlier archeological inventory survey (AIS) and agreed with expert opinion in Wilson and Dega (2005) that no further archeological mitigation is necessary and that the proposed project will have no effect on significant historic properties. DHHL has nonetheless decided to perform archeological monitoring during ground altering activities on the site of the projected Pu‘unani Homesteads development.

The current AMP is created in compliance with HRS §6E-8, HAR §13-279, and HAR §13-275. Its purpose is to account for the potential inadvertent discovery of historical cultural deposits. If human remains are encountered during subsurface work, they will be addressed in accordance with the lawful protocol concerning the Inadvertent Discovery of Human Remains (pursuant to §13-300-40, HAR). Archaeological monitoring “shall entail the archaeological observation of, and possibly intervention with, on-going activities which may adversely affect historic properties” (§13-279-4, HAR).

The following plan briefly outlines background research on the historical setting and significance of the project area. It also details appropriate field and laboratory methods and conventions to be applied during monitoring.

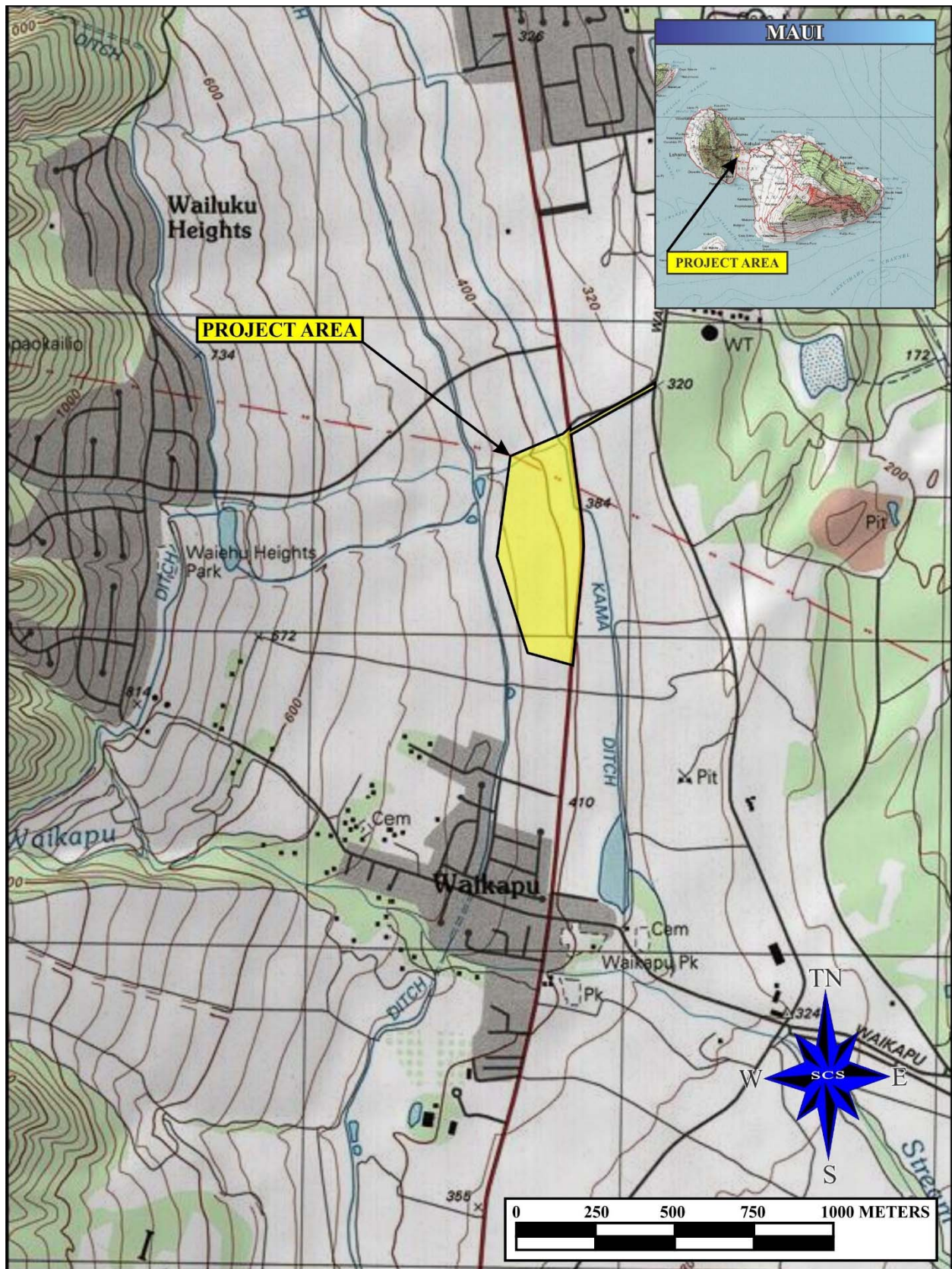


Figure 1: A portion of a 2017 USGS topographic map (Wailuku, HI quadrangle) showing the location of the project area







**Figure 3: A Google Earth aerial photograph showing the location of the project area between Wailuku to the north and Waikapū to the south (imagery date: 6/15/2019)**

## **ENVIRONMENTAL SETTING**

Maui is the second largest island of the Hawaiian Archipelago. It was formed by two volcanoes, the older and extinct Pu‘u Kukui in the west and the younger dormant Haleakalā in the east, joined together by an isthmus of dry, open country. Pu‘u Kukui (from Hawaiian, “candlenut peak”), rising to 1,764 m (5,788 ft) above mean sea level (amsl), is surrounded by large, heavily eroded amphitheater valleys that support permanent streams watering the fertile agricultural lands along the coasts. The deep valleys of the West Maui Mountains (Mauna Kahālāwai) and their coastal regions have been contested and coveted lands remarkable for their productivity. Haleakalā (from Hawaiian, “house of the Sun”) is the larger of the two volcanoes, as it dominates the larger southeastern section of the island soaring 2,727 m (10,023 ft) amsl. Unlike the amphitheater valleys of West Maui, the flanks of Haleakalā are distinguished by their gentle slopes toward the isthmus. The lands in between the two orographically most prominent features of Maui are formed by erosional deposits, and are noticeably drier than their higher elevation counterparts. The low isthmus connecting east and west Maui stretches from Ma‘alaea Bay in the south to Kahului Bay in the north, and contains a large part of the island’s population, as well as the county seat Wailuku.

### **LOCATION**

The project area is situated in the district of Wailuku (also known as Pū‘ali Komohana), between the towns of Wailuku to the north and Waikapū to the south in the lowlands of Maui’s isthmus. The very name “*pū‘ali komohana*” translates as “west isthmus,” while the names of the *ahupua‘a* “*wailuku*” and “*waikapū*” mean respectively “water of destruction” and “forbidden water” (alternatively, “water of the conch”). The project area occupies about 51 acres in TMK: (2) 3-5-002:002 por. and 3-5-001:064 por. It borders Old Waikapu Road [TMK (2) 3 5 002 999] and the undeveloped TMK (2) 3-5-002:003 to the west and north, Honoapi‘ilani Highway [TMK (2) 3 5 999 999], the larger TMKs (2) 3-5-002:011 and 3-5-002:012, the individual parcel 3-5-030:043 and West Kanamele Loop [TMK (2) 3 5 030:135] to the east, and to the south Mo‘olu Circle [TMK (2) 3-5-032:999] and the residential parcels over TMKs 3-5-032:017 to -024, 3-5-032:076 to -083, and -085 to -087. This places the project area about 2.4 miles (3.86 km) from the nearest shoreline of Kahului Bay to the north and about 4.45 miles (7.17 km) from Ma‘alaea Bay to the south. The elevation ranges from about 375 ft amsl at the parcel’s northeastern end to about 450 ft amsl at its southwestern extremity on terrain gently sloping from south to north and from west to east. The project area is bounded by the Waihee Ditch (State Site 50-80-04-5197) to the west, which had been built in Late Post-Contact times and is still partially used for irrigation. Like the rest of Waikapū, the project area is serviced by Honoapi‘ilani Highway (Hawaii Route 30), while the Old Waikapu Road is largely a dirt road.

## CLIMATE AND HYDROLOGY

Characteristically of the isthmus and the leeward areas in general, Wailuku Ahupua‘a lies in a comparatively hot and dry part of Maui. The average annual temperature within the project area is approximately 23°C (73.3°F) (Giambelluca et al. 2014). August is the hottest month with an average air temperature of 25°C (77°F), while January and February are tied for the coolest at 20.9 °C (69.6°F) (Giambelluca et al. 2014).

The project area experiences a rain shadow effect as a result of its location west of Haleakalā, though that is not as pronounced as at lower elevations. The average annual rainfall is approximately 667.7 mm (or 26.27 in) (Giambelluca et al. 2013). Most of it occurs over the winter months (November through March), while the driest month is June with mean monthly rainfall of 7.6 mm (0.30 inches). Thus, seasonal variation in rainfall follows normal orographic patterns for Maui. Along with rainfall, cloud cover also increases with elevation (Giambelluca et al. 2014).

## GEOLOGY, SOILS AND VEGETATION

The project area is located in the middle portion of the isthmus connecting the two parts of Maui (Figure 4). Geologically, the isthmus was created as a result of lava flow from Haleakalā against the West Maui Mountains, and today it supports a number of different soil types depending on elevation, distance from the ocean and level of ecological disturbance. The project area occupies a gently sloping landscape transitional between the plains on the isthmus and the foothills of the West Maui Mountains.

Both the U.S. Natural Resources Conservation Service (NCRS) soil map and Foote et al. (1972) identify the soils in the project area as belonging to the Iao Series (Figure 5), specifically IcB (“clay, 3 to 7 percent slopes”) transitioning into the characteristic of the foothills IbB (“cobbly silty clay, 3 to 7 percent slopes”). The Iao Series are typically well-drained, and usually develop over basic igneous rock on level or moderately sloping terrain where annual rainfall ranges from 25 to 40 inches. IcB in particular are associated with moderately slow permeability and medium runoff (Foote et al. 1972: 46). IbB has a profile similar to IcB with the difference in “the texture of the surface layer and the content of cobblestones” (Foote et al. 1972: 47). Both types of soil are used for sugarcane cultivation and homesites (Foote et al. 1972: 46–47).

Vegetation in the project area is dominated by non-native grasses, shrubs, and trees, many of which xerophytic. According to a previous report, *haole koa* (river tamarind, *Leucaena leucocephala*) is fairly common, especially along the eastern border of the parcel and near irrigation conduits, and several ironwood trees (*Casuarina equisetifolia*) dot the landscape (Wilson and Dega 2005). Other introduced species include *kiawe* trees (*Prosopis pallida*), and the abundant Guinea grass (*Megathyrsus maximus*), sourgrass (*Digitaria insularis*), balloon plant (*Asclepias physocarpa*) and glycine (*Neonotonia wightii*) (Hobdy 2019).





**Figure 4: 2007 aerial photograph showing the foothills of the West Maui Mountains rising from the isthmus plain with the project area highlighted. Image courtesy of Forest and Kim Starr.**





## **HISTORICAL CONTEXT**

Traditionally, Maui's division into *moku* (districts) and *ahupua'a* (subdistricts) was established by a *kahuna* (from Hawaiian, "priest") named Kalaiha'ōhia during the time of *ali'i* ("chief") Kaka'alaneo (Beckwith 1940:383); Fornander places Kaka'alaneo at the end of the 15<sup>th</sup> or the beginning of the 16<sup>th</sup> century (Fornander 1916/17, Vol. 6:248). The *ahupua'a* subdivisions were meant to incorporate all of the natural resources relevant to traditional subsistence stretching from the ocean to the mountain peaks (Lyons 1875:111). These ancient divisions have remained the same and are still commonly used to locate and refer to geographical features of the islands, even though land tenure has gone through radical changes (Sterling 1998:3). The *'ili* were smaller land divisions administered by the chief who controlled the corresponding *ahupua'a* (Lyons 1875:33; Lucas 1995:40). Finally, the *mo'o* were narrow strips of land within an *'ili*. The land holding of a tenant (in Hawaiian, *hoa 'āina*) was called a *kuleana* (from Hawaiian, "right, privilege") (Lucas 1995:61).

The project area is located in the *ahupua'a* of Waikapū, district of Wailuku (Pū'ali Komohana). As suggested in the previous section, the isthmus of Maui is characterized by comparatively dry conditions and paucity of perennial streams. Nonetheless, because of its strategic location between the two Maui mountains on the one hand, and the convenience of the Kahului harbor on the other, Wailuku District was important in Maui's Pre-Contact history. Control over Wailuku and Kahului, the traditional seats of chiefly power in the West of Maui, necessitated control over the entire district of Wailuku. In addition, since the West Maui Mountains provide a number of perennial streams, large scale agriculture was made possible in Late Post-Contact and Modern times. As a result, the district contains substantial archeological and historical record. This section will outline in short the historical context of the project area, the settlement patterns before and after contact with the West, the agricultural practices, and the historical record associated with land ownership.

### **PRE-CONTACT SETTLEMENT AND ECONOMY**

Archaeological data indicate that the initial settlement of the Hawaiian Islands by Polynesians occurred on the windward shores around the 10<sup>th</sup> century C.E., with populations extending into leeward areas at later periods (Kirch 2011). Thus, the 10<sup>th</sup> century would be the earliest date to which human presence could be expected in the project area and its vicinity. More likely, however, it would be traced to the early period of agricultural development, which on Maui began circa 1200-1400 C.E. (Kirch 1985:142). Despite its strategic political and military importance, the isthmus was not especially productive economically until the large-scale irrigation projects of the 19<sup>th</sup> century (Kirch 1985: 135).

Traditional Hawaiian economy was based on agricultural production, marine exploitation, and raising livestock, in addition to collecting wild plants and birds. Settlements were concentrated in river valleys most amenable to wet *kalo* (taro, *Colocasia esculenta*) cultivation which also incorporated pond fields and irrigation canals. Windward areas with higher precipitation permitted the growing of *kalo* (taro, *Colocasia esculenta*), *kō* (sugar cane, *Saccharum officinarum*) and *mai'a* (banana, *Musa spp.*). Pre-Contact populations also frequently integrated brackish and freshwater fishponds with taro (Costa-Pierce 1987: 325), and according to Handy and Handy (1972:496) the largest continuous area of wetland taro cultivation in Hawai'i extended from Waihe'e to Wailuku. Waikapū Stream also supported it into the early 20<sup>th</sup> century (Handy and Handy (1972:497).

The Wailuku District offers favorable conditions for aqua- and agricultural activity, and once supported a substantial population (see the section Previous Archeology): the settlements of Wailuku and Kahului north of the project area represented one of the only two or three Pre-Contact population centers on Maui (Cordy 1981:198-199). The environs of Wailuku from Waihe'e Stream to the north to Waikapū to the south were once known as *na wai 'ehā* (from Hawaiian, "of four waters"), referring to the four rivers that drain the eastern slopes of Mauna Kahālāwai (Handy and Handy 1972). The district is frequently mentioned in historical texts and in the oral tradition as politically and ceremonially important (Cordy 1981, Kirch 1985): the town itself was considered a "chiefly center" with many of the *ali'i* and much of the district's population residing near 'Īao Valley and lower Wailuku (Sterling 1998:90).

In addition, in Pre-Contact times, a number of trails typically extended from the coast to the mountains, facilitating travel and linking communities both economically and socially. In pre-Contact times Wailuku and Kahului were linked with Lāhainā on the opposite side of the mountains, and it is likely that such lines of communication extended over the isthmus to Ma'alaea Bay and Kīhei (Handy 1940:114). Both the extended wetland taro of Wailuku and Kahului's Kanahā Pond (from Hawaiian, "the shattered") *makai* (seaward) of the project area allowed for the development of significant economic resources along the coast. Considering the concentration of population and economic resources in Wailuku and Kahului north of the project area, the scantiness of the agricultural record on the isthmus becomes less significant.

## **PRE-CONTACT POLITICAL HISTORY**

Before the unification by the *ali'i* Pi'ilani in the late 1500s, the whole of Maui was ruled by two separate kingdoms – one centered in Hana on the windward coast and one in Wailuku. Along with consolidating power on the island, Wailuku's chief Pi'ilani also raised Maui's political status in the archipelago by ruling judiciously and using his connections with the reigning chiefly families of O'ahu and Hawai'i (Fornander 1916/1917, Vol. 2:87).

Pi'ilani's possessions were inherited by his firstborn son Lono-a-pi'ilani. According to the oral tradition, after a rift between Lono-a-pi'ilani and his younger brother Kiha-a-pi'ilani (born c. 1626), the latter took refuge from in a place known as Ke'eke'e (from Hawaiian, "zigzag") in the neighboring Kula District. Subsequently, he traveled to the island of Hawai'i, which was the kingdom of their brother-in-law Umi, and convinced him to send an army to Maui in order to avenge Kiha and dethrone Lono (Fornander 1919, Vol. 5: 178–180). The invasion was known in the oral tradition as the "expedition of numberless canoes" because according to legend the canoes stretched across the Maui channel from Kohala on Hawai'i Island, and Umi's army was able to march on them as on a bridge. According to one version, Lono was eventually captured and killed by Umi's troops in Waihe'e, to the northwest of the project area. According to Kamakau (1961:31), however, the Wailuku-based chief died of terror before the invading army reached his residence. In any case, after the successful invasion Kiha-a-pi'ilani became the sole ruler of Maui.

Kiha-a-pi'ilani became famous as a builder, especially for the construction of a stone-lined path, the Alaloa (from Hawaiian, "main road"), or "the Kiha-a-pi'ilani Trail," which finished his father's road building project and for a first time connected all parts of Maui. The chief also constructed the Mau'oni fishpond, which was in a system with Kanahā Pond (Kamakau 1961: 42), and moved the royal residence from Wailuku to eastern Maui (Kirch 2010: 102). According to Kirch, Kiha-a-pi'ilani's coming to power signifies a transition in the political tradition, as the *ali'i nui* ("great chiefs") acquired "direct control over economic production" (Kirch 2010: 102).

The 18<sup>th</sup> century was marked by the rivalry between Maui and Hawai'i Island. At the end of his reign, the ambitious but ruthless Kekaulike (c. 1700–1736) launched an expedition from his seat at Kaupō to Hawai'i. Fearful of retaliation, Kekaulike withdrew to Wailuku, but developed an acute and fatal case of what Kamakau classifies as epilepsy (1961: 69, "*ka maka huki lani*" or "eyes drawn heavenward"). His heir was Kamehameha-nui, the son of a half-sister of the Hawai'i Island chief Alapa'i. With the help of his uncle, in 1738 Kamehameha-nui defeated his older half-brother Ka'uhi and secured his rule over Maui (Kamakau 1961:74).

Maui enjoyed some time of relative peace and prosperity before the conflict returned with the wars between another of Kekaulike's sons named Kahekili II (c. 1737–1794) and Hawai'i chief Kalani'ōpu'u. Shortly before Captain Cook's arrival, Kalani'ōpu'u's armies from Hawai'i island had landed and plundered the district of Honua'ula, and then moved to Ma'alaea Bay from where the chief planned to invade Wailuku (Fornander 1916/1917, Vol. 2:147-157). After losing two battles to Kahekili II, Kalani'ōpu'u welcomed a truce, concentrating his efforts on the eastern side of Maui, protecting Hana and Kīpahulu, which were his spoils from an earlier battle in 1759 (Fornander 1916/1917, Vol. 2:147).

## EARLY POST-CONTACT HISTORY

The Post-Contact Period in Maui begins on November 26, 1778, with British Explorer Captain James Cook's passing by the island on his way back from the extreme Northern Pacific (Daws 1974:8). At the time of his visit, the war between Kalani'ōpu'u and Kahekili II had not been over, and the latter was preparing for another attack (Speakman 1978:26). For a while the internal affairs on the island proceeded independently of significant Western influence. In fact, the height of Maui's political power in the archipelago was reached during the reign of the ambitious Kahekili II in 1783, just five years after the encounter with Captain Cook (Kolb et al., 1997:3). Yet, that moment of superiority proved ephemeral: by May 1790 the chief's soldiers were pushed back into 'Īao Valley by Hawai'i's Kamehameha I (1758–1819), who had enlisted the help of advisors Isaac Davis and John Young and their cannon Lopaka (Daws 1974: 35). Decades later, traveler George W. Bates suggests that the name of Wailuku town (from Hawaiian, "water of destruction") owes its origin to that devastating battle. Bates continues:

Leaving Wai-lu-ku, and passing along toward the village Kahului, a distance of three miles, the traveler passes over the old battle-ground named after the village. It is distinctly marked by moving sand-hills, which owe their formation to the action of the northeast trades. Here these winds blow almost with the violence of a sirocco, and clouds of sand are carried across the northern side of the isthmus to a height of several hundred feet. These sand-hills constitute a huge "Golgotha" for thousands of warriors who fell in ancient battles. In places laid bare by the action of the winds, there were human skeletons projecting, as if in the act of struggling for resurrection from their lurid sepulchers. In many portions of the plain who cart-loads were exposed in this way. Judging of the numbers of the dead, the contest of the old Hawaiians must have been exceedingly bloody (Bates 1854:313–314).

After Kahekili's death at Waikīkī in 1794, his inherently unstable realm once again succumbed to fratricidal conflicts and the mounting pressure from the powerful Kamehameha I (Daws 1974: 38). In the following years, the descendants of Pi'ilani and the chiefly Maui families were for the most part robbed of their possessions unless they surrendered to the conquerors (Fornander 1916/1917, Vol. 6:310).

Maui, along with the rest of the newly named Sandwich Isles, quickly became a stop for fur traders on their way to Canton (Guangzhou). Kauai's Ka'iana was one of the first Hawaiians to leave with the traders on a ship to China and the Philippines in 1787; he came back to the islands after a sojourn in the Pacific Northwest on December 7, 1788, when the ship *Iphigenia* captained by William Douglas arrived at Kahului Bay (Nokes 1998: 113–114). Initially loyal to Kamehameha I, Ka'iana switched sides in 1795 and joined Kahekili II's eldest son Kalanikūpule on O'ahu; he gave his last stand at the famous Battle of Nu'uanu in May 1795 (Daws 1974: 40).

## THE MĀHELE

In the 1840s, Kāiʻiokaʻouli (Kamehameha III, r. 1825–1854) introduced private land ownership (Kuykendall 1938; Kelly 1983). The transition from communal to private land use is commonly called the Māhele (from Hawaiian, “division”). It set the stage for consequential changes to property possession in the islands as it introduced Western legal practices.

As early as 1841, the legislature allowed island governors to lease lands to foreigners for up to fifty years. These leases were then to be registered “in writing so that there be no misunderstandings about terms and rents” (Daws 1974: 125). The question of land reform was set aside in 1843 because of the five-month occupation of the islands by British naval officer George Paulet, but once the kingdom was stable again and Kāiʻiokaʻouli felt secure at its helm it was brought back. By 1844 many chiefs were warming up to the proposal for a formal land division, and in 1845 the Board of Commissioners to Quiet Land Titles (the Land Commission), was established for “the investigation and final ascertainment or rejection of all claims of private individuals, whether natives or foreigners, to any land property” (Chinen 1958:8). The Commission had no authority to divide lands or change their tenure, but was created solely for approval of land claims (Kuykendall Vol. I, 1938: 280).

The Māhele of 1848 divided Hawaiian lands between the king, the chiefs (*aliʻi* and *konohiki*), and the government, and instituted private land ownership. The subsequently awarded parcels were called Land Commission Awards (LCAs). Once lands were made available and private ownership was instituted, the *makaʻāinana* (commoners) were able to claim the plots on which they had been living and which they had been cultivating through the Kuleana Act of 1850. These claims did not include any previously cultivated but presently fallow land, stream fisheries (known in Hawaiian as *okipū*), or many other resources necessary for traditional survival strategies (Kelly 1983; Kameʻeleihiwa 1992:295; Kirch and Sahlins 1992). If occupation could be established through the testimony of two witnesses, the petitioners were awarded the claimed LCA and issued a Royal Patent after which they could take legal possession of the property (Chinen 1961:16). Commoners claiming house lots in Honolulu, Hilo, and Lāhainā were also required to pay commutation to the government before obtaining a Royal Patent for their awards.

Foreigners in Hawaii could acquire land through the Alien Landownership Act of 1850. Oftentimes, they were simply given lands by the *aliʻi*. Commoners, however, would only make claims if they had first been made aware of foreign procedures such as the awarding of *kuleana* lands (from Hawaiian, “right, privilege”) and LCAs. Many of them found them unfamiliar, lengthy and costly, and as a result many Hawaiians missed an opportunity to claim for themselves the lands that had been sustaining their ancestors (Daws 1974: 127–128; Chinen 1961: 16).



## LAND COMMISSION AWARDS AND LAND GRANTS

The entire district was declared Crown Lands with the Māhele. Land ownership in Wailuku Ahupua‘a in particular has been historically and economically significant: after a generous gift of \$10,000, King David Kalākaua (r. 1874–1891) forced his government to allow German-born sugar magnate Claus Spreckels (1828–1908) a lease of 24,000 acres inclusive of the project area on July 8, 1878 (Daws 1974: 226–227). With some more manipulation and \$10,000 more, Spreckels managed to secure a fee simple title to the same land in 1882 with Royal Patent Grant No. 3343 (Daws 1974: 228). Although a handful of other foreigners (Anthony Catalena, James Louzada, E. Bailey, and others) gained control of parcels that would later be used for sugarcane cultivation, the majority of LCAs were awarded to Hawaiians, a statistic which can be used to measure Pre-Contact settlement (Creed 1993:38). Overall, there were over 400 *kuleana* lands awarded in the district.

The Office of Hawaiian Affairs’ Kipuka Database (2020) lists five claimed LCAs overlapping with the project area (Figure 6; Table 1). In general, LCAs in the vicinity of Waikapū contain *lo‘i* (“irrigated terraces”) and *kula* (“pasture”) lands, along with house sites. Thus, the pattern of wet taro cultivation and permanent residences in the vicinity of the project area is historically documented from 1848, though it likely extends further into the past.

In some cases, the Hawaiian government sold lands to generate income for the Kingdom. These transactions were referred to as “land grants.” According to the Waihona Aina Online Database (2020):

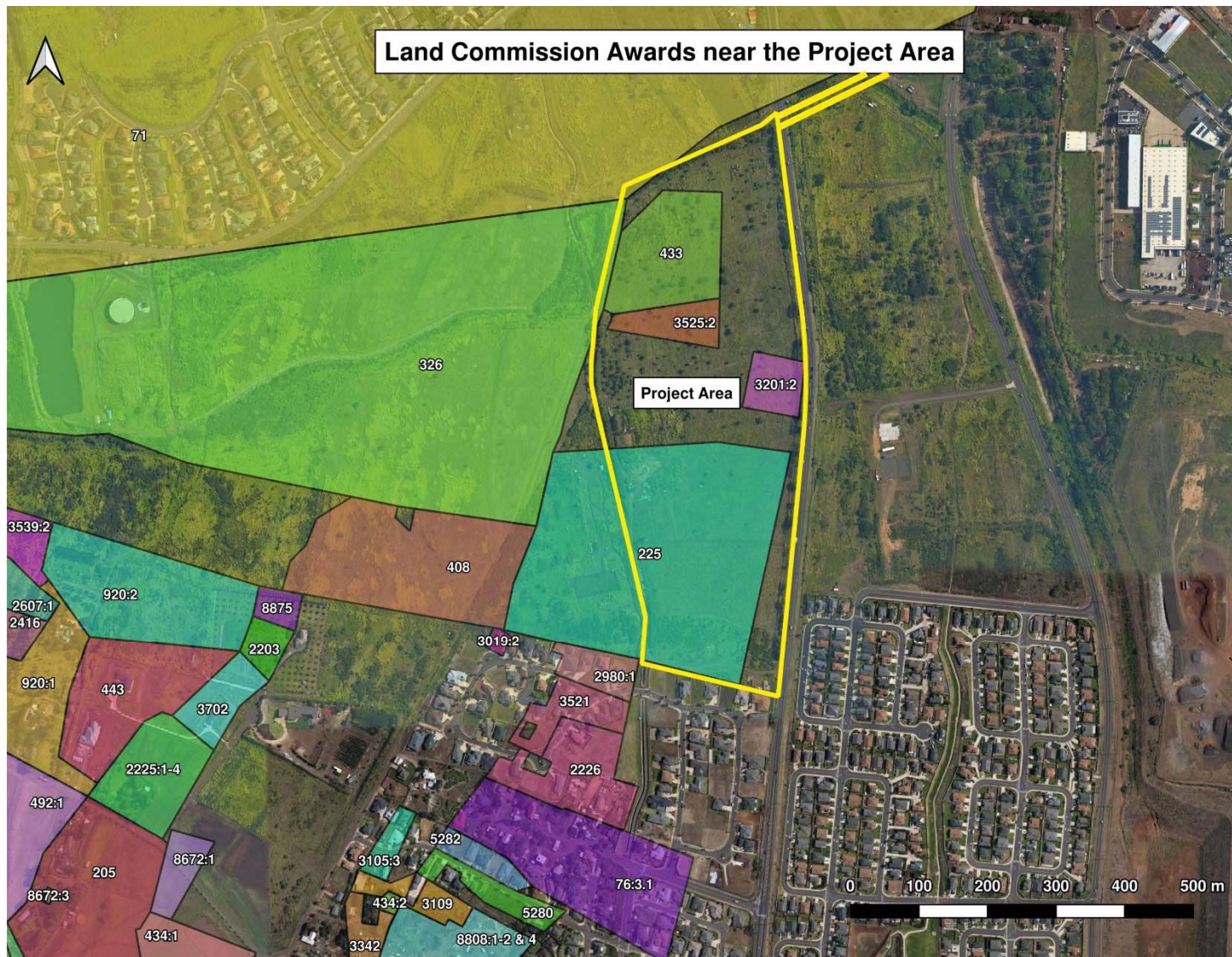
At the time of the Māhele, some of the land was the King’s own land which later became known as Ceded Lands. Other lands in the possession of *ali‘i* were returned to the King in exchange for Commutation of property the *ali‘i* kept. Some of these returned lands became Government lands and were sold by the government to generate income for the Kingdom, since the King gave up his traditional right to collect taxes and goods following the Māhele.

The Office of Hawaiian Affairs Kipuka Database (2020) listed nine Land Grants with lands within or adjacent to the project area. These are listed in Figure 7 and Table 2 below.

The entire *ahupua‘a* belonged to the government and was overseen by the Department of Education. According to Sterling (1998:95):

In 1875 the Board of Education sold at auction the “Land known as the Ahupuaa of Waikapu, saving grants hitherto made within said ahupuaa, or sales by the Board of Education,” to Henry Cornwell, the Government issuing a royal patent to the above terms without survey or statement of area. Mr. Cornwall afterward sold to Claus Spreckels and others the part known as Waikapu Commons.





**Figure 6: Aerial photograph with overlaid Land Commission Awards within and in the vicinity of the project area (Kipuka Database 2020).**

**Table 1: Land Commission Awards within and in the vicinity of the project area.**

<b>Claimant</b>	<b>LCA No.</b>	<b>Royal Patent No.</b>	<b>Year</b>	<b>Awarded</b>	<b>Acreage</b>	<b>‘Āpana (“portion”)</b>	<b>‘Ili</b>	<b>Use</b>
Crowningberg, William (Wilama)	433	1111	1852	Yes	5.93	1	Pohakoi	
Humphreys, William	326	7659	1883	Yes	131.3	1	Awikiwiki, and Puhiawaawa	
Keliiolelo	3525:2	3121	1856	Yes	1.66	1	Awakamanu	
Louzada, James	225	7658	1883	Yes	26.1	1	Pualinapao	Farmland
Manu	408	3540	1857	Yes	11.75	1	Pohakuloa	Taro <i>lo‘i</i>
McLane, William	3201:2	2775	1856	Yes	5.45	2	Kapalaalaea and Awakamanu	
Mehao	3019:2	3353	1864	Yes	0.83	2	Ohia and Pilipili	Taro <i>lo‘i</i>
Nowlein, Michael J.	71	4549	1863	Yes	303.5	3	Papakapu and Kapoi	
Pakele	2980:1	5356	1863	Yes	1.8	2	Kaaa and Olohe	Taro <i>lo‘i</i> , <i>hala</i> trees (screw pine, <i>Pandanus odoratissimus</i> ), and houses.



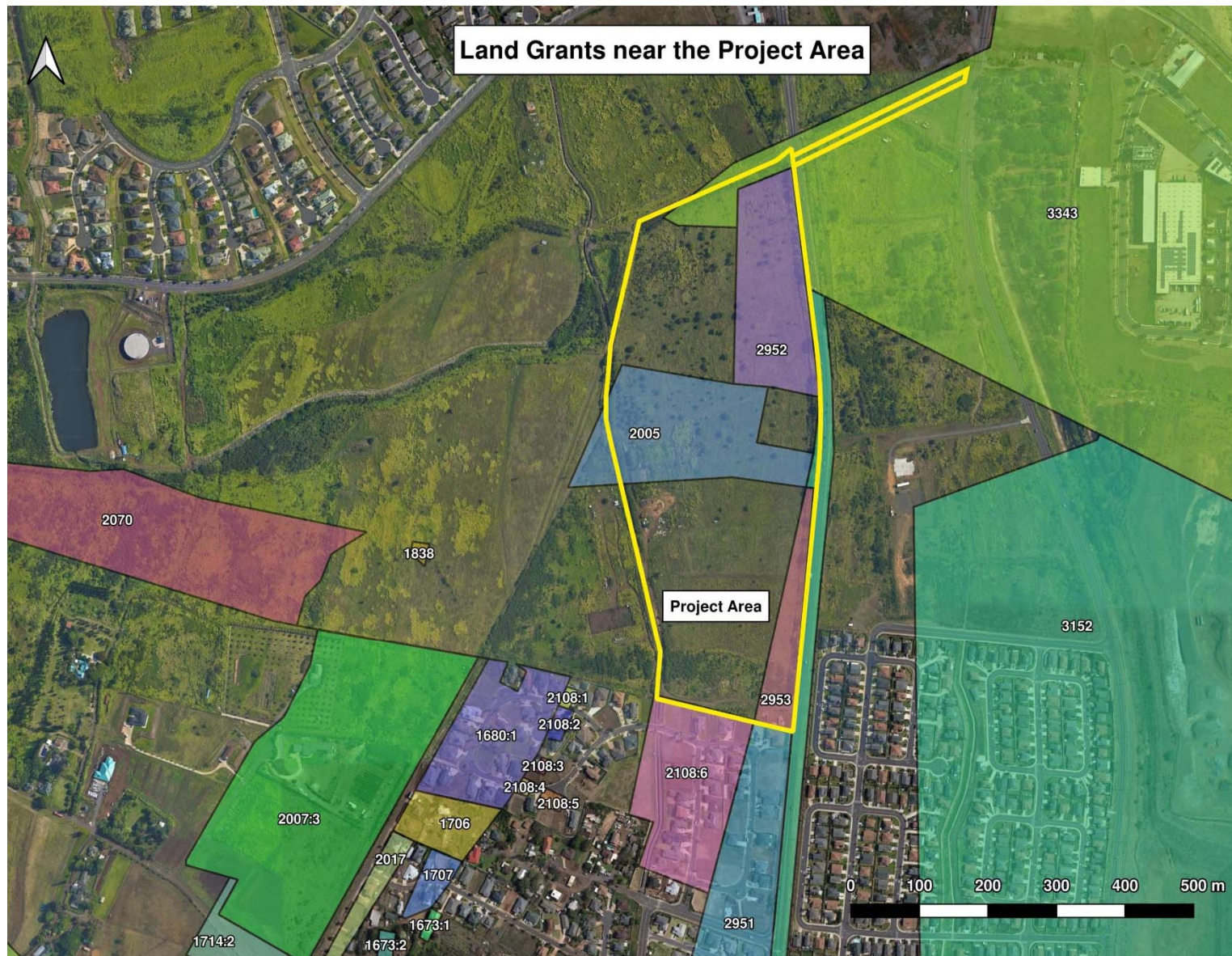


Figure 7: Aerial photograph with overlaid land grants within and in the vicinity of the project area (Kipuka Database 2020).

**Table 2: Land grants within and in the vicinity of the project area.**

Grantee	Land Grant No.	Year	Acreage	‘Ili near the project area
Cockett, Mrs. Beke	2108:6	1856	7.73	Ka‘a‘a
Cornwell, Henry	3152	1875	12,000	‘Ohia
Crowningberg, David	2952	1864	7.44	
Flores, Manuel	1680:1	1855	7.07	Pilipili
Louzada, J. & Henry Cornwell	2951	1864	17.1	
Richardson, J.	2070	1856	15.1	
Ross, John	2005	1856	9.1	Awakamanu
Spreckels, Claus	3343	1882	24,000	

## MID 19<sup>TH</sup> CENTURY TO PRESENT

As Western influence grew, the Wailuku coast and the adjacent isthmus became an important provisioning area. Europeans were living on or frequently visiting the towns north of the project area, and several churches and missionary stations were established. Thomas Hogan built the first western building, a warehouse, near the Kahului shoreline in 1863 (Clark 1980:7).

With the gradual demise of the whaling industry in the 1860s (Speakman 1978:111), the economy of the district changed to sugar cane cultivation, though the crop had been grown in Wailuku as early as 1840. Further impetus to these developments was given by the Reciprocity Treaty of 1875, which granted a duty-free market for Hawaiian sugar in the U.S. in exchange of trade privileges for American products. Soon the Wailuku Sugar Company and the Waikapu Sugar Company converted large tracts of land along the isthmus for sugar cultivation (Figure 8). As the industry developed, a number of warehouses and stores were constructed, while wheelwright and blacksmith shops opened close to Kahului harbor. A small landing was constructed in 1879 to serve Spreckels's Hawaiian Commercial Company and its complex at Spreckelsville Plantation northeast of the project area (Condé and Best 1973:208). The new industry quickly attracted foreign settlers who inadvertently assisted in the further displacement of the native population, though they maintained the population density of the Waikapū–Wailuku area.

As early as the 1860s a number of plantations and mills opened not only in Wailuku and Waikapū, but also in the neighboring Waihe'e and Ha'ikū. Many of the plantation camps associated with these mills were located on the plains surrounding Pu'unēnē to the east of the project area, while others were built closer to the water sources of the West Maui Mountains. For example, Hopoi Camp is said to have been located near Hopoi Reservoir (State Site Number 50-50-04-5473) to the north of the parcel (Figure 9); the reservoir was constructed by 1922, when references to the camp began to occur. Water was channeled both from traditional sources such as *'auwai* ("ditches"), usually connected to Waikapū Stream, and from Western-style wells. Waikapū Ditch (State Site 50-50-04-5493) was built and in use by 1913, and it still remains in operation today. Despite that, sugar cultivation in the area was discontinued in 2016.

Though the vicinity of the project area has been heavily influenced by the sugar industry, it was not immune to worldwide political developments. In the wake of the Pearl Harbor attack, Kahului came under Japanese fire on January 1, 1942, when Japanese submarines shelled its harbor (Clark 1980:7). In March 1943 the Navy constructed an Air Station to serve as a central storage depot for all Maui Activities; that station has now been repurposed as Kahului Airport. Some of the WWII structures north of the project area are still extant today (Clark 1980:9). The former sugarcane and pineapple lands in the vicinity of the project area have been reclaimed through residential developments and industrial baseyards.



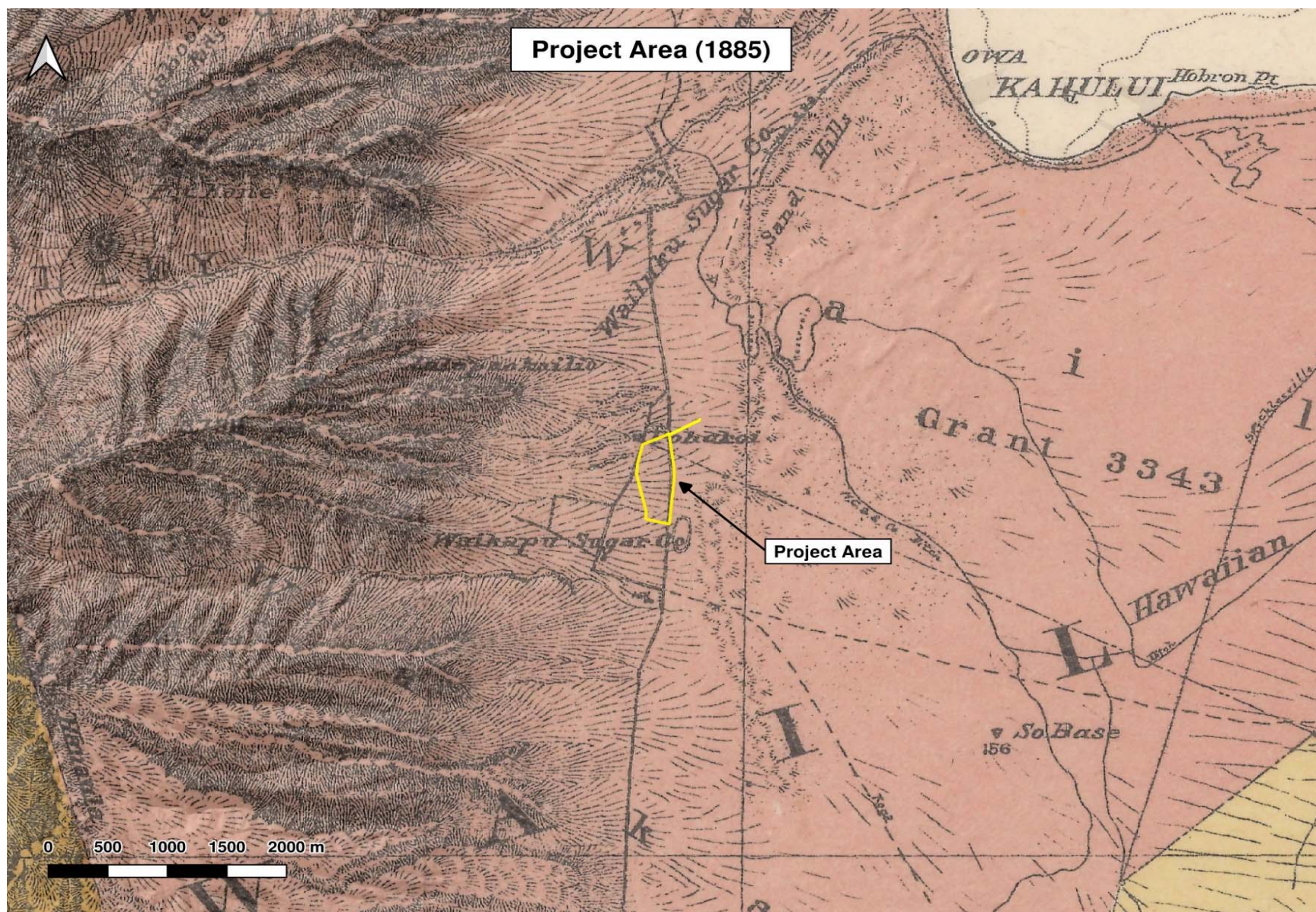


Figure 8: Detail from an archival map of Maui showing the project area, its vicinity, and major land grants. (F.S. Dodge, 1885)



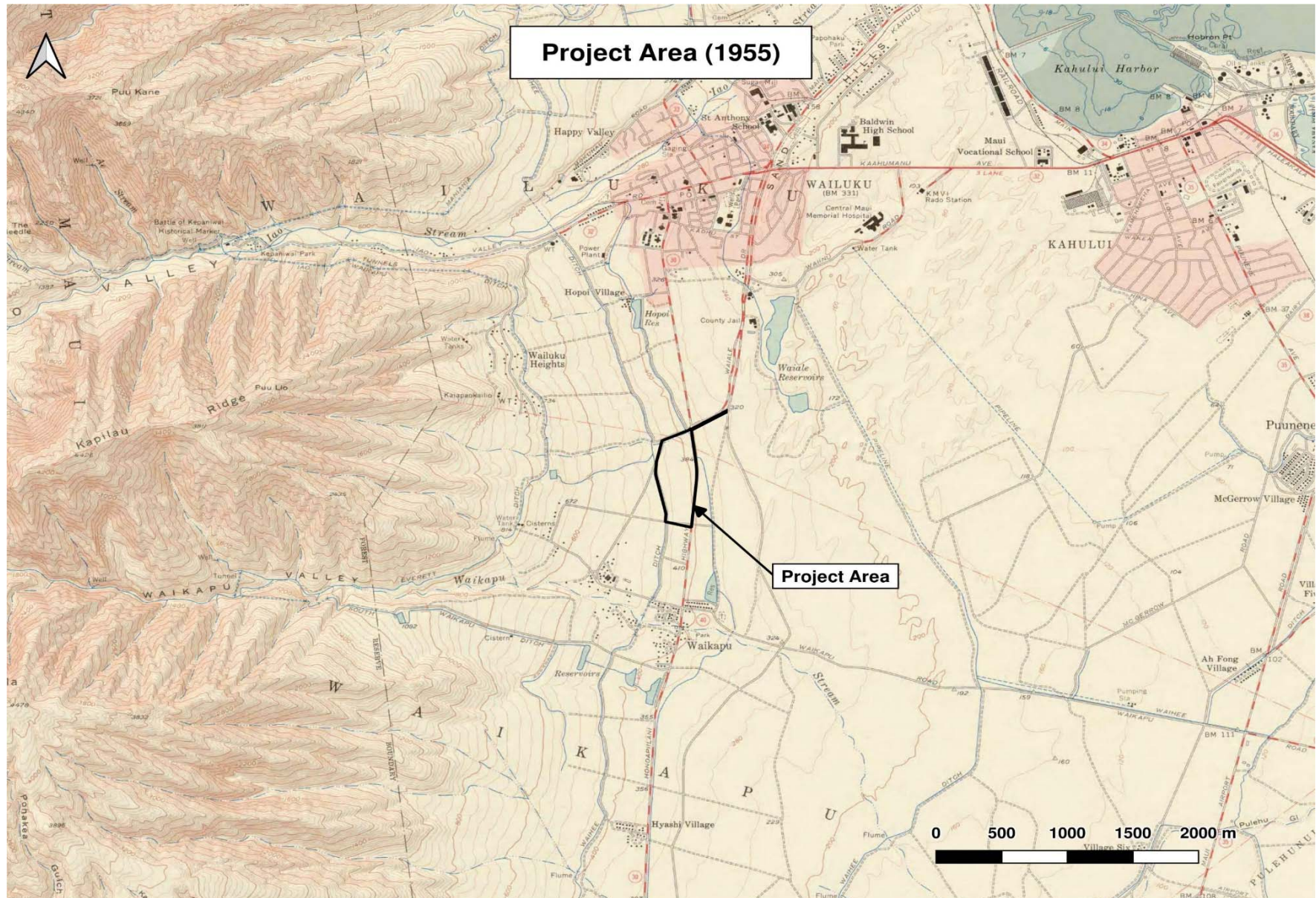


Figure 9: Detail of a 1955 USGS topographic map (Wailuku, HI) depicting the project area and its vicinity in the agricultural lands between Wailuku and Waikapū.



## **PREVIOUS ARCHAEOLOGY**

This AMP concludes with an examination of the past archaeological research in the vicinity of the project area in an effort to identify potential types of cultural practices conducted there. Previous archaeological studies on the Maui isthmus have yielded modest evidence of Pre-Contact human settlement because of the intensive agricultural use in Late Post-Contact and Modern times. Figure 10 shows the location of various archaeological projects conducted in the vicinity of the project area.

Archaeological investigations on Maui began in earnest in the early 20<sup>th</sup> century with the support of the Bernice Pauahi Bishop Museum. These were the studies of Thomas G. Thrum (1909), John F.G. Stokes (1909–1916), and Winslow M. Walker (1931). Thrum (1909:59) mentions that two *heiau* may have possibly existed in the *ahupua* 'a of Waikapū south of the project area, but evidence for them may no longer exist.

Bernice Pauahi Bishop Museum (Rotunno and Cleghorn 1990) conducted a large reconnaissance survey to the east and northeast of the present project area. They identified three temporary archaeological sites, but did not designate them with State Inventory of Historic Places (SIHP) numbers. The first was a potentially modern cobble-lined path with no discernible starting or ending point. The second temporary site was originally identified as a rock wall, but subsequent analysis reclassified it as remnants of bulldozer tailings. The third site was a rock mound made of cobblestones. Rotunno and Cleghorn (1990) recommended additional archaeological work because of the dense vegetation and the possibility of encountering extant human remains in subsurface layers (Rotunno and Cleghorn 1990).

In 1992, SHPD (Donham 1992) conducted data recovery for two separate cases of inadvertently discovered human burials at the construction site of the Maui Homeless Shelter northeast of the project area. Even though some of the remains were crushed by machinery, recording and re-interment was possible. Surrounding one of the burials was a cultural layer likely associated with work on nearby access roads. The two burials were recorded as SIHP Site 50-50-04-02916, and further archaeological monitoring was recommended (Donham 1992).

Immediately to the south of Donham's 1992 data recovery, Xamanek Researchers (Fredericksen and Fredericksen 1995) conducted an archaeological inventory survey on approximately 15 acres for the construction of a rental housing project. Neither the pedestrian survey, nor the excavations yielded any significant cultural remains. Because of the presence of sandy deposits and the proximity to SIHP Site -02916, the archaeologists recommended further monitoring (Fredericksen and Fredericksen 1995).

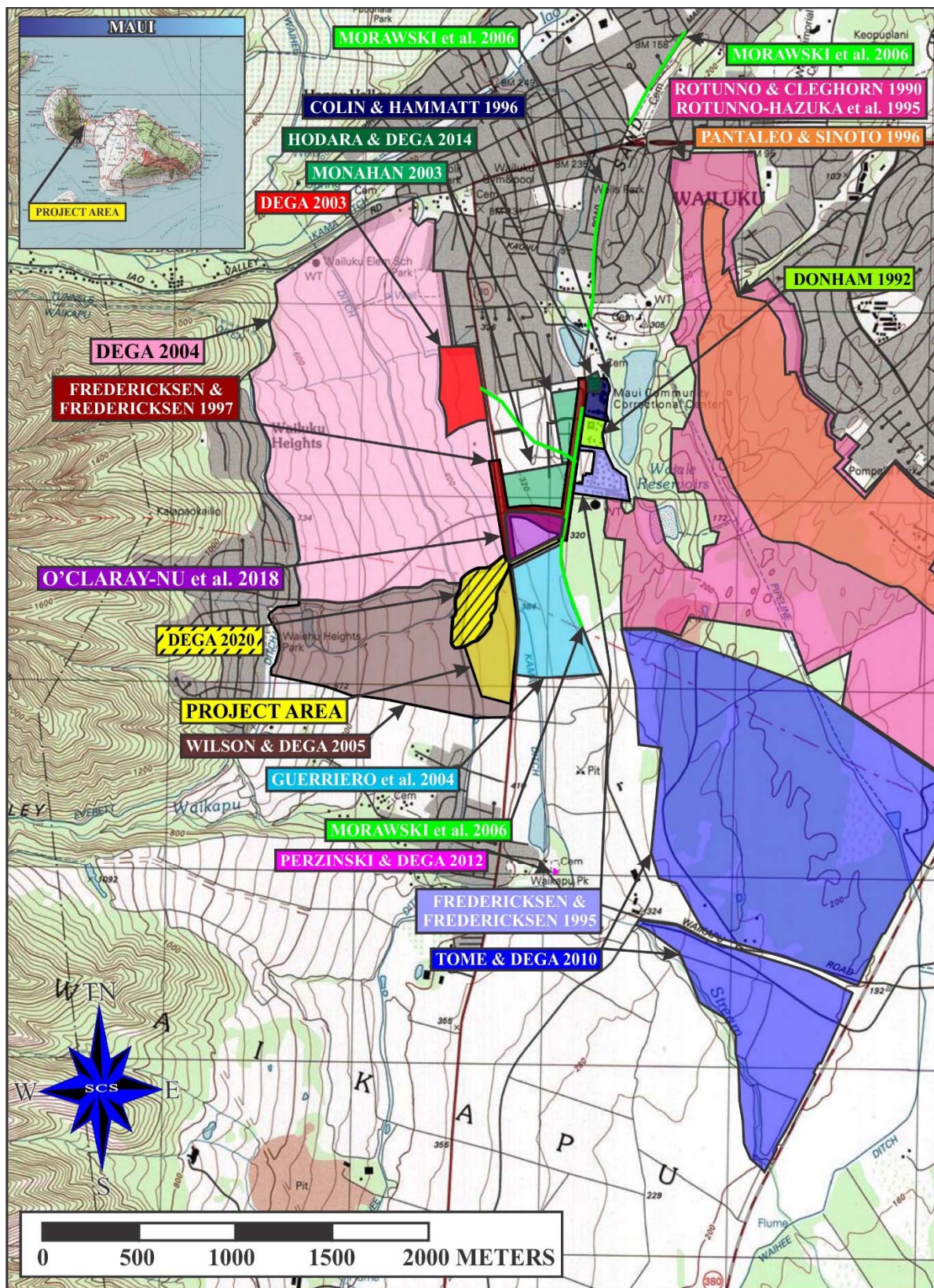


Figure 10: A portion of a USGS topographic map (Wailuku, HI) showing previous archaeology within and in the vicinity of the project area

The Bishop Museum (Rotunno-Hazuka et al. 1995) revisited the Rotunno and Cleghorn (1990) project area at the Maui Lani Development Property to conduct archaeological subsurface testing. The study identified ten Pre-Contact burial features containing at least 12 people. The site was subsequently designated as SIHP Site 50-50-04-02797. Six of the burial features were preserved *in situ*, though one set of remains had to be reinterred. This finding prompted SHPD Maui to request subsequent intensive archeological surveying of the projected development (Rotunno-Hazuka et al. 1995).

That follow-up survey was conducted by Aki Sinoto Consulting (Pantaleo and Sinoto 1996). The subsurface sampling included a total of 58 localities with 90 machine-excavated trenches, two shovel scrapes, and one manually excavated trench. Pantaleo and Sinoto identified six burials (SIHP Sites 50-50-04-04146 and -04147). Four isolated individual burials located at the highest elevation on the tip of a dune were associated with SIHP Site 50-50-04-02797. Pantaleo and Sinoto concluded that there can be no predictive method for avoiding burials, as surface features did not correlate with cultural layers containing human remains. Archeological monitoring was recommended for any further development in the area because of its high potential to contain human burials (Pantaleo and Sinoto 1996).

Cultural Surveys Hawai'i (Colin and Hammatt 1996) conducted archaeological monitoring immediately to the north of Donham's data recovery. The four field inspections revealed no previously unknown historic properties (Colin and Hammatt 1996).

In 1997, Xamanek Researchers (Fredericksen and Fredericksen 1997) conducted an archaeological inventory survey for the Mahalani Street and Wai'ala Drive extension project, partially overlapping with and adjacent to the northeast of the current project area. Once again, neither the reconnaissance survey nor the subsurface testing revealed any historic properties. The presence of sandy substrata, however, prompted the archaeologists to recommend monitoring for any ground disturbing activity in the area (Fredericksen and Fredericksen 1997).

Scientific Consultant Services, Inc. (Dega 2003) conducted an archaeological inventory survey in Wailuku Ahupua'a north of the project area. After a complete pedestrian survey and a total of 18 representative subsurface trenches, three historic properties were documented, all of which dating to the Post-Contact Period. These are the Hopoi Reservoir (SIHP Site 50-50-04-05473), Kama Ditch (SIHP Site 50-50-04-05474), and an isolated basalt adze (SIHP Site 50-50-04-05478). The findings testify to the importance of the isthmus for sugarcane cultivation in the Late Post-Contact and Modern periods. Subsurface testing yielded negative findings (Dega 2003).

Scientific Consultant Services, Inc. (Monahan 2003) conducted an archaeological inventory survey on two undeveloped lots totaling approximately 30 acres in Wailuku Ahupua‘a, north of the project area [TMK: (2) 3-5-001:061, 063, and 066; formerly 017]. After both a pedestrian survey and subsurface testing, no historic properties were identified, and as a result the report was published as an archeological assessment (Monahan 2003).

Archaeological Surveys Hawaii, LLC (Guerriero et al. 2004) conducted an archaeological inventory survey of a 50-acre parcel of land in Wailuku Ahupua‘a directly east of the present project area across Honoapi‘ilani Highway [TMK: (2) 3-5-002:011 and 012]. During the survey, the Kama Ditch (SIHP Site 50-50-04-05474) was reidentified (Guerriero et al. 2004).

Scientific Consultant Services, Inc. (Dega 2004) conducted an archaeological inventory survey on 348.613 acres of land composing the main land parcel of the Kehalani Mauka Subdivision, located northwest of the current project area [TMK:(2) 3-5-001: various]. Six previously undocumented archaeological sites were identified: Waihe‘e Ditch (SIHP Site 50-50-04-05197), Waikapū Ditch (SIHP Site 50-50-04-05493), road segments (SIHP Site 50-50-04-05489), east-west bearing drainages (SIHP Site 50-50-04-05490), a Post-Contact artifact scatter (SIHP Site 50-50-04-05491), and several clearing mounds/push piles from the plantation era (SIHP Site 50-50-04-05492). All six were assessed as significant under Criterion D Representative subsurface testing (27 trenches) revealed mostly homogenous soil matrices, which are to be contrasted with soil profiles to the north, east and south of the studied area. According to Dega, the lack of Pre-Contact findings could be attributed to the intensive sugarcane cultivation, but it may also suggest that the isthmus was not a particularly hospitable area (Dega 2004:43).

Scientific Consultant Services, Inc. (Wilson and Dega 2005) conducted an archaeological inventory survey of 215.800 acres significantly overlapping with the current project area [TMK: (2) 3-5-02: 02 and 03]. The AIS included a 100% pedestrian survey and 21 backhoe dug stratigraphic trenches evenly spread across the project area. Five previously undocumented historic properties were identified during the survey: an unnamed rock and mortar ditch (SIHP Site 50-50-04-05729), another unnamed earthen ditch/drainage (SIHP Site 50-50-04-05726), a large unnamed reservoir (SIHP Site 50-50-04-05727) serving as a terminus of Waikapū Ditch, a sugar field erosion-control site (SIHP Site 50-50-04-05728) comprised of 14 cross-slope, earthen berms of varying length positioned regularly throughout the project area, and the Old Waikapu Road (SIHP Site 50-50-04-05730), a dirt-road serving for cane-haul transport. All of the sites were interpreted as associated with the Late Post-Contact (Plantation Era) Period and were deemed significant under Criterion D. No traditional Hawaiian cultural material was identified and no further work was recommended (Wilson and Dega 2005).



Scientific Consultant Services, Inc. (Morawski et al. 2006) conducted monitoring for the proposed Kehalani Mauka Subdivision along Wai‘ale Road northeast of the project area [TMK: (2) 3-5-002:001 por. and 3-5-001:017 por.] over the course of 20 months between December 2003 and July 2005. Monitoring was conducted because of the high risk of encountering human remains in the area, as shown in previous archeological surveys in the vicinity. Morawski et al. identified five sites: a complete *in situ* human burial (SIHP Site 50-50-04-05965), two locations containing incomplete and previous disturbed burials (SIHP Sites 50-50-04-05965 and -05966), the Post-Contact roadbed of Wai‘ale Road (SIHP Site 50-50-04-05963), and a portion of a sugarcane irrigation flume (SIHP Site 50-50-04-05964). More archeological monitoring was recommended (Morawski et al. 2006).

Scientific Consultant Services, Inc. (Tome and Dega 2010) conducted an archaeological inventory survey of approximately 607 acres of land southeast of the project area [TMK: (2) 3-8-005:23 por., 37 and (2) 3-8-007: 71, 101, 102, and 104]. The testing included as many as 282 backhoe- and five hand-dug trenches. Just one of those encountered a previously undocumented feature: a subsurface fire pit (*imu*) which was assigned SIHP Site 50-50-04-06578. Tome and Dega documented significant disturbance as a result of intensive Late Post-Contact and Modern agricultural activity. Further archeological monitoring was recommended for the parts of the project area containing sandy matrices because of the possibility of encountering more burials (Tome and Dega 2010).

In 2012, Scientific Consultant Services, Inc. (Perzinski and Dega 2012) conducted an archaeological inventory survey of 2.0 acres of land in Waikapū Ahupua‘a, south of the project area [TMK:(2): 3-5-002:015]. Four archaeological sites were documented: the previously known, though undocumented, Waikapū Cemetery (SIHP Site 50-50-04-06808), a cistern associated with a piggery (SIHP Site 50-50-04-06809), a long-abandoned overflow ditch (SIHP Site 50-50-04-06810), and at least two Native Hawaiian burials (SIHP Site 50-50-04-06811). The community (as opposed to a municipal) cemetery contains approximately 75 marked burials and 20 unmarked burials, and was used for interment from 1900 through 1961. One of the Hawaiian burials is demarcated by a headstone and represents the resting place of Ernest Malai. A second burial, identified as that of Papia Nawa‘a, is unmarked and was designated by lineal descendants. Representative subsurface testing via 11 trenches along the cemetery boundaries yielded negative results. All four sites were designated significant under Criterion D. In addition, Sites -06808 and -06811 were assessed as significant under Criterion E. No further work was recommended for Sites -06809 and -06810 (Perzinski and Dega 2012).

In 2014, Scientific Consultant Services, Inc (Hodara and Dega 2014) prepared an archeological monitoring report following the completion of groundwork associated with Maui County Correctional Center. Archeological monitoring was conducted on September 10 and 11, 2014, after the identification of a cultural layer during trenching. The cultural layer was identified as a trash pit (SIHP Site 50-50-04-08017), dated to the Post-Contact period, and found to include bovine bones. According to testimony collected by Hodara and Dega, the project area had been a cattle ranch. Other artefacts identified by Hodara and Dega were iron nails, metal rods, glass shards, various metal, concrete and coral fragments, and lithified sandstone and basalt cobbles. The site was deemed significant under Criterion D, and no further work was recommended (Hodara and Dega 2014).

In 2017, Archaeological Services Hawaii, LLC (O'Claray-Nui et al. 2018) conducted an inventory survey encompassing the sewer line corridor of the current project area and adjacent lands. A full pedestrian survey was followed by the excavation of 11 test trenches. No previously unknown historic properties were uncovered; this was attributed to the intensive agricultural use in the Late Post-Contact Period and modern construction activity (O'Claray-Nui et al. 2018).

The current AMP follows a previous archeological field inspection conducted by Scientific Consultant Services, Inc (Dega 2020). According to cultural practitioner and lineal descendant of Waikapū Ahupua'a Hōkūao Pellegrino, in the northwestern portion of the project area there once was "very important stone called Pōhāko'i." According to Pellegrino, the artifact was in the first place a grinding stone (*hoana*) for adzes (*ko'i*), and secondly a boundary marker (*palena āina*) for the northern end of Waikapū Ahupua'a. Land Grant 2952 (to David Crowningburg) and LCA 433 (to William Crowningburg) specify the stone as a boundary marker. According to Pellegrino, Pōhāko'i is also mentioned in traditional songs (*mele*), chants (*oli*), and legends (*mo'olelo*).

SCS archeologist Ian Bassford conducted a survey under the supervision of Michael Dega over a large segment in the northwestern portion of the project area. The land is now used for small scale cattle ranching, and the surface and landscape composition of the project area have been significantly modified by that and previous industrial-level agricultural activities. Unfortunately, Pōhāko'i was not discovered, and there was no evidence for it among the rock piles or elsewhere on the surface. Dega recommends further monitoring during the sitework ground-disturbing activities in hopes of locating the stone (Dega 2020).

## **MONITORING CONVENTIONS AND METHODOLOGY**

Archaeological monitors will adhere to the following guidelines during monitoring as outlined in HAR §13-279-4:

1. On-site, full time archaeological monitoring will be conducted for all ground-disturbing activities during the sitework improvements.
2. If significant deposits or features are identified and additional field personnel are required, the archaeological consultants conducting the archaeological monitor will notify the contractor or representatives before additional personnel are brought to the site.
3. One archaeological monitor will be present per each piece of machinery conducting ground-altering activities within the project area.
4. If non-burial cultural deposits and/or features are identified during Monitoring, the on-site archaeologist will have the authority to temporarily suspend construction activities at the find location so the deposits or features may be identified, documented, and assessed for significance. The SHPD History and Culture Branch and the Archaeology Branch will both be consulted regarding appropriate documentation and assessment. Documentation will include collecting geospatial data via global positioning (GPS) to plot the find location, recording the GPS location on site map. Geospatial data will be collected utilizing a Trimble Geo7x for sub-meter accuracy to record identified significant historic properties. Documentation will also include, photographing with scale and north arrow and illustrating the deposits or features in planview and/or profile view (depending on nature of exposure), recording stratigraphy using USDA soil survey manual terminology and attributes and Munsell soil colors, and plotting and collection of artifacts and soil samples; stratigraphic profiles will measure a minimum of 2 m across. Construction work and/or back-filling of excavation pits or trenches will occur in the location of find only after all archaeological documentation has been completed. Former A-horizons will be sampled if archeological or historical cultural materials are observed.
5. Stratigraphy will also be recorded and photographed with north arrow and scale at selected locations to provide representative stratigraphic data across the area of potential effect. These locations will also be recorded and represented on a current USGS topographic quadrangle map. Full trench profiles will be collected from across the project area. Both vertical and horizontal scales will be recorded.
6. If sand deposits are identified during archaeological monitoring, work will proceed with a maximum of 6-inch passes, a bladed bucket will be used, and the archaeological monitoring will ensure the project will proceed at a pace to adequately allow the monitor to identify potential burial sites.
7. In the event that human remains (burial or isolated, displaced skeletal elements) are inadvertently encountered, all work in the immediate area of the find will cease, the area and human remains will be secured, and the archaeologist will immediately notify the police, SHPD (archaeologist and burial sites specialist staff), and the island burial council.



Treatment of the human remains (including archaeological documentation) shall be in accordance with Hawaii Revised Statutes §6E-43.6, Hawaii Administrative Rules §13-300-40, and SHPD directives. Work will resume in the area of the inadvertent find only following SHPD approval.

8. To ensure that contractors and the construction crew are aware of this Archaeological Monitoring Plan and possible site types to be encountered on the parcel, a brief coordination meeting will be held between the construction team and monitoring archaeologist prior to initiation of the project. The construction crew will also be informed as to the possibility that human burials and/or cultural deposits or features could be encountered and how protection and mitigation should proceed if they observe such remains.
9. The archaeologist will provide all coordination with the contractor, SHPD, and any other groups involved in the project. The archaeologist will coordinate all monitoring and sampling activities with the safety officers for the contractors to ensure that proper safety regulations and protective measures meet compliance. Close coordination will also be maintained with construction representatives in order to adequately inform personnel of the possibility that open archaeological units or trenches may occur in the project area.
10. As necessary, verbal and/or written reports will be made to SHPD and any other agencies as requested.

## **LABORATORY ANALYSIS**

All non-burial artifacts and samples collected during the project will undergo analysis at the SCS Maui laboratory in Pukalani, Maui. Photographs, illustrations, and all paper and electronic documents accumulated during the project will be curated at the laboratory of the archaeological consultants conducting the monitoring. All collected artifacts and midden samples will be cleaned, sorted, counted, weighed (metric), and analyzed (both qualitative and quantitative data), with all data recorded on standard laboratory forms. Midden samples will be minimally identified to major class (e.g., bivalve, gastropod mollusk, echinoderm, fish, bird, and mammal). Digital photographs with scales will be taken of a representative sample of the diagnostic artifacts. Tables and text discussing the artifact and sample results will be provided in the report, along with appropriate digital photographs.

Samples (wood charcoal, shell, non-human bone, *kukui* nut) identified as potentially suitable for dating from an undisturbed context (e.g., cultural layer, pit feature) shall be considered for radiocarbon dating in consultation with SHPD and the landowner. Prior to submittal, potential wood charcoal samples shall first be submitted to International Archaeological Research Institute, Inc. (IARII) for wood taxa identification. Only samples identified as short-lived endemic or Polynesian-introduced species will be selected for dating purposes.

All stratigraphic profiles and plan view maps of identified historic properties (e.g., sites, cultural layers, features) shall be drafted for presentation in the final report. Photographs of project work,

including overviews, and of individual profiles, cultural layers, and features shall also be included in the final report.

### **CURATION**

If requested by the landowner, all collected non-burial materials will be curated in the laboratory of the archaeological consultants conducting the monitoring until a final disposition repository location is determined in consultation with the landowner and the SHPD.

### **REPORTING**

All historic properties (non-burial and burial) identified and/or further documented during archaeological monitoring (e.g., cultural layer, pit features, buried walls) shall be assessed for site significance per HAR §13-275-6, Criteria *a* through *e*. This information shall be included in the final report, along with an appropriate recommendation for future mitigation, if appropriate.

Within 30 days of completion of archaeological monitoring fieldwork, SCS will submit for review and acceptance a brief archaeological monitoring letter report of findings as specified in HAR §13-282-3(f)(1). Afterward, an archaeological monitoring report meeting the requirements of HAR §13-279-5 will be submitted to SHPD for review and acceptance within 60 days.

## REFERENCES

- Bates, George W.  
1854 *Sandwich Island Notes*. Harper & Brothers Publishers. New York.
- Chinen, Jon J.  
1958 *The Great Mahele: Hawaii's Land Division of 1848*. University of Hawai'i Press, Honolulu, Hawai'i.  
1961 *Original Land Titles in Hawaii*. Library of Congress Catalogue Card No. 61-17314. <http://www.llmc.com/openaccess/docdisplay5.aspx?textid=39920489> Accessed October, 2020
- Clark, John R. K.  
1989 *The Beaches of Maui County: Maui, Moloka'i, Lana'i, Kaho'olawe*, second edition. University of Hawaii Press, Honolulu.
- Colin, Brian, and Hallett H. Hammatt  
1996 *Archaeological Monitoring Report: Maui Community Correctional Center Work Furlough Center, Wailuku, Maui (TMK: 3-8-46: 6)*. Cultural Surveys Hawaii, Kailua, Hawaii.
- Cordy, Ross H.  
1981 *A Study of Prehistoric Social Change: The Development of Complex Societies in the Hawaiian Islands*. Academic Press, New York.
- Costa-Pierce, Barry A.  
1987 "Aquaculture in Ancient Hawaii" *BioScience*, 37:5, 320–331
- County of Maui  
2012 M39006. TMK map. Uploaded to [www.mauicounty.gov](http://www.mauicounty.gov) on May 9, 2012
- Creed, Victoria S.  
1993 *Settlement Pattern for Waikapū, Wailuku District, Maui, Hawaii*. Volume 1. Cultural Surveys Hawaii. Kailua, Hawai'i.
- Daws, Gavan  
1974 *Shoal of Time*. University of Hawai'i Press, Honolulu, Hawai'i.
- Dega, Michael F.  
2003 *Archaeological Inventory Survey in the Intermediate Dry Zone of Wailuku Wailuku Ahupua'a, Wailuku (Kula) District, Maui Island, Hawai'i (TMK: 3-5-001: portion of 001)*. Scientific Consultant Services, Inc., Honolulu.  
2004 *An Intermediate Zone Archaeology Survey Located in Wailuku, Wailuku Ahupua'a, Wailuku (Kula) District, Maui Island, Hawai'i [TMK:3-5-001:portion of 001]*. Scientific Consultant Services, Inc., Honolulu, Hawai'i.

- 2020 *Archeological Field Inspection DHHL Pu'unani Homestead, Waikapu, Maui, Portions of TMK: (2) 3-5-002:002 & 003*. Scientific Consultant Services, Inc., Honolulu.
- Donham, Theresa K  
 1992 *Human Skeletal Remains Discovered at the Maui Homeless Shelter Construction Site (50-50-04-2916), Wailuku, Maui*. State of Hawai'i Department of Land and Natural Resources, State Historic Preservation Division, Wailuku, Hawai'i.
- Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens  
 1972 *Soil Survey of the Islands of Kaua'i, O'ahu, Maui, Molokai, and Lanai, State of Hawai'i*. USDA Soil Conservation Service, GPO, Washington, D.C.
- Fornander, Abraham  
 1916/1917 *Fornander Collection of Hawaiian Antiquities and Folk-Lore*. Bishop Museum Press
- Fredericksen, Erik M., and Demaris L. Fredericksen  
 1995 *An Archaeological Inventory Survey of a 15 Acre Parcel along Waiale Road, Wailuku Ahupua'a, Wailuku District, Maui Island (TMK 3-8-46:21)*. Xamanek Researches, Pukalani, Hawai'i.  
 1997 *Archaeological Inventory Survey of the Mahalani Street Extension Project TMK: 3-8-46 por. 1,2,3,4,17,18,30 and 3-8-07:por. 121 Wailuku Ahupua'a, Wailuku District, Maui Island*. Xamanek Researches, Pukalani, Hawai'i.
- Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delaporte.  
 2013 Online Rainfall Atlas of Hawai'i. *Bull. Amer. Meteor. Soc.* 94, 313-316, doi: 10.1175/BAMS-D-11-00228.1. Accessed October 2020.
- Giambelluca, T.W., X. Shuai, M.L. Barnes, R.J. Alliss, R.J. Longman, T. Miura, Q. Chen, A.G. Frazier, R.G. Mudd, L. Cuo, and A.D. Businger.  
 2014 *Evapotranspiration of Hawai'i*. Final report submitted to the U.S. Army of Corps of Engineers – Honolulu District, and the Commission on Water Resource Management, State of Hawai'i. Accessed October 2020.
- Google Earth  
 2019 Aerial photographs of Hawai'i. Google Inc., 1600 Amphitheatre Parkway, Mountain View, California. Available at [www.google.com/earth.html](http://www.google.com/earth.html). Accessed April 2021.
- Guerriero, Diane, Lisa Rotunno-Hazuka, and Jeffrey Pantaleo  
 2004 *Archaeological Inventory Survey of a 50-Acre Parcel of Land, Waikapu and Wailuku Ahupua'a; Wailuku District, Maui Island TMK: 3-5-02: por. 001*. Archaeological Services Hawaii, LLC, Pu'unene, Hawai'i.

- Handy, E.S.C.  
1940 *The Hawaiian Planter*. Bishop Museum Press, Honolulu.
- Handy, E.S., and E. G. Handy.  
1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu.
- Hobdy, Robert W.  
2019 *Flora and Fauna Survey, Pu'unani Homestead Project, Waikapū, Maui*. Prepared for DDC LLC. Kokomo, Hawai'i.
- Hodara, Rachel, and Michael Dega  
2014 *Archaeological Monitoring Report for the Maui County Correctional Center Wailuku Ahupua'a, Wailuku District, Island of Maui, Hawai'i [TMK: (2) 3-8-46:05]*. Scientific Consultant Services, Inc., Honolulu, Hawai'i.
- I'i, John Papa  
1959 *Fragments of Hawaiian History*. Bishop Museum Press.
- Kamakau, Samuel M.  
1961 *Ruling Chiefs of Hawaii*. The Kamehameha Schools Press, Honolulu, Hawai'i.
- Kame'eleihiwa, Lilikala  
1992 *Native Land and Foreign Desires: How Shall We Live in Harmony?* Bernice Pauahi Bishop Museum Press, Honolulu, Hawai'i.
- Kelly, Marion  
1983 *Na Māla o Kona: Gardens of Kona*. Report 83-2, Department of Anthropology. Bishop Museum. Bishop Museum Press, Honolulu, Hawai'i.
- Kirch, Patrick V.  
1985 "The Chronology of Early Hawaiian Settlement." *Archaeology and Physical Anthropology in Oceania* 9:110-119.  
2010 *How Chiefs Became Kings: Divine Kingship and the Rise of Archaic States in Ancient Hawaii*. University of California Press, Berkeley.  
2011 "When Did the Polynesians Settle Hawai'i? A Review of 150 Years of Scholarly Inquiry and a Tentative Answer," in *Hawaiian Archaeology*. 12 (2011) pp. 3-26.
- Kirch, Patrick V. and Marshall Sahlins  
1992 *Anahulu: The Anthropology of History in the Kingdom of Hawaii*. Vol. 1 and 2. University of Chicago Press, Chicago, Illinois.
- Kolb, Michael J., Patty J. Conte, and Ross H. Cordy  
1997 *Kula: The Archaeology of Upcountry Maui in Waiohuli and Keokea: An Archaeological and Historical Settlement Survey in the Kingdom of Maui*. Prepared

for The Department of Hawaiian Home Lands. MS. on file, State of Hawai‘i, Honolulu, Hawai‘i.

Kuykendall, Ralph S.

1938 *The Hawaiian Kingdom: 1778-1854, Vol. 1*. University of Hawai‘i Press, Honolulu, Hawai‘i.

Lucas, Paul F. Nahoa

1995 *A Dictionary of Hawaiian Legal Land-terms*. Native Hawaiian Legal Corporation. University of Hawai‘i Committee for the Preservation and Study of Hawaiian Language, Art and Culture. University of Hawai‘i Press, Honolulu, Hawai‘i.

Lyons, C.J.

1875 Land Matters in Hawaii. *The Islander*, Vol. I, Honolulu, Hawai‘i.

Monahan, Christopher M.

2003 *An Archaeological Assessment Report on Approximately 30 Acres of Land on Two Undeveloped Lots in Wailuku Ahupua‘a, Wailuku District, Maui Island, Hawai‘i [TMK:3-5-01:61, 63, & 66]*. Prepared for Stanford Carr, Inc. Scientific Consultant Services, Inc., Honolulu, Hawai‘i.

Morawski, Lauren, Donna M. Shefcheck, and Michael F. Dega

2006 *An Archaeological Monitoring Report for Kehalani Subdivision and Offsite Improvements, Wailuku and Waikapu Ahupua‘a, Wailuku District, Island of Maui, Hawai‘i [TMK: 3-5-02:01]*. Prepared for Stanford Carr, Inc. Scientific Consultant Services, Inc., Honolulu, Hawai‘i.

National Cooperative Soil Survey.

Web Soil Survey. <http://websoilsurvey.sc.egov.usda.gov>. Accessed October 2020.

Nokes, J. Richard

1998 *Almost a Hero: The Voyages of John Meares, R.N., to China, Hawaii, and the Northwest Coast*. Washington State University Press. Pullman, WA.

O’Claray-Nui, Jenny, Lisa J. Rotunno-Hazuka, and Jeffrey Pantaleo

2018 *Final Archaeological Assessment Report for a 15.0 acre Parcel Located Along Waiale Road in Wailuku Ahupua‘a and District Pū‘ali Komohana Moku Island of Maui TMK: (2) 3-5-001:064*. Archaeological Services Hawaii, LLC., Pu‘unēnē, Hawai‘i.

Office of Hawaiian Affairs

2016 Kipuka Online Database (<http://kipukadatabase.com/kipuka>). Accessed October 2020.



Pantaleo, Jeffrey and Aki Sinoto

- 1996 *Archaeological Subsurface Sampling of the Proposed Maui Lani Development Phases I and IA, Wailuku Ahupua‘a, Wailuku District, Maui Island*. Aki Sinoto Consulting, Honolulu, Hawai‘i.

Perzinski, David and Michael F. Dega

- 2012 *An Archaeological Inventory Survey of a 2.0 Acre Parcel in Waikapu Ahupua‘a, Wailuku District, Maui Island, Hawai‘i [TMK: 3-05-002:015]*. Scientific Consultant Services, Inc., Honolulu, Hawai‘i.

Rotunno-Hazuka, L., L. Somer, K. Flood, D. Lazzaro, S. Clark, and B. Dixon

- 1995 *Historical Research for the Proposed Maui Lani Project and Test Excavations at Site 50-50-04-2797, Wailuku, Maui*. Bernice Pauahi Bishop Museum, Honolulu, Hawai‘i.

Rotunno, Lisa J., and Paul L. Cleghorn

- 1990 *Archaeological Reconnaissance Survey of TMK 3-8-07: 2 and 110*. Wailuku, Maui. Bishop Museum, Honolulu, Hawai‘i.

Speakman, Jr., Cummins E.

- 1978 *Mowee: An Informal History of the Hawaiian Island*. Pueo Press, San Rafael.

Sterling, Elspeth P.

- 1998 *Sites of Maui*. Bishop Museum Press, Honolulu, Hawai‘i.

Stokes, John F.G.

- 1909–1916 *Maui Heiau*. Manuscript on file at the Bernice Pauahi Bishop Museum, Honolulu.

Thrum, Thomas

- 1909 “Heiaus and Heiau Sites Throughout the Hawaiian Islands.” *Hawaiian Almanac and Annual for 1909*. Honolulu, Hawai‘i.

Tome, Guerin, and Michael Dega

- 2010 *An Archaeological Inventory Survey of Approximately 607 Acres of Land in Waiale, Wailuku and Waikapu Ahupuaa, Wailuku District, Island of Maui, Hawaii. TMK: (2) 3-8-005:023 (por.)*. Scientific Consultant Services, Inc., Honolulu, Hawai‘i.

U.S. Geological Survey

- 1955 *Wailuku, HI*. Maui USGS 7.5-minute topographic quadrangle. Available at USGS Information Services, Box 25286, Denver, Colorado  
2017 *Wailuku, HI*. Maui USGS 7.5-minute topographic quadrangle. Available at USGS Information Services, Box 25286, Denver, Colorado

Waihona Aina Database

2020 <https://www.waihona.com>. Accessed October 2020

Walker, Winslow

1931 *Archaeology of Maui*. Manuscript at Maui Historical Society, Wailuku, Hawai‘i.

Wilson, Jon and Michael F. Dega

2005 *Archaeological Inventory Survey Report on 215.800 Ares Located in Waikapu Ahupua‘a, Wailuku District, Maui Island, Hawai‘i [TMK (2) 3-5-02: 02 and 03]*. Scientific Consultant Services, Inc., Honolulu, Hawai‘i.

## **APPENDIX A: SHPD LETTER**

DAVID Y. IGE  
GOVERNOR  
STATE OF HAWAII

JOSH GREEN  
LT. GOVERNOR  
STATE OF HAWAII

RECEIVED  
LAND DEVELOPMENT  
DIVISION

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RECEIVED  
LAND DEVELOPMENT  
DIVISION

WILLIAM J. AHLA, JR.  
CHAIRMAN  
HAWAIIAN HOMES COMMISSION

TYLER I. GOMES  
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P.O. BOX 1879  
HONOLULU, HAWAII 96805

March 27, 2020

Ms. Suzanne D. Case, Chairperson  
Department of Land and Natural Resources  
1151 Punchbowl St.  
Honolulu, Hawaii 96813

Dear Chairperson Case:

Subject: Pu'unani Homestead Subdivision  
TMK: (2) 3-5-002:002(por.) and (2) 3-5-001:064(por.)

SHPD acceptance of *Archaeological Inventory Survey Report on 215.800' acres located in Waikapu Ahupua'a Wailuku District, Maui Island, Hawai'i [TMK (2) 3-5-002: 02 and 03]* (Wilson and Dega, October 2005) with SHPD Letter dated November 18, 2005, (SHPD Log Number 2005.2398) and *Archaeological Assessment Report for a 15.0 acre parcel located along Waiale Road in Wailuku Ahupua'a and District, Pū'ali Komohana Moku, Island of Maui [TMK (2) 3-5-001:064]* (O'Claray-Nu et al., May 2017) with SHPD Letter dated October 18, 2017 (SHPD Log No. 2017.02039)

TMK: (2) 3-5-002:002(por.)

The Department of Hawaiian Home Lands (DHHL) acknowledges State Historic Preservation Division's (SHPD) November 18, 2005, letter regarding SHPD's review of the report entitled *Archaeological Inventory Survey Report on 215.800 acres located in Waikapu Ahupua'a Wailuku District, Maui Island, Hawai'i [TMK (2) 3-5-002: 02 and 03]* (Wilson and Dega, October 2005). This AIS covered both the parcel for DHHL's Pu'unani Homestead Subdivision and the 148 acre mauka parcel, owned by others. DHHL concurs with SHPD's previous project effect determination under the HRS 6E jurisdiction as described below:

- The AIS documented 7 historic properties within the project area/area of potential effect (APE), as confirmed in the November 18, 2005 SHPD Letter. In accordance with HAR§13-275-6, all 7 sites are significant under Criterion d. No further work is recommended for the 7 sites as these sites have been adequately documented.

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& NATURAL RESOURCES  
STATE OF HAWAII

- DHHL's HRS 6E project effect determination is "No Historic Properties Affected" pursuant to HAR §13-275-7(a)(1). The proposed project will have no effect on significant historic properties.
- Based on SHPD's November 18, 2005, letter, SHPD has accepted the AIS (Wilson and Dega, October 2005), the historic preservation review process is concluded, and no further archaeological mitigation is necessary.
- DHHL requests SHPD's updated concurrence with DHHL's HRS 6E project effect determination of "No Historic Properties Affected."
- A Native Hawaiian organization may enter into an agreement with SHPD. DHHL acknowledges that the development of a memorandum of agreement (MOA) with SHPD and other signatories could be mutually beneficial to the parties involved. DHHL will work with SHPD upon updated acceptance of the AIS and concurrence with 6E project effect determinations to assess if a MOA should be developed.

TMK: (2) 3-5-001:064(por.)

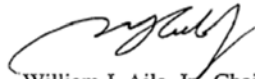
DHHL acknowledges SHPD's October 18, 2017, letter regarding SHPD's review of the report entitled *Archaeological Assessment Report for a 15.0 acre parcel located along Waiale Road in Wailuku Ahupua'a and District, Pū'ali Komohana Moku, Island of Maui [TMK (2) 3-5-001:064]* (O'Claray-Nu et al., May 2017). DHHL's work within the portion of TMK (2) 3-5-001:064 will be limited to only sewerline improvements. DHHL concurs with SHPD's previous project effect determination under the HRS 6E jurisdiction as described below:

- SHPD's determination is no historic properties affected pursuant to HAR§13-284-7 and no historic properties have been identified within the project area. However, SHPD recommends archaeological monitoring for identification purposes.
- SHPD anticipates receiving for review and acceptance an archaeological monitoring plan that satisfies the requirements of HAR§13-279-4.
- DHHL's HRS 6E proposed commitment is archaeological monitoring for identification purposes during all DHHL project-related ground disturbances within the portion of TMK (2) 3-5-001:064.
- DHHL requests SHPD's concurrence with DHHL's HRS 6E project effect determination of "No Historic Properties Affected."

Chairperson Case  
March 27, 2020  
Page 3

Mahalo for the opportunity to provide comments. Should you have any questions, please call me at (808) 620-9501 or Stewart Matsunaga, Acting Administrator, Land Development Division at (808) 620-9283.

Aloha,



William J. Aila, Jr., Chairman  
Hawaiian Homes Commission

☐ CONCUR – The HRS 6E project effect determination is “No Historic Properties Affected” as described herein.

*Alan Downer*

---

Suzanne D. Case, Chairperson

Enclosures – November 18, 2005, SHPD Letter (DOC NO: 0511MK22) and October 18, 2017, SHPD Letter (DOC NO: 1710MBF07)

c: Dr. Alan Downer, Administrator  
State Historic Preservation Division

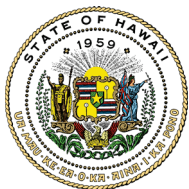
Dr. Susan Lebo, Archaeology Branch Chief  
State Historic Preservation Division

County of Maui Planning Dept.  
DHHL Planning Office  
DHHL Maui District Office



**APPENDIX B: PORTION OF THE PRELIMINARY CONSTRUCTION  
PLANS**





## STATE OF HAWAII

# SPECIAL CONDITIONS

### EXHIBIT C (SC-37: PROJECT SIGN)

#### PROJECT SIGN SPECIFICATIONS

##### LETTER STYLE

COPY IS CENTERED AND SET IN ADOBE TYPE FUTURA HEAVY. IF THIS SPECIFIC TYPE IS NOT AVAILABLE, FUTURA DEMI BOLD MAY BE SUBSTITUTED. COPY SHOULD BE SET AND SPACED BY A PROFESSIONAL TYPESETTER AND ENLARGED PHOTOGRAPHICALLY FOR PHOTO STENCIL SCREEN PROCESS.

##### ART WORK

CONSTANT ELEMENTS OF THE SIGN LAYOUTS -- FRAME, OUTLINE, STRIPE, AND OFFICIAL STATE INFORMATION -- MAY BE DUPLICATED FOLLOWING WORKING DRAWING MEASUREMENTS OR BE REPRODUCED AND ENLARGED PHOTOGRAPHICALLY USING A LAYOUT TEMPLATE IF PROVIDED. THE STATE OF HAWAII" MASTHEAD SHOULD BE REPRODUCED AND ENLARGED AS INDICATED USING THE ARTWORK PROVIDED.

##### TITLES

THE SPECIFIC MAJOR WORK OF THE PROJECT UNDER CONSTRUCTION IS EMPHASIZED BY USING 3-3/4" TYPE (OR AS SPECIFIED BY DHHL), ALL CAPITALS. SECONDARY INFORMATION SUCH AS LOCATIONS OR BUILDING USES 2-1/4" TYPE, ALL CAPITALS. OTHER RELATED INFORMATION OF LESSER IMPORTANCE USES 2-1/4" (CAPITAL HEIGHT) TYPE IN LOWER CASE LETTERS. ALL LINES OF TYPE SHOULD NOT EXCEED THE WIDTH OF THE 6'—2" STRIPE.

##### MATERIALS

PANEL IS 3/4" THICK, "AC" EXTERIOR GRADE FIR PLYWOOD WITH RESIN BONDED SURFACES ON BOTH SIDES.

##### PAINT AND INKS

SCREEN PAINT INKS ARE MATTE FINISH. PAINTS ARE SATIN FINISH, EXTERIOR GRADE. REFERENCE TO AMERITONE COLOR KEY PAINT IS FOR COLOR WHICH MATCH ONLY.

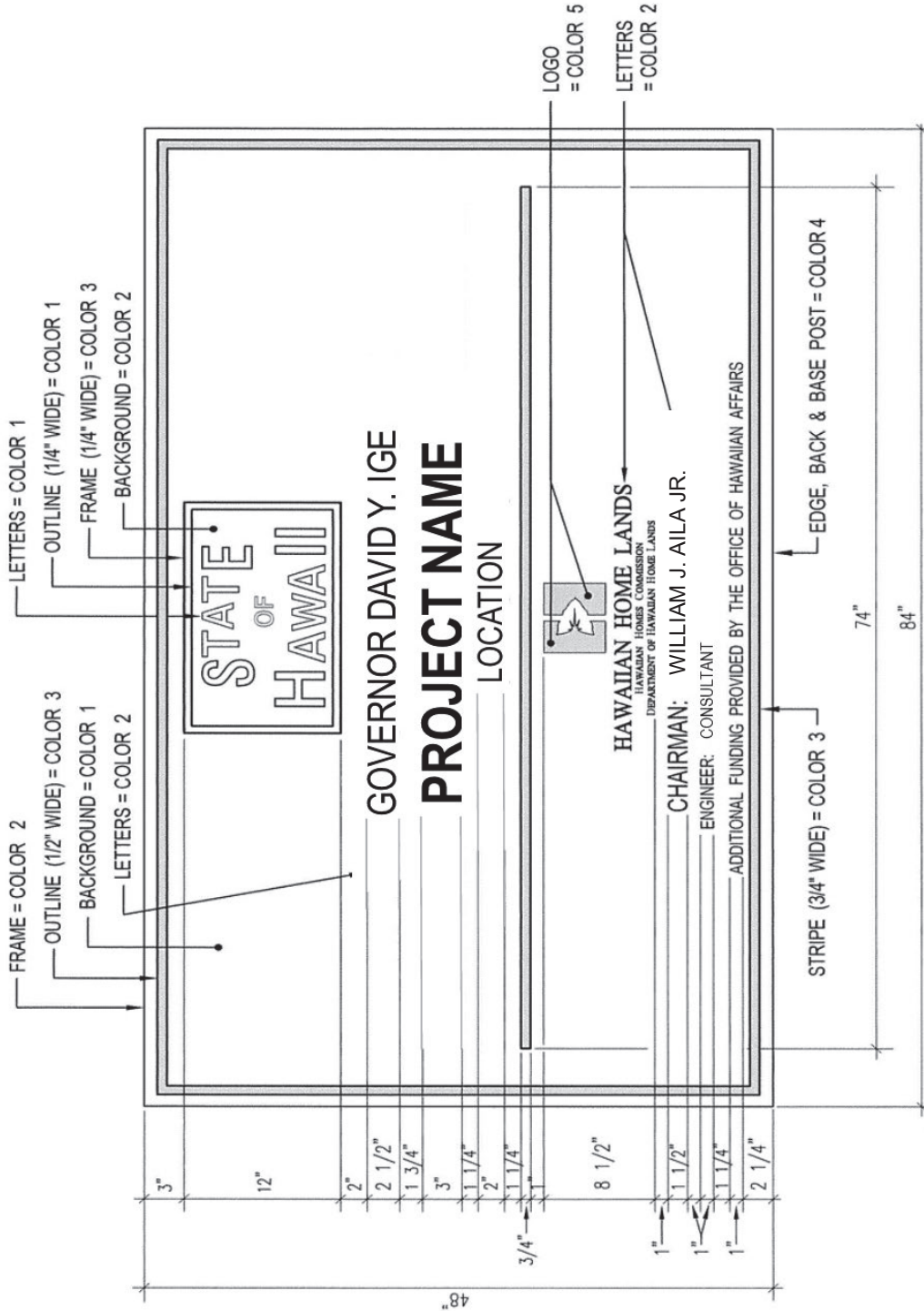
- |        |    |                       |
|--------|----|-----------------------|
| COLOR: | 1. | 1BL10A BOHEMIAN BLUE  |
|        | 2. | 2H16P SOFTLY (WHITE)  |
|        | 3. | 2VR2A HOT TANGO (RED) |
|        | 4. | 1M52E TOKAY (GRAY)    |

REFERENCE TO PPG COLOR KEY PAINT IS FOR COLOR WHICH MATCH ONLY.

- |        |    |                    |
|--------|----|--------------------|
| COLOR: | 5. | 455-7 DEEP EMERALD |
|--------|----|--------------------|



# STATE OF HAWAII SPECIAL CONDITIONS



- COLORS:
1. 1BL10A Bohemian Blue
  2. 2H16P Softly (White)
  3. 2VR2A Hot Tango (Red)
  4. 1M52E Tokay (Grey)
  5. 455-7 Deep Emerald

NOTE: Number of signs required 1

## SIGN LAYOUT DETAIL

NOT TO SCALE