STATE OF HAWAI'I

DEPARTMENT OF HAWAIIAN HOME LANDS

LAND DEVELOPMENT DIVISION

March 11, 2019

Date

ADDENDUM NO. 2

TO

INVITATION FOR BIDS

FOR

IFB-19-HHL-009

HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

HO'OLEHUA, ISLAND OF MOLOKA'I

NOTICE TO ALL PROSPECTIVE BIDDERS

This Addendum is hereby made a part of the Contract Documents for **IFB-19-HHL-009**, and it shall amend the said contract documents as detailed within this Addendum document.

APPROVED:

Date: 3/11/19

Stewart T. Matsunaga, Acting Administrator
Land Development Division
Department of Hawaiian Home Lands

Please execute and immediately return the receipt below to the Department of Hawaiian Home Lands via facsimile to: **(808) 620-9299, Attention: Mitchell H. Kawamura, Project Manager, Land Development Division**.

Receipt of Addendum No. 2 for the **IFB-19-HHL-009**, is hereby acknowledged.

Signed

Date

Print Name

Title

Name of Firm/Company

ADDENDUM NO. 2

IFB-19-HHL-009

HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

HO'OLEHUA, MOLOKA'I, HAWAI'I

General

1. The Minutes from the Pre-Bid Conference held at the Lanikeha Community Center on February 21, 2019 and the Sign-In sheet are attached.

2. The Archaeological Monitoring Plan (AMP) and the SHPD AMP Acceptance letter dated July 30, 2018 are attached.

3. The Geotechnical Investigation Report by Hirata and Associates dated January 23, 2018 is attached.

4. The National Pollutant Discharge Elimination System (NPDES) Notice of General Permit Coverage, dated October 2, 2018 and Notice of Administrative Extension dated November 9, 2018 are attached.

5. The DRAFT Storm Water Pollution Prevention Plan (SWPPP) dated March 5, 2018 is attached.

6. CONTRACTOR'S BID SUBMITTAL - Delete BID OFFER FORM in its entirety and replaced with attached Revised BID OFFER FORM (Addendum No. 2, March 2019).

7. REQUESTS FOR INFORMATION: See attached Request for Information and Substitution Log.

Plans and Specifications

Architecture

1. PLANS: DRAWING T-103 PROJECT INFORMATION CODES AND CODE DIAGRAMS, SYMBOLS – Added Fire Extinguisher Cabinet (FEC) symbols to floor plan to match specification call-out for FEC in Multi-Purpose Room, Classroom and kitchen.

2. PLANS: DRAWING A-702 COLOR MATERIAL AND ROOM FINISH SCHEDULE – Added signage schedule for each room to coordinate with specifications SECTION 10440 – SIGNAGE.

3. SPECIFICATIONS: SECTION 05500 METAL FABRICATIONS – Revised to specify stair nose.

4. SPECIFICATIONS: SECTION 10440 SIGNAGE – Revised to add signage type 1-5 to be used on signage schedule added to PLAN sheet A-702 COLOR MATERIAL AND ROOM FINISH SCHEDULE.

Civil

5. PLANS: DRAWING C001 TITLE SHEET – Deleted Maui County DWS Signature block (Not applicable).

6. PLANS: DRAWING C100 DEMOLITION PLAN – Revise label regarding relocation or replacement of existing trees. Trees marked will be removed and disposed of and will not be relocated or replaced.

7. PLANS: DRAWING C201 SITE PLAN – Deleted removed/relocated trees; deleted new six-inch sewer line connection existing sewer manhole near Lanikeha Community Center; deleted new sewer manholes (2) and clean-out-to-grade (1) along deleted six-inch sewer line; revised limit of disturbance; added new Individual Wastewater System for Hoolehua Veteran and Homestead Resident's Center.

8. PLANS: DRAWING C300 FINISH GRADE PLAN – Deleted removed/relocated trees; deleted new sewer manholes (2) and clean-out-to-grade (1); revised limit of disturbance; added new Individual Wastewater System for Hoolehua Veteran and Homestead Resident's Center.

9. PLANS: DRAWING C301 EROSION CONTROL PLAN – Deleted removed/relocated trees; revised limit of disturbance.

10. PLANS: DRAWING C500 UTILITY PLAN – Deleted removed/relocated trees; deleted new six-inch sewer line connection existing sewer manhole near Lanikeha Community Center; deleted new sewer manholes (2) and clean-out-to-grade (1) along deleted six-inch sewer line; revised limit of disturbance; added new Individual Wastewater System for Hoolehua Veteran and Homestead Resident's Center.

11. PLANS: DRAWING C501 UTILITY PROFILE – Deleted new six-inch sewer line profile and manholes.

12. PLANS: DRAWING C502 UTILITY DETAILS – Deleted sewer channelization and pipe penetration details.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

BID OFFER FORM FOR

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

HOOLEHUA, ISLAND OF MOLOKAI, HAWAII

TAX MAP KEY
(2) 5-2-015:053

IFB NO.: IFB-19-HHL-009

Chairman
Hawaiian Homes Commission
Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, Hawaii 96707

The undersigned has carefully examined, read, and understands the terms and conditions in the Plans and Specifications, Special Conditions attached hereto, DHHL Construction General Conditions, and General Conditions specified in the Invitation for Bid (IFB) No. IFB-19-HHL-009. The State of Hawaii's (State) Contract for Goods and Services Based on Competitive Sealed Bids AG-003 Rev. 6/22/2009, AG-008 103D General Conditions, are included by reference and made part hereof and available upon written request to the Procurement Officer. The undersigned herby submits the following offer to perform the work for IFB No. IFB-19-HHL-009 as specified herein, all in accordance with the true intent and meaning thereof.

The undersigned understands and agrees that:

1. The State reserves the right to reject any and all offers and to waive any items that are defective when, in the State's opinion, such rejection or waiver will be in the best interest of the State. A solicitation may be rejected in whole or part when in the best interest of the State.

2. If awarded the contract, all services will be in accordance with Hawaii Revised Statutes (HRS) § 103-55.5.

3. In submitting this offer, the Offeror is not in violation of HRS Chapter 84, concerning prohibited State contracts.

4. By submitting this offer, the Offeror certifies that the offer was independently arrived at without collusion and the Offeror did not participate in any practices to restrict competition.

5. It is understood that the failure to receive any addendum shall not relieve the Offeror from any obligation under this IFB.

Date:_____

The undersigned represents that it is: **(Check ✓ one only)**

□ A **Hawaii business** incorporated or organized under the laws of the State of Hawaii; **OR**

□ A **Compliant Non-Hawaii business** not incorporated or organized under the laws of the State of Hawaii, is or shall be registered at the State of Hawaii Department of Commerce and Consumer Affairs Business Registration Division (DCCA-BREG) to do business in the State of Hawaii.

State of incorporation: _____

Offeror is:

□ Sole Proprietor □ Partnership □ Corporation □ Joint Venture □ Other: _____

Federal ID No.: _____

Hawaii General Excise Tax ID No.: _____

Telephone No.: _____

Fax No.: _____

E-Mail Address.: _____

Payment address (other than street address below)

_____

(Street Address, City, State, Zip Code)

Business address

_____

(Street Address, City, State, Zip Code)

Respectfully submitted:

_____

Authorized (Original) Signature

_____

Name and Title (Please Type or Print)

*_____

Exact Legal Name of Company (Offeror)

*If Offeror shown above is a "dba" or a "division" of a corporation, furnish the exact legal name of the corporation under which the awarded contract will be executed:

_____

The following bid is hereby submitted for the Hoolehua Veteran and Homestead Resident's Center to the Department of Hawaiian Home Lands.

Item No.	No. of Units	Description	Unit Price	Unit Total
1.	L.S.	Mobilization Lump Sum		$ _____
2.	L.S.	Temporary Erosion and Sediment Control, including installing and maintaining all temporary erosion and sediment control measures as specified in the construction plans, and removing all measures upon full establishment of permanent vergetative cover and permanent erosion control measures. Lump Sum		$ _____
3.	L.S.	Archaelogical services, including monitoring and final report. Lump Sum		$ _____
4.	L.S.	Demolish miscellaneous concrete structures. Lump Sum		$ _____
5.	L.S.	Demolish Concrete Masonry Unit (CMU) wall. Lump Sum		$ _____
6.	L.S.	Demolish miscellaneous structures. Lump Sum		$ _____
7.	L.S.	Wind and Dust Control. Lump Sum		$ _____
8.	L.S.	Clearing and Grubbing. Lump Sum		$ _____
9.	1,200	Cu. Yds., Unclassified earthwork, excavation and embankment, inclusive of hauling and disposal of excess material. Per Cubic Yard	$ _____	$ _____

Item No.	No. of Units	Description	Unit Price	Unit Total
10.	85	Sq. Yds., 4-inch Thick Class B Concrete for Concrete Walkway Construction. Per Square Yard	$ _____	$ _____
11.	310	Tons, 3-inch Thick Asphalt Concrete State Mix IV for Roadway Construction. Per Ton	$ _____	$ _____
12.	L.S.	Furnish and install Signs and Posts (5 each) Lump Sum		$ _____
13.	L.S.	Furnish and install Pavement Marking and Concrete Wheel Stops Lump Sum		$ _____
14.	417	Lin. Ft., Furnish and install 6-inch polyvynil-chloride (PVC) pipe C900, inclusive of trench excavation, pipe cushion, backfill, disposal of excess material, copper toning wire and all necessary pipe fittings, appurtenances and restraints, in place complete Per Linear Foot	$ _____	$ _____
15.	1	Ea., Furnish and install Fire Hydrant Assembly, inclusive of trench excavation, pipe cusion, backfill, disposal of excess material, all necessary pipe fittings, appurtenances and restraints, in place complete Per Each	$ _____	$ _____
16.	1	Ea., Furnish and install 6-inch Gate Valve, 150 lbs., inclusive of excavation, backfill, disoposal of excess material, reinforced concrete block, non-corrosive straps, bolts, nuts and washers, in place complete. Per Each	$ _____	$ _____

Item No.	No. of Units	Description	Unit Price	Unit Total
17.	1	Ea., Furnish and install Valve Box, inclusive of excavation, backfill, disposal of excess material, cast-iron frame and cover and concrete slab, in place complete.		
		Per Each	$ _____	$ _____
18.	1	Ea., Furnish and install 1-inch copper service lateral and connection, inclusive of excavation, backfill, disposal of exccess material, all necessary pipe fittings and appurtenences, in place, complete.		
		Per Each	$ _____	$ _____
19.	2	Ea. Furnish and install Sewer Manhole, frame and cover, inclusive of excavation, backfill, disposal of excess material, in place complete.		
		Per Each	$ _____	$ _____
20.	L.S.	Connect new 6-inch sewer line to existing sewer manhole, inclusive of excavation, backfill, and disposal of excess material, in place, complete.		
		Lump Sum		$ _____
21.	L.S.	Site Electrical System, in place complete.		
		Lump Sum		$ _____
22.	L.S.	Modular Building, inclusive of hauling, assembly, foundation, and roof, in place complete.		
		Lump Sum		$ _____
23.	L.S.	Individual Wastewater System, inclusive of Septic Tank, Leech Field, Spreader and Ports, excavation, backfill and disposal of excess materials, in place complete.		
		Lump Sum		$ _____

Item No.	No. of Units	Description	Unit Price	Unit Total
~~24.~~	~~500~~	~~Lin. Ft., Furnish and install 6-foot high Chain Link Fence and posts, inclusive of footings, excavation, backfill and disposal of excess materials, in place complete.~~		
		~~Per Linear Foot~~	~~$ _____~~	~~$ _____~~
~~25.~~	~~L.S.~~	~~Landscaping and irrigation, in place complete.~~		
		~~Lump Sum~~		~~$ _____~~
26.	L.S.	Furniture, Fixtures and Equipment (FFE); Refer to attached FFE list for product model and description or provide equal.		
		Lump Sum		$ _____
~~27.~~	~~L.S.~~	~~Photovoltaic (PV) System~~		
		~~Lump Sum~~		~~$ _____~~
28.	3	Ea., Remove existing trees, inclusive of excavation and backfill.		
		Per Each	$ _____	$ _____
29.	L.S.	Field Office, shall be full compensation for furnishing materials, labor, tools, equipment, and incidentals necessary to construct the field office, in place complete, as required.		
		Lump Sum		$ _____

Item No.	No. of Units	Description	Unit Price	Unit Total
		DEDUCTIVE ITEMS (In order of Priority)		
~~30.~~	~~788~~	~~Sq. Ft., Removal of Covered Outdoor Lanai area from Modular Building~~ ~~Per Square Foot~~	~~$ _____~~	~~$ _____~~
~~31.~~	~~L.S.~~	~~Individual Wastewater System, inclusive of Septic~~ ~~Lump Sum~~		~~$ _____~~
~~32.~~	~~500~~	~~Lin. Ft., Furnish and install 6-foot high Chain Link~~ ~~Per Linear Foot~~	~~$ _____~~	~~$ _____~~
~~33.~~	~~L.S.~~	~~Landscaping and irrigation, in place complete.~~ ~~Lump Sum~~		~~$ _____~~
~~34.~~	~~L.S.~~	~~Furniture, Fixtures and Equipment (FFE); refer to attached FFE list for product model and description or provide equal.~~ ~~Lump Sum~~		~~$ _____~~
~~35.~~	~~L.S.~~	~~Photovoltaic (PV) System~~ ~~Lump Sum~~		~~$ _____~~
~~36.~~	~~L.S.~~	~~Field Office, shall be full compensation for furnishing materials, labor, tools, equipment, and incidentals necessary to construct the field office, in place complete, as required.~~ ~~Lump Sum~~		~~$ _____~~

Item No.	No. of Units	Description	Unit Price	Unit Total
		DEDUCTIVE ITEMS (In order of Priority)		
30.	3	Ea., Remove existing trees, inclusive of excavation and backfill. Per Each	$ _____	$ _____
31.	L.S.	Field Office, shall be full compensation for furnishing materials, labor, tools, equipment, and incidentals necessary to construct the field office, in place complete, as required. Lump Sum		$ _____
32.	L.S.	Furniture, Fixtures and Equipment (FFE); refer to attached FFE list for product model and description or provide equal. Lump Sum		$ _____

TOTAL BID AMOUNT = _____

_____Dollars ($_____).

The prices herein for the above items shall include all materials, labor, tools, equipment, machinery and all incidentals necessary, inclusive of general excise tax to install or to construct these items in place complete and in accordance with the plans and specifications contained in this IFB.

The CONTRACTOR shall complete all work as specified or indicated in the Contract Documents on or before _____ calendar days after receiving written Notice to Proceed, subject to extensions, as may be granted.

HAWAII PRODUCTS PREFERENCE

In accordance with HRS §103D-1002, the Hawaii products preference is applicable to this solicitation. Hawaii Products [are / may be] available for those items noted on the offer form. The Hawaii products list is available on the SPO webpage at http://hawaii.gov/spo, under Toolbox/QuickLinks click on Goods, Services and Construction, then click on Goods, Services and Construction for Vendors, Contractors and Service Providers, under Preferences, click on Preferences pursuant to HRS 103D Part X including Hawaii Products, then click on Preference for Hawaii Products, and select *Hawaii Products List* to view.

Offeror submitting a Hawaii Product (HP) shall identify the HP on the solicitation offer page(s). Any person desiring a Hawaii product preference shall have the product(s) certified and qualified if not currently on the Hawaii products list, prior to the deadline for receipt of offer(s) specified in the procurement notice and solicitation. The responsibility for certification and qualification shall rest upon the person requesting the preference.

Persons desiring to qualify their product(s) not currently on the Hawaii product list shall complete form SPO-038, *Certification for Hawaii Product Preference* and submit to the Procurement Officer issuing the solicitation (IFB or RFP), and provide all additional information required by the Procurement Officer. For each product, one form shall be completed and submitted (i.e. 3 products should have 3 separate forms completed). Form SPO-038 is available on the SPO webpage at http://spo.hawaii.gov/all-forms/. The manufacturers and producers must complete and submit SPO-38 to DHHL. The form must be received by DHHL on **March 2019**. Submittal by facsimile (808 620-9299) is acceptable. If DHHL receives and approves SPO-38s relating to this solicitation DHHL will issue an addendum listing the additional certified and qualified Hawaii products by **March 2019.**

Bidders may claim a Hawaii product preference for products that it manufactures or produces with its own workforce and equipment. The SPO-38, *Certification for Hawaii Product Preference*, must be submitted in accordance with the procedures described above in order for Bidder to claim a Hawaii product preference for such Hawaii products Bidder intends to use in this work.

When a solicitation contains both HP and non-HP, then for the purpose of selecting the lowest bid or purchase price only, the price offered for a HP item shall be decreased by subtracting 10% for the class I or 15% for the class II HP items offered, respectively. The lowest total offer, taking the preference into consideration, shall be awarded the contract unless the offer provides for additional award criteria. The contract amount of any contract awarded, however, shall be the amount of the price offered, exclusive of the preferences.

Change in Availability of Hawaii product. In the event of any change that materially alters the offeror's ability to supply Hawaii products, the offeror shall notify the procurement officer in writing no later than five working days from when the offeror knows of the change and the parties shall enter into discussions for the purposes of revising the contract or terminating the contract for convenience.

SCHEDULE OF ACCEPTABLE HAWAII PRODUCTS AND DESIGNATION OF HAWAII PRODUCTS TO BE USED			
ACCEPTABLE HAWAII PRODUCTS		HAWAII PRODUCTS TO BE USED Cost FOB Jobsite, Unloaded Including Applicable General Excise and Use Taxes	
Description	Manufacturer	Base Bid	Additive Alternate
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____
		$_____	$_____

It is further understood by the Bidder that if upon being granted Hawaii Products, and being awarded the contract, if the Bidder fails to use such products or meet the requirements of such preference, the Bidder shall be subject to penalties, if applicable.

APPRENTICESHIP AGREEMENT PREFERENCE

Hawaii Revised Statutes §103-55.6 (ACT 17, SLH 2009) provides for a Hawai'i Apprenticeship Preference for public works contracts having an estimated value of $250,000.00 or more. The preference shall be in the form of a 5% bid adjustment applied to the Bidder's amount for bidders that are parties to apprenticeship agreements. The estimated value of this public works contract is $250,000.00 or more and the apprenticeship agreement preference **shall** apply.

To be eligible for the preference, the Bidder shall:

1. Be a party to an apprenticeship agreement registered with the DLIR at the time the bid is made for each apprenticeable trade the Bidder will employ to construct the public works project for which the bid is being made.

    a. The apprenticeship agreement shall be registered and conform to the requirements of HRS Chapter 372.

    b. Subcontractors do not have to be a party to an apprenticeship agreement for the Bidder to obtain the preference.

    c. The Bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.

    d. If a Bidder's employee is multi-skilled and able to perform work in more than one trade (for example, a project requires a carpenter and a laborer, and the employee is a carpenter, but is also able to perform the work of a laborer), the Bidder need only be a party to the carpenter's apprenticeship agreement and does not need to be a party to the laborer's apprenticeship agreement in order to qualify for the preference. The Bidder is not "employing" a laborer, only a carpenter, and so only needs to be a party to the carpenter's apprenticeship agreement.

    e. Qualification for the preference is given on a project-by-project basis and depends upon the specific offer for a specific project. A Bidder's employees may vary from project to project and may qualify for the preference on one project but may not qualify on another project. For example, on one project, if the Bidder only employs carpenters to perform work in the carpentry and labor trades, then the Bidder only needs to be a party to the carpenter's apprenticeship agreement in order to qualify for the preference. However, on another project if the same Bidder employs both carpenters and laborers, then the Bidder will not qualify for the preference if the Bidder is only a party to the carpenter's apprenticeship agreement and not the laborer's apprenticeship agreement.

2. State the trades the Bidder will employ to perform the work;

3. For each trade to be employed to perform the work, the Bidder shall submit a completed signed original *CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17* (*Certification Form 1)* verifying the participation in an apprenticeship program registered with the State Department of Labor and Industrial Relations (DLIR);

4. The *Certification Form 1* shall be authorized by an apprenticeship sponsor of the DLIR list of registered apprenticeship programs. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor; and

5. The completed *Certification Form 1* for each trade must be submitted by the Bidder with the offer. A facsimile or copy is acceptable to be submitted with the offer; however, the completed **signed original** must be submitted within five (5) working days of the due date of the offer. If the signed original is not received within this timeframe, the preference may be denied. Previous certifications shall not apply.

Failure to comply with ALL of the conditions noted above, without exception, shall disqualify the Bidder from qualifying for, and thus receiving, benefit of the Hawai'i Apprenticeship Preference.

The *Certification Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: http://labor.hawaii.gov/wdd/.

Upon receiving *Certification Form 1*, the DHHL will verify with DLIR that the apprenticeship program is on the list of apprenticeship programs registered with the DLIR. If the program(s) are not confirmed by the DLIR, the Bidder will not qualify for the preference.

If the Bidder is certified to participate in an apprenticeship program for each trade which will be employed by the Bidder for the project, a preference will be applied to decrease the Bidder's total bid amount by five per cent (5%) for evaluation purposes.

Should the Bidder qualify for other preferences (for example, Hawaii Products Preference), all applicable preferences shall be applied to the bid amount.

While preference for Hawai'i Apprenticeship will be taken into consideration to determine the low Bidder, the contract awarded shall be the original bid amount, exclusive of any preferences. The preference is only for evaluation purposes.

The Bidder hereby certifies that it will employ the following apprenticeable trades to perform the work for this project:

LIST OF APPRENTICEABLE TRADES TO BE EMPLOYED	
TRADE	APPRENTICESHIP PROGRAM SPONSOR

(Add additional sheets if necessary)

ALL JOINT CONTRACTORS OR SUBCONTRACTORS TO BE ENGAGED ON THIS PROJECT

The Bidder certifies that the following is a complete listing of all joint Contractors or Subcontractors covered under Chapter 444, Hawaii Revised Statutes, who will be engaged by the Bidder on this project to perform the nature and scope of work indicated pursuant to Section 103D-302, Hawaii Revised Statutes, and understands that failure to comply with this requirement shall be just cause for rejection of the bid.

The Bidder further understands that only those joint Contractors or Subcontractors listed shall be allowed to perform work on this project and that all other work necessary shall be performed by the Bidder with his own employees. If no joint Contractor or Subcontractor is listed, it shall be construed that all of the work shall be performed by the Bidder with his own employees.

The Bidders must be sure that they possess and that the Subcontractors listed in the bid possess all the necessary licenses needed to perform the work for this project. The Bidder shall be solely responsible for assuring that all the specialty licenses required to perform the work are covered in his bid.

The Bidder shall include the license number of the joint Contractors or Subcontractors listed below. Failure to provide the correct names and license numbers as registered with the Contractor's Licensing Board may cause rejection of the bid submitted.

Complete Firm Name of Joint Contractor or Subcontractor	License Number	Hawaii Tax ID Number	Nature and Scope of Work to be Performed

(Add additional sheets if necessary)

METHOD OF AWARD

Bidder is required to bid on the entire project. The low Bidder shall be determined by the procedures outlined in items 1) through 4) below:

1) Prior to opening of bids, the State will determine the amount of funds available for the project. This amount will be designated the "control amount". The control amount shall be announced at, and prior to the opening of bids.

2) The Base Bid and Alternate, if any, of each Bidder will be adjusted to reflect the applicable preferences in accordance with Chapter 103D, HRS. The Alternate, if any, will then be added to the Base Bid and compared with the control amount.

3) The low Bidder shall be the Bidder having the lowest aggregate amount, within the control amount (after application of the various preferences), for the Base Bid plus the Alternate, if any.

4) If adding the Alternate, if any, would make the aggregate amount exceed the control amount for all Bidders, the low Bidder shall be the Bidder having the lowest Base Bid after application of the various preferences.

It is further understood and agreed that:

1) The Chairman reserves the right to reject any and/or all bids and waive any defects when, in his opinion, such rejection or waiver will be in the best interest of the State.

2) After determining the low Bidder, an award may be made either on the amount of the Base Bid alone, or including the Alternate (exclusive of preferences), if:

   a. It is in the best interest of the State;

   b. Funds are available at time of the award; and

   c. The combination of the Base Bid plus Alternate does not change the apparent low Bidder.

3) In the event the Base Bid for all Bidders exceed the control amount, the Chairman reserves the right to negotiate with the lowest responsible and responsive Bidder to award a contract within available funds.

4) In the event the award is made for the Base Bid alone, the Chairman reserves the right to amend the contract at a later date to include the Alternate should funds subsequently become available.

OTHER CONDITIONS

1) The liquidated damages per working day for failure to complete the work on time have been determined and are noted in the Special Conditions of the sample contract.

2) By submitting this bid, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past one (1) year.

3) By submitting this bid, the undersigned is declaring that Bidder's own organization will perform at least 20% of the contractor's work. For the purposes of this section, the Contractor's work is defined as: direct cost labor for contractor's forces; direct cost materials installed by the contractor's direct cost labor force; direct cost equipment, either owned or leased, used by the contractor's direct cost labor force; and field overhead cost to include: field supervision, field office trailer (if any), field office equipment and supplies, etc.

4) Upon the acceptance of the bid by the Chairman, the undersigned must enter into and execute a contract for the same and furnish a Performance and Payment Bond, as required by law. These bonds shall conform to the provisions of Sections 103D-324 and 325, Hawaii Revised Statutes, and any law applicable thereto.

5) The quantities given herewith are approximate only and are subject to increase or decrease.

6) 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. Payment on UNIT PRICE items will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.

7) If the product of the UNIT PRICE BID and the number of units does not equal the total amount stated by the undersigned in the Bid for any item, it will be assumed that the error was made in computing the total amount. For the purpose of determining the lowest Bidder, the stated UNIT PRICE alone will be considered as representing the Bidder's intention and the total amount bid on such items shall be considered to be the amount arrived at by multiplying the UNIT PRICE by the number of units.

8) Certification for Safety and Health Programs for Bids in Excess of $100,000. In accordance with Sections 103D-327 and 396-18, Hawaii Revised Statutes, by submitting this bid, the undersigned certifies that his firm will have a written Safety and Health Plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational, Safety and Health Division.

9) Any contract arising out of this offer is subject to the approval of the Department of the Attorney General as to form, and to all further approvals, including the approval of the Governor, required by statute, regulation, rule, order, or other directive.

Receipt of the following addenda issued by the Department is acknowledged by the date(s) of receipt indicated below:

	Date		Date
Addendum No. 1	_____	Addendum No. 5	_____
Addendum No. 2	_____	Addendum No. 6	_____
Addendum No. 3	_____	Addendum No. 7	_____
Addendum No. 4	_____	Addendum No. 8	_____

It is understood that failure to receive any such addendum shall not relieve the Contractor from any obligation under this IFB as submitted.

Bid Security in the amount of:_____

_____ DOLLARS ($_____)

as required by law, is enclosed herewith in the form of:

(____) Surety Bond (*1)
(____) Legal Tender (*2)
(____) Cashier's Check (*3)
(____) Certificate of Deposit (*3)
(____) Certified Check (*3)
(____) Official Check (*3)
(____) Share Certificate (*3)
(____) Teller's Check (*3)
(____) Treasurer's Check (*3)

Respectfully submitted,

_____
Name of Company, Joint Venture or Partnership

_____
License No.

By_____
Signature (*4)

Title:_____

Date:_____

Address:_____

_____

Telephone No.:_____

(IF A CORPORATION, AFFIX CORPORATE SEAL TO SIGNATURE, BE SURE TO FILL IN ATTACHED LIST OF SUBCONTRACTORS. THIS BID FORM MAY NOT BE ALTERED AND BIDDERS MAY NOT QUALIFY OR CONDITION THEIR BIDS IN ANY WAY.)

PLEASE FILL OUT THE ATTACHED CERTIFICATE OF RESOLUTION GIVING EVIDENCE OF THE AUTHORITY OF THIS OFFICER TO SUBMIT BIDS ON BEHALF OF THE COMPANY.

NOTES:

*1. Surety bond underwritten by a company licensed to issue bonds in this State;

*2. Legal tender; or

*3. A certificate of deposit; share certificate; or cashier's, treasurer's, teller's, or official check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation of the National Credit Union Administration.

a. These instruments may be utilized only to a maximum of $100,000.

b. If the required security or bond amount totals over $100,000, more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be accepted.

*4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company, and also the names and residence addresses of all officers of the Company.

*5. Fill in all blank spaces with information asked for or bid may be invalidated. BID MUST BE INTACT; MISSING PAGES MAY INVALIDATE YOUR BID.

CERTIFICATE OF RESOLUTION

I, _____, Secretary of _____, a Hawaii Corporation, do hereby certify that the following is a full, true and correct copy of a resolution duly adopted by the Board of Directors of said Corporation, at its meeting duly called and held at the office of the Corporation _____, Hawaii, on _____ day of _____, 20_____, at which a quorum was present and acting throughout; and that said resolution has not been modified, amended or rescinded and continues in full force and effect.

"RESOLVED that any individual at the time holding the position(s) of _____, be, and each of them hereby is, authorized to execute on behalf of the Corporation any bid, proposal or contract for the sale or rental of the products of the Corporation or for the services to be performed by the Corporation and to execute any bond required by any such bid, proposal or contract with the United States Government or the State of Hawaii or the City and County of Honolulu, or any County of Municipal Government of said State, or any department or subdivision of any of them."

IN WITNESS THEREOF, I have hereunto set my hand and affixed the corporate seal of said

_____ this _____ day of _____, 20___.

_____
Secretary

END OF BID

111 S. King Street
Suite 170
Honolulu, HI 96813
808.523.5866
www.g70.design

PRE-BID CONFERENCE REPORT

TO:	Mitchell Kawamura, DHHL		
FROM:	G70		
PROJECT:	DHHL Ho‘olehua Veteran and Homestead Resident’s Center		
G70 PROJECT NOS.:	217050-01	**DATE:**	March 8, 2019
SUBJECT:	Meeting Minutes (February 21, 2018)		
LOCATION:	Lanikeha Community Center	**NO. OF PAGES:**	2
THOSE PRESENT:	See Sign-In Sheet		

See: Pre-Bid Conference Agenda for IFB-19-HHL-009

1. Meeting commenced at 9:00 a.m. led by G70 (DHHL Personnel were delayed at the rental car company)
2. Proceed with Agenda items:
   - I. Introductions – DHHL, Design Consultant (G70) and Construction Manager (SSFM)
   - II. Schedule
   - III. Invitation for Bid (IFB) Overview
   - IV. Scope of Work
   - V. Procurement Requirements
   - VI. Contract Notice to Proceed, Time of Performance, Liquidated Damages and Change Orders
   - VII. Requests for Information
   - VIII. Information for Prospective Bidders
   - IX. Summary of Bid Deadlines and Contract Award
   - X. Questions/Comments:
     1. Question: Was the landscaping work in the plans and specs?
        Answer: The landscaping work will be deleted.
     2. Question: How long will it take to process a change order? Will the delay due to getting change orders (CO) approved be added to the time of performance or trigger liquidated damages?
        Answer: Any delays due to CO’s will be granted additional time and given due consideration regarding TOP.
     3. Question: Does the Contractor provide for Archaeological Monitoring and when is archaeological monitoring required?
        Answer: Yes, and Archaeological Monitoring is only required during ground disturbing activities.

4. Question: Will there be an Archaeological Monitoring Plan in-place?
   Answer: Yes, there is an Archaeological Monitoring Plan and it will be made available to the contractor.
5. Question: Why a modular building and not a built-in-place structure?
   Answer: Appropriation language specified that the structure be portable.
6. Question: Will the NTP include the time to order, construct and delivery of the modular building? Will 365 calendar days be sufficient? Will need to obtain permits from the County.
   Answer: DHHL will issue a conditional NTP for the modular building and other long-lead items. A separate NTP will be issued for the construction phase. The time between the conditional NTP and the NTP will not count against the TOP.
7. Question: For construction, notice to proceed will trigger 365-day period?
   Answer: Once contracts are signed, funds are encumbered and the NTP is issued the 365-day period will begin.
8. Question: Can begin ordering materials after conditional approval (NTP)?
   Answer: Yes.
9. Question: How will the cost/billing for the modular building be handled?
   Answer: DHHL will only pay for work completed/installed.
10. Question: Does the (homestead) association know this project is beginning?
    Answer: The DHHL has met multiple time with its beneficiaries about this project.

3. Meeting adjourned

PRE-BID CONFERENCE
ATTENDEE SIGN-IN SHEET

No.	Company/Organization Name	Representative Name	Telephone	Fax	Email Address
1	DHHL	MITCHELL KAWAMURA	620-9278		mitchell.h.kawamura@hawaii.gov
2	DHHL	Shelly Carreira	620-9459		shelly.p.carreira@hawaii.gov
3	G70	Jim Stone	441-2105		jims@G70.design
4	G70	PETER MAU	441-2103		petermeG70.design
5	SSFM	Brooks Aoki	957.4787		baoki@ssfm.com
6	Lehua Builders	Kauli Arce	6580362		kauli@lehuabuilders.com
7	C.P creations	Chip Matson	646-0753		C_Pcretions@yahoo.com
8	MIRA	MIKE GANGLOFF	478-0385		MIKE@TEAMMIRA.com
9	MEI CORPORATION	EDWIN SANTOS	439-1803		edwinemeicorporation.net
10	M&R Roofing, LLC	Roger Borce	772-0630		rogerborce@gmail.com
11	M+R Roofing, LL	Wilma Rivera			wilma@mandr-roofing.com
12	Accurate plumbing	Keola Yasso	336-1212		accurate plumbing@usa.com
13	~~Kanaike Alcon~~				
14	KMK Services	Kanaike Alcon	336-0263		kmkservices@yahoo.com

PRE-BID CONFERENCE
ATTENDEE SIGN-IN SHEET

No.	Company/Organization Name	Representative Name	Telephone	Fax	Email Address
15	TRI-L Const	Doug Rine	808-553-3985		RINE@TRI-L-inc.com
16					
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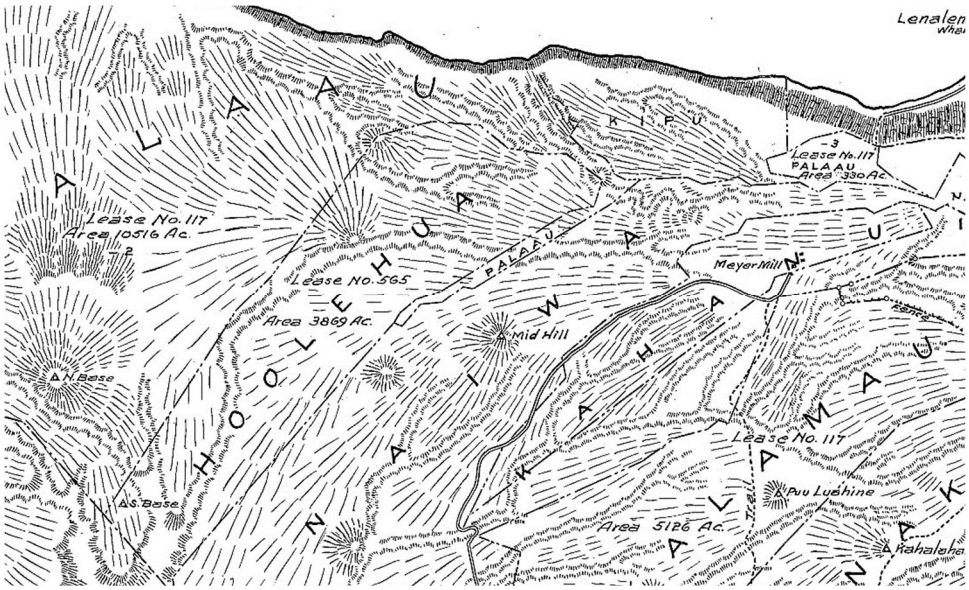
Revised Draft— Archaeological Monitoring Plan for the Proposed Veteran's and Resident's Center, Hoʻolehua Ahupuaʻa, Kona District, Island of Molokaʻi, Hawaiʻi

TMK: (2) 5-2-015:053



Prepared For:

State of Hawaiʻi, Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, Hawaiʻi 96707

HAWAIIAN HOME LANDS
HAWAIIAN HOMES COMMISSION · DEPARTMENT OF HAWAIIAN HOME LANDS

July 2018

Keala Pono Archaeological Consulting, LLC ● PO Box 1645, Kaneohe, HI 96744 ● Phone 808.381.2361

Revised Draft— Archaeological Monitoring Plan for the Proposed Veteran's and Resident's Center Hoʻolehua Ahupuaʻa, Kona District, Island of Molokaʻi, Hawaiʻi

TMK: (2) 5-2-015:053

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HAWAIIAN HOME LANDS
HAWAIIAN HOMES COMMISSION · DEPARTMENT OF HAWAIIAN HOME LANDS

Prepared By:

Windy Keala McElroy, PhD
and
Dietrix Duhaylonsod, BA

July 2018

Keala Pono Archaeological Consulting, LLC ● PO Box 1645, Kaneohe, HI 96744 ● Phone 808.381.2361

MANAGEMENT SUMMARY

Archaeological monitoring will be conducted for the proposed Veteran's and Resident's Center at TMK: (2) 5-2-015:053 in Hoʻolehua Ahupuaʻa, Kona District on the island of Molokaʻi. This monitoring plan is designed to identify and appropriately treat archaeological resources that might be encountered during construction. Monitoring will be conducted only during the grubbing and grading for the new building, and during initial excavations for associated utilities, the access road, and parking lot. After grubbing and grading and initial excavations have been completed, in consultation with the SHPD, the archaeological monitoring plan may be modified.

CONTENTS

FIGURES

TABLES

INTRODUCTION

At the request of G70, on behalf of the State of Hawai‘i Department of Hawaiian Home Lands (DHHL), Keala Pono Archaeological Consulting has prepared an archaeological monitoring plan (AMP) for TMK: (2) 5-2-015:053 in Ho‘olehua Ahupua‘a, Kona District, on the island of Moloka‘i, Hawai‘i. A new community center is planned, to include construction of a building, driveway, and parking lot. This monitoring plan is designed to identify historic properties that might be exposed during construction, and to treat them properly. Because DHHL properties are considered tribal lands under the Native American Graves and Repatriation Act (NAGPRA), federal laws such as NAGPRA and the Archaeological Resources Protection Act (ARPA) will be followed where appropriate, in addition to the State Historic Preservation Division's (SHPD's) *Rules Governing Standards for Archaeological Monitoring Studies and Report*s (§13-279).

The plan includes background information on the project area and an outline of field methods and post-field actions proposed for the archaeological monitoring. Hawaiian words and flora and fauna are defined in the glossary at the end of the document.

Project Location and Environment

The project area is located on Hawaiian homestead lands within the ahupua‘a of Ho‘olehua and within the larger moku of Kona on the island of Moloka‘i (Figures 1 and 2). This is on TMK: (2) 5-2-015:053, a 2.282 ha (5.638 ac.) parcel owned by the State of Hawai‘i Department of Hawaiian Home Lands. The project area is bounded by Farrington Avenue on the south, Hawaiian homestead residential lots to the north and west, and Keena Place to the east.

The project area lies at approximately 250 m (820 ft.) in elevation and is roughly 2.5 km (1.6 mi.) from the northern coastline of Moloka‘i. The Lanikeha Ho‘olehua Community Center occupies the south side of the lot, and the rest of the parcel is an open grassy field, aside from some large trees along the northern perimeter of the property. Lihi Pali Avenue is on the east, and a post and wire fence bounds the property on several sides.

The project area is situated in the middle section of the island on the Ho‘olehua Plain, which consists mainly of a rich lateritic soil that runs from 3–9 m (10–30 ft.) in depth (Meyer 1982). The soil type on the north side of the project area is LaB, or Lahaina silty clay with 3 to 7% slopes (Figure 3). On the south side is HzA, or Hoolehua silty clay with 0 to 3% slopes. The soil association for the project area is the Molokai-Lahaina association which is described as "deep, nearly level to moderately steep, well-drained soils that have a moderately fine textured or fine textured soil; on uplands" (Foote et al. 1972).

The project area receives approximately 89 cm (35 in.) of rainfall annually (Giambelluca et al. 2013). This rainfall helps to recharge the basal zone of groundwater on which almost the entire island sits. Beneath the Ho‘olehua Plain, the basal groundwater is thoroughly brackish due to the lack of surface groundwater adding to the zone where the fresh and salt water mix. The nearest streams are Mane‘opapa, a non-perennial stream that runs through a gulch 300 m (.19 mi.) north of the project area and Kaluape‘elua, another non-perennial watercourse situated 400 m (.25 mi.) to the south of the parcel. Temperatures in the area range from a low of 20° C (68° F) in the cold, rainy season to 24° C (76° F) in the warm, drier season. Typical northeasterly trade winds blow throughout most of the year but are sometimes replaced by the southerly Kona winds (Stearns and Macdonald 1947).

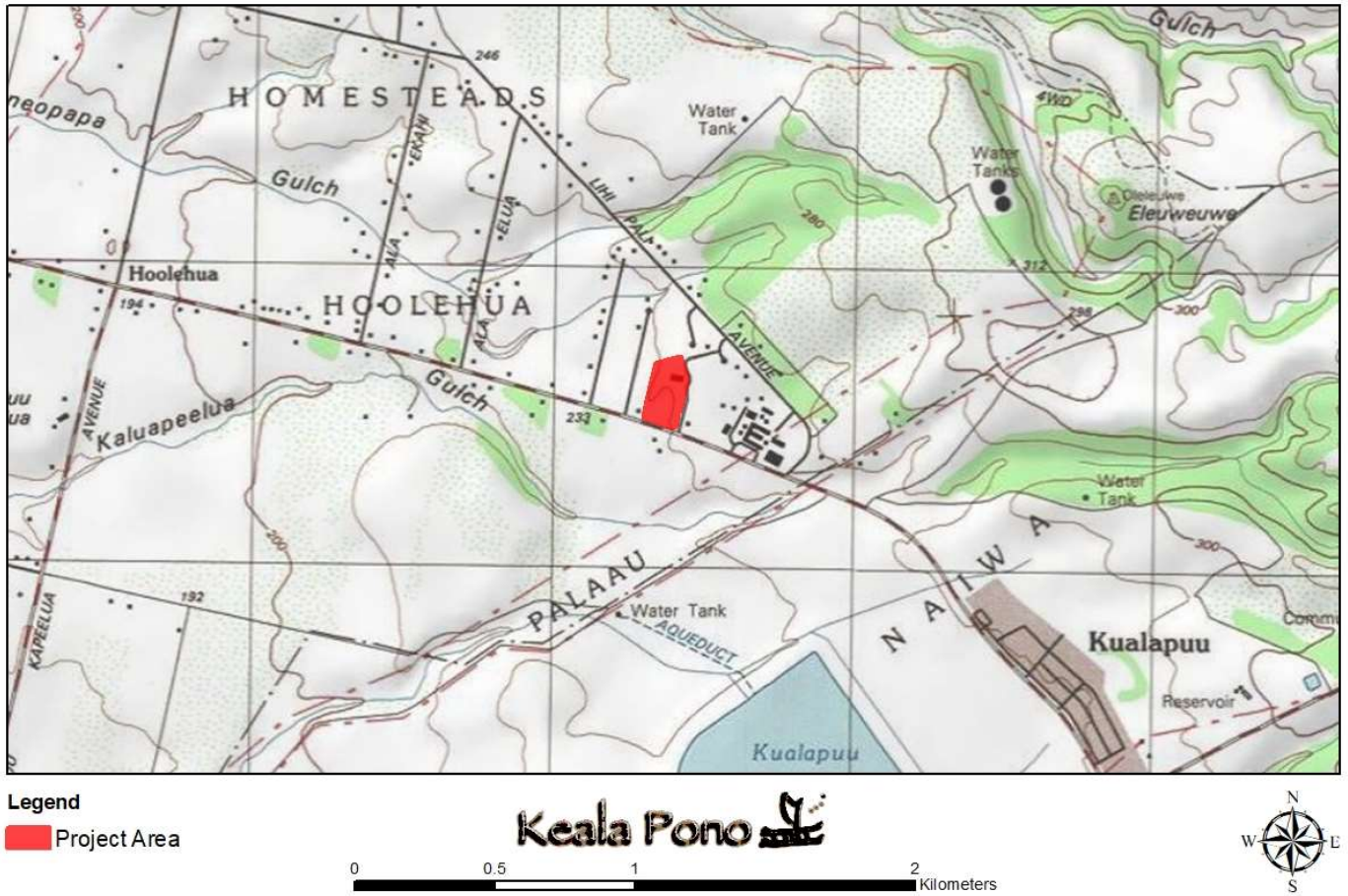

Figure 1. Project area on a 7.5 minute USGS 1993 Kaunakakai quadrangle map.

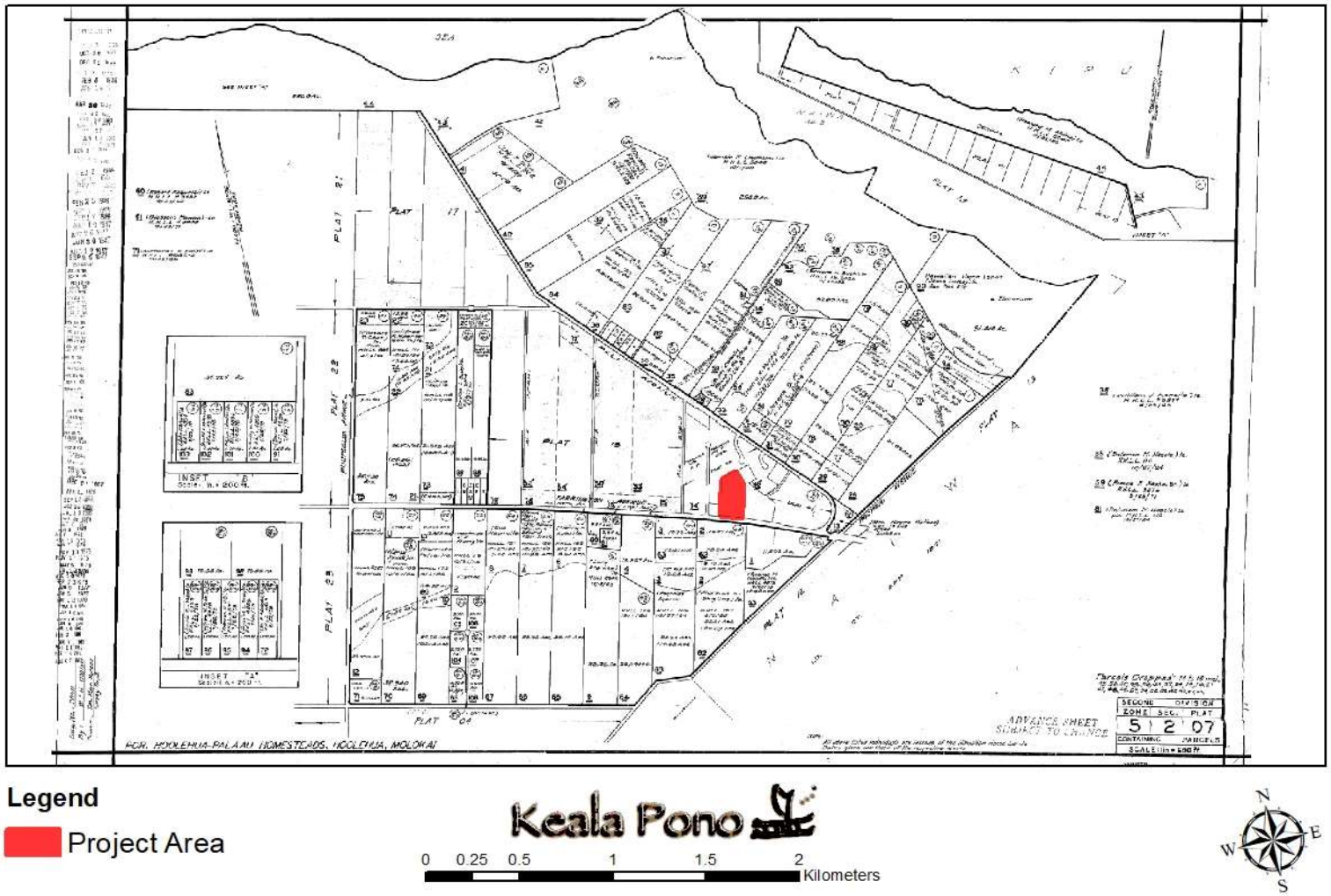

Figure 2. Project area (in red) on TMK plat map (2) 5-2-007.

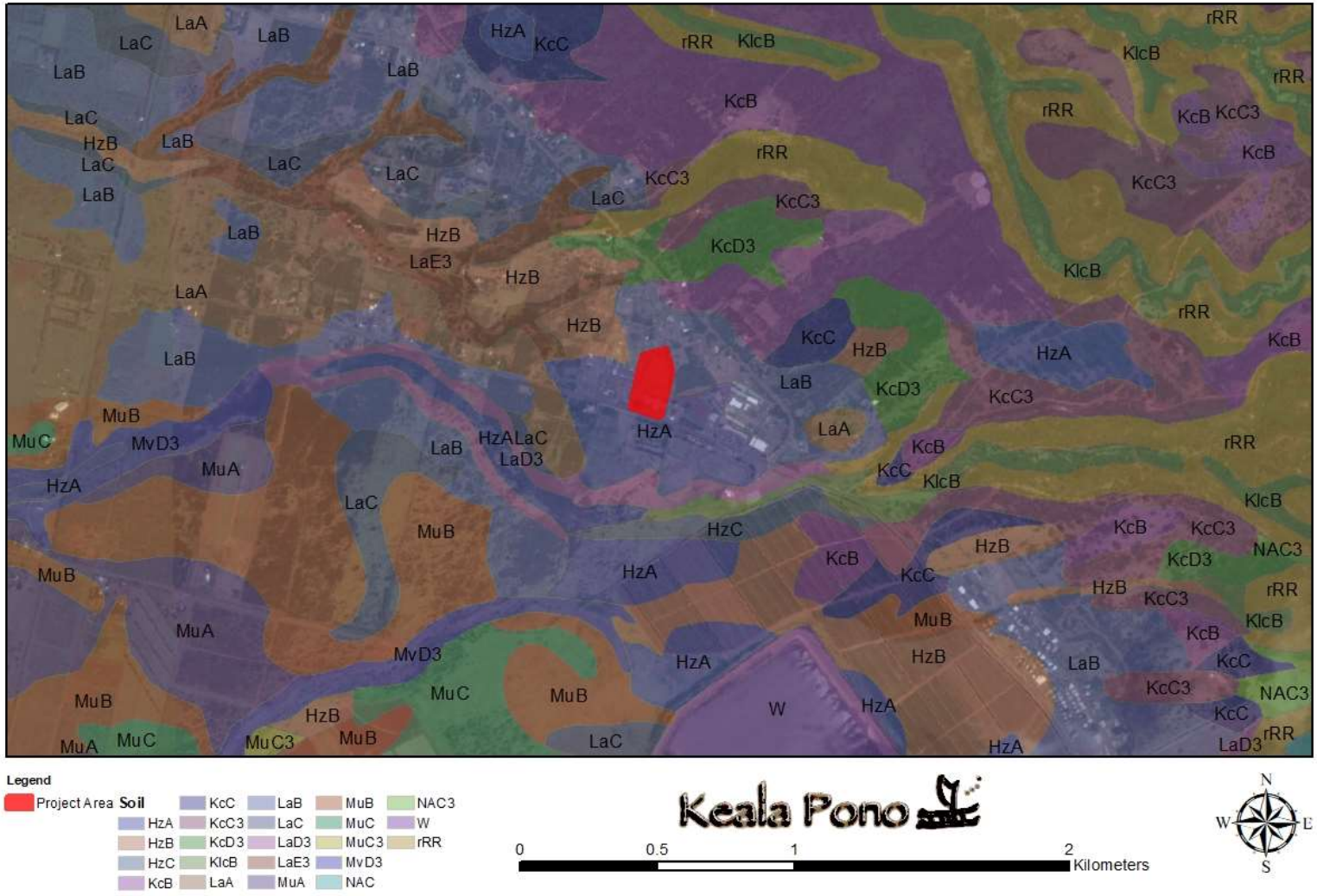

Figure 3. Soils in the vicinity of the project area.

The Project

DHHL in cooperation with the State of Hawaii Department of Defense (DOD) propose to construct a new Community Center adjacent (within the same property) to the existing Lanikeha Community Center. The DOD will provide the funding to DHHL through State House Bill 100, HD1 SD1 CD1 and DHHL will provide the land and the lease agreement. The new facility will serve the communities of both the Moloka‘i military veterans and the DHHL Homestead residents, many of whom are both DHHL beneficiaries and veterans.

The new facility will connect to the existing driveway of the Lanikeha Community Center. A 7-m (24-ft.) access driveway will lead to a parking lot which will be sized to support a daily use of 20–50 users. DHHL proposes to construct a building utilizing customized modular units due to the construction schedule and available funding. The minimum components for the facility include: classroom space, a kitchen, a meeting and display room, four offices (two each for veteran and homestead resident use), storage space (indoor and outdoor), an outdoor gathering space, indoor and outdoor restroom facilities (one set each). The classroom, meeting and storage spaces will have the flexibility to be partitioned and customized. An outdoor playset has also been proposed. The building and support facilities are situated on the site such as to preserve as much of the existing open space as possible.

It is anticipated that the new facility will be able to utilize the existing infrastructure for its wastewater, water, and electrical demand, although if this is not possible then a new leach field will be constructed. The adequacy of all infrastructure requirements will be verified. Utilization of the existing infrastructure and the existing driveway for access will hopefully minimize the impact to the community.

BACKGROUND

This section of the report presents background information as a means to provide a context through which one can examine the cultural and historical significance the Hoʻolehua region. In the attempt to record and preserve both the tangible (i.e., traditional and historic archaeological sites) and intangible (i.e., moʻolelo, ʻōlelo noʻeau) culture, this research assists in the discussion of anticipated finds. Research was conducted at the Hawaiʻi State Library, the University of Hawaiʻi at Mānoa libraries, the SHPD library, and online on the Papakilo, Ulukau, and Waihona ʻAina databases, and the State of Hawaiʻi Department of Accounting and General Services (DAGS) website. Historical maps, archaeological reports, and historical reference books were among the materials examined.

Hoʻolehua in Traditional Times

The history of Hoʻolehua begins with the origin of Molokaʻi Island:

> Molokaʻi and Lānaʻi were the children of Wākea by different wives. Hina was the mother of Molokaʻi and the child was called Molokaʻi-a-Hina. The mother of Lānaʻi was Kaʻulawahine. They became ancestors of the people of those islands, but the two islands had ancient names (Kamakau 1991:129).

Much of the oral accounts which narrate the events from the first peopling of Hawaiʻi to the recent period of written documentation has been lost in time. However, there are other means by which Hawaiʻi's history has been preserved. One often overlooked traditional source of history is the information embedded in the Hawaiian landscape. Hawaiian place names "usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated… The place names provide a living and largely intelligible history [to those familiar with the stories behind the names]" (Pukui et al. 1974:xii).

Among the place names relevant to the project area which have been listed in the book *Place Names of Hawaii* are Hikauhi, Hoʻolehua, ʻĪloli, Kāluapeʻelua, Kona, Molokaʻi, Pālāʻau, and Puʻukapeʻelua; the stories associated with these place names are in the Moʻolelo section of this report:

> Hikauhi. Coastal area, gulch, fishpond, and reef passage, south Molokaʻi. This was the daughter of Chief Hoʻolehua and his wife ʻĪloli. [*No translation given].
>
> Hoʻolehua. Village, land divisions, and Hawaiian homesteads area near the Molokaʻi airport, said to be named for a chief. *Lit.*, acting the expert.
>
> ʻĪloli. Three land divisions, Molokaʻi. *Lit.*, yearning.
>
> Kāluapeʻelua. Gulch, Molokaʻi. *Lit.*, baked caterpillar
>
> Kona. Leeward districts on Hawaiʻi, Kauaʻi, Molokaʻi, Niʻihau, and Oʻahu. *Lit.*, leeward.
>
> Molokaʻi. Island, 38 miles long, 10 miles wide, 261 square miles in area, and having a 1970 population of 5,261. District, forest reserve, lighthouse, high school, airport, and hospital. [*No translation given].
>
> Pālāʻau. Three land divisions, north central and southwest Molokaʻi. *Lit.*, wooden fence or enclosure.

> Puʻukapeʻelua. Hill, north Molokaʻi. A beautiful girl lived in a cave near Kalaʻe. *Lit.*, hill [of] the caterpillar.

The name "Kanakaloloa" is also listed in *Place Names of Hawaii*, as a hill in north Molokaʻi. It is translated as "tall person."

In addition to the land features having significance in their names, so too was there importance attached to the naming of the rains, the winds, the clouds and many other phenomena of the natural environment. Hehikaʻuala is a rain name of Hoʻolehua. Literally it translates to "the rain that tramples sweet potato." Lanikeha, literally "lofted heaven," is another rain name of Hoʻolehua. It is a rain that shares its name with a native sweet potato variety of Molokaʻi. Both rain names are associated with the ʻuala, showing the importance of that crop to the area. Among Hoʻolehua's wind names, one is Ikioe (Kamakau 1991), and another is Puluea which translates to "a damp breath." Summers gives two names for Hoʻolehua's winds, Kaikioe and Iʻaiki, and she cites Pukui and Elbert's dictionary as the source for this information (Summers 1971), but upon verifying the citation, only Iʻaiki is listed in the dictionary (Pukui and Elbert 1986).

Subsistence and Traditional Land Use

Like the names of Hoʻolehua's rains hint, the Hoʻolehua Plain was noted for the cultivation of ʻuala. This is affirmed by the written and oral histories of Molokaʻi, which stress the importance of sweet potato (*Ipomea batatas*) on leeward Molokaʻi and in Hoʻolehua in particular. This might be expected since sweet potato cultivation was dominant in similar dry environments on other islands throughout the archipelago that were not conducive to wet taro farming. Handy and Handy (1991:571) elaborate on the ʻuala cultivation of this region:

> In 1931 there were many flourishing [sweet potato] patches on the Hawaiian homesteads at Hoʻolehua. It is said that Hoʻolehua and Palaʻau were noted for sweet potatoes in the olden days. Any part of the pineapple lands westward from this section may have been used for sweet potatoes.

Handy and Handy (1991:213) also note the cultivation of a distinctive type of gourd in Hoʻolehua:

> *ʻOlo* or *Hokeo* bore the long gourd used for the *hula* drum and for holding the fisherman's tackle. These still grow wild in Kaʻu, near Punaluʻu, and are cultivated at Hoʻolehua on Molokai.

A final observation on traditional subsistence comes from Southwick Phelps in the 1930s:

> For Palaʻau (Apana 2), Kaluakoi, and Punakou, Hoʻolehua, and Naiwa, planting areas for yams and sweet potatoes cannot be delimited but it is known that these were grown in that general area and were, with fish, the staples of the inhabitants. (In Handy and Handy 1991:518)

Summers (1971) reports that the majority of Molokaʻi's pre-contact population resided east of the project area from Kalamaʻula to Kumimi and that the population in the island's central Hoʻolehua region was scattered. But this by no means diminished the importance of the area. In contrast, the region was part of a complex of learning centers dedicated to the practice of hula and to the medicinal arts for curing and/or causing sickness. Two of Molokaʻi's famous sayings allude to this spiritual power that the island has been associated with: *Molokaʻi kuʻi lāʻau* (Molokaʻi, pounder of medicine); and *Molokaʻi Pule ʻOʻo* (Molokaʻi of the potent prayer).

Scattered or not, the population on the Hoʻolehua Plain during traditional times was substantial enough to have left behind several heiau and koʻa. Summers (1971) lists two heiau in Hoʻolehua. One was called Lepekaheo Heiau, and it was near the boundary between Hoʻolehua 2 and Pālāʻau 2 Ahupuaʻa. The other heiau was documented without a name, and it was east of a place called ʻEleuweue. Another feature that Summers notes offers additional insight to traditional living in the area in pre-contact times. This was a 6 ft. by 7 ft. boulder at Puʻu Kapeʻelua, Hoʻolehua, which was interpreted as either a stone for sharpening adzes or for collecting water (Summers 1971).

Areas north of the Kualapuʻu reservoir near Puʻu ʻAnoʻano were used in ancient times to teach kahuna the spiritual and medicinal arts. The proverb, "Molokaʻi kuʻi lāʻau" (Molokaʻi, pounder of medicine) attests to the expertise of Molokaʻi kahuna in compounding medicines and poisonous potions (Pukui 1983). From a chant extolling the powers of Molokaʻi, Mrs. Vanda Hanakahi, a native of Hoʻolehua wrote in the late 20th century, " ʻAe nō ʻo Molokaʻi ka piko o ka paeʻāine o Hawaiʻi nei; he wahi laʻa ʻihi no ke anaina mea hoʻōla…" meaning that Molokaʻi is agreed upon as the center of the Hawaiian archipelago and is a sacred and revered place of healing arts for the multitudes.

Moʻolelo

As mentioned earlier, Hawaiian place names were connected to traditional stories by which the history of the places was preserved. These stories were referred to as moʻolelo, defined as follows:

> A term embracing many kinds of recounted knowledge, including history, legend, and myth. It included stories of every kind, whether factual or fabulous, lyrical or prosaic. Moʻolelo were repositories of cultural insight and a foundation for understanding history and origins, often presented as allegories to interpret or illuminate contemporary life… Certainly many such [oral] accounts were lost in the sweep of time, especially with the decline of the Hawaiian population and native language. (Nogelmeier 2006:429–430)

Still, a good amount of traditional stories managed to be recorded as Hawaiian society transitioned from an oral culture to a written one, and among those recorded were several versions of stories concerning the places associated with Molokaʻi's Hoʻolehua Plain.

One moʻolelo points out that several of these Molokaʻi places were named after legendary figures from the ancient days. Hoʻolehua was named after an ancient chief of the same name (Pukui et al. 1974). Hoʻolehua's wife was ʻĪloli, and their daughter was named Hikauhi (Pukui et al. 1974). Today, ʻĪloli is the name of a nearby ahupuaʻa in Molokaʻi's Kona District, and it is also the name of a hill in another nearby ahupuaʻa, Kaluakoʻi. As for Hikauhi, it is the name of several features in Kaluakoʻi Ahupuaʻa, namely a gulch, a hill, a fishpond and a specific point along the coast.

This story is tied to the legend of Pākaʻa, which Beckwith (1970) puts in the category of legends about lesser Hawaiian gods. Pākaʻa inherited from his grandmother Loa, the supernatural ability to call upon the winds. However, when others became jealous of Pākaʻa, he left his home on Hawaiʻi Island, fleeing for his life, and settled on Molokaʻi. There, he married Hikauhi, the aforementioned daughter of Hoʻolehua and ʻĪloli. Hikauhi bore Pākaʻa a son, named Kūapākaʻa, and this son carried on the supernatural abilities of his father (Beckwith 1970; Pukui et al. 1974).

Beckwith (1970) shares that Pākaʻa's mother was Laʻamaomao, a woman of chiefly rank from Kapaʻa, Kauaʻi. Kamakau also mentions a Laʻamaomao in his written accounts, and this Laʻamaomao is connected to Molokaʻi, but it appears to be a different person with the same name. Kamakau does not even specify if this Laʻamaomao is female or male. In Kamakau's moʻolelo of the great navigator Moʻikeha, Laʻamaomao is one of many supporters who followed Moʻikeha as he sailed from Kahiki to Hawaiʻi. As he sailed through the islands, some of Moʻikeha's followers

stayed on Hawai‘i Island, some stayed on Maui, some on O‘ahu, and La‘amaomao stayed on Moloka‘i. It is in this account that Kamakau gives us one of the names of Ho‘olehua’s winds:

> Mo‘ikeha belonged to Kahiki, and the reason he came to Hawai‘i was because he… was severely criticized, and so he went off to sea. He took with him his followers Moa‘ula, Pāha‘a, La‘a-maomao, Mō‘eke, Kaunalewa, and some others. The first place they landed on was at Kalae in Ka‘ū, Hawai‘i…
>
> La‘amaomao remained on Moloka‘i at Haleolono in Kaluako‘i --- in Kaluako‘i of the tiny fish of Haleki‘i, the black sea cucumbers of Pālā‘au, the Ikioe wind of Ho‘olehua; the sweet waters of Waiakāne, and the stratified limestone (*‘unu‘unu pa‘akea*) of Haleolono. There lived La‘a-maomao (Kamakau 1991:105–106).

Ho‘olehua is mentioned in a mo‘olelo involving the inception of sorcery on the island of Moloka‘i (Kamakau 1964:131–132). Only one person, a man named Kaiakea was trained in sorcery, and his teaching came directly from the gods. Kaiakea built a house in Kala‘e and organized a feast for his house warming. Kaiakea, however, was a man that did not have a god. While his wife prepared the food for the feast, Kaiakea stood in the doorway of the hale mua, or men’s house, and saw a multitude of women and one man crossing the plains from Ho‘olehua to Pālā‘au. They wore yellow kapa and multicolored leis. The man approached Kaiakea, and Kaiakea offered food to his party. The man said that he would not accept any food unless Kaiakea built a thatched house for them. The man disclosed that he and the women in the procession were angels and if Kaiakea could complete the house in a single day then they would become Kaiakea’s gods and give him their belongings to do their work. Kaiakea was able to build the house that day and filled it with food offerings, which pleased the angels. Kaiakea took care of his new gods for the rest of his life and did not use them for malicious purposes. Before he died, Kaiakea instructed his children not to use the gods to seek wealth and not to disclose the knowledge of sorcery.

A final mo‘olelo sheds light on a hill called Pu‘ukape‘elua and a gulch called Kāluape‘elua, both in the ahupua‘a of Ho‘olehua. According to this mo‘olelo a beautiful girl was in a relationship with a lover who only visited in the night and left by daylight. Unbeknownst to the girl, her lover was a demi-god who could take the form of a caterpillar. The girl’s parents enlisted the aid of a kahuna to help them find out who the girl’s lover was and where he disappeared to everyday. With the help of the kahuna, they found the lover in his caterpillar form sleeping on a hill, and they set him on fire. As a result, he exploded into a multitude of smaller caterpillars, and the situation was ended after all the caterpillars were burned. The name of the hill, which means “Caterpillar Hill,” and the name of the gulch, which means “Baked Caterpillar,” are reminders of this story (Summers 1971).

‘Ōlelo No‘eau

Traditional proverbs and wise sayings also known as ‘ōlelo no‘eau have been another means by which the history of Hawaiian locales have been recorded. In 1983, Mary Kawena Pukui published a volume of nearly 3,000 ‘ōlelo no‘eau, or Hawaiian proverbs/wise sayings, that she collected throughout the islands. The introductory chapter reminds us that if we could understand these proverbs and wise sayings well, then we would understand Hawai‘i well (Pukui 1983). Although none of the ‘ōlelo no‘eau in Pukui’s volume mentions Pālā‘au, there are two which refer to Ho‘olehua. One saying calls to mind the hot weather that the Ho‘olehua Plain is known for. The other saying is more about the kioea bird rather than Ho‘olehua, but still, it is a reminder that this native bird is familiar to the area:

> (1935) Ku‘u manu lawelawe ō o Ho‘olehua.
> *My bird of Ho‘olehua that cries out about food.*

Said of the *kioea,* whose cry sounds like "*Lawelawe ke ō! Lawelawe ke ō!"* ("Take the food! Take the food!"). The *kioea* is the bird that calls to the fishermen to set out to sea.

(2164) Moʻa nopu ka lā i ke kula o Hoʻolehua.

The sun scorches the plain of Hoʻolehua.

Refers to Hoʻolehua, Molokaʻi.

There are several other ʻōlelo noʻeau which should be mentioned here. While they are not associated specifically with the project area, these sayings attribute certain things to the Molokaʻi people and/or the entire island, Hoʻolehua included. One saying celebrates the people's lineage to Hina. Other sayings declare that the people of Molokaʻi are expert athletes and practitioners of hula, sorcery, and the medicinal arts. And finally, one of the ʻōlelo noʻeau describes the island as a place of hurt and distress due to the tragedies associated with the Hansen's disease patients and their exile to a remote part of Molokaʻi:

(2191) Molokaʻi ʻāina o ka ʻehaʻeha.

Molokaʻi, island of distress.

This expression came about after the establishment of the leper colony there. It refers to the separation of loved ones, the ravages of the disease, and the sad life in the early days at Kalawao, when so much was lacking for the comfort of the patients.

(2193) Molokaʻi kuʻi lāʻau.

Molokaʻi, pounder of medicine.

The *kahuna* of Molokaʻi were said to be experts in compounding medicines and poisonous potions. Also, a stick dance bore this name.

(2194) Molokaʻi nui a Hina.

Great Molokaʻi, land of Hina.

The goddess Hina is said to be the mother of Molokaʻi.

(2195) Molokaʻi pule oʻo.

Molokaʻi of the potent prayers.

Molokaʻi is noted for its sorcery, which can heal or destroy.

(2315) Niniu Molokaʻi, poahi Lānaʻi.

Molokaʻi resvolves, Lānaʻi sways.

A description of the revolving hips and the swaying movements in *hula.*

(2698) Pua ka uwahi o kāʻeʻaʻeʻa moku o Hina.

Up rose the smoke of the experts of the island of Hina.

Said of the quickness of the athletes of Molokaʻi --- they were so fast that they smoked.

(Pukui 1983:206, 235, 238, 239, 252, 294)

Hoʻolehua in the Historic Era

Molokaʻi and the entire Hawaiian archipelago entered the historic era in the late 18th century. Captain Cook's so-called discovery of the islands is in 1778, and although he noted Molokaʻi in the distance that year, he did not sail up to the island until 1779. But it is not until 1786 that there is the first recording of Westerners meeting and interacting with the natives of Molokaʻi (Summers 1971).

Just prior to the arrival of foreigners, Molokaʻi had seen several centuries as an independent kingdom starting with its first aliʻi nui, Kamauaua, in the 13th century (Summers 1971). There was a brief challenge to its independence from Hawaiʻi Island in the 15th century, but otherwise, Molokaʻi enjoyed its sovereignty all the way up to the 18th century when it was once again challenged by chiefs from various neighboring islands. It should be noted, however, that there had also been episodes of intra-island conflict among Molokaʻi chiefs from the leeward and windward districts as well disrupting the peace.

It is uncertain if Molokaʻi was still an independent kingdom or under the rule of a neighboring island's chief when Westerners arrived in the late 18th century. It is documented that when Captain James King landed on Oʻahu in 1779, the warriors of Oʻahu had gone to Molokaʻi to battle the forces of Maui's King Kahekili there (Summers 1971). What is not clarified is if at that time Molokaʻi was still independent, or if it was under the rule of Oʻahu, or under the rule of Maui. However, what is clearly recorded is that in 1780, Molokaʻi was under the rule of Oʻahu's King Kahahana. Kahahana gave the far eastern portion of Molokaʻi to Kahekili because Kahekili was Kahahana's elder, but that was not enough, and eventually, in 1785, Kahekili's forces invaded Oʻahu and killed Kahahana. As a result, the entire island of Molokaʻi went under the Maui rule of Kahekili. On the way to battle Kahahana on Oʻahu, Kahekili stopped on Molokaʻi to supply their canoes with fish from Molokaʻi's fishponds. The historian Kamakau records that Kahekili's forces were multitudinous, and his fleet of canoes stretched from Hoʻolehua to Kaluakoʻi (Translation by D. Duhaylonsod):

> Ma Lahaina i hoʻākoakoa ʻia ke anaina no ka holo ʻana i ke kaua. ʻO Halekumukalani ka hale o ke akua, aia ma Pūehuehu. I ka pau ʻana o ke kapu, ʻo ka hoʻomaka nō ia i ka holo a Molokaʻi; ʻo ka iʻa o nā loko kuapā, ʻo ia ke ō o ka holo ʻana; mai Hoʻolehua a Kaluakoʻi ka piha i nā waʻa. I ka holo ʻana o nā waʻa kaua ma ka mole o Lānaʻi, a ua kapa ʻia kēia alanui moana a Kahekili i holo mai ai i ke kaua i Oʻahu, ʻo Kaʻōpuakiʻikiʻi ka inoa; a ma ka lewa loa o ka moana, a loaʻa i ka wēlau o ka ʻAoʻaoa, a nāna i hoʻihoʻi i ka ʻāina, a ʻo Waikīkī ke awa (Kamakau 1996[1866]:88).
>
> *Lahaina was where the multitude was assembled to go into battle. Halekumukalani was the name of their god's house; it was at Pūehuehu. When the kapu period was over, they began sailing to Moloka'i, to get the fish from the fishponds, and their sailing continued, from Hoʻolehua to Kaluakoʻi, it was filled with canoes. When the war fleet sailed away from Lānaʻi, this ocean route that Kahekili traveled on to make war on Oʻahu was called Kaʻōpuakiʻikiʻi, under the long skies of the open sea, and they caught ahold of the tip of the ʻAoʻaoa wind, and it pushed them to the land, and Waikīkī was the landing place.*

Not long after Kahekili's death in 1794, King Kamehameha's forces from Hawaiʻi Island defeated both the Oʻahu warriors and the Maui warriors, and so Molokaʻi unquestionably went under the rule of Kamehameha. Like Kahekili, Kamehameha stopped on Molokaʻi on his way to fight on Oʻahu, and while on Molokaʻi, Kamehameha used the Hoʻolehua Plain as a training area for his warriors. Kamehameha eventually unified the entire island chain (Summers 1971).

Missionary and Ranching Activity

For many decades following the arrival of Westerners, Molokaʻi was not a prominent port of call that foreigners visited. After Captain Vancouver's description of the island in 1792, the only other accounts of Westerners visiting the island prior to the early 1800s were of missionaries (Summers 1971). The first permanent church established on the island was a Protestant mission on the east side of Molokaʻi in 1832. Much later, Catholic missionaries also established themselves on the island, but perhaps the one with the most profound impact was the mission founded on the Kalaupapa Peninsula by Saint Damien in the 1870s. It was there at the settlement established by

King Kamehameha V that Saint Damien ministered to the patients afflicted with Hansen's Disease. While the missionary foreigners and their activities helped shape Molokaʻi Island as a whole, they did not have a major impact on the Hoʻolehua Plain.

On the other hand, the activities brought about by ranchers and the ranching industry on Molokaʻi did have a more direct impact on the region of interest. An important figure who ties much of this together is the German immigrant R.W. Meyer. Meyer arrived on Molokaʻi in the 1840s, married a chiefess from the island, and settled in the Kalaʻe area to the east of Hoʻolehua. Meyer also became the overseer of the Kalaupapa settlement for Hansen's disease patients after its creation by King Kamehameha V's legislation in the 1860s, and furthermore, Meyer became the manager for the king's ranch on Molokaʻi which operated on lands to the west and south of the Hoʻolehua Plain. From Kamehameha's ranch came multitudes of cattle which were allowed to roam free on kapu, and in addition to that, the king introduced deer in 1868 which quickly multiplied and spread throughout the island (Summers 1971).

After Kamehameha V's death in 1872, Meyer continued to administer the royal ranchlands for Kamehameha's heirs. Excerpts from two Hawaiian language newspapers confirm the continuance of Meyer's land management. In the first excerpt, from *Ka Nupepa Kuokoa*, Meyer announces that lands of the Kamehameha heiress Princess Ruth Keʻelikōlani extend from Kaluakoʻi, past the Hoʻolehua Plain, and east to Kapaʻakea. In the second article, from *Ka Makaainana*, Meyer specifically lists Pālāʻau as one of the ahupuaʻa still under the royal name. Both newspaper excerpts, presented below, caution the rest of the population not to allow their animals to roam onto the royal lands:

> Mai keia manawa a mahope aku nei. Ke papa ia'ku nei na kanaka a pau, mai hookuu a hooholo i ka lakou mau holoholona maluna o na aina o ke Alii ka Mea Kiekie Ruta Keelikolani e waiho ia ma ka mokupuni o Molokai, ma Kapaakea a hiki i Kaluakoi, me ka ae like ole mamua me ko'u hope R.W. Meyer. Aina e kue kekahi i keia olelo papa, alaila, e hoopii ia no ma ke kanawai SIMON K. KAAI. Agena o ke Alii R. Keelikolani. (*Ka Nupepa Kuokoa* 1879)
>
> Olelo Hoolaha.
>
> E ike auanei na mea a pau he mau holoholona ka lakou [lio, miula a me na iakake], e holo ana maluna o na aina hanai holoholona ma Molokai-Kaluakoi, Palaau, Iloli, Naiwa, Kahanui Kalamaula, Kaunakakai, Makakupaiaiki a me ke kula o Kawela. E hooukuia aku ana mai ka la mua kau o Iulai, 1897, no kela a me keia holoholona e hele ana maluna o ua mau aina la he 25 keneta no ka holoholona hookahi o ka mahina, e hookaaia ma ke dala, a i ole, ma ka hana maoli paha maluna o ua mau aina la, ma ka ae like a ma ke kauoha a ka Luna Hooponopono o ua mau aina la i oleloia maluna. O na holoholona i hookaa ole ia, e hopuia aku ana ma ke ano komohewa. R.W. MEYER, Luna Hooponopono, Kalae, Molokai, Maraki 25, 1897. mar. 28-4ts. (Meyer 1897:1)

Meyer died in 1897, and coincidentally that same year, a group of businessmen organized to purchase 70,000 acres of the late Kamehameha V's former ranchlands and lease another 30,000 more, stretching from the west end of the island to the Hoʻolehua Plain. By that time, Princess Ruth had passed away, and her lands there had already gone into the hands of her heiress Bernice Pauahi Bishop. The purchasing business entity would later be named the Molokai Ranch, and the next year, this business organization also formed the American Sugar Company (ASCO) which added sugarcane fields to the Hoʻolehua Plain and constructed a railroad through it for transport. Since the Molokaʻi sugar venture had a tough time competing with other sugar enterprises throughout the islands, the early 1900s found ASCO switching its focus to raise cattle and sheep and to produce honey instead.

Māhele Land Tenure

During Kamehameha III's reign, in 1848, sweeping changes were made to the traditional land tenure system. This was called the Māhele. This proclamation allowed the king to divide landownership for three groups of people: the king, the chiefs, and the commoners. The new system of land tenure was another influence of Westerners in Hawai‘i:

> THE MAHELE is rightfully considered one of the most significant chapters in the modern history of Hawai'i. Several legislative acts during the period 1845-1855 codified a sweeping transformation from the centuries-old Hawaiian traditions of royal land tenure to the western practice of private land ownership. (Moffat and Fitzpatrick 1995)

The king enacted the Māhele intending for it to provide the Native Hawaiian population with an irrevocable land base they would own. The process that the commoners needed to follow to secure their land titles consisted of filing a claim with the Land Commission; having their land claim surveyed; testifying in person on behalf of their claim; and submitting their final Land Commission Award to get a binding royal patent. However, in actuality, the vast majority of the native population never received any land commission awards recognizing their land holdings due to several reasons such as their unfamiliarity with the process, their distrust of the process, and/or their desire to cling to their traditional way of land tenure regardless of how they felt about the new system. In 1850, the king passed another law, this one allowing foreigners to buy land. This further hindered the process of natives securing lands for their families.

There were no land claims awarded for Ho‘olehua. However, there were five land grants that were awarded in Ho‘olehua. Three of these were given to the Dudoit family; one was granted to the Lewis family; and one was conferred to the Makakoa family. Three of the five land grants listed here were awarded in 1899, the other two show no date. The lack of land ownership and transfers for Ho‘olehua may reflect the large block of land consolidation first under the Kamehamehas and later by the Molokai Ranch, followed by the Hawaiian Homes Commission.

Hawaiian Homesteads

The turn of the century also brought the most significant political changes to Moloka‘i and the rest of the Hawaiian Islands. Following the overthrow of the monarchy in 1893, the United States claimed the islands to be an annexed territory in 1898. To champion the Hawaiian people's rights, Prince Jonah Kūhiō Kalaniana‘ole became a delegate to the United States Congress. Due to Prince Kūhiō's efforts, Congress passed the Hawaiian Homes Commission Act in 1921 which set aside land throughout the islands to be reserved for the native Hawaiian population. An administrative body, The Hawaiian Homes Commission, was created, consisting of the Governor of Hawai‘i and four appointed citizens, three of which must have half Hawaiian blood or more (Keesing 1936). The Commission has evolved so that today it is composed of nine members, at least four of which must have one quarter Hawaiian blood or more (DHHL n.d.).

Resulting from the Hawaiian Homes Commission Act, the plains of Ho‘olehua were among the homestead lands designated as such, and in 1924, the first Hawaiian homesteaders settled there. Ho‘olehua was one of the first Hawaiian homesteads in the state, second to Kalamaula, which was established only two years earlier. There were three waves of early settlement for Ho‘olehua: the first 75 people that arrived between 1924 and 1926; another eight that came in 1928; and an additional 48 that moved there in 1929 (Keesing 1936).

The Hawaiian Homes Commission Act designated more than 200,000 acres for Hawaiian Home Lands, with roughly 3,500 acres constituting the Ho‘olehua Homestead. The early homestead at Ho‘olehua consisted of the following:

> …153 tracts of approximately forty acres each allotted, also a special group of 10 residential lots, besides other units connected with the scheme: a school and school farm, a community hall, an office of the Hawaiian Homes Commission, churches, stores, and camps for Filipino laborers who work in connection with the pineapple industry. (Keesing 1936:28)

Historic Maps

Historic maps help to paint a picture of Hoʻolehua in times past and illustrate the changes that have taken place in the region over the years. The earliest depiction of the project area comes from an 1886 map of the island of Molokaʻi drawn by M.D. Monsarrat (Figure 4). General topography and a few place names are provided. Also shown are the names of paddocks in the project area vicinity, indicating that ranching took place during that time.

Among the early maps which clearly point out Hoʻolehua is a Hawaii Territory Survey map from 1915 (Figure 5). The map outlines the numerous land boundaries from the east end of the island and west to Kaluakoʻi and Punakou. Notice that Hoʻolehua is labeled "Lease No. 565, Area 3869 Ac."

The next map, titled "Subdivision of Portion of Hawaiian Homes Lands of Hoolehua and Palaau," dates to 1924 (Figure 6). This is the same year that the Hoʻolehua lands were designated as homesteads due to the Hawaiian Homes Commission Act. The homestead plots and numbers are clearly depicted. The main roadways in the vicinity of the parcel are already in place, including Farrington Highway and Lihi Pali Avenue.

A University of Hawaiʻi Land Study Bureau map shows the land uses and productivity of Central Molokaʻi in 1959 (Figure 7). The project area is at the edge of the yellow designation, which represents pineapple lands. There is a small portion of the project area in beige marked with "NI," which is designated as "Urban, Home-sites, Military, etc." The beige plot just east of the project parcel is marked with an "X," signifying miscellaneous agricultural land for noncommercial use. There are also large areas designated as grazing lands (in green) to the north of the project site.

Contemporary History

Most of the contemporary history of Hoʻolehua is tied to the Hawaiian homestead lands there. Generations of families have made the area their home. It should be noted that in the 1920s the pineapple industry also came to central Molokaʻi, as seen in historic maps, and this likely affected the project lands. The island's major airport was also developed just south of the project area, but the community has retained its rural residential atmosphere until today.

Previous Archaeology

The island of Molokaʻi has not received the same amount of archaeological work as the other main islands and this is reflected in the limited number of published materials relating to the island's archaeological resources. The following summaries are based on reports found in the SHPD library in Kapolei, and are listed chronologically (Figure 8 and Table 1).

The foundation of works that comprise the canon of Molokaʻi's archaeological resources include *Heiau of Molokai* (Stokes 1909); *A Regional Study of Molokai* (Phelps 1941); and the most comprehensive work to date, *Molokai: A Site Survey* (Summers 1971), which is a compilation of other sources.

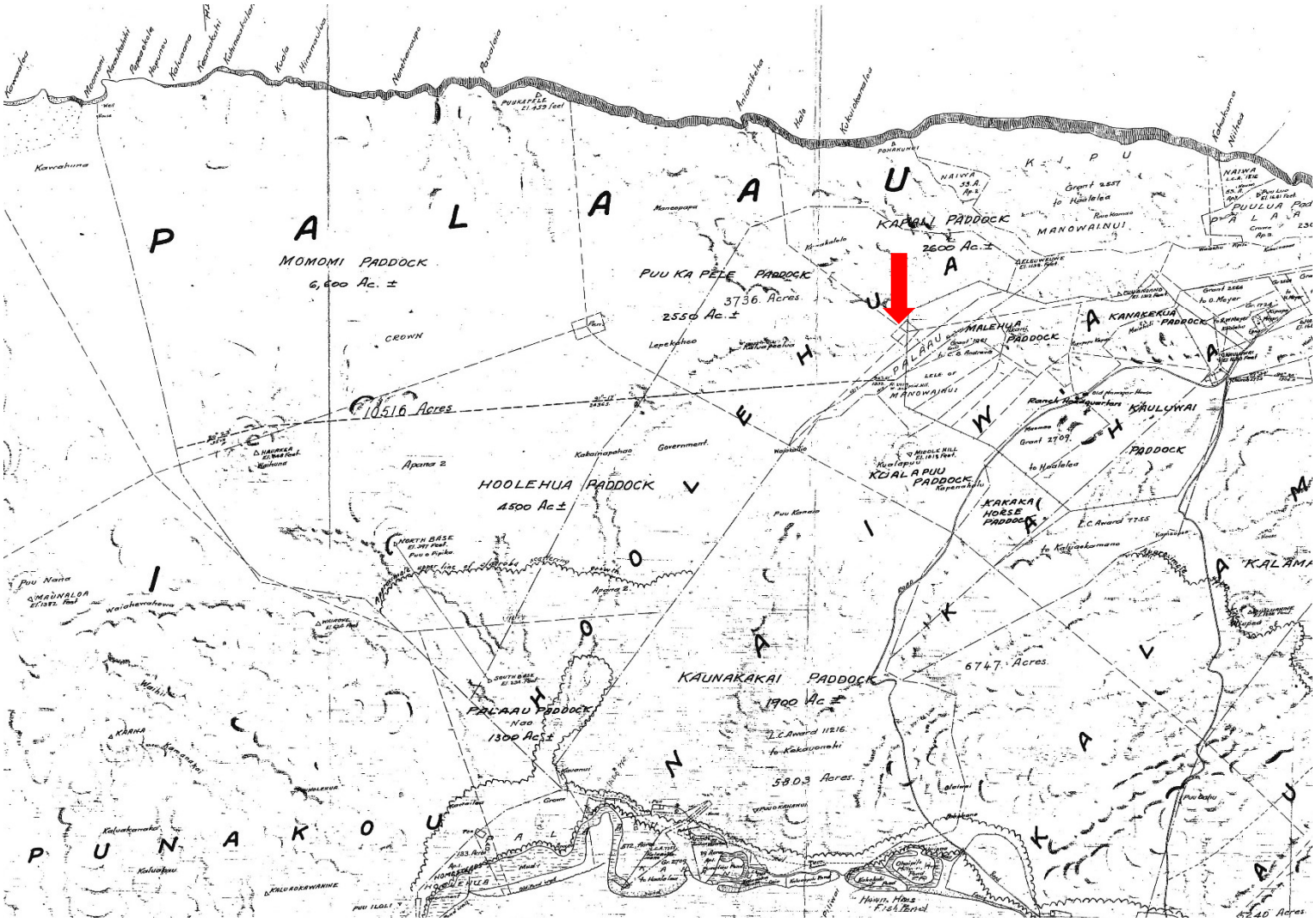

Figure 4. Portion of a second map of Moloka‘i drawn by Monsarrat in 1886 (Monsarrat 1886). The red arrow points to the project area.

Figure 5. Portion of a Hawaii Territory Survey map of Molokai government tracts (Wall 1915). The red arrow points to the project area.

Figure 6. Portion of a Hawaii Territory Survey map of Hoʻolehua and Pālāʻau (Wall 1924). The red arrow points to the project area.

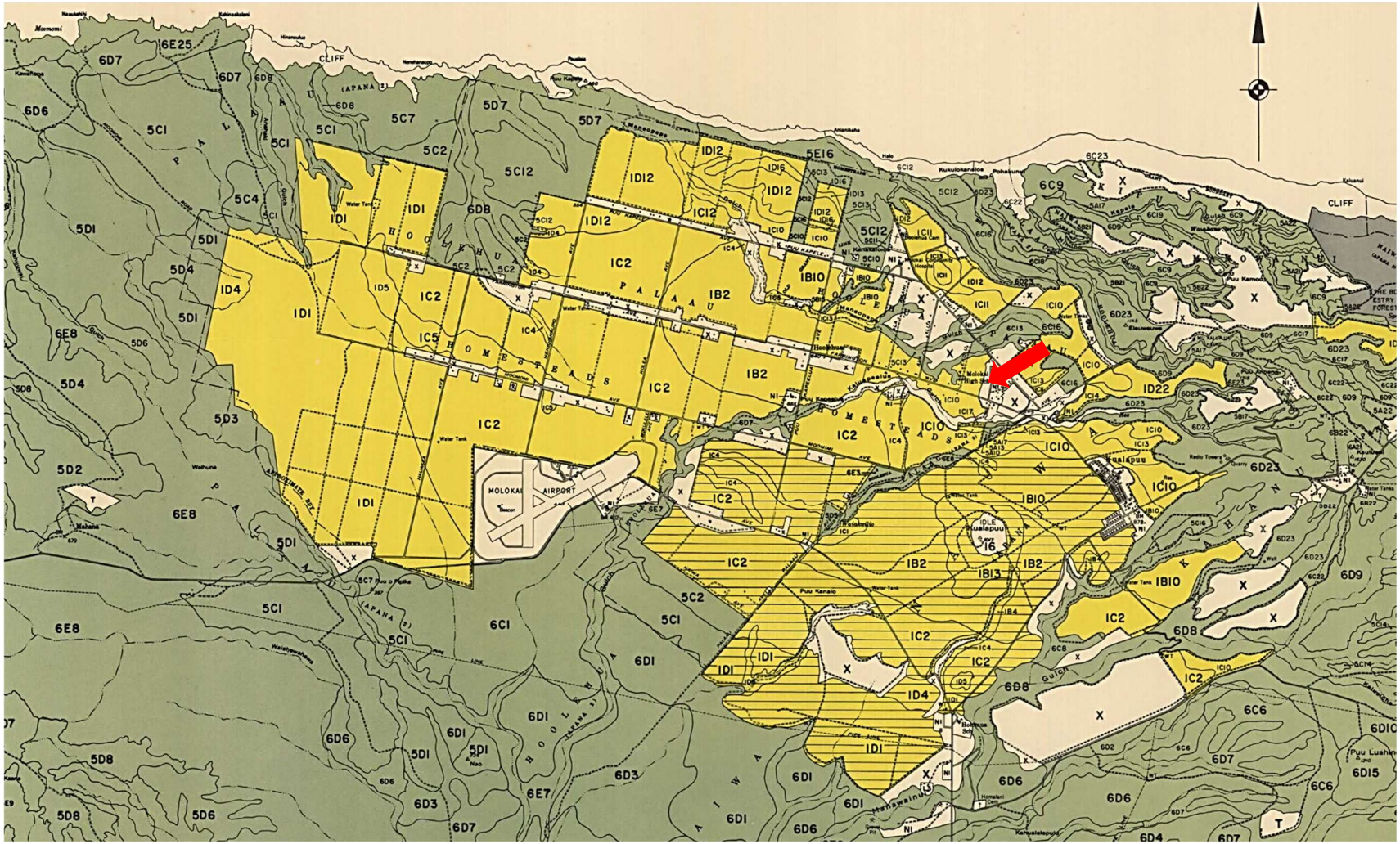

Figure 7. Portion of a map showing land use in the project area ca. 1959 (Fujimura 1959). Note the extent of the pineapple lands in yellow and grazing lands in green. The red arrow points to the project area.

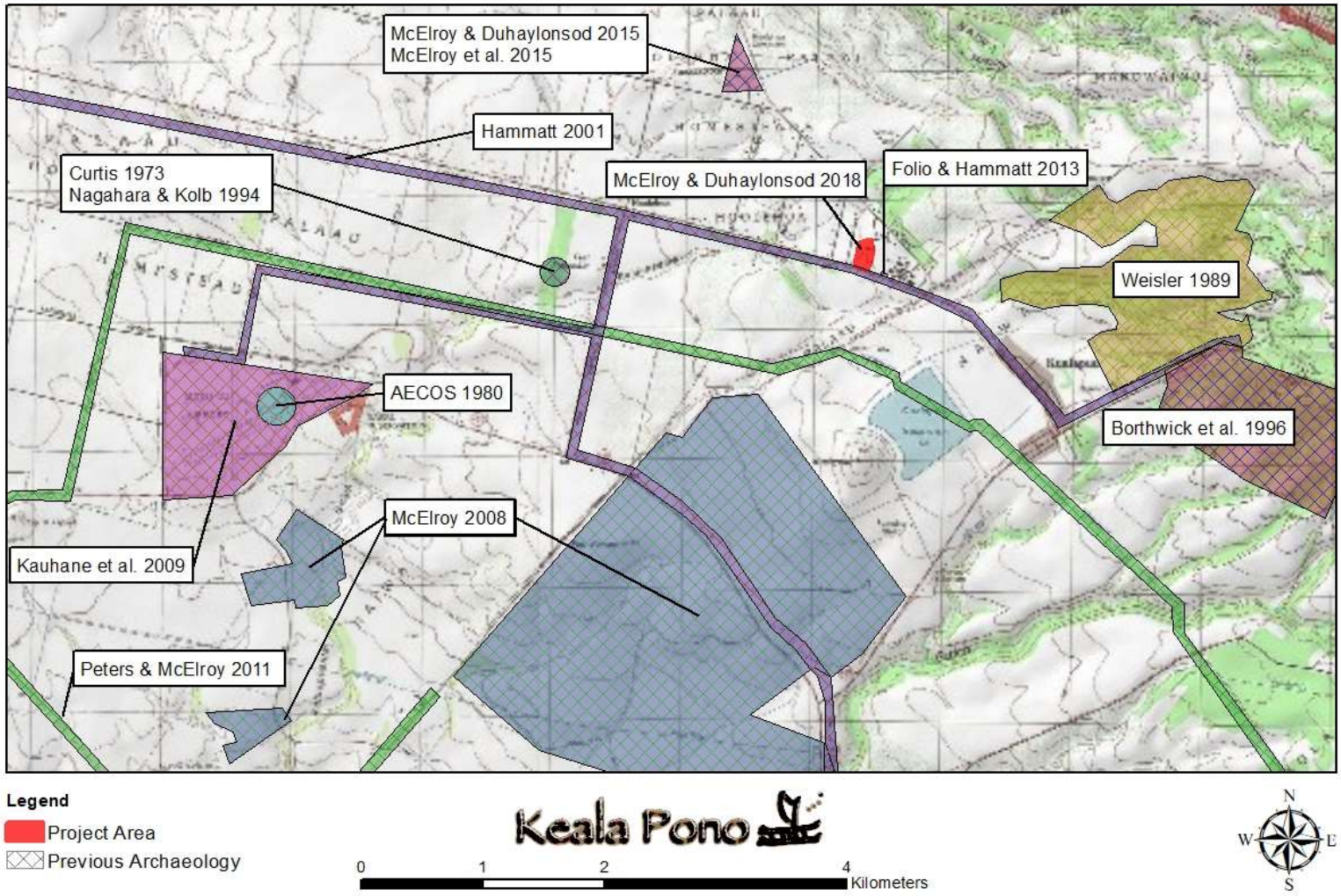

Figure 8. Previous archaeological studies in the vicinity of the project area.

Table 1. Previous Archaeological Studies in the Vicinity of the Project Area

Author	Location	Work Completed	Findings
Stokes 1909	Molokaʻi, island-wide	Recording	Documented sites island-wide.
Phelps 1941	Molokaʻi, island-wide	Recording	Documented sites island-wide.
Summers 1971	Molokaʻi, island-wide	Recording	Documented sites island-wide.
Curtis 1973	Molokaʻi, island-wide	Recommendation Report	Recommended the preservation of Puʻu Kapeʻelua and Hawaiian Homes Commission Headquarters.
AECOS 1980	Hoʻolehua Airport	Reconnaissance Survey	Identified World War II sites.
Weisler 1989	Kipū	Archaeological Survey	Documented two heiau previously recorded by Summers (1971): 111 and 109A and identified a subsurface cultural deposit, SIHP 50-60-03-885.
Nagahara and Kolb 1994	Kapeʻelua Complex, Hoʻolehua	Field Inspection and Mapping	Recommended the Kapeʻelua Complex (SIHP 50-60-03-11) for preservation.
Borthwick et al. 1996	Kahanui 2	Archaeological Inventory Survey	Identified three sites: platform remnant (SIHP 50-60-03-1633), a historic wall segment (SIHP 50-60-03-1634), and a terrace (SIHP 50-60-03-1635).
Hammatt 2001	60 km road corridor (multiple ahupuaʻa)	Archaeological Assessment	None.
McElroy 2008	Pālāʻau, Hoʻolehua, and Nāʻiwa	Archaeological Assessment	None.
Kaʻuhane et al. 2009	Molokaʻi Airport Rescue and Firefighting Station, Pālāʻau	Cultural Impact Assessment	Compiled archival and oral history documentation.
Peters and McElroy 2011	27 km proposed waterline corridor (multiple ahupuaʻa)	Archaeological Assessment	None; two previously identified sites in the area could not be found.
Folio and Hammatt 2013	Molokaʻi High School	Archaeological Inventory Survey	Identified a historic trash pit (SIHP 50-60-01-2527).
McElroy and Duhaylonsod 2015	Kanakaloloa Cemetery	Archaeological Inventory Survey	Documented one site, the Kanakaloloa Cemetery (SIHP 50-60-02-2564).
McElroy et al. 2015	Kanakaloloa Cemetery	Cultural Impact Assessment	Interviewed four community members who identified cultural practices that take place at the cemetery and vicinity.
McElroy and Duhaylonsod 2018	Current Project Area	Cultural Impact Assessment	Interviewed four community members who shared their knowledge of the area and recommendations for the project.

Regarding Hoʻolehua, a review of the archaeological sites documented by Summers (1971) indicates the presence of Lepekaheo Heiau located west of Kāluapeʻelua Gulch; an unnamed heiau on the east side of ʻEleuweue; and an assortment of pōhaku on Puʻu Kapeʻelua. One of those stones is a huge boulder interpreted as an adze-sharpening or water-collecting stone, and the rest of the stones are called "The Caterpillar Stones," which are associated with the legend of the local caterpillar demi-god (Summers 1971).

The closest sites to the area of study are Site 11 at Puʻu Kapeʻelua in Hoʻolehua, and Site 107, a hōlua slide in Kualapuʻu.

Site 11 is located at Puʻu Kapeʻelua, south of the current project area, between Moʻomomi Avenue and Farrington Avenue. The site consists of two components. Site 11A is known as the "Caterpillar Stones" (Summers 1971:37). Summers (1971:37) quotes a moʻolelo told by Cooke (1949:102), although no description is given for the stones

> …this beautiful girl was visited each night by a lover who left before daylight. She was unable to discover who he was. This suspense told on her, and she began to waste away. A priest, consulted by her parents, advised the girl to attach a piece of white tapa to a wart on her lover's back. In the morning, sheds of tapa helped to trace the demi-god lover to the hill Puu Peelua, in the middle of Hoolehua. The kahuna (priest) and friends of the family found a large peelua (caterpillar) asleep on the hill. The kahuna ordered the people to collect wood which was placed around the sleeping peelua, and a fire was lit. As the heat of the fire increased, the caterpillar burst into myriads of small caterpillars which were scattered all over the plain. That accounts for the army-worm pest, called peelua.

Site 11B is a "stone at Puʻu Kapeʻelua" located just south of the Caterpillar Stones (Summers 1971:37). The stone was visited in 1959 and consisted of a flat rock, measuring 7 feet long, 6 feet wide, and 22 inches tall. The flat surface contained a 21-inch-long basin with two grooves leading into two sides of the hollowed-out area on the north. On the south, another set of grooves led from this basin to another basin, 18 inches long. Marine shell was scattered around the area. The stone may have been used for sharpening adzes or for collecting water (Summers 1971:37).

Site 107 is a hōlua slide on the south-southwest side of Kualapuʻu Hill. Note that the site map in Summers (1971) places the hōlua southeast of the project area, as is shown in Figure 8, while the site description says the hōlua lies on Kualapuʻu Hill. In 1966, no paving could be identified, but traces of the hōlua slide could be seen on the hillside. It is also said that the hillside was once covered in sweet potato fields, which were delineated by rows of stones (Cooke 1949 in Summers 1971:80).

In 1973, the Sub-Committee for the Preservation of Historical Resources Ad-Hoc Committee of the Commerce and Industry drafted a report for the Molokai Task Force enumerating the island's numerous pre-contact and post-contact archaeological and cultural sites. In the report, the committee specifically recommended the preservation of the wahi pana of Puʻu Kapeʻelua, legendary since ancient times, and the preservation of the Hawaiian Homes Commission Headquarters first built by the early homesteaders in 1923 (Curtis 1973).

An archaeological reconnaissance was conducted in 1980 for possible expansion of the Molokaʻi Airport (AECOS 1980). Two alternative sites were surveyed on foot: one at the current Molokaʻi Airport and another mauka of Moʻomomi Beach. Only the airport site is in the general vicinity of the current project area. Several historic features were found there, including World War II bunkers, earthen revetments, Quonset huts, and old roads. They were thought to date from 1942–1947.

A 1989 survey further documented sites recorded by Summers (1971) and identified one new site (Weisler 1989). The survey was conducted for a proposed golf course at Kipū. The previously-recorded sites were both heiau: Site 111 and 109. The newly identified site was a subsurface cultural deposit, State Inventory of Historic Places (SIHP) 885.

In 1994, a field inspection and brief mapping was conducted on previously Site 11, also known as the Kapeʻelua complex (Nagahara and Kolb 1994). This site, which consists of the legendary "caterpillar stones," had already been previously mapped. During this field inspection, the site was assessed to be in fairly good condition, and recommended for preservation without further mitigation efforts. The site was also described to be in Kalamaʻula which might be erroneous since the site appears to be in Hoʻolehua.

A 1996 archaeological inventory survey for the Puʻu Kolea subdivision identified three archaeological sites (Borthwick et al. 1996). A total of 350 acres were surveyed at the 850–1,300 ft. elevation in Kahanui 2 Ahupuaʻa. The three archaeological sites consist of a platform remnant (SIHP 1633), a historic wall segment (SIHP 1634), and a terrace (SIHP 1635). Extensive bulldozing was observed in the area, and historic ranching remains were noted, including the remnants of the 1912 Puʻu Kolea Ranch guest house.

In 2001, an archaeological assessment was conducted along a road corridor of 59.55 km (37 mi.) across Molokaʻi for the proposed installation of a fiber-optic cable system (Hammatt 2001). The assessment included a review of literature covering previous work and a field inspection of the route. Regarding the Hoʻolehua, it was determined that the potential for subsurface deposits was low, and no further archaeological work was recommended.

In 2008, an archaeological assessment with a field inspection was conducted through several ahupuaʻa including Hoʻolehua (McElroy 2008). No surface architecture was observed, and no other cultural materials were identified. The negative findings were attributed to past ranching and agricultural activities which have modified the landscape immensely.

In 2009, a CIA was conducted in the nearby ahupuaʻa of Pālāʻau for the Molokaʻi Airport Aircraft Rescue and Firefighting Station Improvements Project (Kaʻuhane et al. 2009). Results concluded that the project would not adversely impact any cultural resources or practices. It was recommended that proactive community consultation should be pursued.

In 2011, an archaeological assessment was conducted through multiple ahupuaʻa on Molokaʻi, over a 27-km (16.78-mi.) corridor for a proposed waterline (Peters and McElroy 2011). No archaeological material and/or structures were identified during the project even though archival records indicated the possible presence of two sites. It was determined that previous ranching and agricultural activities as well as modern development may have caused the disappearance of the two previously identified sites.

An archaeological inventory survey in 2013 identified one site at Molokaʻi High School, just west of the current project area (Folio and Hammatt 2013). This was a historic trash pit that was designated as SIHP 2527. Items observed in the pit include a ca. 1910 cheese cutter, along with pieces of rusted metal.

In 2015, an archaeological inventory survey (McElroy and Duhaylonsod 2015) and cultural impact assessment (McElroy et al. 2015) were completed for the Kanakaloloa Cemetery, which straddles the boundary of Hoʻolehua and Pālāʻau. The survey documented one site, the Kanakaloloa Cemetery (SIHP 2564), while the cultural impact assessment interviewed four community members who identified cultural practices that take place at the cemetery and vicinity.

In addition to the above archaeological studies, an Historic American Engineering Report (HAER) was done for the Meyer Sugar Mill, located northeast of Kualapuʻu, off of Kalaʻe Highway (Bluestone 1978). When the report was written in 1978, the mill was deemed "the only surviving 19th Century Hawaiian sugar mill with its original machinery intact and its original design essentially unaltered" (Bluestone 1978:1). The mill was small in size compared to those of its time (ca. 1888), but it survives as a good example of Hawaiʻi's sugar-era constructions.

Most recently, a cultural impact assessment was completed for the current project (McElroy and Duhaylonsod 2018). Four community members shared their knowledge of the area and made recommendations for the project. No traditional practices or cultural sites were identified for the specific area of study.

Summary and Settlement Patterns

The Hoʻolehua Plain, set on the island of Molokaʻi, has its origin at the dawn of time when Hina and Wākea dwelled together, and Molokaʻi was born. This same Molokaʻi-a-Hina was to become the ancestor of the people of Molokaʻi (Kamakau 1991).

According to Summers (1971), the estimated population of Molokaʻi at the time of contact was around 10,500. Most of this population was established along the southern shore of the island and in some of the windward valleys. However, evidence suggests that the Hoʻolehua Plain must have seen some kind of substantial pre-contact population, whether transient or permanent, due to the many heiau and koʻa and a kahua maika in the area.

Although Molokaʻi remained a sovereign chiefdom for most of its pre-contact history, during the end of the 18th century, the island fell to neighboring Oʻahu and Maui and eventually to Hawaiʻi Island under Kamehameha I. It appears that much of central to west Molokaʻi stayed closely connected to the Kamehameha family during the historic era. By the mid-1800s, Kamehameha V had a ranch in that portion of the island, and after his death in 1872, much of his lands passed into the hands of Princess Ruth Keʻelikōlani and after her, to Princess Bernice Pauahi Bishop.

While ranching was widespread in the historic era, the central plains also saw ventures into sugarcane cultivation, pineapple agriculture, and honey production. However, with the passage of the Hawaiian Homes Commission Act in 1921, the Hoʻolehua Plain became a designated location for Hawaiian homesteads, and by 1924, the first homesteaders moved there. The area has developed as Hawaiian homestead lands until today.

PROJECT DESIGN

Archaeological monitoring will be conducted for selected ground disturbing activity during construction of the proposed Veteran's and Resident's Center at TMK: (2) 5-2-015:053 in Hoʻolehua Ahupuaʻa, Kona District on the island of Molokaʻi. No archaeological resources are known for the project area. SHPD has recommended that archaeological monitoring is conducted only during the grubbing and grading for the new building, and during initial excavations for associated utilities, the access road, and parking lot (Appendix). After grubbing and grading and initial excavations have been completed, in consultation with the SHPD, the archaeological monitoring plan may be modified with written approval from the SHPD.

Project Personnel

A senior archaeologist, qualified under §13-281, HAR, will serve as principal investigator for the project. The principal investigator will be responsible for overall project organization and management, will ensure high standards for field sampling and laboratory analyses, may conduct field visits and direct supervision of field personnel as appropriate, and will review the content of the monitoring report. The archaeological monitor will have sufficient fieldwork experience in Hawaiʻi or have completed sufficient college-level coursework in Anthropology and Hawaiian Archaeology. If archaeological remains are identified, the monitor has the authority to halt ground-disturbing activities in the immediate area of the find.

Fieldwork

Prior to fieldwork, the archaeological monitor and/or principal investigator will meet with the construction team to discuss the monitoring plan. The archaeologist will ensure that the construction team understands the purpose of the monitoring and that the monitor has the authority to halt construction activity, and also that one archaeological monitor is needed for each ground disturbing activity.

Field recording and sampling may include, but are not limited to, the drawing of stratigraphic profiles, photography, and controlled excavation of exposed features. Accurate map locations of test units, stratigraphic profiles, and archaeological features, deposits, and artifacts will be maintained. Field recording and sampling are intended to mitigate any potentially adverse effects to historic properties. Standards of documentation, recording, and analysis shall accord with HAR §13-279. If non-burial historic properties are identified, the SHPD will be notified and provisions outlined in HAR §13-280-3 will be followed.

If human remains are discovered during monitoring, work in the vicinity of the remains will cease and the archaeological monitor will protect any exposed remains, secure the area, and notify the proper authorities. No further work will take place in the immediate vicinity, although work in other areas of the project site may continue. In the event of inadvertent discovery of non-burial historic properties, SHPD shall be consulted concerning appropriate mitigation measures. As DHHL properties are considered tribal lands under NAGPRA, DHHL will make decisions regarding notification and consultation under NAGPRA, ARPA, and and HAR §13-300 as appropriate.

The AMP does not propose any additional treatment of human remains, other than documentation of archaeological context. Upon consultation with Native Hawaiian parties in accordance with NAGPRA, or with another ethnic group as appropriate, DHHL shall specify the archaeological procedures, if any, required to treat the remains, and the archaeological consultant shall assist in carrying out the requirements. DHHL will be responsible for final custody and disposition of any human remains and associated items found at the project site.

Post-Field Actions

The nature and scope of post-field actions will vary according to the results of the fieldwork. At minimum, if no archaeological remains are discovered, a report documenting the negative findings will be produced and submitted to SHPD. If archaeological remains are discovered, appropriate analyses will be conducted and reported.

Laboratory analyses of cultural material and sediments will be conducted in accordance with HAR §13-279 and will follow the SHPD *Rules Governing Standards for Archaeological Monitoring Studies and Report*s (§13-279). The specific procedures employed in laboratory analysis will vary according to the kinds of remains that are recovered. For example, artifacts will be measured, weighed, sketched or photographed, and identified as appropriate. Faunal material will be weighed, counted, and taxonomically identified to the highest level of detail possible.

Preparation of a final report shall conform to HAR §13-279-5. Photographs of excavations will be included in the monitoring report even if no historically significant sites are documented. A draft monitoring report shall be prepared and submitted to the SHPD within 45 days of the end of fieldwork. A revised final report will be submitted within 30 days following receipt of review comments on the draft report. Should burials and/or human remains be identified, other letters, memos, and/or reports may be required.

Per HAR §279-6 arrangements shall be made with the landowner regarding final disposition of any non-burial collections. If the landowner requests archiving, then the archive shall be determined in consultation with the SHPD.

SUMMARY AND RECOMMENDATIONS

The Hoʻolehua Plain of Molokaʻi, has its origin at the dawn of time when Hina and Wākea dwelled together, and Molokaʻi was born. Evidence suggests that the Hoʻolehua Plain must have seen some kind of substantial pre-contact population, whether transient or permanent, due to the many heiau and koʻa and a kahua maika in the area. In the historic era, ranching was widespread throughout the region, and the central plains also saw ventures into sugarcane agriculture, pineapple cultivation, and honey production. However, with the passage of the Hawaiian Homes Commission Act in 1921, the Hoʻolehua Plain became a designated location for Hawaiian homesteads, and by 1924, the first homesteaders moved there. The area continues to be used as Hawaiian homestead lands today.

Archaeological monitoring will be performed for selected ground disturbing activity associated with construction of the proposed Veteran's and Resident's Center at TMK: (2) 5-2-015:053 in Hoʻolehua Ahupuaʻa, Kona District on the island of Molokaʻi. Monitoring will be conducted only during grubbing and grading for the new building, and during initial excavations for associated utilities, the access road, and parking lot. After grubbing and grading and initial excavations have been completed, in consultation with the SHPD, the archaeological monitoring plan may be modified. Whereas DHHL properties are considered tribal lands under NAGPRA, both federal and state law will be followed if human remains are found on the parcel.

GLOSSARY

ahupua‘a	Traditional Hawaiian land division usually extending from the uplands to the sea.
‘āina	Land.
ali‘i nui	High chief.
hale mua	Men’s eating house.
heiau	Place of worship and ritual in traditional Hawai‘i.
hōlua	Traditional Hawaiian sled used on grassy slopes.
kahua	Open place for sports, such as ‘ulu maika.
kama‘āina	Native-born.
kahuna	An expert in any profession, often referring to a priest, sorcerer, or magician.
kapa	Tapa cloth.
kapu	Taboo, prohibited, forbidden.
kioea	The bristle-thighed curlew, or *Numenius tahitiensis*, a large brown bird with a curved beak.
ko‘a	Fishing shrine.
Māhele	The 1848 division of land.
mauka	Inland, upland, toward the mountain.
moku	District, island.
mo‘olelo	A story, myth, history, tradition, legend, or record.
‘ōlelo no‘eau	Proverb, wise saying, traditional saying.
pōhaku	Rock, stone.
pu‘u	Hill, mound, peak.
‘uala	The sweet potato, or *Ipomoea batatas*, a Polynesian introduction.
wahi pana	Sacred places or legendary places that may or may not be kapu, or taboo.

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APPENDIX: SHPD LETTER REQUESTING ARCHAEOLOGICAL MONITORING

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

January 30, 2018

IN REPLY REFER TO:
Log. No. 2017.02697
Doc. No. 1801MBF01
Archaeology
Architecture
History & Culture

Norman Sakamoto, Administrator
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Dear Sirs:

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Consultation and Request for Determination
Ho'olehua Veterans and Homestead Residents' Community Center Project
Ho'olehua Ahupua'a, Kona District, Moloka'i
TMK: (2) 5-2-015:001 por., 053 por.

This letter provides the State Historic Preservation Division's (SHPD's) review comments regarding the subject project. The pre-consultation request was made by email on October 18, 2017 and a conference call was held on October 26, 2017. The conference consultation included representatives from SHPD, the Department of Hawaiian Home Lands (DHHL), and consultant representatives from G70 and Keala Pono. SHPD received the conference report (meeting minutes) via email on October 30, 2017. The official project notification letter from DHHL (Norman Sakamoto) was submitted to SHPD on November 22, 2017, and additional requested historic preservation review materials were received by the SHPD on December 5, 2017.

DHHL indicates in the November 22, 2017 letter that the project includes the designing and constructing of a new Ho'olehua Veterans and Homestead Residents' Community Center to satisfy the needs of the Veterans living on Molakai'i. The new facility is proposed to be a dual-use Veterans and Residents Center. A customized modular unit will be constructed on TMK: (2) 5-2-015:053, which is an approximate 5.64-acre parcel owned by DHHL. The new facility will connect to the existing infrastructure servicing the Lanikeha Community Center, accessing the property from Keena Place. A 24-foot access driveway will lead from this driveway located south of the property to a parking lot, which will be located at the northern end of the property and be sized to support a daily use of twenty to fifty users. The new center will generally occupy the same area as the former Ho'olehua Community Center that was located at the northern end on property, but demolished in the early 2000s. The Lanikeha Community Center located on the southern end of the property replaces the older facility. Some grading will occur for construction of the new building foundation.

The State of Hawai'i Department of Defense (Hawaii DoD) had funding available to build a new Veteran's Center on Moloka'i, but did not have available land to do it. The DHHL agreed to accept the funds from the Hawaii DoD to

build the center on DHHL property; the project involves no federal funds. The DHHL will lease the facility to the Molokai Veterans Caring for Veterans Group (Veterans Group). The Veterans Group is a local non-profit organization comprised of local veterans caring for veterans.

During the consultation teleconference on October 26, 2017, SHPD suggested the DHHL consult with key stakeholders regarding the project via community meetings. The DHHL advised that a Beneficiary Information Meeting (BIM) was held on September 5, 2017 regarding the subject project. Approximately 65 people participated in the BIM, including veterans, homesteaders and other members of the community. The results of community consultation have not been provided to the SHPD; it was stated in the conference report from October 30, 2017 that the results would be shared in the environmental assessment (EA).

Also during that conference call, the SHPD requested information regarding demolition of the old community center. It was reported in the November 22, 2017 letter to SHPD from DHHL that demolition documentation for the former Ho'olehua Community Center is not available. Fulfillment of any previous mitigation requirements is unknown. A letter dated February 16, 1999 (Log No. 23022, Doc No. 9902SC05) from the SHPD to the DHHL acknowledges the plan to demolish the Ho'olehua Community Center, and at that time the SHPD concurred with a "no historic properties affected" determination.

No archaeological inventory survey (AIS) has been completed on the parcel. The project area was historically used extensively for pineapple production, and the scope of work for the subject project requires only minimal ground disturbance. However, buried cultural resources could be impacted by the undertaking. The project requires grubbing and grading, and minor excavations for utilities, an access road, and a parking lot. During the conference call on October 26, 2017, it was discussed that archaeological monitoring for identification purposes might be implemented in place of a full-scale AIS. Monitoring should only be necessary during the grubbing and grading for the new building, and during initial excavations for associated utilities, access road, and parking lot.

Based on the background information and summary of previous archaeological studies in the area, **SHPD requests archeological monitoring** be conducted for identification purposes for the subject project. Per Hawaii Administrative Rules (HAR) §13-279-3, archaeological monitoring may be utilized as an identification, mitigation, or post-mitigation contingency measure. As an identification measure, archaeological monitoring shall be conducted to adequately document and assess integrity and site significance of any identified historic properties, to determine the potential impacts of the subject project on any identified significant historic properties and, if necessary, appropriate mitigation measures.

SHPD looks forward to receiving an archaeological monitoring plan meeting the requirements of HAR 13-279-4 prior to project initiation.

Please contact Dr. Susan A. Lebo, Archaeology Branch Chief, at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov for any questions regarding this letter. Please contact Dr. Matthew Barker Fariss at matthew.b.fariss@hawaii.gov, or at (808) 243-4626 for any concerns regarding archaeological resources or the development and review of the archaeological monitoring plan.

Aloha,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc. Windy Keala McElroy, PhD (wkm@keala-pono.com)

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
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July 30, 2018

IN REPLY REFER TO:
Log No. 2018.01067
Doc No. 1807MBF17
Archaeology

Norman Sakamoto
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Dear Mr. Sakamoto,

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Archaeological Monitoring Plan for the Proposed Veteran's and Resident's Center
Ho'olehua Ahupua'a, Kona District, Island of Moloka'i
TMK: (2) 5-2-015:053

Thank you for consulting with the State Historic Preservation Division (SHPD) regarding the submittal, *Archaeological Monitoring Plan for the Proposed Veteran's and Resident's Center; Ho'olehua Ahupua'a, Kona District, Island of Moloka'i, Hawai'i; TMK: (2) 5-2-015:053* (McElroy and Duhaylonsod, February 2018). The SHPD received the draft archaeological monitoring plan (AMP) on May 2, 2018.

The project scope is to design and construct a new Ho'olehua Veterans and Homestead Resident's Community Center to satisfy the needs of veterans living on Molakai'i. The parcel identified as TMK: (2) 5-2-015:053 is 5.638 acres, and it is owned by the Department of Hawaiian Home Lands (DHHL).

The new facility will connect to the existing driveway of the Lanikeha Community Center. A 24-foot access driveway will lead to a parking lot which will be sized to support a daily use of 20–50 users. The DHHL proposes to construct a building utilizing customized modular units due to the construction schedule and available funding. The minimum components for the facility include: classroom space, a kitchen, a meeting and display room, four offices (two each for veteran and homestead resident use), storage space (indoor and outdoor), an outdoor gathering space, indoor and outdoor restroom facilities (one set each). The classroom, meeting and storage spaces will have the flexibility to be partitioned and customized. An outdoor playset has also been proposed. The building and support facilities are situated on the site such as to preserve as much of the existing open space as possible.

It is anticipated that the new facility will be able to utilize the existing infrastructure for its wastewater, water, and electrical demand, although if this is not possible then a new leach field will be constructed. The adequacy of all infrastructure requirements will be verified. Utilization of the existing infrastructure and the existing driveway for access will hopefully minimize the impact to the community.

The State of Hawaii Department of Defense (DOD) will provide the funding to DHHL through State House Bill 100, HD1 SD1 CD1 and DHHL will provide the land and the lease agreement. The new facility will serve the communities of both the Moloka'i military veterans and the DHHL Homestead residents, many of whom are both DHHL beneficiaries and veterans. The DHHL maintains the position that they are not required to comply with Section 106 of the National Historic Preservation Act (NHPA) as this project does not involve the use of federal funds and does not require federal permit or approval.

An archaeological inventory survey (AIS) for this project was not conducted. During a conference call on October 26, 2017, it was discussed that archaeological monitoring for identification purposes might be implemented in place of a full-scale AIS. The plan for monitoring during the grubbing and grading for the new building, and during initial excavations for associated utilities, access road, and parking lot was approved by the SHPD (January 12, 2018; Log No. 2017.02697, Doc No. 1801MBF01).

The archaeological monitoring plan meets the requirements of HAR §13-279-4. **It is accepted**. Please send two hard copies clearly marked FINAL, along with a copy of this review letter and a text-searchable PDF version on CD to the Kapolei SHPD office, attention SHPD Library.

The DHHL is the agency of record for this project. Please maintain a copy of this review as part of your administrative record.

You may contact the Maui Lead Archaeologist at matthew.b.fariss@hawaii.gov, or by phone at (808) 243-4626, for questions about this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Kawika McKeague
G70
kawikam@g70.design

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Windy McElroy
Keala Pono
wkm@keala-pono.com

GEOTECHNICAL INVESTIGATION
HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
DEPARTMENT OF HAWAIIAN HOME LANDS
HOOLEHUA, MOLOKAI, HAWAII

for

G70

HIRATA & ASSOCIATES, INC.
W.O. 17-6139
January 23, 2018

Hirata & Associates
Geotechnical Engineering
Hirata & Associates, Inc.
99-1433 Koaha Pl
Aiea, HI 96701
tel 808.486.0787
fax 808.486.0870

January 23, 2018
W.O. 17-6139

Peter Mow
G70
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813

Dear Mr. Mow:

Our report, "Geotechnical Investigation, Hoolehua Veteran and Homestead Resident's Center, Department of Hawaiian Home Lands, Hoolehua, Molokai, Hawaii," dated January 23, 2018, our Work Order 17-6139 is enclosed. This investigation was conducted in general conformance with the scope of services presented in our proposal dated September 8, 2017.

Our borings encountered surface soil classified as brown to mottled brown clayey silt with gravel and completely to highly weathered rock fragments. The clayey silt was in a stiff condition, extending to the maximum depths drilled. Laboratory testing on the clayey silt indicated that the soil has a low expansion potential. Neither groundwater nor seepage water was encountered in the borings.

Conventional shallow foundations bearing directly on the undisturbed clayey silt may be used to support the proposed resident's center. Building slabs-on-grade will require only the standard 4-inch gravel cushion and vapor barrier.

The following is a summary of our geotechnical recommendations. This summary is not intended to be a substitute for our report which includes more detailed explanations of our recommendations, as well as additional requirements.

- Allowable bearing value = 3,000 psf
- Coefficient of friction = 0.4
- Passive earth pressure = 300 pcf

We appreciate this opportunity to be of service. Should you have any questions concerning this report, please feel free to call on us.

Very truly yours,

HIRATA & ASSOCIATES, INC.

Paul S. Morimoto President

PSM:EY

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GEOTECHNICAL INVESTIGATION
HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
DEPARTMENT OF HAWAIIAN HOME LANDS
HOOLEHUA, MOLOKAI, HAWAII

INTRODUCTION

This report presents the results of our geotechnical investigation performed for the proposed veteran and homestead resident's center in Hoolehua, Molokai, Hawaii. Our scope of services for this study included the following:

- A visual reconnaissance of the site and its vicinity to observe existing conditions which may affect the project. The general location of the project site is shown on the enclosed Location Map, Plate A2.1.

- A review of available in-house soils information pertinent to the site and the proposed project.

- Drilling and sampling six exploratory borings to depths ranging from about 5.5 to 15.5 feet. A description of our field investigation is summarized on Plates A1.1 and A1.2. The approximate exploratory boring locations are shown on the enclosed Boring Location Plan, Plate A2.2, and the soils encountered in the borings are described on the Boring Logs, Plates A4.1 through A4.6.

- Drilling four percolation test holes to depths of approximately 5 feet. The approximate test hole locations are shown on Plate A2.2. Falling head percolation tests were performed in the test holes and results are presented on the Department of Health Site Evaluation/Percolation Test forms, Plates A5.1 through A5.4.

- Laboratory testing of selected soil samples. Testing procedures are presented in the Description of Laboratory Testing, Plates B1.1 and B1.2. Test results are presented in the Description of Laboratory Testing, and on the Unified Soil Classification System Sheet (Plate A3.2), Boring Logs (Plates A4.1 through A4.6), Consolidation Test report (Plate B2.1), Direct Shear Test report (Plate B3.1), Modified Proctor Test report (Plate B4.1), and CBR Test

report (Plate B5.1).

- Engineering analyses of the field and laboratory data.

- Preparation of this report presenting geotechnical recommendations for the design of foundations, including seismic considerations, resistance to lateral pressures, concrete slabs-on-grade, flexible pavement, and site grading.

PROJECT CONSIDERATIONS

Information regarding the proposed project was provided by personnel from your office.

The proposed veteran and homestead resident's center will be located on the north side of the existing Lanikeha Community Center (LCC) site. The center will consist of modular type buildings for classroom, meeting room, kitchen, office, and storage spaces, and will have an overall footprint area of about 59 by 120 feet. Although not available at the time of this report, we expect that the final building loads will be relatively light.

The project will also include a new parking lot with plan dimensions of about 61 by 145.5 feet, and will accommodate a total of 34 parking stalls. A new 24-ft wide driveway/fire lane, with a length of about 350 lineal feet, will extend from the existing LCC site to the new parking lot. Low Impact Development (LID) features in the vicinity of the new resident's center and parking lot are also planned.

Finish floor elevations were not available at the time this report. However, we assume that finish elevations will generally match that of the existing. As a result, only minor site grading is expected, including shallow fills on the northwest corner of the site.

SITE CONDITIONS

The project site is located on the west side of Keena Place, north of its intersection with Farrington Avenue in Hoolehua, Molokai, Hawaii. The site is generally bordered by the LCC on the south, residential lots on the west and north, and undeveloped land on the east. The proposed resident's center will be located on the northern portion of the site.

At the time of our fieldwork, the area of the proposed veteran and homestead resident's center was vacant of structures and covered with grassed landscaping. Ground elevations range from about +796 on the eastern side of the site to about +793 on the northwestern side.

SOIL CONDITIONS

Our borings encountered surface soil classified as brown to mottled brown clayey silt with gravel and completely to highly weathered rock fragments. The clayey silt was in a stiff condition, extending to the maximum depths drilled. Laboratory testing on the clayey silt indicated that the soil has a low expansion potential.

Neither groundwater nor seepage water was encountered in the borings.

CONCLUSIONS AND RECOMMENDATIONS

Based on our exploratory fieldwork and laboratory testing, it is our opinion that conventional shallow foundations bearing directly on the undisturbed clayey silt may be used to support the proposed resident's center. Building slabs-on-grade will require only the standard 4-inch gravel cushion and vapor barrier.

Foundations

Conventional shallow foundations bearing directly on the undisturbed clayey silt may be used to support the proposed resident's center and may be designed for an allowable bearing value of 3,000 pounds per square foot.

The recommended allowable bearing value is for the total of dead and frequently applied live loads, and may be increased by one-third for short duration loading which includes the effects of wind and seismic forces.

Spread footings should be a minimum 16 inches in width, and embedded at least 12 inches below finish adjacent grade. The bottom of footing excavations should be thoroughly tamped and cleaned of loose material prior to placement of reinforcing steel and concrete.

Seismic Design

Based on the borings drilled as part of this study and our knowledge of the deep soil conditions in the area, the subsurface soils can be characterized as a stiff soil profile. Therefore, based on the 2012 International Building Code, Site Class D is recommended for this site.

Lateral Design

Resistance to lateral loading may be provided by friction acting at the base of foundations, and by passive earth pressure acting on the buried portions of foundations.

A coefficient of friction of 0.4 may be used with the dead load forces. Passive earth pressure may be computed as an equivalent fluid having a density of 300 pounds per cubic foot with a maximum earth pressure 3,000 pounds per square foot. Unless covered by pavement or concrete slabs, the upper 12 inches of soil should not be considered in computing lateral resistance.

Foundation Settlement

Structural loads were not available at the time of this report. However, structural loads are expected to be relatively light and excessive total and differential settlement is not anticipated.

Slabs-on-Grade

To provide uniform support, all building slabs-on-grade should be underlain by a minimum 4 inches of gravel cushion, such as #3 Fine (ASTM C 33, No.67). All building slabs should also be protected by a vapor barrier.

The exposed subgrade should be scarified to a minimum depth of 6 inches, moisture conditioned to about 2 percent above optimum moisture content, and compacted to a minimum 90 percent compaction as determined by ASTM D 1557.

In terms of serving as a slab cushion, basaltic termite barrier (BTB) may be used in place of the 4 inches of clean gravel. The recommended minimum thickness of the BTB material should be compacted as indicated by the manufacturer's specifications.

Slabs-on-grade which will receive floor covering should include control joints saw-cut into the concrete slab. The purpose of this is to help reduce the potential for reflective cracking of the floor covering due to shrinkage cracks in the

concrete slab. Proper curing of the concrete slab will help reduce shrinkage cracking.

Exterior slabs-on-grade and concrete walkways should be underlain by a minimum 4 inches consisting of aggregate base course in lieu of the typical gravel cushion. The base course should be compacted to a minimum 95 percent compaction as determined by ASTM D 1557.

Pavement Design

Flexible pavement for the fire access lane and parking lot may be designed on the following sections.

Driveway/Fire Access Lane

3.0"	Asphaltic Concrete
6.0"	Base Course (CBR = 85 minimum)
8.0"	Total Thickness

Parking Lot Stalls

2.0"	Asphaltic Concrete
6.0"	Base Course (CBR = 85 minimum)
8.0"	Total Thickness

Prior to placement of base course, the exposed subgrade should be scarified to a minimum depth of 6 inches, moisture conditioned to about 2 percent above optimum moisture content, and compacted to a minimum 90 percent compaction as determined by ASTM D 1557. The base course should be compacted in lifts to a minimum 95 percent compaction as determined by ASTM D 1557.

Site Grading

Site Preparation - The project site should be cleared of all vegetation, demolition debris, and other deleterious material. In areas requiring fill placement, the exposed subgrade should be scarified to a minimum depth of 6 inches, moisture conditioned to about 2 percent above the optimum moisture content, and

compacted to a minimum 90 percent compaction as determined by ASTM D 1557.

Structural Excavations - Based on our exploratory borings, we believe that excavations into the onsite clayey silt can generally be accomplished using conventional excavating equipment.

Temporary cuts into the clayey fills should be stable at slope gradients of 1H:1V or flatter. However, it should be the Contractor's responsibility to conform to all OSHA safety standards for excavations.

Onsite Fill Material – The onsite clayey silt will be acceptable for reuse in compacted fills and backfills. All rock fragments larger than 3 inches in maximum dimension should be removed prior to reuse.

Imported Fill Material - Imported structural fill should be well-graded, non-expansive granular material. Specifications for imported granular structural fill should indicate a maximum particle size of 3 inches, and state that between 8 and 20 percent of soil by weight shall pass the #200 sieve. In addition, the plasticity index (P.I.) of that portion of the soil passing the #40 sieve shall not be greater than 10. Imported structural fill should have a CBR expansion value no greater than 1.0 percent and a minimum CBR value of 15 percent, when tested in accordance with ASTM D 1883.

Compaction – Cohesive soils, such as the onsite clayey silt, should be placed in horizontal lifts restricted to eight inches in loose thickness and compacted to a minimum 90 percent compaction as determined by ASTM D 1557.

Imported structural fill should also be placed in horizontal lifts restricted to eight inches in loose thickness and compacted to a minimum 95 percent compaction as determined by ASTM D 1557.

Fill placed in areas which slope steeper than 5H:1V should be continually benched as the fill is brought up in lifts.

ADDITIONAL SERVICES

We recommend that we perform a general review of the final design plans and specifications. This will allow us to verify that the foundation design and earthwork recommendations have been properly interpreted and implemented in the design plans and construction specifications.

For continuity, we recommend that we be retained during construction to (1) observe footing excavations prior to placement of reinforcing steel and concrete, (2) review and/or perform laboratory testing on import borrow to determine its acceptability for use in compacted fills, (3) observe structural fill placement and perform compaction testing, and (4) provide geotechnical consultation as required.

Our services during construction will allow us to verify that our recommendations are properly interpreted and included in construction, and if necessary, to make modifications to those recommendations, thereby reducing construction delays in the event subsurface conditions differ from those anticipated.

LIMITATIONS

The boring logs indicate the approximate subsurface soil conditions encountered only at those times and locations where our borings were made, and may not represent conditions at other times and locations.

This report was prepared specifically for G70 and their sub-consultants for design of the proposed veteran and homestead resident's center in Hoolehua, Molokai, Hawaii. The boring logs, laboratory test results, and recommendations presented in this report are for design purposes only, and are not intended for use in developing cost estimates by the contractor.

During construction, should subsurface conditions differ from those encountered in our borings, we should be advised immediately in order to re-evaluate our recommendations, and to revise or verify them in writing before proceeding with construction.

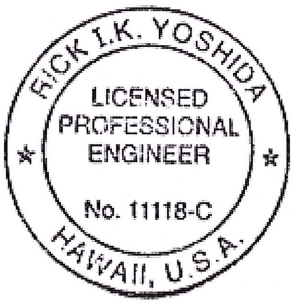
Our recommendations and conclusions are based upon the site materials observed, the preliminary design information made available, the data obtained from our site exploration, our engineering analyses, and our experience and engineering judgment. The conclusions and recommendations in this report are professional opinions which we have strived to develop in a manner consistent with that level of care, skill, and competence ordinarily exercised by members of the profession in good standing, currently practicing under similar conditions in the same locality. We will be responsible for those recommendations and conclusions, but will not be responsible for the interpretation by others of the information developed. No warranty is made regarding the services performed, either expressed or implied.

Respectfully submitted,

HIRATA & ASSOCIATES, INC.

Rick Yoshida, Project Manager

RY:EY



This work was prepared by
me or under my supervision.
Expiration Date of License:
April 30, 2018

APPENDIX A

FIELD INVESTIGATION

DESCRIPTION OF FIELD INVESTIGATION

GENERAL

The site was explored on November 28 and 29, 2017, by performing a visual reconnaissance of the site and drilling six test borings to depths ranging from about 5.5 to 15.5 feet with a truck-mounted drill rig. In addition, four percolation test holes were drilled to depths of about 5 feet and tested in general accordance with Department of Health guidelines.

During drilling operations, the soils were continuously logged by our field engineer and classified by visual examination in accordance with the Unified Soil Classification System. The boring logs indicate the depths at which the soils or their characteristics change, although the change could actually be gradual. If the change occurred between sample locations, the depth was interpreted based on field observations. Classifications and sampling intervals are shown on the boring logs. A Boring Log Legend is presented on Plate A3.1. The Unified Soil Classification and Rock Weathering Classification Systems are shown on Plates A3.2 and A3.3, respectively. The soils encountered are logged on Plates A4.1 through A4.6.

Borings were located in the field by measuring/taping offsets from existing site features shown on the plans provided by your office. Surface elevations at boring locations were estimated based on the Conceptual Site Layout provided by your office on September 6, 2017. The accuracy of the boring locations shown on Plate A2.2 and the elevations shown on Plates A4.1 through A4.6 are therefore approximate, in accordance with the field methods used.

SOIL SAMPLING

Representative soil samples were recovered from the borings for selected laboratory testing and analyses. Representative samples were recovered by driving a 3-inch O.D. split tube sampler a total of 18 inches with a 140-pound

hammer dropped from a height of 30 inches. The number of blows required to drive the sampler the final 12 inches are recorded at the appropriate depths on the boring logs, unless noted otherwise. In addition, a bulk soil sample was recovered from boring B4 at a depth of about 0.5 feet below grade.

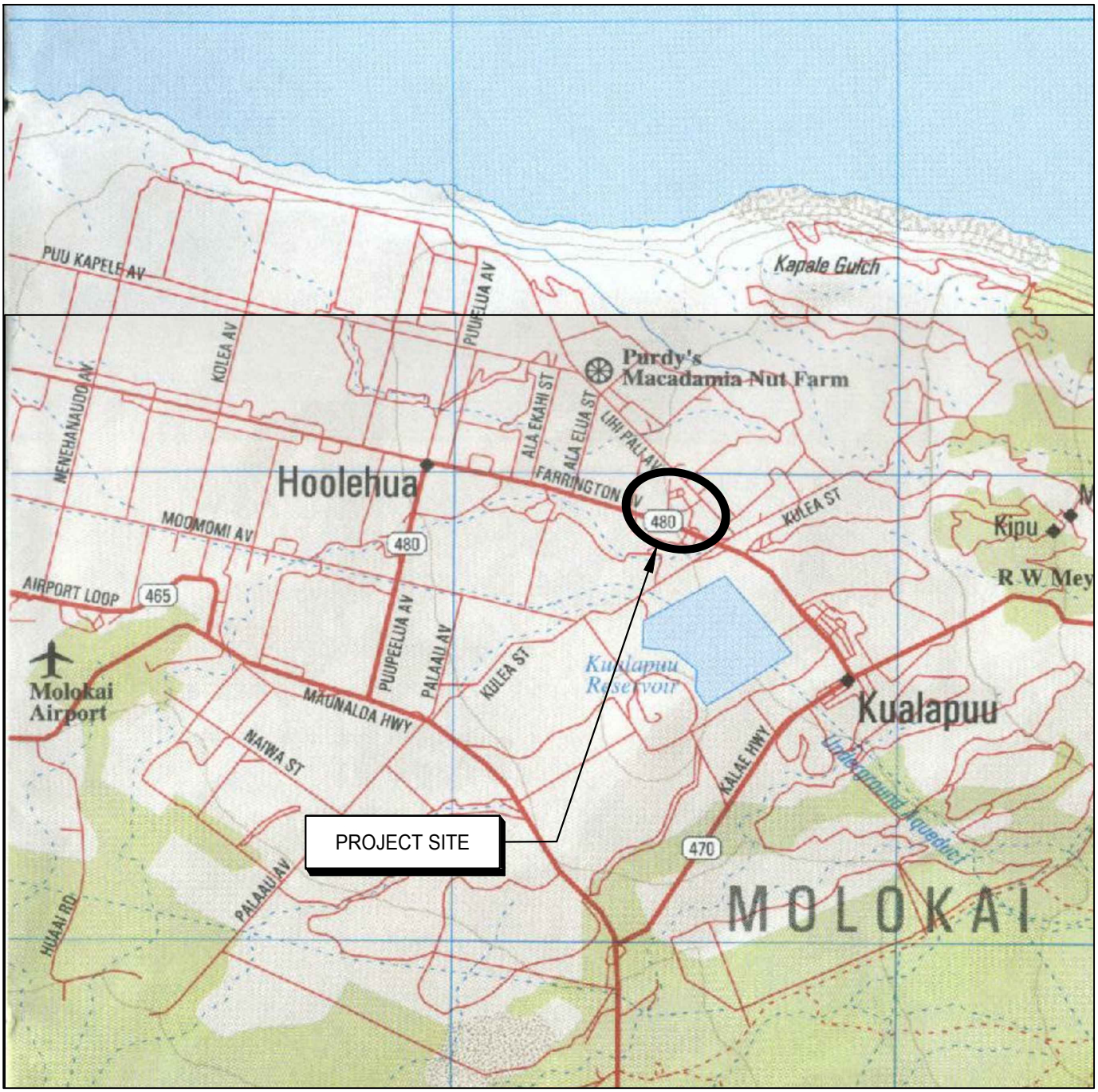
PERCOLATION TESTING

Our fieldwork also included drilling and testing four percolation test holes to depths of about 5 feet. Falling head percolation tests were performed in the test holes in general accordance with Department of Health guidelines.

Based on the procedures outlined in the Department of Health guidelines, results of the falling head percolation tests were recorded as percolation rates measured in minutes per inch. However, the City and County of Honolulu's Storm Water BMP Guide requires that infiltration rates, measured in inches per hour, be used in the design of infiltration systems. Therefore, the Porchet Method (also known as the Inverse Borehole Method) was used to estimate the infiltration rates from the percolation field test data. The Porchet Method considers time interval, drop in water level, test hole radius, and test hole depth.

The approximate test hole locations are shown on Plate A2.2, and test results are presented on the Department of Health Site Evaluation/Percolation test forms, Plates A5.1 through A5.4. The results are summarized in the following table.

Test Hole	Depth (ft)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
P1	5	13.3	0.68
P2	5	17.8	0.18
P3	5	17.1	0.20
P4	5	30.0	0.09



Reference: Hawaii Atlas & Gazetteer, Topo Maps of the Entire State by DeLorme (1999)

Hoolehua Veteran and Homestead Resident's Center

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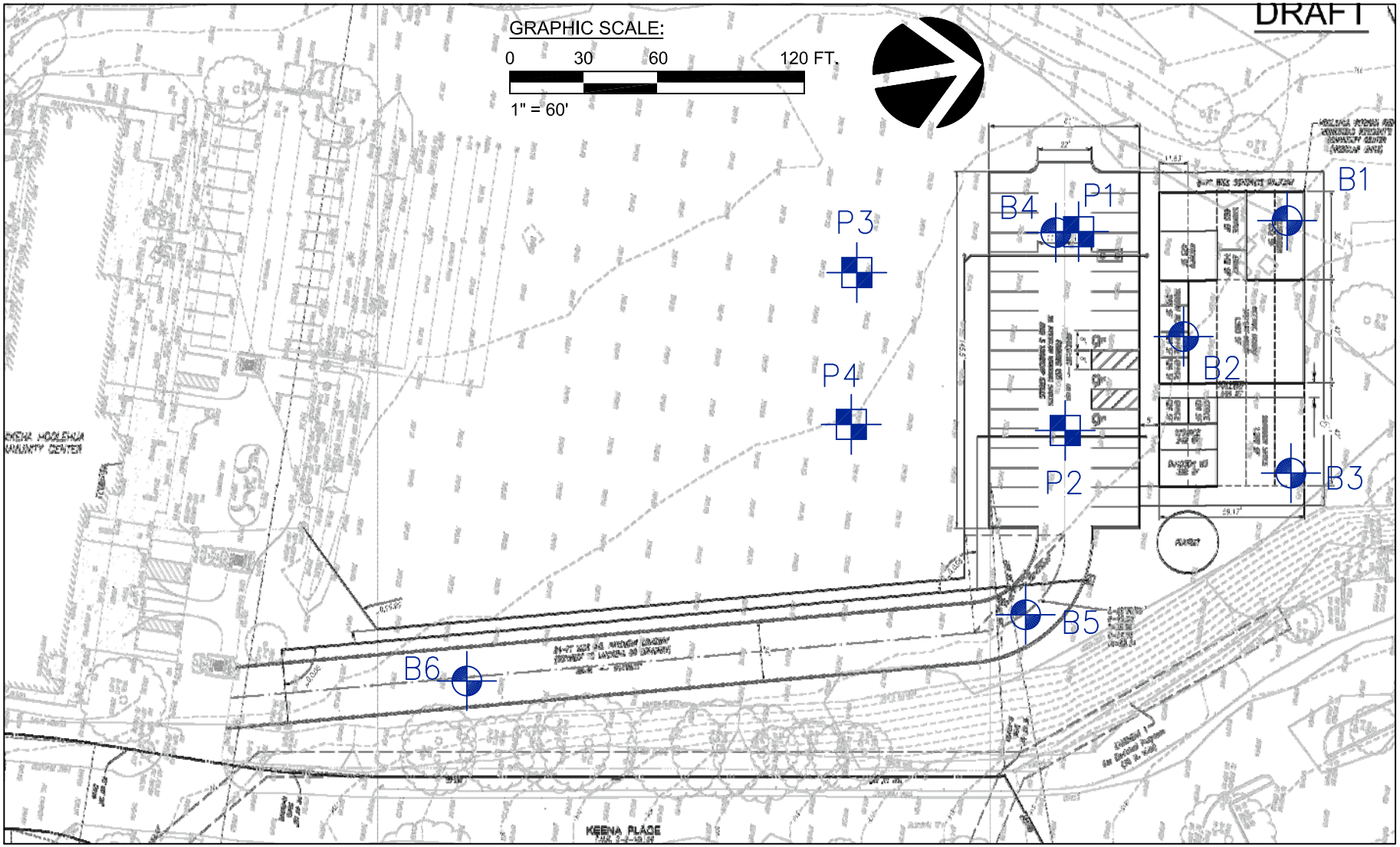
W.O. 17-6139

LOCATION MAP

Plate A2.1



LEGEND

Approximate location of borings

Approximate location of percolation tests

Reference: Conceptual Site Layout provided by G70 on September 6, 2017.

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W.O. 17-6139

BORING LOCATION PLAN

Plate A2.2

MAJOR DIVISIONS			GROUP DIVISIONS	TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of the material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines.)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amt. of fines.)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines.)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amt. of fines.)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of the material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50.)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of high plasticity, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50.)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic silts.
FORMATIONS				FRESH TO MODERATELY WEATHERED BASALT
				VOLCANIC TUFF / HIGHLY TO COMPLETELY WEATHERED BASALT
				CORAL

SAMPLE DEFINITION

2" O.D. Standard Split Spoon Sampler	Shelby Tube	RQD: Rock Quality Designation
3" O.D. Split Tube Sampler	Core Sample	Water Table

Hoolehua Veteran and Homestead Resident's Center

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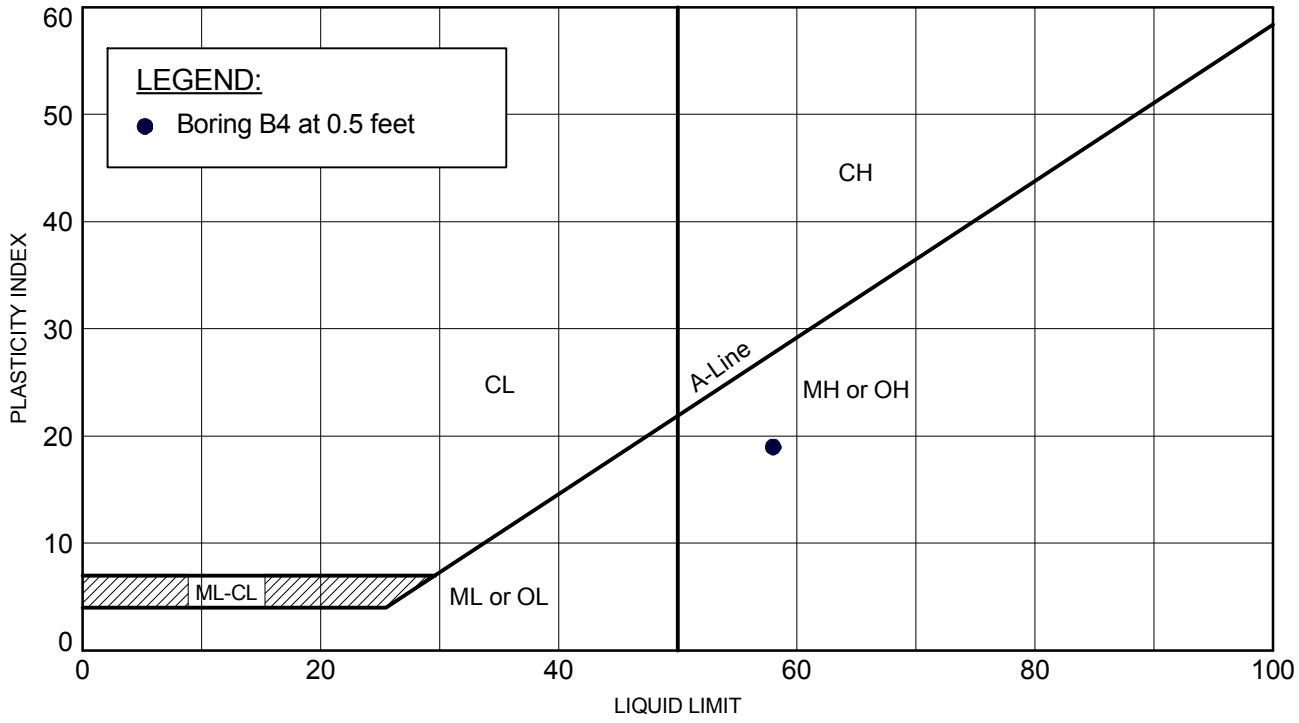
BORING LOG LEGEND

Plate A3.1

PLASTICITY CHART



GRADATION CHART

COMPONENT DEFINITIONS BY GRADATION	
COMPONENT	SIZE RANGE
Boulders	Above 12 in.
Cobbles	3 in. to 12 in.
Gravel	3 in. to No. 4 (4.76 mm)
Coarse	3 in. to 3/4 in.
Fine Gravel	3/4 in. to No. 4 (4.76 mm)
Sand	No. 4 (4.76 mm) to No. 200 (0.074mm)
Coarse Sand	No. 4 (4.76 mm) to No. 10 (2.0 mm)
Medium Sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine Sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074 mm)

Hoolehua Veteran and Homestead Resident's Center

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W.O. 17-6139

UNIFIED SOIL CLASSIFICATION SYSTEM

Plate
A3.2

Grade	Symbol	Description
Fresh	F	No visible signs of decomposition or discoloration. Rings under hammer impact.
Slightly Weathered	WS	Slight discoloration inwards from open fractures, otherwise similar to F.
Moderately Weathered	WM	Discoloration throughout. Weaker minerals such as feldspar decomposed. Strength somewhat less than fresh rock but cores cannot be broken by hand or scraped by knife. Texture preserved.
Highly Weathered	WH	Most minerals somewhat decomposed. Specimens can be broken by hand with effort or shaved with knife. Core stones present in rock mass. Texture becoming indistinct but fabric preserved.
Completely Weathered	WC	Minerals decomposed to soil but fabric and structure preserved (Saprolite). Specimens easily crumbled or penetrated.
Residual Soil	RS	Advance state of decomposition resulting in plastic soils. Rock fabric and structure completely destroyed. Large volume change.

Reference: Soil Mechanics, NAVFAC DM-7.1, Department of the Navy, Naval Facilities Engineering Command, September, 1986.

Hoolehua Veteran and Homestead Resident's Center

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ROCK WEATHERING CLASSIFICATION SYSTEM

Plate A3.3

Hirata & Associates, Inc.
GEOTECHNICAL ENGINEERING

Boring No.
B1

BORING LOG

PROJECT NAME Hoolehua Veteran and Homestead Resident's Center
WORK ORDER NO. 17-6139 DRIVING WT. 140 lb. START DATE 11/28/17
SURFACE ELEV. 795.6 ±* DROP 30 in. END DATE 11/28/17

REMARKS/ SAMPLE NO.	CORE RECOVERY (%)	RQD (%)	BLOWS PER FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	DEPTH (ft)	GRAPHIC LOG	SAMPLE	MATERIAL DESCRIPTION
			29	76	25				Clayey SILT (MH) - Brown, moist, stiff, with gravel.
Direct Shear Test			52/6"	75	24				
			54/6"	84	21	5			Mottled brown in color, with completely to highly weathered rock fragments from 4.5 feet.
			75	82	19	10			
			77	82	27	15			
									End boring at 15.5 feet.
									Neither groundwater nor seepage water encountered.
						20			* Elevations based on Conceptual Site Layout provided by G70 on September 6, 2017.
						25			
						30			
						35			

Plate A4.1

Hirata & Associates, Inc.
GEOTECHNICAL ENGINEERING

Boring No.
B2

BORING LOG

PROJECT NAME Hoolehua Veteran and Homestead Resident's Center
WORK ORDER NO. 17-6139 DRIVING WT. 140 lb. START DATE 11/28/17
SURFACE ELEV. 795.8 ± DROP 30 in. END DATE 11/28/17

REMARKS/ SAMPLE NO.	CORE RECOVERY (%)	RQD (%)	BLOWS PER FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	DEPTH (ft)	GRAPHIC LOG	SAMPLE	MATERIAL DESCRIPTION
									Clayey SILT (MH) - Brown, moist, stiff, with gravel.
			61	58	39				
Consolidation Test			54/6"	85	24	5			Mottled brown in color, with completely to highly weathered rock fragments from 3.5 feet.
			47	71	40	10			
			35	85	32				
						15			End boring at 14.5 feet.
									Neither groundwater nor seepage water encountered.
						20			
						25			
						30			
						35			

Plate A4.2

Hirata & Associates, Inc.
GEOTECHNICAL ENGINEERING

Boring No.
B3

BORING LOG

PROJECT NAME Hoolehua Veteran and Homestead Resident's Center
WORK ORDER NO. 17-6139 DRIVING WT. 140 lb. START DATE 11/28/17
SURFACE ELEV. 796.4 ± DROP 30 in. END DATE 11/28/17

REMARKS/ SAMPLE NO.	CORE RECOVERY (%)	RQD (%)	BLOWS PER FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	DEPTH (ft)	GRAPHIC LOG	SAMPLE	MATERIAL DESCRIPTION
			47	73	11				Clayey SILT (MH) - Brown, moist, stiff, with gravel.
									Mottled brown in color, with completely to highly weathered rock fragments from 1.5 feet.
			92/11"	83	19				
			74	114	15	5			
			42	77	41	10			Decreased gravel content from 9 feet.
			31	78	41	15			
									End boring at 15.5 feet.
									Neither groundwater nor seepage water encountered.
						20			
						25			
						30			
						35			

Plate A4.3

Hirata & Associates, Inc.
GEOTECHNICAL ENGINEERING

Boring No.
B4

BORING LOG

PROJECT NAME Hoolehua Veteran and Homestead Resident's Center
WORK ORDER NO. 17-6139 DRIVING WT. 140 lb. START DATE 11/29/17
SURFACE ELEV. 795.4 ± DROP 30 in. END DATE 11/29/17

REMARKS/ SAMPLE NO.	CORE RECOVERY (%)	RQD (%)	BLOWS PER FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	DEPTH (ft)	GRAPHIC LOG	SAMPLE	MATERIAL DESCRIPTION
			33	76	23				Clayey SILT (MH) - Brown, moist, stiff, with gravel.
									Mottled brown in color, with completely weathered rock fragments from 2 feet.
			100/9.5"	80	22	5			
									End boring at 5.5 feet.
									Neither groundwater nor seepage water encountered.
						10			
						15			
						20			
						25			
						30			
						35			

Plate A4.4

Hirata & Associates, Inc.
GEOTECHNICAL ENGINEERING

Boring No.
B5

BORING LOG

PROJECT NAME Hoolehua Veteran and Homestead Resident's Center
WORK ORDER NO. 17-6139 DRIVING WT. 140 lb. START DATE 11/29/17
SURFACE ELEV. 796.1 ± DROP 30 in. END DATE 11/29/17

REMARKS/ SAMPLE NO.	CORE RECOVERY (%)	RQD (%)	BLOWS PER FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	DEPTH (ft)	GRAPHIC LOG	SAMPLE	MATERIAL DESCRIPTION
			52	84	26				Clayey SILT (MH) - Brown, moist, stiff, with gravel. Mottled brown in color, with completely to highly weathered rock fragments from 1 foot.
			76	80	13				Increased gravel content from 3 feet.
			96	84	9	5			
									End boring at 6.5 feet.
						10			Neither groundwater nor seepage water encountered.
						15			
						20			
						25			
						30			
						35			

Plate A4.5

Hirata & Associates, Inc.
GEOTECHNICAL ENGINEERING

Boring No.
B6

BORING LOG

PROJECT NAME Hoolehua Veteran and Homestead Resident's Center
WORK ORDER NO. 17-6139 DRIVING WT. 140 lb. START DATE 11/29/17
SURFACE ELEV. 794.3 ± DROP 30 in. END DATE 11/29/17

REMARKS/ SAMPLE NO.	CORE RECOVERY (%)	RQD (%)	BLOWS PER FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	DEPTH (ft)	GRAPHIC LOG	SAMPLE	MATERIAL DESCRIPTION
			48	72	34				Clayey SILT (MH) - Brown, moist, stiff, with gravel. Mottled brown in color, with completely to highly weathered rock fragments from 1 foot.
			82/9"	70	20				
			98/9.5"	75	17	5			
									End boring at 6.5 feet.
									Neither groundwater nor seepage water encountered.
						10			
						15			
						20			
						25			
						30			
						35			

Plate A4.6

SITE EVALUATION/PERCOLATION TEST

Date/Time: 11/28/17 12:43 pm
Test performed by: Hirata & Associates, Inc.
Owner: Department of Hawaiian Home Lands
Tax Map Key: 5-2-15 : 53
Test Number: P1

Elevation: +795.4 ft.
Depth to Groundwater Table: >14.5 ft. below grade (Based on boring B2)
Depth to Bedrock, if observed: >14.5 ft. below grade (Based on boring B2)
Diameter of Hole: 4 in.
Depth to Hole Bottom: 5 ft. below grade

Depth (inches)	Soil Profile (Color, texture, other)
0-24	Brown clayey silt
24-60	Mottled brown clayey silt (highly to completely weathered basalt)

PERCOLATION READINGS

Time 12 inches of water to seep away: >30 min.
Time 12 inches of water to seep away: _____ min.

___ For percolation tests in sandy soils, record time intervals and water drops every 10 minutes for at least 1 hour.

✓ For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour; or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time interval	Drop in inches
10 min	2 - 3/16	10 min	3/4
10 min	2 - 3/16		
10 min	2 - 5/16		
10 min	1		
10 min	15/16		
10 min	13/16		

Percolation Rate (time/final water level drop): 13.3 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.

RICK I.K. YOSHIDA
LICENSED PROFESSIONAL ENGINEER
No. 11118-C
HAWAII, U.S.A.

Engineer's Signature/Stamp

Plate A5.1

SITE EVALUATION/PERCOLATION TEST

Date/Time: 11/28/17 12:31 pm
Test performed by: Hirata & Associates, Inc.
Owner: Department of Hawaiian Home Lands
Tax Map Key: 5-2-15 : 53
Test Number: P2

Elevation: +795.5 ft.
Depth to Groundwater Table: >14.5 ft. below grade (Based on boring B2)
Depth to Bedrock, if observed: >14.5 ft. below grade (Based on boring B2)
Diameter of Hole: 4 in.
Depth to Hole Bottom: 5 ft. below grade

Depth (inches)	Soil Profile (Color, texture, other)
0-42	Brown clayey silt
42-60	Mottled brown clayey silt (highly to completely weathered basalt)

PERCOLATION READINGS

Time 12 inches of water to seep away: >30 min.
Time 12 inches of water to seep away: _____ min.

___ For percolation tests in sandy soils, record time intervals and water drops every 10 minutes for at least 1 hour.

✓ For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour; or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time interval	Drop in inches
10 min	1 - 1/8	30 min	2 - 7/16
10 min	1	30 min	2 - 3/16
10 min	1 - 7/16	30 min	1 - 15/16
10 min	1 - 1/8	30 min	1 - 11/16
30 min	3 - 3/4		
30 min	3 - 1/16		

Percolation Rate (time/final water level drop): 17.8 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.

RICK I.K. YOSHIDA
LICENSED PROFESSIONAL ENGINEER
No. 11118-C
HAWAII, U.S.A.

Keith I.K. Yoshida
Engineer's Signature/Stamp

Plate A5.2

SITE EVALUATION/PERCOLATION TEST

Date/Time: 11/28/17 10:01 pm
Test performed by: Hirata & Associates, Inc.
Owner: Department of Hawaiian Home Lands
Tax Map Key: 5-2-15 : 53
Test Number: P3

Elevation: +792.9 ft.
Depth to Groundwater Table: >14.5 ft. below grade (Based on boring B2)
Depth to Bedrock, if observed: >14.5 ft. below grade (Based on boring B2)
Diameter of Hole: 4 in.
Depth to Hole Bottom: 5 ft. below grade

Depth (inches)	Soil Profile (Color, texture, other)
0-36	Brown clayey silt
36-60	Mottled brown clayey silt (highly to completely weathered basalt)

PERCOLATION READINGS

Time 12 inches of water to seep away: >30 min.
Time 12 inches of water to seep away: _____ min.

___ For percolation tests in sandy soils, record time intervals and water drops every 10 minutes for at least 1 hour.

✓ For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour; or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time interval	Drop in inches
10 min	1/4	30 min	1 - 3/4
10 min	3/16	30 min	1 - 3/4
10 min	1/4		
30 min	7/8		
30 min	1 - 1/16		
30 min	1 - 5/8		

Percolation Rate (time/final water level drop): 17.1 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.

RICK I.K. YOSHIDA
LICENSED PROFESSIONAL ENGINEER
No. 11118-C
HAWAII, U.S.A.

Engineer's Signature/Stamp

Plate A5.3

SITE EVALUATION/PERCOLATION TEST

Date/Time: 11/29/17 10:59 pm

Test performed by: Hirata & Associates, Inc.

Owner: Department of Hawaiian Home Lands

Tax Map Key: 5-2-15 : 53

Test Number: P4

Elevation: +794.1 ft.
Depth to Groundwater Table: >14.5 ft. below grade (Based on boring B2)
Depth to Bedrock, if observed: >14.5 ft. below grade (Based on boring B2)
Diameter of Hole: 4 in.
Depth to Hole Bottom: 5 ft. below grade

Depth (inches)	Soil Profile (Color, texture, other)
0-18	Brown clayey silt
18-60	Mottled brown clayey silt (highly to completely weathered basalt)

PERCOLATION READINGS

Time 12 inches of water to seep away: >30 min.
Time 12 inches of water to seep away: _____ min.

___ For percolation tests in sandy soils, record time intervals and water drops every 10 minutes for at least 1 hour.

✓ For percolation tests in non-sandy soils, presoak the test hole for at least 4 hours. Record time intervals and water drops at least every 10 minutes for 1 hour; or if the time for the first 6 inches to seep away is greater than 30 minutes, record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

Time interval	Drop in inches	Time interval	Drop in inches
10 min	11/16	30 min	1 - 1/2
10 min	9/16	30 min	1 - 3/16
10 min	5/8	30 min	1 - 1/16
30 min	2- 7/16	30 min	1
30 min	2 - 5/16		
30 min	1 - 13/16		

Percolation Rate (time/final water level drop): 30 min/in

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable.

RICK I.K. YOSHIDA
LICENSED PROFESSIONAL ENGINEER
No. 11118-C
HAWAII, U.S.A.

Engineer's Signature/Stamp

Plate A5.4

APPENDIX B

LABORATORY TESTING

DESCRIPTION OF LABORATORY TESTING

CLASSIFICATION

Field classification was verified in the laboratory in accordance with the Unified Soil Classification System. Laboratory classification was determined by both visual examination and Atterberg Limit tests performed in general accordance with ASTM D 4318. The results of the Atterberg Limit tests are plotted on Plate A3.2. The final classifications are shown at the appropriate locations on the Boring Logs, Plates A4.1 through A4.6.

MOISTURE-DENSITY

Representative samples were tested for field moisture content and dry unit weight. The dry unit weight was determined in pounds per cubic foot while the moisture content was determined as a percentage of dry weight. Samples were obtained using a 3-inch O.D. split tube sampler. Test results are shown at the appropriate depths on the Boring Logs, Plates A4.1 through A4.6.

CONSOLIDATION

A selected representative sample was tested for its consolidation characteristics. The test sample was 2.42 inches in diameter and 1 inch high. Porous stones were placed in contact with the top and bottom of the test sample to permit addition and release of pore fluid. Loads were then applied in several increments in a geometric progression, and the resulting deformations recorded at selected time intervals. Test results are plotted on the Consolidation Test report, Plate B2.1.

SHEAR TESTS

Shear tests were performed in the Direct Shear Machine which is of the strain control type. Each sample was sheared under varying confining loads in order to determine the Coulomb shear strength parameters, cohesion and angle of internal friction. Test results are presented on Plate B3.1.

SWELL TEST

Swell tests were performed on representative samples by placing a 90 psf surcharge load on one-inch high specimens. The samples were inundated with water, and total expansion recorded after a period of at least 24 hours. Test results were recorded as a percentage of original height. Test results are summarized in the following table:

Sample	Sample Type	Recorded Expansion	Moisture Content Prior to Test
B1 @ 3’	Representative	1.2%	24%
B4 @ 2'	Representative	0.1%	23%

EXPANSION INDEX TEST

An expansion index test was performed in general accordance with ASTM D 4829. A surcharge load of 144 psf was placed on a one-inch high by four inch diameter specimen which was molded to about 50 percent saturation. The sample was inundated with water, and total expansion recorded after volumetric equilibrium was reached. An expansion index test performed on a bulk soil sample obtained from boring B4 at a depth of about 0.5 feet below existing grade resulted in an expansion index of 48, corresponding to a low expansion potential.

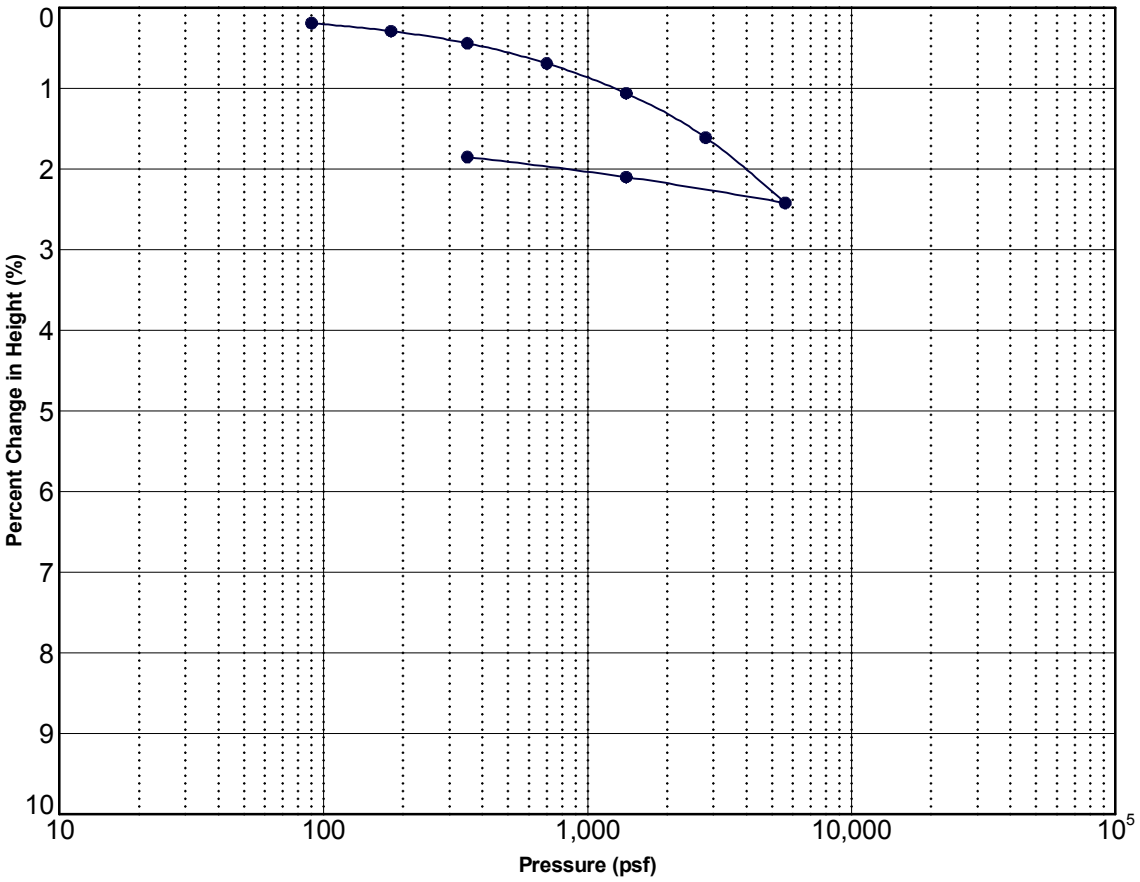
PROCTOR TEST

A Modified Proctor test was performed in general accordance with ASTM D 1557 on a bulk sample obtained from boring B4 at a depth of about 0.5 feet below existing grade. The test is used to determine the optimum moisture content at which the soil compacts to 100 percent dry density. Results are shown on Plate B4.1.

CALIFORNIA BEARING RATIO TEST

A CBR test was performed on a bulk sample obtained from boring B4 at a depth of about 0.5 feet below existing grade, in general accordance with ASTM D 1883. The test is used to evaluate the relative quality of subgrade soils to be used in the design of flexible pavement. Results are shown on Plate B5.1.

Consolidation Test Results



Sample Description

Boring No.: B2 Depth (ft): 4

Soil Description: Mottled brown clayey silt

	Moisture Content (%)	Dry Density (pcf)
Initial	24.3	85.1
Final	23.1	86.7

Hoolehua Veteran and Homestead Resident's Center

HIRATA & ASSOCIATES, INC.
Geotechnical Engineering

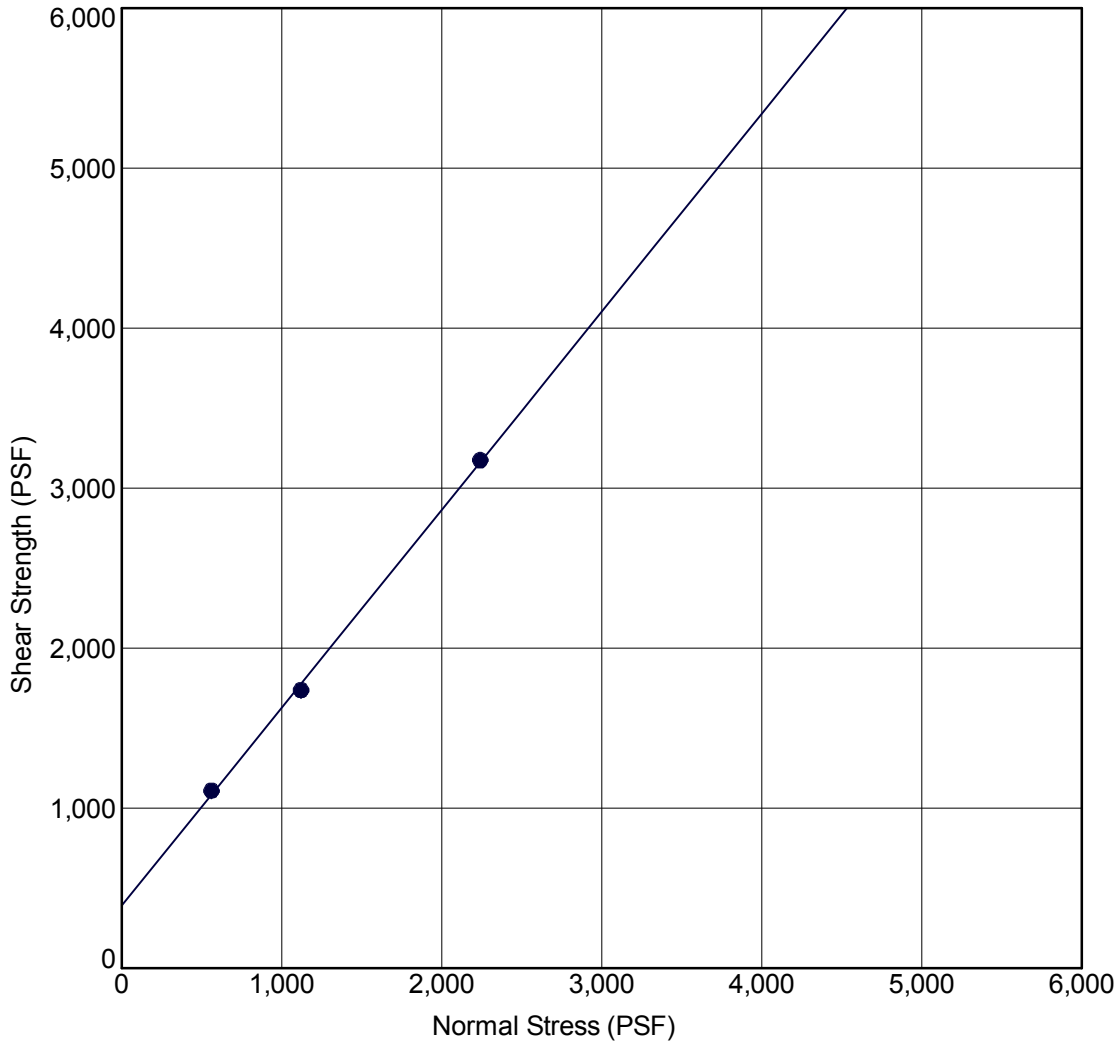
W.O. 17-6139

CONSOLIDATION TEST

ASTM D2435 / D2435M - 11

Plate B2.1

Direct Shear Test Results



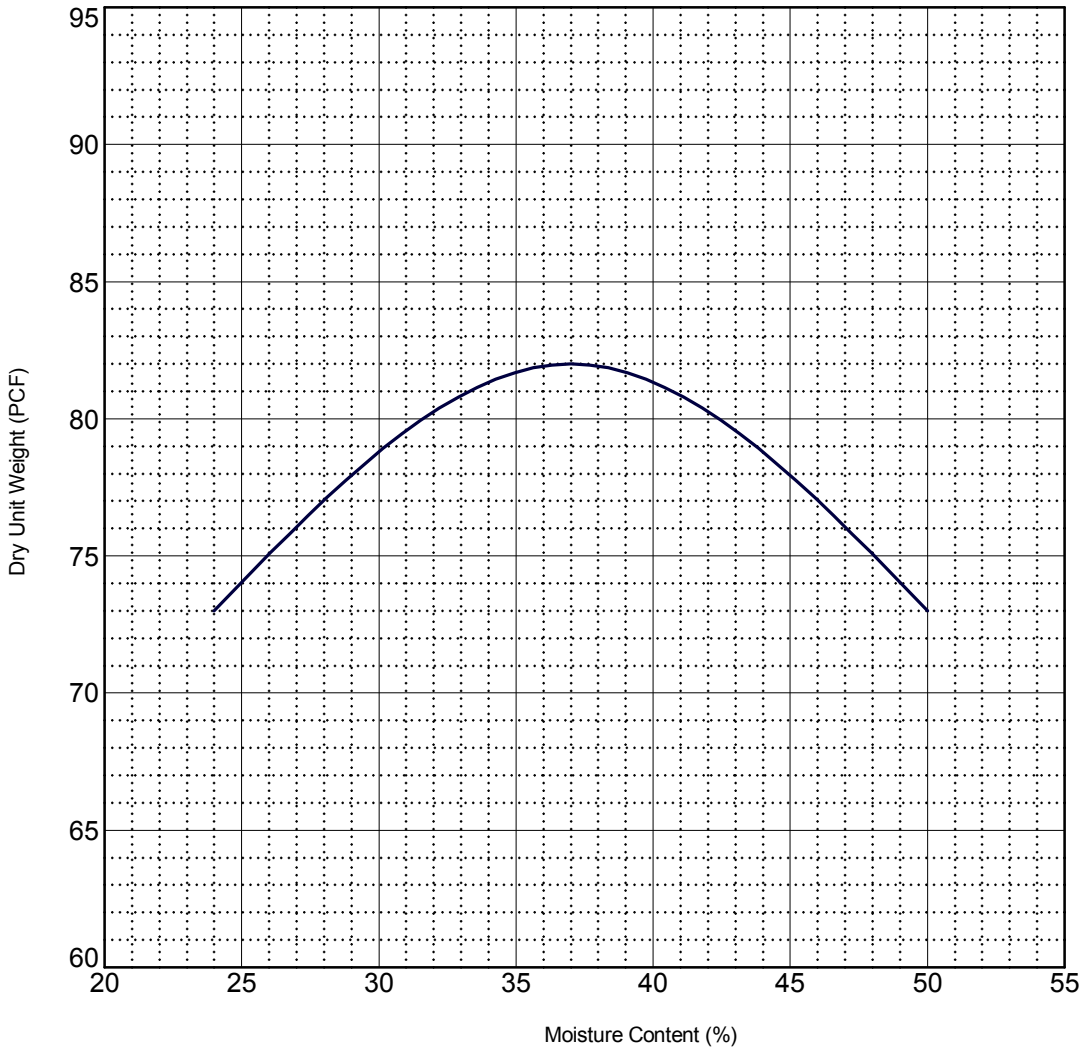
Soil Data

Boring No.: B1 Depth (ft): 3
Soil Description: Brown clayey silt

Test Results

Strength Intercept (c): 390.9 PSF (Peak Strength)
Friction Angle (phi): 51.1 DEG (Peak Strength)

	Hoolehua Veteran and Homestead Resident's Center		
	HIRATA & ASSOCIATES, INC. Geotechnical Engineering	**DIRECT SHEAR TEST**	Plate B3.1
	W.O. 17-6139	*ASTM D3080*	



Soil Data

Location: Boring B4 at 0.5 feet

Description: Brown clayey silt

Test Results

Maximum Dry Density: 82.0 PCF

Optimum Moisture Content: 37.0 %

Hoolehua Veteran and Homestead Resident's Center

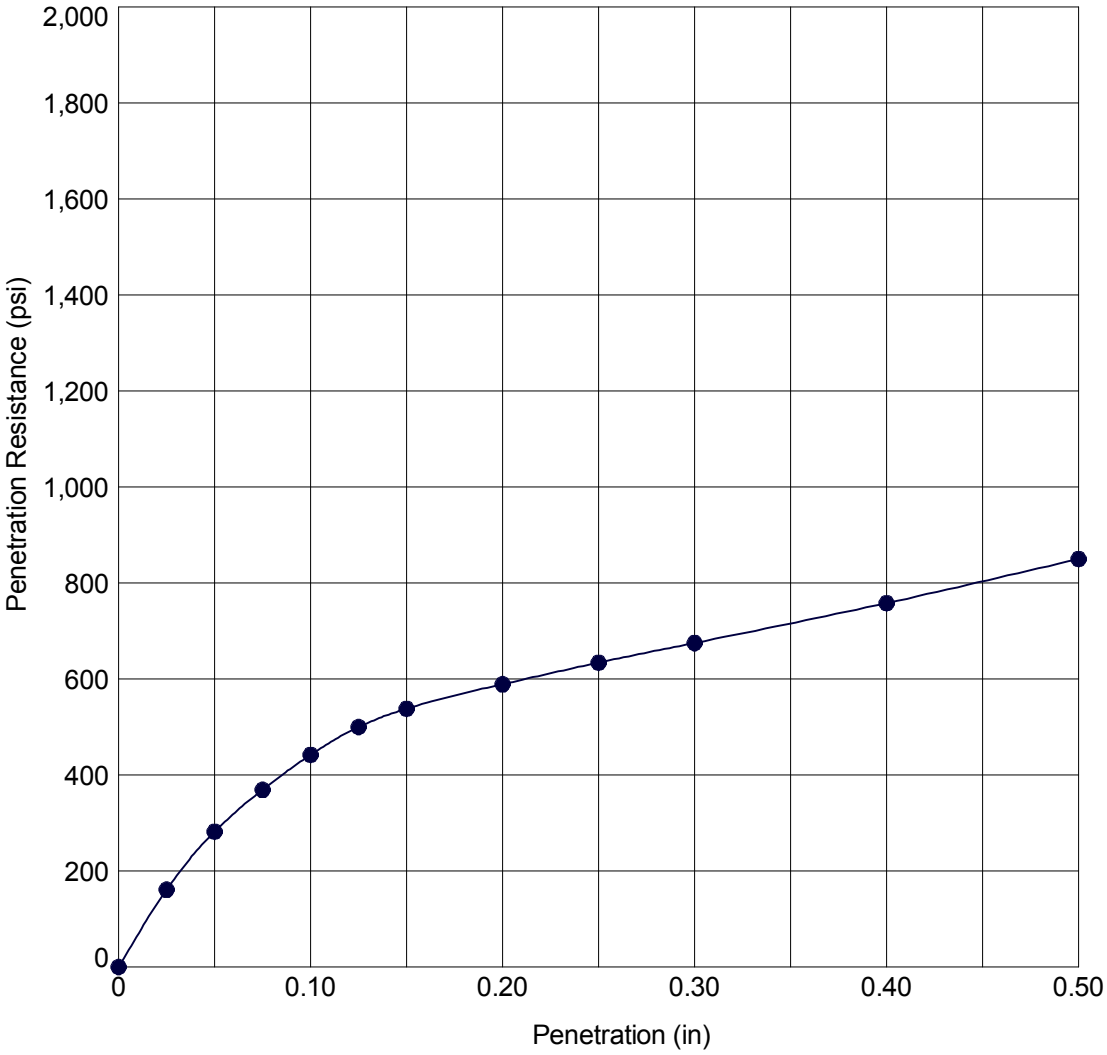
HIRATA & ASSOCIATES, INC.
Geotechnical Engineering

W.O. 17-6139

MODIFIED PROCTOR CURVE

ASTM D1557

Plate B4.1



Soil Data

Location:	Boring B4 at 0.5 feet
Description:	Brown clayey silt
Sample Dry Density	82.0 pcf
Sample Moisture Content	37.0 %

Test Results

CBR Value:	44.0 %
Expansion:	0.5 %

Hoolehua Veteran and Homestead Resident's Center

HIRATA & ASSOCIATES, INC.
Geotechnical Engineering

W.O. 17-6139

CBR STRESS PENETRATION CURVE

ASTM D1883

Plate B5.1

DAVID Y. IGE
GOVERNOR OF HAWAII

BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

R10F649.FNL.18

October 2, 2018

The Honorable Jobie M.K. Masagatani
Chair
Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, Hawaii 96707

Dear Ms. Masagatani:

Subject: NOTICE OF GENERAL PERMIT COVERAGE (NGPC)
National Pollutant Discharge Elimination System (NPDES)
Hoolehua Veterans and Homestead Resident's Center
Hoolehua, Island of Molokai, Hawaii
File No. HI R10F649

This letter is to notify you that the **DEPARTMENT OF HAWAIIAN HOME LANDS, LAND DEVELOPMENT DIVISION** (hereinafter PERMITTEE) is now covered under the NPDES General Permit authorizing discharges of storm water associated with construction activities. Coverage under this general permit authorizes you to discharge only storm water to the receiving State waters discharge point(s) from the project location(s) identified in the Notice of Intent (NOI), dated September 4, 2018, **provided that you comply with Hawaii Administrative Rules (HAR) 11-54; HAR 11-55; HAR 11-55, Appendix A; HAR 11-55, Appendix C; and the information submitted in the NOI.** Discharges of non-storm water, toxics, and other water pollutants to State waters are not authorized by this NPDES General Permit. HAR 11-54 and 11-55 are available on the Department of Health (DOH), Clean Water Branch (CWB) website at: http://health.hawaii.gov/cwb/.

This NGPC will take effect on the date of this notice. This NGPC will expire at midnight, December 5, 2018, or when amendments to HAR, Chapter 11-55, Appendix C, are adopted, whichever occurs first. Failure to comply with HAR 11-54; HAR 11-55; HAR 11-55, Appendix A; HAR 11-55, Appendix C; and information provided in the NOI is an enforceable violation and your NGPC may be terminated. If you violate Hawaii Revised Statutes (HRS), Chapter 342D, you may be subject to penalties of up to $25,000 per violation per day and up to two (2) years in jail.

Falsification of information, including providing information in the NOI that does not match what is actually occurring at the project site/facility and failure to prepare the Storm Water Pollution Prevention Plan (SWPPP) prior to NOI submission, may result in criminal penalties for the Permittee and their authorized representative as provided in Clean Water Act, Section 309 and HRS, Section 342D-35.

As a reminder, this general permit requires the Permittee to:

1. Notify DOH of the construction start date within seven (7) calendar days before the start of construction activities.
2. Complete and submit the Solid Waste Disclosure Form for Construction Sites to the DOH, Solid and Hazardous Waste Branch, Solid Waste Section, as specified on the form at least 30 calendar days before the start of the construction activities. The form can be downloaded at: https://health.hawaii.gov/shwb/files/2018/04/swdiscformapr2018.pdf.
3. Implement the SWPPP in accordance with HAR 11-55, Appendix C. The Director reserves the right to require the Permittee to modify the SWPPP.
4. Submit a new NOI with filing fee and obtain a new NGPC for any revisions to the information submitted in the NOI (with the exception of changes to contact person information for non-transfer of ownerships and changes to the SWPPP). This NGPC cannot be modified.
5. Complete and submit the Notice of Cessation (NOC) within seven (7) calendar days after the end of the month that the subject project was completed.

All NGPC compliance submittals, including the NOC shall be submitted on the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form shall be completed on the e-Permitting Portal located at: https://eha-cloud.doh.hawaii.gov/epermit/.

The Permittee is responsible for obtaining other Federal, State, or local authorizations as required by law.

Please complete the DOH Customer Satisfaction Survey regarding your request for General Permit coverage. This brief survey is available on the e-Permitting Portal located at: https://eha-cloud.doh.hawaii.gov/epermit/. Please use the Application Finder button and search for the "Customer Satisfaction Survey."

If you have any questions, please contact the Enforcement Section or Mr. Darryl Lum of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

for
BRUCE S. ANDERSON, Ph.D.
Director of Health

c: Ms. Jobie M.K. Masagatani, DHHL [via e-mail jobie.k.masagatani@hawaii.gov]
Mr. Al Jerome Leano, G70
[via e-mail aljeromel@g70.design only]
(w/Receipt No. 61786 for $500 Filing Fee only)

2018 Renewal Notice of Intent Form

version 1.5

(Submission #: HNH-9E1H-82E9N, version 1) < < This submission is currently locked and cannot be revised.

PRINTED ON 3/8/2019

Summary

Submission #:	HNH-9E1H-82E9N	**Date Submitted:**	10/11/2018 2:48 PM
Form:	2018 Renewal Notice of Intent Form	**Status:**	On Hold
Submitted By:	Al Jerome Leano	**Submission Creator:**	Al Jerome Leano
Active Steps:	NGPC Issued		
Reference #:	HIR10F649		
Description:	2018 Renewal Notice of Intent Form		

Notes

Details

1. Renewal Information

Provide your current NGPC file number (e.g. HIR10E951, HI16LE231, HI12LD380). Your NGPC file number is located in the subject line of your NGPC. Do not put a space after HI.

HIR0F649

Provide the project or facility name that is on the subject line of your NGPC. For example: Construction of ABC Building Project.

Hoolehua Veterans and Homestead Resident's Center

By submitting this form you are certifying that:

You are currently complying with your NGPC requirements, including notifying DOH-CWB of all non-compliance via the e-Permitting CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs.

2. Owner Information

Owner Legal Name Identified on Your Current NGPC

State of Hawaii

Owner Department

Department of Hawaiian Home Lands

Owner Division

Land Development Division

Owner Mailing Address

91-5420 Kapolei Parkway
Kapolei, Hawaii 96707

Owner Type

Municipal - City, County, or State Government Project

Signatory Type

The person certifying this NOI must meet one of the following descriptions and be employed by the Owner. Please identify your appropriate signatory type based on the items listed below.

State Agency: I certify that for a state agency, I am a principal executive officer or ranking elected official.

Municipal Agency: I certify that for a municipal agency, I am a principal executive officer or ranking elected official.

Non-Federal Public Agency: I certify that for a non-federal public agency, I am a principal executive officer or ranking elected official.

Federal Agency: I certify that for a federal agency, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Partnership: I certify that I am a general partner for a partnership.

Proprietorship: I certify that I am the proprietor for a sole proprietorship.

Corporation Officer: I certify that for a corporation, I am the President, Vice President, Secretary, or Treasurer of the corporation and in charge of a principal business function, or I perform similar policy or decision-making functions for the corporation.

Corporation Manager: I certify that for a corporation, I am the Manager of one or more manufacturing, production, or operating facilities and am authorized to make management decisions which govern the operation of the regulated facility or facilities including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations. I can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.

Trust: I certify that for a trust, I am a trustee.

LLC: I certify that for a limited liability company (LLC), I am the Manager or a Member authorized to make management decisions for the LLC and am in charge of a principal business function, or I perform similar policy or decisionmaking functions for the LLC.

Please Select the Signatory Type based on the above descriptions.
State Agency

Certifying Person Salutation
Ms.

Certifying Person First Name
Jobie

Certifying Person Last Name
Masagatani

Certifying Person Title
Chair

Certifying Person Email Address
jobie.k.masagatani@hawaii.gov

Certifying Person Phone Number (e.g., 555-555-5555)
808-620-9529

3. Authorized Representative

Authorization

The Certifying Person hereby authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to submit information/documents necessary to complete the NOI to discharge to State waters from the subject facility. Our representative is further authorized to submit information/documents for compliance with the NPDES general permit conditions, except submittal of the Notice of Cessation (NOC). The Owner hereby agrees to comply with and be responsible for all NPDES general permit conditions. This authorization begins with NOI processing and ends upon receipt of the NOC by the CWB. The Owner authorizes the duly authorized representative to submit additional information/documents necessary to complete the NOI and to submit information/documents to comply with the NPDES general permit conditions. The Owner is responsible for all information/documents submitted by the duly authorized representative for completion of the NOI and for compliance with the NPDES general permit conditions. The Certifying Person is required to sign the NOC for the project. After receipt of the NOC for the project, the duly authorized representative is no longer recognized by the CWB. The responsibility of the authorized representative cannot be delegated to an outside consultant with no financial responsibility for the company - they cannot sign as the "authorized representative" on behalf of the Owner. This requirement stems from the fact that self-reporting is critical under the Clean Water Act and Hawaii Water Pollution statutes; reports filed with CWB can have serious legal consequences, including possible civil and even criminal liability. The Owner in signing reports, therefore, must be represented by someone who has some responsibility for the corporation's financial interests. The Certifying Person attests that the authorized representative 1) meets the requirements of HAR 11-55-07(b); and 2) has financial responsibility within the corporation/organization who can attest to the accuracy of reports either because he or she participated in the preparation of the report, or supervises those who did prepare it and can attest that those individuals followed standard protocols that ensure the accuracy of the report. Both the Certifying Person and authorized representative understand that they can be subject to civil and criminal liability for non-compliance with NPDES general permit conditions, non-compliance with HAR Chapters 11-54 and 11-55, and for falsifying information.

Authorized Representative Contact Information

Complete the following for your Authorized Representative.

Authorized Representative Company/Organization Name
NONE PROVIDED

Authorized Representative Department
NONE PROVIDED

Authorized Representative Division
NONE PROVIDED

Authorized Representative Mailing Address
NONE PROVIDED

Authorized Representative First Name
NONE PROVIDED

Authorized Representative Salutation
NONE PROVIDED

Authorized Representative Last Name
NONE PROVIDED

Authorized Representative Email Address
NONE PROVIDED

Authorized Representative Phone (e.g., 555-555-5555)

Attachments

Date	Attachment Name	Context	Confidential?
None			

Status History

Date	User	Processing Status
10/3/2018 10:39:58 AM	Al Jerome Leano	Draft

Date	User	Processing Status
10/11/2018 2:48:42 PM	Al Jerome Leano	Submitted
11/9/2018 2:22:39 PM	Michael Hayato Kaneshiro	On Hold

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Submit Form via ePermitting. Mail or Deliver Completed Hard Copy to DOH-CWB to Begin Processing.	Al Jerome Leano	10/11/2018 02:48 PM
Hard Copy Signature Received	Michael Hayato Kaneshiro	11/09/2018 02:22 PM
NGPC Issued		
Administrative Extension Granted.	Michael Hayato Kaneshiro	11/09/2018 02:22 PM
Wait for Readoption of General Permit		

Stormwater Pollution Prevention Plan (SWPPP)

For Construction Activities At:

Ho'olehua Veterans and Homestead Residents' Community Center

TMK: (2) 5-2-015:053

SWPPP Prepared For:

Department of Hawaiian home Lands
91-5420 Kapolei Parkway
Honolulu, HI 96707

SWPPP Prepared By:

G70
925 Bethel Street, 5th Floor
Honolulu, HI 96813
(T) 808-523-5866
(F) 808-523-5874

SWPPP Preparation Date:

3/5/2018

Estimated Project Dates:

Project Start Date: 11/1/2018

Project Completion Date: 7/10/2019

Contents

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

Instructions (see definition of "operator" at CGP Part 1.1.a):

- Identify the operator(s) who will be engaged in construction activities at the site. Indicate respective responsibilities, where appropriate. Also include the 24-hour emergency contact.
- List subcontractors expected to work on-site. Notify subcontractors of stormwater requirements applicable to their work.
- Consider using Subcontractor Agreements such as the type included as a sample in Appendix G of the Template.

Operator(s):

Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

Subcontractor(s):

Additional Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

1.2 Stormwater Team

Instructions (see CGP Part 7.2.1):

- Identify the staff members (by name or position) that comprise the project's stormwater team as well as their individual responsibilities. At a minimum the stormwater team is comprised of individuals who are responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the requirements in this permit (i.e., installing and maintaining stormwater controls, conducting site inspections, and taking corrective actions where required).
- Each member of the stormwater team must have ready access to either an electronic or paper copy of applicable portions of the 2012 CGP and your SWPPP.

Project Owner

State of Hawaii
Department of Hawaiian Home Lands – Land Development Division
91-5420 Kapolei Parkway
Kapolei, Hawaii, 96707

Facility Manager and Stormwater BMP Manager

Additional Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

Civil Engineering Consultant

Ryan Char
G70
808-441-1629
ryanc@g70.design

SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project/Site Information

Instructions (see "Project/Site Information" section of Appendix J – NOI form):

- In this section, you are asked to compile basic site information that will be helpful to you when you file your NOI.
- Detailed information on determining your site's latitude and longitude can be found at www.epa.gov/npdes/stormwater/latlong

Project Name and Address

Project/Site Name: **Ho'olehua Veterans and Homestead Residents' Community Center**
Project Street/Location: **2200 Farrington Avenue**
City: **Ho'olehua**
State: **Hawaii**
ZIP Code: **96792**
County or Similar Subdivision: **City and County of Honolulu**

Project Latitude/Longitude

(Use **one** of three possible formats, and specify method)

Latitude:	Longitude:
21.1648 ° N (decimal)	157.0507 ° W (decimal)

Method for determining latitude/longitude:
☐ USGS topographic map (specify scale: _____) ☐ EPA Web site ☐ GPS
☒ **Other (please specify): State of Hawaii, DOH, e-Permitting System for NOI Form C**

Horizontal Reference Datum:
☐ NAD 27 ☒ **NAD 83 or WGS 84** ☐ Unknown

If you used a U.S.G.S topographic map, what was the scale? _____

Additional Project Information

If you are conducting earth-disturbing activities in response to a public emergency, document the cause of the public emergency *(e.g., natural disaster, extreme flooding conditions)*, information substantiating its occurrence *(e.g., state disaster declaration)*, and a description of the construction necessary to reestablish effective public services:

Are you applying for permit coverage as a "federal operator" as defined in Appendix A of the 2012 CGP? ☐ Yes ☒ **No**

2.2 Discharge Information

Instructions (see "Discharge Information" section of Appendix J – NOI form):

- In this section, include information relating to your site's discharge. This information corresponds to the "Discharge Information" section of the NOI form. Because you may be using EPA's mapping tool to answer some of these questions, and the tool is accessed in the eNOI system, you may find it necessary to leave some questions unanswered until you have completed that portion of the NOI.
- For Table 1, list the name of the first surface water that receives discharges from your site. If your site has discharges to multiple surface waters, indicate the names of all such waters.
- For Table 2, if any of the surface waters you listed out in Table 1 are listed as impaired by the applicable State or Tribe, provide specified information about pollutants causing the impairment and whether or not a Total Maximum Daily Load (TMDL) has been completed for the surface water. For more information on TMDLs and impaired waters, including a list of TMDL contacts and links by state, visit www.epa.gov/npdes/stormwater/tmdl.
- For Table 3, indicate whether any of the surface waters you listed out in Table 1 are designated as Tier 2, 2.5, or 3 waters by your State or Tribe. See Appendix F for more information.

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☒ Yes ☐ **No**

Are there any surface waters that are located within 50 feet of your construction disturbances?
☐ Yes ☒ **No**

Table 1 – Names of Receiving Waters

Name(s) of the first surface water that receives stormwater directly from your site and/or from the MS4 (note: multiple rows provided where your site has more than one point of discharge that flows to different surface waters)
1. Unnamed Drainage Ditch
2. Maneopapa Gulch
3.
4.
5.
6.

Table 2 – Impaired Waters / TMDLs (Answer the following for each surface water listed in Table 1 above)

	Is this surface water listed as "impaired"?	If you answered yes, then answer the following:			
		What pollutant(s) are causing the impairment?	Has a TMDL been completed?	Title of the TMDL document	Pollutant(s) for which there is a TMDL
1.	☐ YES ☒ **NO**		☐ YES ☒ **NO**		
2.	☐ YES ☒ **NO**		☐ YES ☒ **NO**		
3.	☐ YES ☒ **NO**		☐ YES ☒ **NO**		

Describe the method(s) you used to determine whether or not your project/site discharges to an impaired water: Review of Topographic maps and drainage flow patterns. Review of impaired waters 303d list.

Table 3 – Tier 2, 2.5, or 3 Waters (Answer the following for each surface water listed in Table 1 above)

	Is this surface water designated as a Tier 2, Tier 2.5, or Tier 3 water? (see Appendix F)	If you answered yes, specify which Tier (2, 2.5, or 3) the surface water is designated as?
1.	☐ YES ☒ NO	No tier 2,2.5 or 3 waters located in HI
2.	☐ YES ☒ NO	No tier 2,2.5 or 3 waters located in HI

2.3 Nature of the Construction Activity

Instructions (see CGP Parts 1.3.c and 7.2.2):

- Provide a general description of the nature of the construction activities at your project.
- Describe the size of the property (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activities covered by this permit (see Part 1.3.c of the permit), and the maximum area expected to be disturbed at any one time.

General Description of Project
Development on the property will include a new Veterans and Homestead Residents' Community Center. The development will include a new 7,000 sq. ft. building, asphalt concrete pavement driveway, and a 34-stall parking lot.

Size of Construction Project
What is the size of the property (in acres), the total area expected to be disturbed by the construction activities (in acres), and the maximum area expected to be disturbed at any one time?

Total Property Size: 5.6 acres

Total Area of Construction Disturbances: 1.1 acres

Maximum Disturbed Area at any one time: 1.1 acres

Construction Support Activities (only provide if applicable)
Describe any construction support activities for the project (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas)

- Equipment Staging
- Material Storage
- Temporary Stockpiles
- Vehicle Wash-down
- Dust Control Activities

Additional Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

2.4 Sequence and Estimated Dates of Construction Activities

Instructions (see CGP Part 7.2.5):

- Describe the intended construction sequence and timing of major activities.
- For each phase of construction, include the following information:
  - ✓ Installation of stormwater controls, and when they will be made operational;
  - ✓ Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
  - ✓ Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;
  - ✓ Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject to in Part 2.2.1; and
  - ✓ Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.
- The construction sequence must reflect the following requirements:
  - ✓ Part 2.1.1.1 (area of disturbance);
  - ✓ Part 2.1.1.3.a (installation of stormwater controls); and
  - ✓ Parts 2.2.1.1, 2.2.1.2, 2.2.1.3 (stabilization deadlines).
- Also, see EPA's *Construction Sequencing BMP Fact Sheet* at http://www.epa.gov/npdes/stormwater/menuofbmps/construction/cons_seq)

Construction will be done in one phase.

Installation of all stormwater controls will be installed before start of earth-disturbing activities.
Estimated Start Date: 11/1/2018

Commencement and duration of earth-disturbing activities, including clearing and grubbing, grading, and creation of soil and vegetation stockpiles requiring stabilization.
Estimated Start Date: 11/1/2018

Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject to in Part 2.2.1.

- Temporary BMPs will be removed after exposed soil is stabilized. Estimated 7/10/2019

Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.
Estimated 7/10/2019

Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site.
Cessation of construction: N/A

2.5 Allowable Non-Stormwater Discharges

Instructions (see CGP Parts 1.3.d and 7.2.8):

- Identify all allowable sources of non-stormwater discharges. The allowable non-stormwater discharges identified in Part 1.3.d of the 2012 CGP include:
  - ✓ Discharges from emergency fire-fighting activities;
  - ✓ Fire hydrant flushings;
  - ✓ Landscape irrigation;
  - ✓ Waters used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
  - ✓ Water used to control dust;
  - ✓ Potable water including uncontaminated water line flushings;
  - ✓ Routine external building wash down that does not use detergents;
  - ✓ Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and detergents are not used. You are prohibited from directing pavement was waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
  - ✓ Uncontaminated air conditioning or compressor condensate;
  - ✓ Uncontaminated, non-turbid discharges of ground water or spring water;
  - ✓ Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and
  - ✓ Construction dewatering water that has been treated by an appropriate control.

List of Allowable Non-Stormwater Discharges Present at the Site

Type of Allowable Non-Stormwater Discharge	Likely to be Present at Your Site?
Discharges from emergency fire-fighting activities	☐ YES ☒ **NO**
Fire hydrant flushings	☒ **YES** ☐ NO
Landscape irrigation	☒ **YES** ☐ NO
Waters used to wash vehicles and equipment	☒ **YES** ☐ NO
Water used to control dust	☒ **YES** ☐ NO
Potable water including uncontaminated water line flushings	☒ **YES** ☐ NO
Routine external building wash down	☒ **YES** ☐ NO
Pavement wash waters	☒ **YES** ☐ NO
Uncontaminated air conditioning or compressor condensate	☐ YES ☒ **NO**
Uncontaminated, non-turbid discharges of ground water or spring water	☐ YES ☒ **NO**
Foundation or footing drains	☐ YES ☒ **NO**
Construction dewatering water	☐ YES ☒ **NO**

2.6 Site Maps

Instructions (see CGP Part 7.2.6):

- Attach site maps in Appendix A of the Template. For most projects, a series of site maps is necessary and recommended. The first should show the undeveloped site and its current features. An additional map or maps should be created to show the developed site or, for more complicated sites, show the major phases of development.

These maps must include the following features:

- Boundaries of the property and of the locations where construction will occur, including:
  - ✓ Locations where earth-disturbing activities will occur, noting any phasing of construction activities;
  - ✓ Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in Appendix A;
  - ✓ Locations where sediment, soil, or other construction materials will be stockpiled;
  - ✓ Locations of any crossings of surface waters;
  - ✓ Designated points on the site where vehicles will exit onto paved roads;
  - ✓ Locations of structures and other impervious surfaces upon completion of construction; and
  - ✓ Locations of construction support activity areas covered by this permit.
- Locations of all surface waters, including wetlands, that exists on or near your site. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters.
- The boundary lines of any natural buffer areas. See CGP Part 2.1.2.1.a.
- Areas of federally-listed critical habitat for endangered or threatened species.
- Topography of the site, existing vegetative cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of stormwater and allowable non-stormwater flow onto, over, and from the site property before and after major grading activities.
- Stormwater and allowable non-stormwater discharge locations, including:
  - ✓ Locations of any storm drain inlets on the site and in the immediate vicinity of the site; and
  - ✓ Locations where stormwater or allowable non-stormwater will be discharged to surface waters (including wetlands).
- Locations of all potential pollutant-generating activities.
- Locations of stormwater control measures.
- Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

Refer to Appendix A for site maps

SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 Endangered Species Protection

Instructions (see CGP Parts 1.1.e, 7.2.14.1, Appendix D, and the "Endangered Species Protection" section of the Appendix J – NOI form):

Follow the process in Appendix D of the permit for determining which eligibility criterion (A-E) you have met with respect to the protection of endangered species. You will

- Include documentation supporting your determination of eligibility.
- Additional information on Endangered Species Act (ESA) provisions for EPA's Construction General Permit is at www.epa.gov/npdes/stormwater/esa

Eligibility Criterion

Under which criterion listed in Appendix D are you eligible for coverage under this permit?

☒ **A** ☐ B ☐ C ☐ D ☐ E

For reference purposes, the eligibility criteria listed in Appendix D are as follows:

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.

Criterion B. The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

Criterion C. Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.

Criterion D. Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion E. Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:

i. a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or

ii. written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.

You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion F. Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Supporting Documentation

Provide documentation for the applicable eligibility criterion you select in Appendix D, as follows:

For criterion A, indicate the basis for your determination that no federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's action area (as defined in Appendix A of the permit). Check the applicable source of information you relied upon:

☐ Specific communication with staff of the U.S. Fish & Wildlife Service or National Marine Fisheries Service.
☐ Publicly available species list.
☒ Other source: **U.S. Fish & Wildlife Critical Habitat Portal (Website: http://ecos.fws.gov/crithab/)**

3.2 Historic Preservation

Instructions (see CGP Part 1.1.f, 7.2.14.2, Appendix E, and the "Historic Preservation" section of the Appendix J – NOI form):

Follow the screening process in Appendix E of the permit for determining whether your installation of subsurface earth-disturbing stormwater controls will have an effect on historic properties.

- Include documentation supporting your determination of eligibility.
- To contact your applicable state or tribal historic preservation office, information is available at www.achp.gov/programs/html.

Appendix E, Step 1

Do you plan on installing any of the following stormwater controls at your site? Check all that apply below, and proceed to Appendix E, Step 2.

- ☐ Dike
- ☐ Berm
- ☐ Catch Basin
- ☐ Pond
- ☐ Stormwater Conveyance Channel (e.g., ditch, trench, perimeter drain, swale, etc.)
- ☐ Culvert
- ☐ Other type of ground-disturbing stormwater control:

None of the above will be installed.

(Note: If you will not be installing any ground-disturbing stormwater controls, no further documentation is required for Section 3.2 of the Template.)

Appendix E, Step 2

If you answered yes in Step 1, have prior surveys or evaluations conducted on the site already determined that historic properties do not exist, or that prior disturbances at the site have precluded the existence of historic properties? ☐ YES ☐ NO

- If yes, no further documentation is required for Section 3.2 of the Template.
- If no, proceed to Appendix E, Step 3.

Appendix E, Step 3

If you answered no in Step 2, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? ☐ YES ☐ NO

If yes, provide documentation of the basis for your determination.

If no, proceed to Appendix E, Step 4.

Appendix E, Step 4

If you answered no in Step 3, did the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Office (THPO), or other tribal representative (whichever applies) respond to you within 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? ☐ YES ☐ NO

If no, no further documentation is required for Section 3.2 of the Template.

If yes, describe the nature of their response:

☐ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.

☐ No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.

3.3 Safe Drinking Water Act Underground Injection Control Requirements

Instructions (see CGP Part 7.2.14.3):

- If you will use any of the identified controls in this section, include documentation of contact between you and the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144-147.
- For state UIC program contacts, refer to the following EPA website: *http://water.epa.gov/type/groundwater/uic/whereyoulive.cfm*.

Do you plan to install any of the following controls?

☐ Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

☐ Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow

☐ Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

None of the above will be installed.

SECTION 4: EROSION AND SEDIMENT CONTROLS

General Instructions (See CGP Parts 2.1 and 7.2.10):

- Describe the erosion and sediment controls that will be installed and maintained at your site.
- For more information or ideas on BMPs, see EPA's National Menu of BMPs http://www.epa.gov/npdes/stormwater/menuofbmps

Prior to grading, stormwater will surface flow to silt fences before discharging into an existing concrete ditch located west of the property. After site grading is accomplished, stormwater will flow to permanent BMP facilities before discharging into drainage systems.

4.1 Natural Buffers or Equivalent Sediment Controls

Instructions (see CGP Parts 2.1.2.1 and 7.2.9, and Appendix G):

This section only applies to you if a surface water is located within 50 feet your construction activities. If this is the case, consult CGP Part 2.1.2.1 and Appendix G for information on how to comply with the buffer requirements.

- Describe the compliance alternative (CGP Part 2.1.2.1.a.i, ii, or iii) that was chosen to meet the buffer requirements, and include any required documentation supporting the alternative selected. The compliance alternative selected must be maintained throughout the duration of permit coverage. However, if you select a different compliance alternative during your period of permit coverage, you must modify your SWPPP to reflect this change.
- If you qualify for one of the exceptions in CGP Part 2.1.2.1.e, include documentation related to your qualification for such exceptions.

N/A

4.2 Perimeter Controls

Instructions (see CGP Parts 2.1.2.2 and 7.2.10):

- Describe sediment controls that will be used (e.g., silt fences, filter berms, temporary diversion dikes, or fiber rolls) to meet the Part 2.1.2.2 requirement to "install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities."
- For linear projects, where you have determined that the use of perimeter controls in portions of the site is impracticable, document why you believe this is to be the case.
- Also see, EPA's *Silt Fence BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/silt_fences or *Fiber Rolls BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/fiber_rolls

General

- Silt fences will be installed downstream of the construction limits for each phase.
- Contractor may amend the SWPPP to use approved equal perimeter controls.

Specific Perimeter Controls

Perimeter Control # 1

Perimeter Control Description

- 3' Silt Fence - anchored with #5 rebar spaced every 6'.

Installation

Estimated Date of Installation: 11/1/2018

Maintenance Requirements

- Per CGP 2.1.2.2.b inspection will be on a weekly basis and immediately after storm events of 0.25" or greater by visual inspection, if heavy rains are predicted and daily during periods of prolonged rain. Damaged or compromised portions of the silt fence will be repaired or replaced immediately. Build up of sediment shall be removed from the silt fence when it has reached one-third of the height of the fence. Should the fabric on a silt fence decompose, or become ineffective prior to the end of the expected usable life and the fence still be necessary, the fabric shall be replaced promptly.

4.3 Sediment Track-Out

Instructions (see CGP Parts 2.1.2.3 and 7.2.10):

- Describe stormwater controls that will be used to "minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site."
- Describe location(s) of vehicle exit(s), procedures to remove accumulated sediment off-site (e.g., vehicle tracking), and stabilization practices (e.g., stone pads or wash racks or both) to minimize off-site vehicle tracking of sediment. Also include the design, installation, and maintenance specifications for each control.
- Also, see EPA's *Construction Entrances BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/cons_entrance

General

- Stabilized construction entrance

Specific Track-Out Controls

Track-Out Control # 1

Track-Out Control Description

- Single point of egress and ingress to the site shall be protected with stabilized construction entrance
- 20'(min.)x50'(min.), 8" thick, 1" to 3" coarse aggregate or larger (7" max) gravel entrance with Amoco series 2000 geotextile fabric, or approved equal. Refer to erosion control details in the construction drawings.

Installation

- Estimated Date of Installation: 11/1/2018

Maintenance Requirements

- Per CGP 2.1.2.3.d., where sediment has been tracked-out from the site onto paved areas, removal of the deposited sediment will be required within 24 hours. Removal of the track-out will be by way of sweeping, shoveling, or vacuuming the surface, or by using other similarly effective means of sediment removal. Hosing or sweeping track-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water will be strictly prohibited. Inspection and verification that the BMP is in place will take place prior to construction activities. Inspection of the entrance will be required on a weekly basis during the rainy season or bi-weekly during the non-rainy season, and after storm events. Any accumulated sediment within the gravel entrance will be removed and disposed of. Any voids present within the aggregate will be replaced.

4.4 Stockpiled Sediment or Soil

Instructions (see CGP Parts 2.1.2.4 and 7.2.10):

- Describe stormwater controls and other measures you will take to minimize the discharge of sediment or soil particles from stockpiled sediment or soil. Include a description of structural practices (e.g., diversions, berms, ditches, storage basins), including design, installation, and maintenance specifications, used to divert flows from stockpiled sediment or soil, retain or detain flows, or otherwise limit exposure and the discharge of pollutants from stockpiled sediment or soil.
- Also, describe any controls or procedures used to minimize exposure resulting from adding to or removing materials from the pile.

General

- Filter socks will be installed around the perimeter of stocked sediment or soil.
- Contractor may amend the SWPPP to use approved equal stockpile sediment or soil controls.

Specific Stockpile Controls

Stockpile Control # 1

Stockpiled Sediment/Soil Control Description

3' Silt Fence - anchored with #5 rebar spaced every 6'

Installation

- Estimated Date of installation: 11/1/2018

Maintenance Requirements

- The contractor shall be responsible for inspecting and maintaining any temporary stockpile on site, and shall protect the stockpile from wind and rain erosion, utilizing stabilization methods described above. Inspections will be on a weekly basis, immediately after storm events, if heavy rains are predicted, and daily during periods of prolonged rain. Sediment will be removed before it has reached a third of the height of the filter sock. Damaged or compromised filter socks will be repaired or replaced immediately.

4.5 Minimize Dust

Instructions (see CGP Parts 2.1.2.5 and 7.2.10):

Describe controls and procedures you will use at your project/site to minimize the generation of dust.

General

- Wind erosion consists of dust particulate matter that should be controlled during grading and excavation activities.
- The site will be protected by BMPs, similar to those used to control runoff and water erosion from the site, to control dust and reduce wind erosion.

Specific Dust Controls

Dust Control # 1

- *Watering will prevent dust generation, but only for a short duration, generally less than a few hours.*

Installation

- Applied daily or as needed.

Maintenance Requirements

- *Rate of application will be monitored such that all water will be retained onsite and allowed to percolate into the ground or evaporate.*

4.6 Minimize the Disturbance of Steep Slopes

Instructions (see CGP Parts 2.1.2.6 and 7.2.10):

- Describe how you will minimize the disturbance to steep slopes (as defined by CGP Appendix A).
- Describe controls (e.g., erosion control blankets, tackifiers), including design, installation and maintenance specifications, that will be implemented to minimize sediment discharges from slope disturbances.
- Also, see EPA's *Geotextiles BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/geotextiles

General

- Minimize soil compaction in areas where final vegetative stabilization will occur.
- Restrict vehicle/equipment use along steep slopes.
- Contractor may amend the SWPPP to use approved equal stockpile sediment or soil controls.

Specific Disturbance of Steep Slopes Control

Disturbance of Steep Slopes Control # 1

Hydroseeding – Provide hydroseeding to match existing conditions of property.

Installation

- Estimated Date of installation: 11/1/2018

Maintenance Requirements

- The contractor shall be responsible for inspecting and monitoring vegetation growth and water, fertilize, mow, and/or prune the grasses/plants as needed.

4.7 Topsoil

Instructions (see CGP Parts 2.1.2.7 and 7.2.10):

- Describe how topsoil will be preserved and identify these areas and associated control measures on your site map(s).
- If it is infeasible for you to preserve topsoil on your site, provide an explanation for why this is the case.

N/A

4.8 Soil Compaction

Instructions (see CGP Parts 2.1.2.8 and 7.2.10):

- In areas where final vegetative stabilization will occur or where infiltration practices will be installed, describe the controls, including design, installation, and maintenance specifications that will be used to restrict vehicle or equipment access or condition the soil for seeding or planting.

General

- Soil compaction will be limited to areas requiring heavy truck traffic for construction operations. Vehicles will be limited to stabilized construction roadways and not allowed to drive over undisturbed native soils.

Specific Soil Compaction Controls

Soil Compaction Control # 1

Soil Compaction Control Description

- Minimize the surface area allowed for vehicular traffic. Limit the amount and activity of vehicles on site

4.9 Storm Drain Inlets

Instructions (see CGP Parts 2.1.2.9 and 7.2.10):

- Describe controls (e.g., inserts, rock-filled bags, or block and gravel) including design, installation, and maintenance specifications that will be implemented to protect all inlets that will receive stormwater from your construction activities, and that you have authority to access.
- Also, see EPA's *Storm Drain Inlet Protection BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/storm_drain

General

- Compost filter socks and geotextile filter fabric will be installed around each existing drain inlet which prevents sediment from entering inlet structures.

Specific Storm Drain Inlet Controls

Storm Drain Inlet Control # 1

Storm Drain Inlet Control Description

- Geotextile filter fabric – installed at curb inlet basins.

Installation

- Estimated Installation date: 11/1/2018

Maintenance Requirements

- Inspections will be on a weekly basis, immediately after storm events, if heavy rains are predicted, and daily during periods of prolonged rain. Cleaning, or removal and replacement, of the protection measures will be required as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection, the contractor shall remove the deposited sediment within 24 hours.

4.10 Constructed Stormwater Conveyance Channels

Instructions (see CGP Parts 2.1.3.1 and 7.2.10):

If you will be installing a stormwater conveyance channel, describe control practices (e.g., velocity dissipation devices), including design specifications and details (volume, dimensions, outlet structure), that will be implemented at the construction site.

N/A

4.11 Sediment Basins

Instructions (see CGP Parts 2.1.3.2 and 7.2.10):

If you will install a sediment basin, include design specifications and other details (volume, dimensions, outlet structure) that will be implemented at in conformance with CGP Part 2.1.3.2.

- At a minimum, sediment ponds must provide storage for either (1) the calculated volume of runoff from the 2-year, 24-hour storm (see CGP App. H), or (2) 3,600 cubic feet per acre drained
- Sediment ponds must also utilize outlet structures that withdraw water from the surface, , unless infeasible
- Also, see EPA's *Sediment Basin BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/sediment_basins

N/A

4.12 Chemical Treatment

Instructions (see CGP Parts 2.1.3.3 and 7.2.10.2):

If you are using treatment chemicals at your site, provide details for each of the items below. This information is required as part of the SWPPP requirements in CGP Part 7.2.10.2.

N/A

4.13 Dewatering Practices

Instructions (see CGP Parts 2.1.3.4 and 7.2.10):

If you will be discharging stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, include design specifications and details of all dewatering practices that are installed and maintained to comply with CGP Part 2.1.3.4.

N/A

4.14 Other Stormwater Controls

Instructions:

- Describe any other stormwater controls that do not fit into the above categories.

No other controls used.

4.15 Site Stabilization

Instructions (see CGP Parts 2.2 and 7.2.10):

The CGP requires you to immediately initiate stabilization when work in an area of your site has permanently or temporarily stopped, and to complete certain stabilization activities within prescribed deadlines. See CGP Part 2.2.1. The CGP also requires that stabilization measures meet certain minimum criteria. See CGP Part 2.2.2. For your SWPPP, you must include the following:

- Describe the specific vegetative and/or non-vegetative practices that will be used to stabilize exposed soils where construction activities have temporarily or permanently ceased. Avoid using impervious surfaces for stabilization whenever possible.
- Also, see EPA's *Seeding BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/seeding
- Once you begin construction, consider using the Grading/Stabilization Activities log in Appendix H of the Template to document your compliance with the stabilization requirements in CGP Part 2.2

Site Stabilization Practice (only use this if you are not located in an arid, semi-arid, or drought-stricken area)
☒ *Vegetative* ☐ *Non-Vegetative*
☐ *Temporary* ☒ *Permanent*

Description of Practice

- Exposed areas will be seeded or planted with vegetation when earth-disturbing activities have permanently ceased on any portion of the site.
- Filter rolls (perimeter controls) will be in place until vegetation sets in.
- Other areas will be paved with asphalt concrete.

Installation

- Installation date: Once final grades are established.

Maintenance Requirements

- Shrubs and trees must be adequately watered and fertilized, and if needed, pruned.
- Grasses may need to be watered and mowed.

Site Stabilization Practice (only use this if you are located in an arid, semi-arid, or drought-stricken area)
☐ *Vegetative* ☒ *Non-Vegetative*
☒ *Temporary* ☐ *Permanent*

Description of Practice

- Exposed areas will be mulched when earth-disturbing activities have temporarily ceased on any portion of the site.
- Types of mulch, binders, and application rates will be recommended by the contractor.

Installation

- Installation date: Implemented when needed.

Maintenance Requirements

- Must be inspected weekly and after rain for damage or deterioration.

SECTION 5: POLLUTION PREVENTION STANDARDS

5.1 Potential Sources of Pollution

Instructions (see CGP Part 7.2.7):

- Identify and describe all pollutant-generating activities at your site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal).
- For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents associated with that activity (e.g., sediment, fertilizers, and/or pesticides, paints, solvents, fuels), which could be exposed to rainfall or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges.

Construction Site Pollutants

Pollutant-Generating Activity	**Pollutants or Pollutant Constituents** (that could be discharged if exposed to stormwater)	**Location on Site** (or reference SWPPP site map where this is shown)
Demolition/Clearing & Grubing	Construction debris, green waste, general litter, and construction/domestic waste	
Operations and Maintenance of Equipment	Fuels, oils, other pollutants used in the vehicle and equipment operation and maintenance	
Stabilization	Pesticides, herbicides, insecticides, fertilizers, and landscape materials	
Grading	Sediment, dust	
Activities associated with painting	Paint, paint wash solvent	
Waterline flushing	Chemical treatments	

Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

5.2 Spill Prevention and Response

Instructions (see CGP Parts 2.3 and 7.2.11):

- Describe procedures you will use to prevent and respond to leaks, spills, and other releases. You must implement the following at a minimum:
  - ✓ Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or title of the employee(s) responsible for detection and response of spills or leaks; and
  - ✓ Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.3.4c and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.
- Some projects/site may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan.

General

- **Spill control may be utilized on the following materials:**
  - Soil stabilizers
  - Dust stabilizers
  - Herbicides
  - Fertilizers
  - Fuels
  - Lubricants
  - Petroleum distillates
- **Spill Prevention Measures**
  - Educate and be aware of pollutant sources and pollutant characteristics. Ensure employees know what a "significant" spill is for materials they use.
  - Educate on the potential dangers to humans and environment from spills and leaks.
  - Hold regular meetings to discuss appropriate disposal procedures.
  - Establish continuing education as needed.
  - Have a superintendent or representative oversee and enforce proper spill prevention measures.
  - Store hazardous materials in covered containers and protect from vandalism.

- **Spill Control Measures consist of:**
  - Contain and clean up any spill immediately.
  - Properly remove and dispose of any hazardous materials or contaminated soil in significant residual materials remain on the ground after construction is complete.
  - If spills or leaks of materials occur that are not contained and could discharge to surface waters, sampling of site discharge may be required.
  - Do not allow water used for cleaning and decontamination to enter watercourse.
  - Clean up as much of the material as possible and dispose of properly.
  - Notify the local emergency response if the spill is significant. Notify proper county officials.
  - Report significant spills to the fire department.

5.3 Fueling and Maintenance of Equipment or Vehicles

Instructions (see CGP Parts 2.3.3.1 and 7.2.11):

- Describe equipment/vehicle fueling and maintenance practices that will be implemented to eliminate the discharge of spilled or leaked chemicals (e.g., providing secondary containment *(examples: spill berms, decks, spill containment pallets)* and cover where appropriate, and/or having spill kits readily available.
- Also, see EPA's *Vehicle Maintenance and Washing Areas BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/vehicile_maintain

General

- No fuel will be stored on-site. The Contractor shall prohibit discharging: fuels, oils and other pollutants used in the vehicle and equipment operation and maintenance.
- Effective means of eliminating discharge of spilled or leaked chemicals:
  - Checking all vehicles at the beginning of each work day for leaks
  - Vehicle inspections and fueling shall be in the designated fueling areas
  - Ensuring adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids
  - Using drip pans and absorbents under or around leaky vehicles and equipment
  - Installing compost filter socks around vehicle staging area
  - Disposing of or recycling oil and oily wastes in accordance with other federal, state, and local requirements
  - Cleaning up spills or contaminated surfaces immediately, using dry clean up measures where possible
  - Storing chemicals in water-tight containers
  - Eliminating the source of the spill to prevent a discharge or a furtherance of an ongoing discharge
  - No cleaning of surfaces by hosing down the area

5.4 Washing of Equipment and Vehicles

Instructions (see CGP Parts 2.3.3.2 and 7.2.11):

- Describe equipment/vehicle washing practices that will be used to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing (e.g., locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls).
- Describe how you will prevent the discharge of soaps, detergents, or solvents by providing either (1) cover (*examples: plastic sheeting or temporary roofs*) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.
- Also, see EPA's *Vehicle Maintenance and Washing Areas BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/vehicile_maintain

General

- No soap, detergent, or solvents will be used to wash vehicles and equipment
- Sediment and wash water trap shall be maintained in order to not permit any discharge or percolation into the ground
- Trap will be inspected daily for wash water/potential petroleum and will be removed and disposed of if not evaporated
- Steam cleaning will not be permitted on site

5.5 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes

Instructions (see CGP Parts 2.3.3.3 and 7.2.11):

- For any of the types of construction products, materials, and wastes below in Sections 5.5.1-5.5.6 below that are expected to be used or stored at your site, provide the information on how you will comply with the corresponding CGP provision and the specific practices that will be employed.
- Also, see EPA's *General Construction Site Waste Management BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/cons_wasteman

General

- Hazardous materials storage onsite will be minimized.
- Hazardous materials should be handled as infrequently as possible.
- Ample spill cleanup supplies appropriate for the materials being stored will be provided.
- Employees to be trained in emergency spill cleanup procedures.

5.5.1 Building Products

(Note: Examples include asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures.)

General

- Manufacturer's recommendations for use will be followed, including the use of protective equipment, ventilation, flammability, mixing, etc.
- Either plastic sheeting or a temporary roof will be used to prevent chemicals and materials from coming into contact with rainwater.
- To prevent materials from discharging due to storm water runoff, all containers will be tightly sealed and stored in the contractor's staging area when not required for use.
- All wash water and solvents will be dried with absorbent Oil-Dri and then disposed of in a landfill when completely dry

5.5.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape M15aterials

General

- Either plastic sheeting or a temporary roof will be used to prevent chemicals and materials from coming into contact with rainwater.
- All application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label will be complied with.
- To prevent materials associated with painting from discharging due to storm water runoff, all containers will be tightly sealed and stored in the contractor's staging area when not required for use

5.5.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

General

- On-site storage of fuel will be prohibited.
- Discharging of fuels, oils, and other pollutants used in vehicle and equipment operation and maintenance will be prohibited.
- All vehicles and equipment will be checked at the beginning of each work day for leaks.
- Vehicle inspections and fueling shall be in the designated fueling areas.
- An effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where operation and maintenance activities will take place by:
    - Ensuring adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids
    - Using drip pans and absorbents under or around leaky vehicles and equipment
    - Installing compost filter socks around vehicle staging area
    - Disposing of or recycling oil and oily wastes in accordance with other federal, state, and local requirements
    - Cleaning up spills or contaminated surfaces immediately, using dry clean up measures where possible and disposing of used materials properly
    - Storing chemicals in water-tight containers
    - Eliminating the source of the spill to prevent a discharge or a furtherance of an ongoing discharge
    - No cleaning of surfaces by hosing down the area

5.5.4 Hazardous or Toxic Waste

(Note: Examples include paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.)

General

- Wastes shall be stored in sealed containers, labeled, and transported according to appropriate Federal Regulations.
- Over application of toxic or hazardous materials will be prohibited.
- Material Safety Data Sheets (MSDS) will be supplied for all materials.
- Disposal of hazardous or toxic wastes shall be in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state and local requirements
- Spills shall be cleaned immediately using dry clean-up methods where possible, and used materials shall be disposed of properly.
- Elimination of the source of the spill shall be the primary priority to prevent a discharge or a furtherance of an ongoing discharge.

5.5.5 Construction and Domestic Waste

(Note: Examples include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.)

General

- All waste containers of sufficient size and number will be provided to contain all construction and domestic wastes and will be properly stored in designated areas on the project site.
- Waste containers shall be watertight, and lid-equipped.
- Waste collection will occur on a daily basis and during rainy and/or windy conditions.
- All wastes generated at the site shall be removed immediately off-site to listed locations. These wastes include, but are not limited to, clearing and grubbing debris, sediment removed from the site, and other construction and domestic waste

5.5.6 Sanitary Waste

General

- Portable toilets will be positioned so that they are secured and will not be tipped or knocked over.
- Portable toilets will be maintained and sanitary waste will be disposed of on a weekly basis.
- Disposal will be done by an approved DOH pumper at DOH approved disposal sites.

5.6 Washing of Applicators and Containers used for Paint, Concrete or Other Materials

Instructions (see CGP Parts 2.3.3.4 and 7.2.11):

- Describe how you will comply with the CGP Part 2.3.3.4 requirement to "provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials."
- Also, see EPA's *Concrete Washout BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/concrete_wash

General

- Do not wash out concrete trucks, excess concrete, slurry, PCC, and AC waste into storm drains, open ditches, streams, or onto the ground. Trucks and applicators, hoses, etc., should be washed out into designated facilities.
- Do not allow excess concrete to be dumped on-site except in designated areas.
- Do not rinse or clean paint brushes, containers, etc., into the street, gutter, storm drain, or watercourse. Dispose of paint thinners that cannot be recycled as hazardous waste.
- Rinse brushes for water-based paint, and drain to sanitary sewer.
- Rinse and clean brushes for oil-based paint with thinners and solvents.

5.7 Fertilizers

Instructions (CGP Parts 2.3.5 and 7.2.11):

Describe how you will comply with the CGP Part 2.3.5 requirement to "minimize discharges of fertilizers containing nitrogen or phosphorus"

General

- All application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label will be closely monitored and complied with.
- Either plastic sheeting or a temporary roof will be used to prevent rainwater from contacting chemicals and materials.
- Pesticides, insecticides, fertilizers, and landscape materials will be used after final grades have been established.
- Application of chemicals will be forbidden in stormwater conveyance channels and will follow all federal, state, and local requirements.

5.8 Other Pollution Prevention Practices

Instructions:

Describe any additional pollution prevention practices that do not fit into the above categories.

N/A

SECTION 6: INSPECTION AND CORRECTIVE ACTION

6.1 Inspection Personnel and Procedures

Instructions (see CGP Parts 2.1.1.4, 2.3.2, 3.3.2, 4, 5, and 7.2.12):

Describe the procedures you will follow for conducting inspections in accordance with CGP Parts 2.1.1.4, 2.3.2, 3.3.2, 4, 5, and 7.2.12.

Personnel Responsible for Inspections

Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

Note: All personnel conducting inspections must be considered a "qualified person." CGP Part 4.1.1 clarifies that a "qualified person" is a person knowledgeable in the principles and practices of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

Inspection Schedule

Specific Inspection Frequency

BMP	Inspection Schedules and Procedures
Construction Entrance/Exit	The inspection will be on a weekly basis, immediately after storm events of 0.25" or greater by visual inspection, if heavy rains are predicted, and daily during periods of prolonged rain. Maintenance and/or repair will occur immediately if the inspection indicates that the crushed rock has been damaged (clogged) or compromised. Sediment will be removed before it has reached a third of the height of the sandbags. Storm water will be allowed to evaporate but sediment trap will be emptied of sediment and water build up when the trap reaches half full. Damaged liner will be repaired and disposed of in the PVT Landfill. Sediment and wash water trap shall be maintained in order to not permit any discharge or percolation into the ground; it will be monitored daily for wash water/potential petroleum within the trap. If wash water does not evaporate it must be removed and disposed.
Silt Fence	Inspection will be on a weekly basis and immediately after storm events of 0.25" or greater by visual inspection, if heavy rains are predicted and daily during periods of prolonged rain. Damaged or compromised portions of the silt fence will be repaired or replaced immediately. Build up of sediment shall be removed from the silt fence when it has reached one-third of the height of the fence. Should the fabric on a silt fence decompose, or become ineffective prior to the end of the expected usable life and the fence still be necessary, the fabric shall be replaced promptly.
Staging and Storage Areas	The inspection will be on a weekly basis and immediately after storm events of 0.25" or greater by visual inspection, if heavy rains are predicted, and daily during periods of prolonged rain. Inspection shall include general housekeeping of the area to make sure items are in the correct location, secure, covered, and contained as required.

Temporary Inlet & Catch Basin Protection	The inspection will be on a weekly basis and immediately after storm events of 0.25" or greater by visual inspection, if heavy rains are predicted, and daily during periods of prolonged rain. Clean, or remove and replace, the protection measure as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, the contractor shall remove the deposited sediment by the end of the same work day in which it is found or by the end of the following day if removal by the same work day is not feasible.

The contractor shall conduct timely inspections of the receiving waters, storm water runoff and control measure and best management practices to detect violations and conditions which may cause violations of the Basic Water Quality Criteria as specified in HAR section 11-54-4: The contractor shall visually inspect storm water discharges and receiving state waters (if accessible) for potential pollutants, including, but not limited to the following:

- Turbidity
- Color
- Floating oil and crease
- Floating debris and scum
- Materials that will settle
- Substances that will produce taste in the water or detectable off flavor in fish
- Inspect for items that may be toxic or harmful to human or other life.

The contractor should inspect the drainage system at the further down gradient point on the storm drainage system. The contractor may inspect the discharge where it enters a drainage system rather than at the receiving water (excluding an upset even, BMP failure, or rainfall events greater than 0.25"). If it is infesible to inspect the discharge at the receiving water for rain events greater than 0.25", the inspection of discharge may be done at the point it enters the MS4. For upset or BMP failure, contractor will document why it is infeasible in the SWPPP/inspection report.

The contractor shall immediately stop, reduce, or modify construction, or implement new or revised BMPs as needed to stop or prevent a violation of the Basic Water Quality Criteria as specified in HAR Section 11-54-4. Corrective actions are taken to repair, modify, or replace any storm water control used at the site; clean up and properly dispose of spills, releases; or other deposits; or remedy a permit violation.

The contractor shall complete the following corrective actions in accordance with the deadlines specified in this section, regardless of circumstances: the contractor shall immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

At minimum, the contractor shall conduct a site inspection in accordance with the schedules listed below:

- At least once every 7 calendar days; and

- Immediately after a storm even of 0.25" or greater. For any day of rainfall during normal business hours that measure 0.25" or greater, the contractor shall record the total rainfall measured for that day.

Reductions in Inspection Frequency (if applicable)

- For the reduction in inspections resulting from stabilization:
  (Note: It is likely that you will not be able to include this in your initial SWPPP. If you qualify for this reduction (see CGP Part 4.1.4.1), you will need to modify your SWPPP to include this information.)

- For the reduction in inspections in arid, semi-arid, or drought-stricken areas:

Inspection Report Forms

Refer to Appendix D for sample Inspection Report Forms.

6.2 *Corrective Action*

Instructions (CGP Parts 5 and 7.2.12):

– Describe the procedures for taking corrective action in compliance with CGP Part 5.

All BMPs shall be inspected, repaired and/or re-installed as needed. If repair is necessary, it shall be initiated immediately after the inspection. Work to be corrected immediately (does not require significant repair or replacement) shall be completed by the close of the next work day. When installation of a new pollution prevention control or significant repair is needed, the work or repair shall be complete no later than 7 calendar days from the time of discovery. If it is infeasible to install or repair a pollution prevention control within 7 days, the contractor shall document in the records why it is infeasible to complete. To facilitate repair or replacement, the contractor will be required to store surplus material on the project site if the site is located where replacement materials will not be readily available.

For each corrective action taken, the contractor shall complete a corrective action report detailing the following:

Within 24 hours of triggering corrective action:

- Identification of the condition at the project site
- The nature of the condition identified
- The date and time of the identification and how it was identified.

Within 7 calendar days triggering corrective action:

- Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred
- Summary of stormwater control modifications, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed
- Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action

Personnel Responsible for Corrective Actions

Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

Corrective Action Forms

Refer to Appendix E for sample Corrective Action Forms.

6.3 Delegation of Authority

Instructions:

- Identify the individual(s) or positions within the company who have been delegated authority to sign inspection reports.
- Attach a copy of the signed delegation of authority (see example in Appendix J of the Template.
- For more on this topic, see Appendix I, Subsection 11 of EPA's CGP.

Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

Duly Authorized Representative(s) or Position(s):

Insert Company or Organization Name:
Insert Name:
Insert Position:
Insert Address:
Insert City, State, Zip Code:
Insert Telephone Number:
Insert Fax/Email:

SECTION 7: TRAINING

Instructions (see CGP Part 6 and 7.2.13):

- Complete the table below to provide documentation that the personnel required to be trained in CGP Part 6 completed the appropriate training
- If personnel will be taking course training (which is not required as part of the CGP), consider using Appendix I to track completion of this training
- The following personnel, at a minimum, must be receive training, and therefore should be listed out individually in the table below:
  - ✓ Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
  - ✓ Personnel responsible for the application and storage of treatment chemicals (if applicable);
  - ✓ Personnel who are responsible for conducting inspections as required in Part 4.1.1; and
  - ✓ Personnel who are responsible for taking corrective actions as required in Part 5.
- CGP Part 6 requires that the required personnel must be trained to understand the following if related to the scope of their job duties:
  - ✓ The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
  - ✓ The proper procedures to follow with respect to the permit's pollution prevention requirements; and
  - ✓ When and how to conduct inspections, record applicable findings, and take corrective actions.

Table 7-1: Documentation for Completion of Training

Name	Date Training Completed

Information to be provided via SWPPP Amendment, as required by HAR 11-55, Section 7.2.4, prior to the start of construction activities.

SECTION 8: CERTIFICATION AND NOTIFICATION

Instructions (CGP Appendix I, Part I.11.b):

- The following certification statement must be signed and dated by a person who meets the requirements of Appendix I, Part I.11.b.
- This certification must be re-signed in the event of a SWPPP Modification.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

[Repeat as needed for multiple construction operators at the site.]

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Appendix A – Site Maps

Appendix B – Copy of 2012 CGP

Appendix C – NOI and EPA Authorization Email

Appendix D – Inspection Form

(Note: EPA is in the process of developing a sample inspection form for use by CGP permittees. The form will be made available at http://cfpub.epa.gov/npdes/stormwater/cgp.cfm.)

Appendix E – Corrective Action Form

(Note: EPA is in the process of developing a sample corrective action form for use by CGP permittees. The form will be made available at http://cfpub.epa.gov/npdes/stormwater/cgp.cfm.)

Appendix F – SWPPP Amendment Log

Appendix G – Subcontractor Certifications/Agreements

Appendix H – Grading and Stabilization Activities Log

Appendix I – Training Log

Appendix J – Delegation of Authority

Appendix K – Endangered Species Documentation

Appendix L – Historic Preservation Documentation

Appendix A – Site Maps

Appendix B – Copy of 2012 CGP

REFER TO THE FOLLOWING LINKS FOR COPIES OF THE 2012 CGP AND 2014 WATER QUALITY STANDARDS:

https://www.epa.gov/npdes/stormwater-discharges-construction-activities-2012-cgp#cgp

http://health.hawaii.gov/cwb/

http://health.hawaii.gov/cwb/files/2013/04/Clean_Water_Branch_20131210_Appendices_C_and_A.pdf

http://health.hawaii.gov/cwb/files/2013/04/Clean_Water_Branch_20131210_HAR11_54.pdf

http://health.hawaii.gov/cwb/files/2013/04/Clean_Water_Branch_20131217_HAR1155.pdf

Appendix C – Copy of NOI and EPA Authorization email

Appendix D – Copy of Inspection Form

Appendix E – Copy of Corrective Action Form

Appendix F – *Sample* SWPPP Amendment Log

Instructions (see CGP Part 7.4):

- Create a log here of changes and updates to the SWPPP. You may use the table below to track these modifications.
- SWPPP modifications are required pursuant to CGP Part 7.4.1 in the following circumstances:
  - ✓ Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater control measures, pollution prevention measures, or other activities at your site that are no longer accurately reflected in your SWPPP;
  - ✓ To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
  - ✓ If inspections or investigations determine that SWPPP modifications are necessary for compliance with this permit;
  - ✓ Where EPA determines it is necessary to impose additional requirements on your discharge; and
  - ✓ To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater control measures implemented at the site.
- If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix G – *Sample* Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Appendix H – *Sample* Grading and Stabilization Activities Log

Date Grading Activity Initiated	**Description of Grading Activity**	**Description of Stabilization Measure and Location**	**Date Grading Activity Ceased** (Indicate Temporary or Permanent)	**Date When Stabilization Measures Initiated**

Appendix I – *Sample* SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ **Sediment and Erosion Controls**
- ❑ **Emergency Procedures**
- ❑ **Stabilization Controls**
- ❑ **Inspections/Corrective Actions**
- ❑ **Pollution Prevention Measures**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		

Appendix J – *Sample* Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix I of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix I.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

Appendix K – Endangered Species Documentation

Criterion A was selected under section 3.1

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.

For criterion A, indicate the basis for your determination that no federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's action area (as defined in Appendix A of the permit). Check the applicable source of information you relied upon:

- ☐ Specific communication with staff of the U.S. Fish & Wildlife Service or National Marine Fisheries Service.
- ☐ Publicly available species list.
- ☒ **Other source: U.S. Fish & Wildlife Critical Habitat Portal (Website: http://ecos.fws.gov/crithab/)**

Appendix L – Historic Properties Documentation

N/A

No ground-disturbing stormwater controls used.

DEPARTMENT OF HAWAIIAN HOME LANDS

IFB-19-HHL-009
HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
FURNITURE, FIXTURES AND EQUIPMENT LIST

ADDENDUM NO. 2
MARCH 11, 2019

	Room	Equipment	Qty	Description / Specification (Or Equal)	Unit Price	Total
1	Classroom	Folding Table	15	Realspace® Folding Table, 6' Wide, 29"H x 72"W x 30"D, Walnut		
	Classroom	Chair (Folding)	30	Cosco Resin 4-Pack Folding Chair with Molded Seat and Back, Black		
	Classroom	Chair/Table Storage Carts	2	AdirOffice Chair & Table Combo Cart - Foldable Seat & Table Wheeled Caddy - Steel Body Truck With Locking Swivel Caster Wheels - 600 Lbs Weight Capacity - Quick & Easy Assembl		
	Classroom	Instructor Desk	1	Sauder 408558 Edge Water Computer Desk, L: 59.06" x W: 23.23" x H: 29.02", Estate Black finish		
	Classroom	Instructor Chair	1	Modway Articulate Ergonomic Mesh Office Chair in Black		
	Classroom	Display Units	4			
	Classroom	AV screen	1	Projector Screen with Stand, TaoTronics Indoor Outdoor Projection Screen 4K HD 100 Inch 16:9 with Premium Wrinkle-Free Design (Easy to Clean, 1.1 Gain, 160° Viewing Angle & Includes a Carry Bag)		
	Classroom	AV projector	1	JMGO J6S 1080P 4K Projector with Android, 1100 ANSI (7000 lumens) DLP Home Cinema Projector, Smart Projector Support 3D Video, Dual 10W Bluetooth Stereo Speakers		
2	Storage	Shelf	6	https://www.lowes.com/pd/Storage-Concepts-63-in-H-x-48-in-W-x-18-in-D-4-Tier-Wire-NSF-Certified-Freestanding-Shelving-Unit/1000405971		
	Storage	Janitorial Kit	2	https://www.amazon.com/Powr-Flite-JANKIT-Janitorial-Sanitation-Cleaning/dp/B015DQUPNM/ref=sr_1_1?adgrpid=56047601166&hvadid=282610733438&hvdev=c&hvlocphy=9032812&hvnetw=g&hvpos=1t2&hvqmt=e&hvrand=16652908620454852965&hvtargid=kwd-410560910532&keywords=janitorial+kit&qid=1551227143&s=gateway&sr=8-1&tag=googhydr-20		
3	Meeting/Display	Folding Table	30	SHELVING SOLUTION Folding Utility Table, 6ft Fold-in-Half Portable Plastic Picnic Party Dining Camp Table (White)		
	Meeting/Display	Folding Chair	60	Cosco Resin 4-Pack Folding Chair with Molded Seat and Back, Black		
	Meeting/Display	Serving Tables (Folding Table)	2	SHELVING SOLUTION Folding Utility Table, 6ft Fold-in-Half Portable Plastic Picnic Party Dining Camp Table (White)		
	Meeting/Display	Chair/Table Storage Carts	2	AdirOffice Chair & Table Combo Cart - Foldable Seat & Table Wheeled Caddy - Steel Body Truck With Locking Swivel Caster Wheels - 600 Lbs Weight Capacity - Quick & Easy Assembl		
	Meeting/Display	Display units	6			
	Meeting/Display	AV screen	1	Projector Screen with Stand, TaoTronics Indoor Outdoor Projection Screen 4K HD 100 Inch 16:9 with Premium Wrinkle-Free Design (Easy to Clean, 1.1 Gain, 160° Viewing Angle & Includes a Carry Bag)		
	Meeting/Display	AV projector	1	JMGO J6S 1080P 4K Projector with Android, 1100 ANSI (7000 lumens) DLP Home Cinema Projector, Smart Projector Support 3D Video, Dual 10W Bluetooth Stereo Speakers		
	Meeting/Display	Public address	1			
4	Office	Desk	4	https://www.officefurniture.com/8822524.aspx		
	Office	Chair	4	Modway Articulate Ergonomic Mesh Office Chair in Black		
	Office	Visitor chair	8	OFM 403-801 Reception Chair with Arms - Fabric Guest Chair, Gray		
	Office	File cabinet	4	2L Lifestyle Hanover 2-Drawer File Cabinet, Brown		
	Office	Paper Shredder	4	https://www.officedepot.com/a/products/429995/Sentinel-FM64B-6-Sheet-Micro-Cut/		
	Office	Wastepaper Basket	4	https://www.officedepot.com/a/products/566134/Highmark-Wastebasket-7-Gallons-14-12/		
	Office	Desktop Computer	4	Dell Optiplex 7010 Business Desktop Computer (Intel Quad Core i5-3470 3.4GHz, 16GB RAM, 2TB HDD, USB 3.0, DVDRW, Windows 10 Professional) (Certified Refurbished) -- AMAZON		
		Computer Monitor	4	Dell D Series LED-Lit Monitor 31.5" White D3218HN, FHD 1920x1080, 16:9, IPS LED Back-lit, HDMI, VGA, VESA		
	Office	Desktop Multi-Use Printer/Fax/Copier	4	Canon Lasers ImageCLASS MF419dw Wireless Monochrome Printer with Scanner, Copier & Fax		
	Office	Display Units	8			
				Online search: Central Restaurant Products (CRP)		
5	Kitchen	Commercial Reach-In Refrigerator	2	https://www.lowes.com/pd/Maxx-Cold-49-cu-ft-2-Door-Reach-In-Commercial-Refrigerator-Stainless-Steel/50208713		
	Kitchen	Commercial Freezer	1	https://www.lowes.com/pd/Maxx-Cold-49-cu-ft-Frost-Free-Freestanding-Commercial-Upright-Freezer-Stainless-Steel/50262161		
	Kitchen	Commercial Range/Oven	1	https://www.centralrestaurant.com/Vulcan-36S-6B---36-inW-Endurance-Gas-Range-6-Burners-and-1-Bakers-Oven-c267p21423.html		
	Kitchen	Commercial Blender	1	https://www.lowes.com/pd/Cuisinart-Hurricane-64-oz-Gray-10-Speed-2600-Watt-Pulse-Control-Blender/1000448313		
	Kitchen	Commercial Microwave	1	https://www.lowes.com/pd/General-1-cu-ft-1-000-Watt-Commercial-Countertop-Microwave-Stainless-Steel/3657676		
	Kitchen	Dishwasher	1	https://www.lowes.com/pd/Bosch-800-44-Decibel-Built-in-Dishwasher-Stainless-Steel-Common-24-Inch-Actual-23-5625-in-ENERGY-STAR/999906163		
	Kitchen	Commercial Ice Maker	1	https://www.centralrestaurant.com/Central-Exclusive-69K-081-Undercounter-Cube-Ice-Machine-75lb-Production-17-inW-c100p52486.html		
	Kitchen	Range Hood	1			
	Kitchen	Stainless Steel Cart	4	https://www.lowes.com/pd/Bayou-Classic-Stainless-Steel-Steel-Outdoor-Serving-Cart/1000368735		
	Kitchen	Stainless Steel Kitchen Table	2	https://www.lowes.com/pd/NewAge-Products-Modular-Outdoor-Kitchen-Prep-Station/1000273615		
6	Bathroom	Air Hand Dryer	2	TCBunny Super Quiet Automatic Electric Hand Dryer Commercial High Speed 90m/s, Silver, Instant Heat & Dry		
	Bathroom	Baby Changing Station	2	Koala Kare KB101 Vertical Wall Mounted Baby Changing Station, Gray		
7	Entry	Memorabilia Display Case	1	https://www.schooloutfitters.com/catalog/product_info/pfam_id/PFAM3383/products_id/PRO10220?sc_cid=Google_BES-93R85&adtype=pla&kw=&CAWELAID=1238965227&CAGPSPN=pla&CAAGID=13113488417&CATCI=aud-70578342617:pla-89050595177&gclid=EAIaIQobChMIuamo3Mva4AIVxR6tBh0C7gH3EAQYBCABEgLQwvD_BwE		
	Entry	Wait Room Seating	6	https://www.hayneedle.com/product/bossfabricguestchair.cfm		
8	Outdoor Space	Commercial Gas Grill	1	https://www.lowes.com/pd/Char-Broil-Commercial-Stainless-Black-4-Burner-Liquid-Propane-and-Natural-Gas-Infrared-Gas-Grill-with-1-Side-Burner/1000364739		

	Room	Equipment	Qty	Description / Specification (Or Equal)	Unit Price	Total
	Outdoor Space	Bench seating	6	https://www.homedepot.com/p/Lifetime-Convertible-Patio-Bench-60054/202733910		
	Outdoor Space	All-Weather Folding Table	15	https://www.lowes.com/pd/LIFETIME-PRODUCTS-72-in-x-30-in-Rectangle-Steel-Almond-Folding-Table/3701872		
	Outdoor Space	All-Weather Chair	30	https://www.lowes.com/pd/SuddenSolution-Indoor-Outdoor-Steel-Mocha-Standard-Folding-Chair/3692066		
	Outdoor Space	Large Folding Table	2	https://www.lowes.com/pd/LIFETIME-PRODUCTS-96-in-x-30-in-Rectangle-Steel-Almond-Folding-Table/3701890		
9	General	Phone System (Bldg-wide System)	1			
	General	WI-FI System	1			
	General	Security System	1			
	General	HVAC System	1			
	General	Water Filtration System	1			
	General	Office Print/Copy/Fax Machine	1			
	General	Window Treatments	10	https://blinds.lowes.com/f/Custom-Cordless?limited=0&page=1&pageSize=18&sortCode=-Most%20Popular		
	General	Commecial Washing Machine	1	Whirlpool 3.1-cu ft Front Load Commercial Washer (White) ENERGY STAR		
	General	Commercial Dryer	1	Whirlpool Commercial 6.7-cu ft Coin-Operated Electric Commercial Dryer (White)		
	General	Flags & Stands	4	https://www.united-states-flag.com/low-cost-indoor-american-flag-and-pole-kit.html?utm_source=googlepepla&utm_medium=adwords&id=420476987513&gclid=EAIaIQobChMIo4bSu5rJ4AIVUCCtBh09BgsYEAQYASABEgKudPD_BwE		
	General	Emergency Generator	3	https://www.alliedelec.com/product/siemens/6ep19332ec51/70240400/?&mkwid=styS8Utfd&pcrid=30980760979&pkw=&pmt=&gclid=EAIaIQobChMI5-7A2pjJ4AIVrB-tBh337AlNEAQYBCABEgLXxPD_BwE&gclsrc=aw.ds		
	General	Golf Cart	1	https://www.tntcartparts.com/rear-seat-kits/madjax-genesis-150-rear-flip-seat-with-black-cushions-fits-ez-go-rxv/?_vsrefdom=adwords&gclid=EAIaIQobChMIwrbDg5vJ4AIV7x6tBh20SA0jEAQYASABEgKZuPD_BwE		
	General	8'x40' Shipping/Storage Container	4	http://containerstoragehawaii.com/container-rentals-sales/1966148		
	General	Trash Recepticles	4	https://www.lowes.com/pd/Toter-32-Gallon-Greenstone-Wheeled-Trash-Can/50385698		
	General	Trash/Recycling Dumpsters	2	https://www.webstaurantstore.com/rubbermaid-2007919-slim-jim-4-stream-recycling-station-kit-with-open-paper-and-2-bottle-lids/6902007919.html?utm_source=Google&utm_medium=cpc&utm_campaign=GoogleShopping&gclid=EAIaIQobChMI_aWOjpnJ4AIV_R6tBh1MOwdPEAQYBCABEgK7X_D_BwE		
		Sub-Total				
		Tax (4.166%)				
		TOTAL				

State of Hawaii
Department of Hawaiian Home Lands

IFB-19-HHL-009
HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
REQUEST FOR INFORMATION / SUBSTITUTION REQUEST LOG

ITEM	PROSPECTIVE BIDDER / CONTRACTOR				RESPONSE			
	DATE	NAME	COMPANY	QUESTION	ADD	DATE	BY	DETAIL
1	02/19/19	Ronald Banaga	Safety Systems and Signs Hawaii	Specification Section 05500-6 (Part 2, 2.07) – Stair nosings. Please verify if stair nosings arerequired to all stairs shown on Plan Sheet A-202.	2	03/11/19	G70	Revised Specification Section 05500 - Metal Fabrications to specify stair nose.
2	02/19/19	Ronald Banaga	Safety Systems and Signs Hawaii	Specification Section 10440 – Signage. Please provide a sign schedule, locations or quantities, and sign drawings/details. These are not provided or shown on the drawings.	2	03/11/19	G70	Revised Plan Sheet A-702 to add signage schedule for each room to coordinate with specifications Section 10440 - Signage; Revised Specification Section 10440 - Signage to add signage type 1-5 to be used on signage schedule on Plan Sheet A-702.
3	02/19/19	Ronald Banaga	Safety Systems and Signs Hawaii	Specification Section 10520 – Fire extinguishers and cabinets. Please provide locations or quantities because they are not provided or shown on the drawings.	2	03/11/19	G70	Revised Plan Sheet T-103 to add Fire Extinguisher Cabinet (FEC) symbols to floor plan to match specification call-out for FEC in multi-purpose room, classroom and kitchen.
4	02/25/19	Patricia Paz	Diede Construction, Inc.	Sheet C500 shows 18 pipes connecting to the septic system for the leach field. Please confirm that there are to be 18 branches.	2	03/11/19	G70	Confirmed.
5	02/25/19	Patricia Paz	Diede Construction, Inc.	Drawings also indicate 100' maximum for these pipes, please provide a minimum length for these pipes.	2	03/11/19	G70	The maximum length refers the maximum trench length allowed by statute (HAR 11-62). The system requires a specific absorption area and the maximum trench length was utilized to minimize the number of trenches. If the contractor believes that an alternative equivalent system layout is possible through the use of shorter trenches, the contractor, at his own cost, may value engineer the IWS design to reduce construction cost.
6	03/01/19	Courtney Damore	Scranton Products	Substitution Request: Toilet Partition - Hiny Hiders Solid Plastics	2	03/11/19	G70	See Attached Response
7								
8								
9								
10								
11								

SUBSTITUTION REQUEST
(During the Bidding/Negotiating Stage)

Project:	Hoolehua Veteran and Homestead Residents Center (19-546823)	Substitution Request Number:	SubReq-02685
	HOOLEHUA, HI	From:	Courtney Damore, Scranton Products
To:	Mitchell Kawamura, DHHL - Dept of Hawaiian Home Lands	Date:	03/01/2019
	mitchell.h.kawamura@hawaii.gov, (808) 620-9284	A/E Project Number:	
Re:	Toilet Partitions	Contract For:	DHHL - Dept of Hawaiian Home Lands

Specification Title: Toilet Partitions
Description: Solid Phenolic Toilet Partitions
Section: 10165 Page: 1,2
Article/Paragraph: 2.01

Proposed Substitution: Hiny Hiders Solid Plastic
Manufacturer: Scranton Products Address: scrantonproducts.com Phone: 570-348-0997
Trade Name: Scranton Hiny Hiders Solid Plastic Model No.: N/A

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted by: Courtney Damore
Signed by: Courtney Damore
Firm: Scranton Products
Address: 801 E. Corey Street
Scranton, Pennsylvania 18504
Telephone: (570) 348-0997 ext. 8032, courtney.damore@azekco.com

A/E' s REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Substitution Procedures.

☒ Substitution approved as noted - Make submittals in accordance with Specification Substitution Procedures.

☐ Substitution rejected - Use specified materials.

☐ Substitution Request received too late - Use specified materials.

Signed by: James Stone/Arch-DOR 3-7-19 **Date:**

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ ___

Proposed product line appears to have the capability to meet the specified requirements for the project and is accepted pending a final submittal of the various items to be selected for the specific model provided, see attached Outline Specification with notes

SECTION 10155

SCRANTON PRODUCTS HINY HIDERS HDPE
TOILET COMPARTMENTS

** NOTE TO SPECIFIER ** Scranton Products; toilet compartments, vanities, privacy screens, shower cubicles, dressing compartments, lockers and locker benches.
.
This section is based on the products of Scranton Products, which is located at:
801 E. Corey St.
Scranton, PA 18505
Toll Free Tel: (800) 445-5148
Fax: (800) 551-6993
Email: info@scrantonproducts.com
Web: http://www.scrantonproducts.com

With over 30 years of experience, Scranton Products is the industry leader in plastic bathroom partitions and lockers. Constructed from premium, American-made solid plastic, our products resist dents, scratches, corrosion and graffiti and mildew. When you purchase Scranton Products, you are investing in peace of mind. With unmatched durability and array of designer colors and textures, Scranton Products installs confidence in every project.

Why Performance Plastics?
Bathroom partitions and lockers are placed in harsh, high traffic environments that tend to be damp, making the materials susceptible to mold, mildew and rust. It is also common to encounter graffiti and vandalism in these public spaces.

It is important to invest in a worry-free product that will save you time and money.

Solid plastic partitions and lockers are built to last, down to every detail. Graffiti can be easily wiped clean with a common non-abrasive cleaner, and since Scranton Products performance plastic is formulated with a solid color throughout, scratches are difficult to see. Compared to other traditional material types, performance plastic has a greater resistance to impacts and dents providing you with a low maintenance product that will look great for years

PART 1 GENERAL

1.1 SECTION INCLUDES

** NOTE TO SPECIFIER ** Delete items below not required for project.

A. Solid plastic toilet compartments including the following: (Hiny Hiders)
1. Floor mounted overhead-braced toilet compartments.
2. Floor-to-ceiling toilet compartments.
3. Ceiling hung toilet compartments.
4. Privacy screens.
5. Shower and dressing compartments.

6. Vanities

1.1 RELATED SECTIONS

** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.

A. Section 05500 - Metal Fabrications: Structural support ceiling beam for ceiling hung partitions provided as Work of Section 05500; Unistrut channels not acceptable.

B. Section 06100 - Rough Carpentry: Anchorage/blocking for attachment of partitions.

1.2 REFERENCES

** NOTE TO SPECIFIER ** Delete references from the list below that are not actually required by the text of the edited section.

A. ASTM A 666 - Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.

B. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

C. National Fire Protection Association (NFPA) 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.

D. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

A. Shop Drawings: Provide layout drawings and installation details with location and type of hardware required.

** NOTE TO SPECIFIER ** Delete selection samples if colors have already been selected.

B. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

C. Verification Samples: For each finish product specified, two samples representing actual product, color, and patterns.

D. Sustainable Design Submittals:

1. Recycled Content: Certify percentages of post-consumer and pre-consumer recycled content.

1. Regional Materials: Certify distance between manufacturer and Project and between manufacturer.

1.1 QUALITY ASSURANCE

A. Manufacturer Qualifications: A company regularly engaged in manufacture of products specified in this section, and whose products have been in satisfactory use under similar service conditions for not less than 5 years.

B. Installer Qualifications: A company regularly engaged in installation of products specified in this Section, with a minimum of 5 years experience.

C. Materials: Doors, panels and pilasters shall be constructed from High Density Polyethylene (HDPE) resins. Partitions shall be fabricated from polymer resins compounded under high pressure, forming a single component which is waterproof, nonabsorbent and has a self-lubricating surface that resists marks from pens, pencils, markers and other writing instruments. All plastic components shall be covered with a protective plastic masking.

D. Performance Requirements:

1. Fire Resistance: Partition materials shall comply with the following requirements, when tested in accordance with the ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials:

specify correct Class

** NOTE TO SPECIFIER ** Delete class not required.

a. Class A flame spread/smoke developed rating, tested to ASTM E84.
b. Class B flame spread/smoke developed rating, tested to ASTM E84.

1. Material Fire Ratings:
a. National Fire Protection Association (NFPA) 286: Pass.
b. International Code Council (ICC): Class B.

1.1 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

1.2 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.3 WARRANTY

A. Manufacturer guarantees its plastic against breakage, corrosion, and delamination under normal conditions for 25 years from the date of receipt by the customer. If materials are found to be defective during that period for reasons listed above, the materials will be replaced free of charge. (Labor not included in warranty.)

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Scranton Products, which is located at: 801 E. Corey St. ; Scranton, PA 18507; Toll Free Tel: 800-445-5148; Email: request info (info@scrantonproducts.com); Web: www.scrantonproducts.com
1. Fabricator: Santana Toilet Partitions.
2. Fabricator: Comtec Toilet Partitions.

1. Fabricator: Capitol Toilet Partitions.

** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

A. Substitutions: Not permitted.

A. Requests for substitutions will be considered in accordance with provisions of Section 01600.

meet phenolic requriements

1.2 MATERIAL

A. Plastic Panels: High density polyethylene (HDPE) suitable for exposed applications, waterproof, non-absorbent, and graffiti-resistant textured surface;

** NOTE TO SPECIFIER ** Delete fire-resistance rating not required.

1. Fire Rating: Not required.
2. Fire-resistance Rating: Class A.
3. Fire-resistance Rating: Class B.
4. Fire-resistance Rating: NFPA 286.

** NOTE TO SPECIFIER ** Delete recycled content not required. Verify amount of recycled content available for panels selected.

5. Recycled Content (Post Industrial): 25 %.
6. Recycled Content (Post Industrial): 100 %.
7. Recycled Content (Post Consumer): 100 %.

A. Zinc Aluminum Magnesium and Copper Alloy (Zamac): ASTM B 86.

B. Stainless Steel Castings: ASTM A167, Type 304.

C. Aluminum: ASTM 6463-T5 alloy.

** NOTE TO SPECIFIER ** With tough construction and rugged good looks, Hiny Hiders Partitions offer durability that will save customers time, hassle, and maintenance costs. Hiny Hiders Partitions offer superior value that simply can't be beat by the competition.

1.3 SOLID PLASTIC TOILET COMPARTMENTS

A. Basis of Design: Hiny Hiders Toilet Partitions as manufactured by and supplied by Scranton Products.

specify correct model

** NOTE TO SPECIFIER ** Delete style not required.

1. Style: Floor mounted overhead-braced toilet compartments.
2. Style: Floor-to-ceiling toilet compartments.
3. Style: Ceiling hung toilet compartments.

A. Doors, panels, and pilasters shall be 1 inch (25 mm) thick with all edges rounded to a radius. Doors and dividing panels shall be mounted based on height of specified system.

** NOTE TO SPECIFIER ** Delete panel/door height not required.

specify correct Class

1. Door and Panel Height: 55 inches standard (1397 mm) (standard).
1. Door and Panel Height: 66 inches high (1676 mm) (requires a modular panel).
2. Door and Panel Height: 72 inches extra high (1829 mm) (requires a modular panel).

** NOTE TO SPECIFIER ** Delete if heat sink not required for fire rating.

a. Aluminum heat sink fastened to bottom edges.

** NOTE TO SPECIFIER ** Delete door design not required.

specify correct Class

1. Door Design: Traditional 2600.
2. Door Design: Traditional 2800.
3. Door Design: Modern 3000.
4. Door Design: Modern 3200.
5. Door Design: Modern 3800.
6. Door Design: Modern 4000.
7. Door Design: Two panel side panel design.

** NOTE TO SPECIFIER ** Delete door & pilaster edge not required.

11. Door & Pilaster Edge: Standard.
12. Door & Pilaster Edge: Shiplap.
13. Pilasters shall be 82 inches (2083 mm) high fastened to floor.

** NOTE TO SPECIFIER ** Delete series and series color not required.

A. Panel Color: Traditional Series:
   1. Black - Orange Peel.
   2. Black - Grip Ex.
   3. Paisley - Orange Peel.
   4. Shale - Orange Peel.
   5. Charcoal Grey - Orange Peel.
   6. Grey - Orange Peel.
   7. Glacier Grey - Orange Peel.
   8. White - Orange Peel.

arch to select color

A. Panel Color: Bold Series:
   1. Fossil - Orange Peel.
   2. Hunter Green - Orange Peel.
   3. Burgundy - Orange Peel.
   4. Blueberry - Orange Peel.
   5. French Blue - Orange Peel.

A. Panel Color: Warm Series:
   6. Mahogany - Orange Peel.
   7. Concrete - Orange Peel.
   8. Linen - Orange Peel.
   9. Sandcastle - Orange Peel.
   10. Sandstone - Orange Peel.

1. Desert Beige - Orange Peel.
2. Mocha - Orange Peel.

A. Panel Color: Metallic Series:

1. Bronze – Hammered.
2. Bronze - Rotary Brushed.
3. Nickel – Hammered.
4. Nickel - Rotary Brushed.
5. Stainless – Hammered.
6. Stainless - Grip Ex.
7. Stainless - Rotary Brushed.

** NOTE TO SPECIFIER ** Delete if pilaster shoes not required. Delete shoe material not required.

20. Pilaster shoes shall be 3 inches (76 mm) high stainless steel (type 304, 20 gauge) secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.
21. Pilaster shoes shall be 3 inches (76 mm) high one-piece molded HDPE secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.

** NOTE TO SPECIFIER ** Delete pilaster plastic shoe color not required.

b. Pilaster Plastic Shoe Color: Mocha.
c. Pilaster Plastic Shoe Color: Black.
d. Pilaster Plastic Shoe Color: Grey.
e. Pilaster Plastic Shoe Color: Linen.
f. Pilaster Plastic Shoe Color: Beige.
g. Pilaster Plastic Shoe Color: Blueberry.

** NOTE TO SPECIFIER ** Delete if not required.

A. Headrail shall be made of heavy-duty extruded aluminum (6463-T5 alloy) with anti-grip design. The headrail shall have a clear anodized finish and shall be fastened to the headrail bracket by a stainless steel tamper resistant Torx head sex bolt, and fastened at the top of the pilaster with stainless steel tamper resistant Torx head screws.
Headrail brackets shall be 20 gauge stainless steel with a satin finish and secured to the wall with a stainless steel tamper resistant Torx head screws.

A. Wall Brackets:

** NOTE TO SPECIFIER ** Delete wall bracket material not required.

1. Aluminum Brackets: Wall brackets shall be made of heavy-duty aluminum 6463-T5 alloy.
2. Extruded PVC Brackets: Wall brackets shall be made of extruded PVC plastic.
3. Stainless Steel Brackets: Wall brackets shall be made of stainless steel type 304.
4. The brackets are fastened to the pilaster with stainless steel tamper resistant Torx head screws and fastened to the panels with stainless steel tamper resistant Torx head sex bolts.

** NOTE TO SPECIFIER ** Delete bracket not required. Stirrup brackets in metal only. Continuous brackets in metal and plastic with 68 inches (1727 mm) in aluminum only.

5. Bracket Type: Stirrup double ear aluminum.
6. Bracket Type: Stirrup single ear aluminum.
7. Bracket Type: Stirrup stainless steel double ear.
8. Bracket Type: Stirrup stainless steel single ear.
9. Bracket Type: Continuous 54 inches (1372 mm) plastic.
10. Bracket Type: Continuous 54 inches (1372 mm) stainless steel.
11. Bracket Type: Continuous 54 inches (1372 mm) aluminum.
12. Bracket Type: Continuous 68 inches (1727 mm) aluminum.

A. Door Hardware:

** NOTE TO SPECIFIER ** Delete hinge type not required.

1. Hinges: 54 inches (1372 mm) continuous aluminum.
2. Hinges: 65 inches (1651 mm) continuous aluminum.
3. Hinges: 71 inches (1803 mm) continuous aluminum.
4. Hinges: 54 inches (1372 mm) continuous stainless steel helix.
5. Hinges: 71 inches (1803 mm) continuous stainless steel helix.
6. Hinges: 54 inches (1372 mm) continuous stainless steel spring loaded.
7. Vault Hinge: Heavy-duty diecast vault zamac hinge shall have gravity-acting cams and are fabricated from a die cast aluminum alloy with a brushed finish and wrap around flanges. The cam is constructed from ¾" diameter nylon rod and a 3/8" stainless steel pin.
8. Integral Hinges (Stealth): Hinges shall be integral, fabricated in the door and pilaster with no exterior exposed metal parts. Hinges operate with field adjustable nylon cams. Cams can be field adjusted to any degree.
9. Wrap-Around Hinges: Hinges shall be 8 inches (203 mm) and fabricated from heavy-duty extruded aluminum wrap-around hinges through-bolted to pilasters and doors with stainless steel tamper resistant Torx head sex bolts. Hinges operate with field adjustable nylon cams. Cams can be field set in 30, 60 or 90-degree increments.
10. Wrap-Around Hinges (Regal): Hinges shall be fabricated from heavy-duty cast aluminum, wrap around flanges through bolted to doors and pilasters. Hinges operate with field adjustable nylon cams. Cams can be field set in 30, 60 or 90-degree increments.
11. Door strike/keeper shall be made of heavy-duty extruded aluminum (6436-T5 alloy) with a bright dip anodized finish and secured to the pilasters with stainless steel tamper resistant Torx head sex bolts. Bumper shall be made of extruded black vinyl.

** NOTE TO SPECIFIER ** Delete strike style not required.

a. Style: 6 inches (152 mm) aluminum
a. Style: 54 inches (1372 mm) aluminum
b. Style: 65 inches (1651 mm) aluminum
c. Style: 71 inches (1803 mm) aluminum
d. Style: 3 inches (76 mm) stainless steel emergency access

** NOTE TO SPECIFIER ** Delete latch type not required.

12. Aluminum Slide Bolt Latch and housing shall be made of heavy-duty extruded aluminum (6463-T5 alloy). The latch housing shall have a bright dip anodized finish, and the slide bolt and button shall have a black anodized finish.
13. Aluminum Paddle Latch and housing shall be made of heavy-duty extruded aluminum (6463-T5 alloy). The latch housing and paddle shall have a bright dip anodized finish.
14. Stainless Steel Slide Bolt Latch and housing shall be made of heavy-duty stainless steel type 304. The latch housing shall have a bright finish, and the slide bolt and button shall have a black anodized finish.
15. Stainless Steel Paddle Latch and housing shall be made of heavy-duty stainless steel type 304. The latch housing and paddle shall have a bright finish.
16. Provide occupancy indicator.

** NOTE TO SPECIFIER ** Delete if not required.

17. Each door shall be supplied with one coat hook/bumper and door pull made of chrome plated Zamak.

** NOTE TO SPECIFIER ** Delete if not required.

18. Equip outswing handicapped doors with second door pull and door stop.

** NOTE TO SPECIFIER ** Delete if not required.

1.1 SOLID PLASTIC PRIVACY SCREENS

A. Provide plastic privacy screens in urinal and entry toilet room applications as indicated or scheduled.

B. Panels, and pilasters, if required, shall be 1 inch (25 mm) thick with all edges rounded to a radius. Screens shall be mounted at 14 inches (356 mm) above the finished floor. Color as selected by Architect from manufacturer's full line of current colors.

** NOTE TO SPECIFIER ** Delete if heat sink not required for fire rating.

1. Aluminum heat sink fastened to bottom edges.

** NOTE TO SPECIFIER ** insert recycled content required. Delete if recycled content not required.

2. Recycled content: Minimum 25 percent.

** NOTE TO SPECIFIER ** Delete mounting type not required.

C. Type: Wall mounted screen.

** NOTE TO SPECIFIER ** Delete screen height not required.

1. Screen: Urinal screens shall be 18 inches (457 mm) wide by 42 inches (1067 mm) high.
1. Screen: Urinal screens shall be 18 inches (457 mm) wide by 55 inches (1397 mm) high.

2. Screen: Urinal screens shall be 24 inches (610 mm) wide by 42 inches (1067 mm) high.
3. Screen: Urinal screens shall be 24 inches (610 mm) wide by 55 inches (1397 mm) high.

A. Type: Pilaster supported screen.

** NOTE TO SPECIFIER ** Delete configuration not required.

1. Configuration: Floor to ceiling pilaster supported screen.
2. Configuration: Floor pilaster supported screen.
3. Configuration: Ceiling pilaster supported screen.

** NOTE TO SPECIFIER ** Delete screen height not required.

4. Screen: Urinal screens shall be 18 inches (457 mm) wide by 42 inches (1067 mm) high.

1. Screen: Urinal screens shall be 18 inches (457 mm) wide by 55 inches (1397 mm) high.
2. Screen: Urinal screens shall be 24 inches (610 mm) wide by 42 inches (1067 mm) high.
3. Screen: Urinal screens shall be 24 inches (610 mm) wide by 55 inches (1397 mm) high.

** NOTE TO SPECIFIER ** Delete pilaster height not required.

8. Pilaster: Pilaster screens shall be 56 inches (1422 mm) high.
9. Pilaster: Pilaster screens shall be 69 inches (1600 mm) high.
10. Pilaster: Pilaster screens shall be 82 inches (2083 mm) high.

** NOTE TO SPECIFIER ** Headrail and headrail bracket used with 82 inches (2083 mm) high floor mounted pilaster only. Delete if not required.

11. Headrail shall be made of heavy-duty extruded aluminum (6463-T5 alloy) with anti-grip design and integrated curtain track. The headrail shall have a clear anodized finish and shall be fastened to the headrail bracket by a stainless steel tamper resistant Torx head sex bolt, and fastened at the top of the pilaster with stainless steel tamper resistant Torx head screws

12. Headrail brackets shall be 20 gauge stainless steel with a satin finish and secured to the wall with a stainless steel tamper resistant Torx head screws.

** NOTE TO SPECIFIER ** Floor to ceiling pilaster configuration only. Delete if not required.

13. Floor to Ceiling Supported Pilaster: A stainless steel angle shall be used to attach pilasters to floor and ceiling. These angles shall be attached to pilasters with 3/4 inch (19 mm) stainless steel tamper resistant Torx head screws. Pilaster sleeves shall be 4 inches (102 mm) high.

** NOTE TO SPECIFIER ** Delete sleeve material not required.

a. Pilaster sleeves shall be stainless steel (type 304, 20 gauge) secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.

a. Pilaster sleeves shall one-piece molded HDPE secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.

** NOTE TO SPECIFIER ** Delete plastic pilaster shoe color not required.

c. Pilaster Shoe Color: Mocha.
d. Pilaster Shoe Color: Black.
e. Pilaster Shoe Color: Grey.
f. Pilaster Shoe Color: Linen.

g. Pilaster Shoe Color: Beige.
h. Pilaster Shoe Color: Blueberry.

** NOTE TO SPECIFIER ** Floor and ceiling pilaster configuration only. Delete if not required.

1. Pilaster sleeves shall be 3 inches (76 mm) high secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.

** NOTE TO SPECIFIER ** Delete sleeve material not required.

a. Pilaster sleeves shall be stainless steel (type 304, 20 gauge) secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.
a. Pilaster sleeves shall be one-piece molded HDPE secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.

** NOTE TO SPECIFIER ** Delete bracket type not required.

A. Wall brackets shall be made of extruded PVC plastic. Brackets are fastened to the panel/pilaster with stainless steel tamper resistant torx head screws and fastened to the wall with stainless steel tamper resistant torx head sex bolts.

** NOTE TO SPECIFIER ** Delete length not required.

1. Wall brackets shall be 41 inches (1041 mm) long.
1. Wall brackets shall be 54 inches (1327 mm) long.

** NOTE TO SPECIFIER ** Delete plastic bracket color not required.

a. Bracket Color: Mocha.
b. Bracket Color: Black.
c. Bracket Color: Grey.
d. Bracket Color: Linen.
e. Bracket Color: Beige.
f. Bracket Color: Blueberry.

A. Wall brackets shall be 1-1/2 inches (38 mm) stirrup type made of heavy-duty aluminum (6463-T5 alloy). Stirrup brackets shall be fastened to panel/pilaster with stainless steel tamper resistant Torx head sex bolts.

1.1 SOLID PLASTIC SHOWER AND DRESSING COMPARTMENTS

A. Provide plastic privacy screens in shower room applications as indicated or scheduled.

B. Panels and pilasters shall be 1 inch (25 mm) thick with all edges rounded to a radius. Screens shall be mounted at 14 inches (356 mm) above the finished floor. Color as selected by Architect from manufacturer's full line of current colors.

** NOTE TO SPECIFIER ** insert recycled content required. Delete if recycled content not required.

1. Recycled content: Minimum 25 percent.

A. Type: Floor mounted pilaster supported screen.
1. Panels: Panel screens shall be 76 inches (1930 mm) high.
2. Pilaster: Pilaster screens shall be 82 inches (2083 mm) high.

3. Headrail: Headrail shall be made of heavy-duty extruded aluminum (6463-T5 alloy) with anti-grip design and integrated curtain track. The headrail shall have a clear anodized finish and shall be fastened to the headrail bracket by a stainless steel tamper resistant Torx head sex bolt, and fastened at the top of the pilaster with stainless steel tamper resistant Torx head screws.

1. Headrail brackets shall be 20 gauge stainless steel with a satin finish and secured to the wall with a stainless steel tamper resistant Torx head screws.
2. Pilaster sleeves shall be 3 inches (76 mm) high. Pilaster sleeves shall be stainless steel (type 304, 20 gauge) secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.
3. Wall brackets shall be continuous made of heavy-duty aluminum (6463-T5 alloy) with a bright dip anodized finish. Brackets shall be fastened to panel/pilaster with stainless steel tamper resistant Torx head sex bolts.
4. Shower Curtains: White non PVC, 42 inches wide x 72 inches high, hung with aluminum curtain hooks with self-lubricating Delrin slides.

1.1 SOLID PLASTIC VANITY

A. Provide vanities in sizes and applications as indicated or scheduled.

B. Tops, Splashes, Skirts, End and Center Supports: 1 inch (25 mm) thick with all edges rounded to a radius. Screens shall be mounted at 14 inches (356 mm) above the finished floor. Color as selected by Architect from manufacturer's full line of current colors.

C. Pilaster sleeves shall be 3 inches (76 mm) high one-piece molded HDPE secured to the pilaster with a stainless steel tamper resistant Torx head sex bolt.

D. Attachment Brackets: 16 inches (406 mm) long, heavy duty extruded aluminum with bright dip anodized finish.

PART 2 GENERAL

2.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

2.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Examine areas to receive toilet partitions, screens, and shower compartments for correct height and spacing of anchorage/blocking and plumbing fixtures that affect installation of partitions. Report discrepancies to the architect.

2.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install partitions rigid, straight, plumb, and level manor, with plastic laid out as shown on shop drawings.

C. Clearance at vertical edges of doors shall be uniform top to bottom and shall not exceed 3/8 inch (9.5 mm).

D. No evidence of cutting, drilling, and/or patching shall be visible on the finished work.

E. Finished surfaces shall be cleaned after installation and be left free of imperfections.

2.4 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

PROJECT INFORMATION

GENERAL

LOT SIZE:

EXISTING FLOOR AREA: 8400SF
EXISTING PARIMETER: 380'-0"
TOTAL PARIMETER:> 30'-0"
OPEN = 275'-0"

TAX MAP KEY

(2) 5-2-015:053

SCOPE OF WORK

MODULAR DESIGN FOR NEW COMMUNITY CENTER WITH MULTI-PURPOSE, CLASSROOM, KITCHEN AND OFFICES, SITE IMPROVEMENTS TO INCLUDE PARKING LOT, SIDEWALKS AND UTILITY SERVICES.

REFERENCE CODES

BUILDING CODE: (OAHU/MAUI/HAWAII/KAUAI) COUNTY CODE - INTERNATIONAL BUILDING CODE 2006

ACCESSIBILITY: AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES

ENERGY CODE: (OAHU/MAUI/HAWAII/KAUAI) MODEL ENERGY CODE

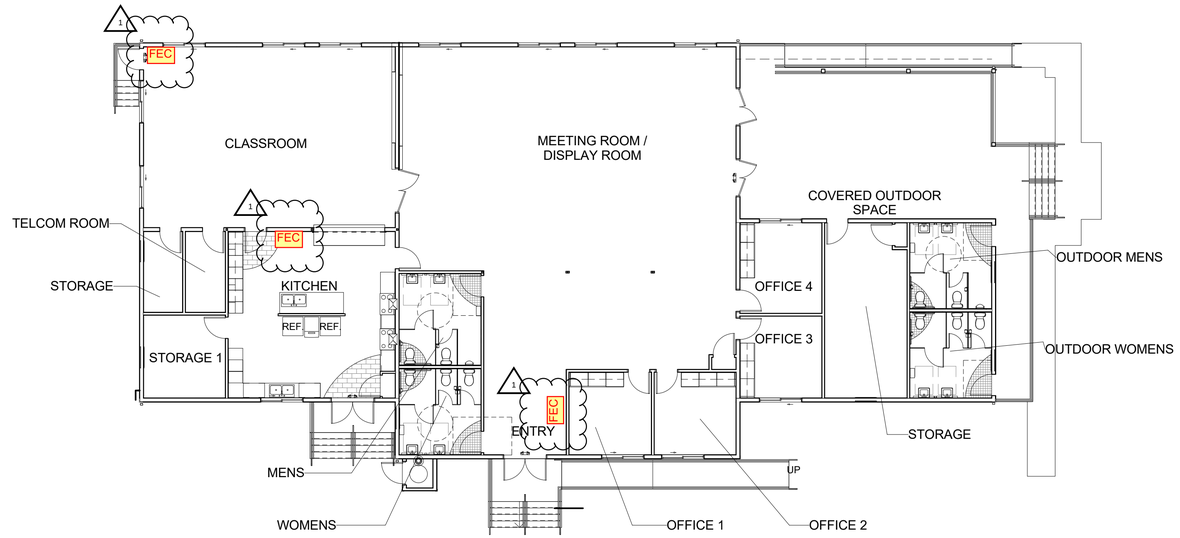
ZONING

MAUI ZONING ORDINANCE

PARKING:
CLUBHOUSE (1 STALL: 200 S.F.): 32 STALLS

SANITARY FACILITIES
ALLOWABLE MINIMUM SANITARY FACILITIES PER UNIFORM PLUMBING CODE (1991,1997)

CODE DIAGRAM



CODE - FLOOR PLAN

BUILDING CODE NOTES

OCCUPANCY: OCCUPANCY A-3 - TRAINING AND SKILLED DEVELOPMENT NOT WITHIN A SCHOOL

CONSTRUCTION TYPE: V-B NON-SPRINKLERED

PROPOSED BUILDING AREA: 6,342 SF
BASE ALLOWABLE BUILDING AREA (TABLE 503): 6,000 SF

SECTION 506.2 FRONTAGE INCREASE
274'-0" / 380'-0" = 0.724 = 0.72
0.72 - 0.25 = 0.47 = 47% BONUS

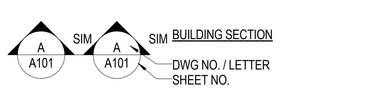
TOTAL ALLOWABLE AREA
6,000 S.F. X 1.47 = 8,820 S.F. EXCEEDS PROPOSED BUILDING AREA

MAX HEIGHT: 26'

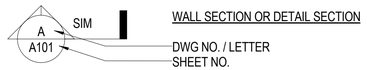
MAX STORIES: 1-STORY

FLOOD ZONE: AE 10'
CURRENT ELEVATION: FINISH FLOOR 7.70', FLOOD PROTECTION PROVIDED TO 10'

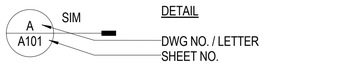
SYMBOLS



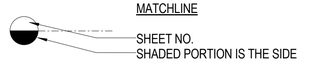
BUILDING SECTION
DWG NO. / LETTER
SHEET NO.



WALL SECTION OR DETAIL SECTION
DWG NO. / LETTER
SHEET NO.

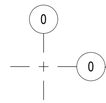


DETAIL
DWG NO. / LETTER
SHEET NO.

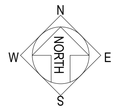

MATCHLINE
SHEET NO.
SHADED PORTION IS THE SIDE CONSIDERED

WORKING POINT, CONTROL POINT OR DATUM POINT

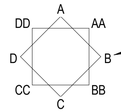
NEW POINT ELEVATION



EXISTING POINT ELEVATION
COLUMN LINE
REFERENCE NO. / LETTER



EXTERIOR ELEVATIONS AND NORTH POINT REFERENCE



KEY TO INTERIOR ELEVATIONS
DWG NO. / LETTER

ROOM IDENTIFICATION
ROOM NAME
ROOM NUMBER

WINDOW MARK
AND LOUVER MARK (L-)

PARTITION MARK

EQUIPMENT TYPE
EQUIPMENT GROUP

DOOR MARK

KEYNOTE MARK

REVISION

REVISION	DATE	BRIEF	MADE BY	APPROVED
1	3-11-19	ADDENDUM #2	G70	

JAMES L. STONE
LICENSED PROFESSIONAL ARCHITECT
No. 8352
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION AS DEFINED IN SECTION 16-115-2 OF THE STATE OF HAWAII, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS 8/29/94).

SIGNATURE
LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

PROJECT INFORMATION CODES AND CODE DIAGRAMS, SYMBOLS

DESIGNED BY: JS | CHECKED BY: RO | DRAWN BY: G70

01-14-19

DWG. NO. T-103
SHEET OF

ADD. 2

FILE	POCKET	FOLDER	NO.

1/14/2019 1:27:05 PM

COLOR AND MATERIAL FINISH SCHEDULE

MARK	MATERIAL DESCRIPTION	MATERIAL MANUFACTURER	MATERIAL NAME	MATERIAL SIZE	MATERIAL NO/COLOR	MATERIAL FINISH	MATERIAL LOCATION USED/REMARKS
EXTERIOR FINISHES							
EXPT-1	EXTERIOR PAINT-WALLS	BENJAMIN MOORE	PAINT		BEIGE SUPREME	EGG SHELL	WALLS
EXPT-2	EXTERIOR PAINT-TRIM	BENJAMIN MOORE	PAINT		GOLDEN YELLOW	EGG SHELL	
EXPT-3	EXTERIOR PAINT-WINDOW/DOOR TRIM	BENJAMIN MOORE	PAINT		OCHER	EGG SHELL	
EXPT-4	EXTERIOR PAINT-DOORS/FRAMES	BENJAMIN MOORE	PAINT		MEDIUM BROWN	SEMI-GLOSS	
EXPT-5	WINDOW/LOUVERS FRAMES	WINDOW MANUF.	VARIES		OFF WHITE	SEMI-GLOSS	
EXPT-6	EXTERIOR SOFFITS/CEILING	BENJAMIN MOORE	PAINT		OFF WHITE	EGG SHELL	
EXPT-7	METAL ROOF, GUTTER, VENT & FLASHING	KLOCKNERS METALS	PAINT		PATINA GREEN 872GS		ROOF COLOR
EXPT-8	RAILINGS	KYNAR	KYNAR		SIENNA BROWN		
FLOORING							
CPT	CARPET TILE	SHAW	PATCRAFT	24" X 24"	BIG SPLASH MODULAR	202	OFFICE
CT-1	CERAMIC TILE-FLOORS	DAL TILE	KEYSTONES	1"X1" MESH			COVE BASE
DCK	DECKING SYSTEM	RESYSTA	DECKING PLATINUM		SIAM		DECKS AND RAMPS
DPT	CONCRETE DECK PAINT	INSL-X	SURE STEP		LIGHT GREY SU-0310		ADA RAMPS-CONCRETE
GT-1	BATHROOM FLOOR TILE GROUT	MAIPEI COMMERCIAL	MEDIUM GRAY				PROVIDE SEALER
GT-2	QUARRY TILE GROUT	MAIPEI COMMERCIAL	DARK GRAY				PROVIDE SEALER
QT	QUARRY TILE	DAL TILE	KITCHEN QUARRY TILE & COVE BASE		0Q42 ARID GRAY		PROVIDE SEALER
SVF	SHEET VINYL	ARMSTRONG FLOORING	DECORART REJUVINATIONS TIMBERLINE	6' WIDE	BAMBOO MINK	37367	CLASSROOM & MEETING
VCT	VINYL COMPOSITE TILE	ARMSTRONG FLOORING	STANDARD EXCELON IMPERIAL TEXTURE	12" X 12"	PEWTER 51908		STORAGE
MISCELLANEOUS FINISHES							
ACT-1	ACOUSTIC CEILING TILE	ARMSTRONG	CALLA 2821	24" X 48"	WHITE	WHITE	AS SCHEDULED
ACT-2	ACOUSTIC CEILING TILE	ARMSTRONG	KITCHEN ZONE 672	24" X 48"	WHITE	WHITE	KITCHEN
PLAM-1	PLASTIC LAMINATE	WILSONART	WOOD VENEER 1	N/A		N/A	KITCHEN CABINETS
PLAM-2	PLASTIC LAMINATE	WILSONART	WOOD VENEER 2	N/A		N/A	OFFICE CABINETS
RB	ROLLER BLINDS	MECHO SHADE	SOHO		CANAL 1102 CORNSILK		OFFICE AND CLASSROOM WINDOWS
SS-1	SOLID SURFACE	CORIAN	-	N/A	ANTARTICA		KITCHEN COUNTERTOPS
SS-2	SOLID SURFACE	CORIAN	-	N/A	FOSSIL		RESTROOM COUNTERTOPS
STS	STAINLESS STEEL	VARIES	-				KITCHEN SINK COUNTER
WALLS							
CT-2	CERAMIC TILE-WALLS	DAL TILE	KEYSTONES	4" X 4"			ACCENT STRIP
FRP	FIBERGLASS REIFORCED PLASTIC	MARLITE	INDURO	PANEL	4143 NEUTRAL GLACE		KITCHEN WALLS
GT-3	BATROOM WALLS	MAIPEI COMMERCIAL	GRAY				PROVIDE SEALER
PT-1	PAINT-WALLS	BENJAMIN MOORE	PAINT	-		EGG SHELL	WALLS
PT-2	PAINT-ACCENT WALL	BENJAMIN MOORE	PAINT	-		EGG SHELL	ACCENT WALL
PT-3	PAINT-CEILING	BENJAMIN MOORE	PAINT	-		EGG SHELL	CEILING
PT-4	PAINT-CEILING BATHROOMS	BENJAMIN MOORE	PAINT	-		SEMI-GLOSS	CEILING-BATHROOMS
PT-5	PAINT-DOORS/FRAMES	BENJAMIN MOORE	PAINT	-		SEMI-GLOSS	DOORS/FRAMES
PT-6	PAINT-TRIM	BENJAMIN MOORE	PAINT	-		SEMI-GLOSS	TRIM
RB-1	RUBBER BASE	JOHNSONITE	RUBBER BASE	4"			PUBLIC ROOMS-VINYL
RB-2	RUBBER BASE	JOHNSONITE	RUBBER BASE	4"			OFFICES-CARPET
RB-3	RUBBER BASE	JOHNSONITE	RUBBER BASE	4"			BOH-VCT

NOTE: ALL MANUFACTUERS LISTED ARE ALLOWED TO BE SUBSTITUTED WITH EQUAL MATERIAL OR BETTER

SIGN SCHEDULE

ROOM NO.	ROOM NAME/DESCRIPTION	SIGN TYPE
101	ENTRY	1, 4, 5
102	WOMENS	2
103	MENS	2
104	KITCHEN	3
105	STORAGE 1	3
106	TELCOM ROOM	3
107	CLASSROOM	1
108	MEETING ROOM / DISPLAY ROOM	1
109	OFFICE 1	1
110	OFFICE 2	1
111	OFFICE 3	1
112	OFFICE 4	1
113	STORAGE	3
114	OUTDOOR MENS	2
115	OUTDOOR WOMENS	2
116	COVERED OUTDOOR SPACE	1
117	STORAGE	3
118	WH CLOSET	3
-	EXTERIOR DECK/STAIR/ADA RAMP	4

ROOM FINISH SCHEDULE

SIGN TYPE

ROOM NO.	ROOM NAME/DESCRIPTION	SIGN TYPE	BASE	WALL	CEILING	CASEWORK	WINDOW
101	ENTRY	SVF	RB-1	PT-1	ACT-1	-	-
102	WOMENS	CT-1/GT-1	CT-1/GT-1	CT-2/GT-3	PT-4	SS-2	-
103	MENS	CT-1/GT-1	CT-1/GT-1	CT-2/GT-3	PT-4	SS-2	-
104	KITCHEN	QT/GT-2	QT/GT-2	FRP	ACT-2	SS-1/PLAM-1/STS	-
105	STORAGE 1	VCT	RB-3	PT-1	ACT-1	-	-
106	TELCOM ROOM	VCT	RB-3	PT-1	ACT-1	-	-
107	CLASSROOM	SVF	RB-1	PT-1/PT-2	ACT-1/PT-3	-	RB
108	MEETING ROOM / DISPLAY ROOM	SVF	RB-1	PT-1/PT-2	ACT-1/PT-3	-	-
109	OFFICE 1	CPT	RB-2	PT-1	ACT-1	PLAM-2	RB
110	OFFICE 2	CPT	RB-2	PT-1	ACT-1	PLAM-2	RB
111	OFFICE 3	CPT	RB-2	PT-1	ACT-1	PLAM-2	RB
112	OFFICE 4	CPT	RB-2	PT-1	ACT-1	PLAM-2	RB
113	STORAGE	VCT	RB-3	PT-1	ACT-1	-	-
114	OUTDOOR MENS	CT-1/GT-1	CT-1/GT-1	CT-2/GT-3	PT-4	SS-2	-
115	OUTDOOR WOMENS	CT-1/GT-1	CT-1/GT-1	CT-2/GT-3	PT-4	SS-2	-
116	COVERED OUTDOOR SPACE	DCK	EXPT-2	EXPT-1,2&8	EXPT-6	-	-
117	STORAGE	VCT	RB-3	PT-1	ACT-1	-	-
118	WH CLOSET	DPT	-	PT-1	EXPT-6	-	-
-	EXTERIOR DECK/STAIR/ADA RAMP	DCK/DPT	-	EXPT-8	-	-	-

NOTE: SCHEDULED FINISHES EXTEND INTO CLOSETS WITHIN ROOMS

1/14/2019 1:26:32 PM

REVISION	DATE	BRIEF	MADE BY	APPROVED
1	3-11-19	ADDENDUM #2	G70	

JAMES L. STONE
LICENSED PROFESSIONAL ARCHITECT
No. 8352
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION, OBSERVATION OF CONSTRUCTION AS DEFINED IN SECTION 16-115-2 OF THE STATE OF HAWAII, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS 8/29/94).

SIGNATURE
LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

COLOR, MATERIAL AND ROOM FINISH SCHEDULE

DESIGNED BY: Designer CHECKED BY: Checker DRAWN BY: Author

01-14-19

DWG. NO. A-702
SHEET OF

ADD. 2

FILE	POCKET	FOLDER	NO.

SECTION 05500 – METAL FABRICATIONS

PART 1 - GENERAL

1.01 SUMMARY

A. Metal fabrications include items made from iron and steel shapes, plates, bars, strips, tubes, pipes and castings which are not a part of structural steel or other metal systems specified elsewhere.

B. Extent of metal fabrications is indicated on drawings and schedules.

C. Types of work in this section include metal fabrications for:

1. Steel Access Ladders.
2. Rough hardware.
3. Miscellaneous framing and supports.
4. Grating at elevator sump pit
5. Elevator Hoist beams
6. ***Stair Nosings***

D. Related Work Described Elsewhere:

1. Section 05120 - STRUCTURAL STEEL

1.02 QUALITY ASSURANCE

A. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

1.03 SUBMITTALS

A. General: Submit under provisions of Section 01330 – SUBMITTAL PROCEDURES.

B. Product Data: Submit manufacturer's specifications, anchor details and installation instructions for products used in miscellaneous metal fabrications, including paint products.

C. Shop Drawings: Submit shop drawings for fabrication and erection of miscellaneous metal fabrications. Include plans, elevations and details of sections and connections. Show anchorage and accessory items. Provide templates for anchor and bolt installation by others.

D. Where materials or fabrications are indicated to comply with certain requirements for design loadings include structural computations, material properties and other information needed for structural analysis.

E. Samples: Submit 2 sets of representative samples of railing materials and finished products as may be requested by Architect.

1.04 SYSTEM PERFORMANCES

A. General: Engineer systems to withstand structural loads indicated, determine allowable design working stress of materials based on the following:

1. For Cold-Formed Structural Steel: AISI "Specification for Design of Cold-Formed Steel Structural Members".

2. For Aluminum: AA 30 "Specifications for Aluminum Structures".

PART 2 - PRODUCTS

2.01 MATERIALS

A. Ferrous Metals:

1. Metal Surfaces, General: For fabrication of miscellaneous metal work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness.

2. Structural Steel Plates, Channels, Angles and Bars: ASTM A 36/A 36M.

3. Structural Steel Wide Flanges Shapes: ASTM A 992/ A 992M

4. Steel Pipe: ASTM A 53; Type and grade (if applicable) as selected by fabricator and as required for design loading; galvanized finish, G90; standard weight (schedule 40), unless otherwise indicated.

5. Steel tubing as follows:

a. Cold-Formed Steel Tubing: ASTM A 500.

b. Hot-Formed Steel Tubing: ASTM A 501

i. For exterior installations and where indicated, provide tubing with hot-dip galvanized coating per ASTM A 53.

6. Brackets, Flanges and Anchors: Cast or formed metal of the same type material and finish as supported rails, unless otherwise indicated.

7. Gray-Iron Castings: ASTM A 48, Class 30

8. Malleable-Iron Castings: ASTM A 47, Grade 32510 (ASTM A47M, Grade 22010).

9. Cast-in Place Anchors in Concrete: Anchors of type indicated below, fabricated from corrosion-resistant materials capable of sustaining, without failure, the load imposed with a safety factor of 4, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency.

a. Threaded or wedge type; galvanized ferrous castings, either malleable iron, ASTM A 47, or cast steel, ASTM A 27. Provide bolts, washers and shims as required, hot-dip galvanized, ASTM A 153.

10. Welding Rods and Bare Electrodes: Select according to AWS specification for the metal alloy to be welded.

B. Fasteners:

1. General: Provide zinc-coated fasteners for exterior and interior use. Select fasteners for the type, grade and class required.
2. Bolts and Nuts: Regular hexagon head type, ASTM A 307, Grade A, except where specified of stainless steel.
3. Screws: ANSI B18.2.1, ANSI B18.6.2, and ANSI B18.6.3.
4. Plain Washers: Round, carbon steel, ANSI B18.22.1, except where specified of stainless steel.
5. Expansion Anchors: CID A-A-1924 of Group ll, Type 4, Class 1. Provide embedment as required by manufacturer.
6. Toggle Bolts: ANSI B18.2.1 as required.
7. Lock Washers: Helical spring type carbon steel, ANSI B18.21.1.

C. Miscellaneous Steel Backing Plates: Provide adequate steel backing plates as required by architectural and mechanical drwings for the attachment of items such as fixtures, toilets, sinks, railings, equipment, and other items. Securely fasten all plates in precise position to supporting members.

D. Paint:

1. Shop Primer for Ferrous Metal: Fast-curing, abrasion-resistant, rust-inhibitive primer selected for compatibility with substrates and with types of finish paint systems indicated, and for capability to provide a sound foundation for field-applied topcoats despite prolonged exposure; complying with material and performance requirements of Section 09900 - PAINTING.
2. Galvanizing Repair Paint: High zinc dust content paint for regalvanizing welds in galvanized steel, complying with SSPC-Paint-20.

2.02 FABRICATION, GENERAL

A. Workmanship: Use materials of size and thickness indicated or, if not indicated, as required to produce strength and durability in finished product for use intended. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support. Use type of materials indicated or specified for various components of work.

B. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Ease exposed edges to a radius of approximately 1/32-inch unless otherwise indicated. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.

C. Weld corners and seams continuously, complying with AWS recommendations. At exposed connections, grind exposed welds smooth and flush to match and blend with adjoining surfaces.

D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type indicated or, if not indicated, Phillips flathead (countersunk) screws or bolts.

E. Provide for anchorage of type shown, coordinated with supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.

F. Cut, reinforce, drill and tap miscellaneous metal work as indicated to receive finish hardware and similar items.

G. Galvanizing: Provide a zinc coating for those items shown or specified to be galvanized, as follows:

1. ASTM A 153 for galvanizing iron and steel hardware.

2. ASTM A 123 for galvanizing rolled, pressed an forged steel shapes, plates, bars and strip 1/8-inch thick and heavier, and for assembled steel products.

3. Coating thickness shall be not less than G90 designation.

H. Fabricate joints which will be exposed to weather in a manner to exclude water or provide weep holes where water may accumulate.

I. Shop Painting: Apply shop primer to surfaces of metal fabrications except those which are galvanized or as indicated to be embedded in concrete or masonry, unless otherwise indicated, and in compliance with requirements of SSPC-PA1 "Paint Application Specification No. 1" for shop painting.

J. Stripe paint all edges, corners, crevices, bolts, welds and sharp edges.

K. Surface Preparation: Prepare ferrous metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications:

1. Exteriors (SSPC Zone 1B): SSPC-SP6 'Commercial Blast Cleaning".

2. Interiors (SSPC Zone 1A): SSPC-SP3 "Power Tool Cleaning".

2.03 ROUGH HARDWARE

A. Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels and other miscellaneous steel and iron shapes as required for framing and supporting metal fabrications.

B. Fabricate items of sizes, shapes and dimensions required. Furnish steel washers.

2.04 MISCELLANEOUS FRAMING AND SUPPORTS

A. Provide miscellaneous steel framing and supports which are not a part of structural steel framework reinforcement, and other members as required to complete work.

B. Fabricate miscellaneous units to sizes, shapes and profiles indicated or, if not indicated, of required dimensions to receive adjacent other work to be retained by framing. Except as otherwise shown, fabricate from structural steel shapes, plates, and steel bars, for supports, of welded construction using mitered joints for field connection. Cut, drill and tap units to receive hardware and similar items.

C. Galvanize all miscellaneous frames and supports.

2.05 METAL LADDERS

A. General:

1. Comply with ANSI A14.3 unless otherwise indicated.

2. For elevator pit ladders, comply with ASME A17.1.

B. Steel Access Ladders: Side bars, rungs and bracket sizes as detailed on the Drawings. Rungs shall not exceed 12 inches on center. Fit rungs in centerline of side rails; plug-weld and grind smooth on outer rail faces:

1. Provide nonslip surfaces on top of each rung, either by coating rung with aluminum-oxide granules set in epoxy-resin adhesive or by using a type of manufactured rung filled with aluminum-oxide grout.

2. Secure ladders top, bottom and at 48-inches on center maximum.

3. Galvanize ladders, including brackets and fasteners.

4. Finish as specified in Section 09900 – PAINTING.

2.06 METAL BAR GRATINGS

A. Manufacturers: Subject to compliance with requirements, [available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. All American Grating

2. IKG Industries; a division of Harsco Corporation.

3. Ohio Gratings, Inc.

B. Welded Steel Grating @ Elevator sump pit:

1. Bearing Bar Spacing: 1-3/16 inches o.c.

2. Bearing Bar Depth: 3/4 inch.

3. Bearing Bar Thickness: 1/8 inch.

4. Crossbar Spacing: 4 inches o.c.

5. Traffic Surface: Plain.

6. Steel Finish: Hot-dip galvanized with a coating weight of not less than 1.8 oz./sq. ft. of coated surface.

C. Grating Frames and Supports: Fabricate from metal shapes, plates, and bars of welded construction to sizes, shapes, and profiles indicated and as necessary to receive gratings. Miter and weld connections for perimeter angle frames. Cut, drill, and tap units to receive hardware and similar items.

1. Unless otherwise indicated, fabricate from same basic metal as gratings.

2. Equip units indicated to be cast into concrete or built into masonry with integrally welded anchors. Unless otherwise indicated, space anchors 24 inches o.c. and provide minimum anchor units in the form of steel straps 1-1/4 inches wide by 1/4 inch thick by 8 inches long.

D. Finishes: Finish gratings, frames, and supports after assembly. Hot-dip galvanized items to comply with ASTM A 153 for steel and iron hardware and with ASTM A 123 for other steel and iron products.

2.07 STAIR NOSINGS

A. Cast-Metal Units: Cast aluminum, with an integral-abrasive, as-cast finish consisting of aluminum oxide, silicon carbide, or a combination of both. Fabricate units in lengths necessary to accurately fit openings or conditions***. Provide single length at all exterior stair nosings.***

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. American Safety Tread Co., Inc; Style 801 with wing anchors.
   b. or approved equal.

B. Concrete Nosings: Cross-hatched units, 4 inches wide with 1/4-inch lip, for casting into concrete steps

C. Wood Stair Nosings: Aluminum channel with 1 inch tapered back, abrasive filler consisting of aluminum oxide and/or silicon carbide in an epoxy-resin binder. Design based on Babcock-Davis, Inc.; Model BSTRB, black with photoluminescent

PART 3 - EXECUTION

3.01 PREPARATION

A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication, where possible, do not delay job progress; allow for trimming and fitting where taking field measurements before fabrication might delay work.

B. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as concrete inserts, sleeves, anchor bolts and miscellaneous items having integral anchors, which are to be embedded in concrete or masonry construction. Coordinate delivery of such items to project site.

3.02 INSTALLATION

A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction; including, threaded fasteners for concrete and masonry inserts, toggle bolts, through bolts, and other connectors as required.

B. Cutting, Fitting and Placement: Perform cutting, drilling and fitting required for installation of miscellaneous metal fabrications. Set work accurately in location, alignment and elevation, plumb, level, true and free of rack, measured from established lines and levels. Provide temporary bracing or anchors in formwork for items which are to be built into concrete masonry or similar construction.

C. Fit exposed connections accurately together to form tight hairline joints. Weld connections which are not to be left as exposed joints, but cannot be shop welded because of shipping size limitations. Grind exposed joints smooth and touch-up shop paint coat. Do not weld, cut or abrade the surfaces of units which have been hot-dip galvanized after fabrication, and are intended for bolted or screwed field connections.

D. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and methods used in correcting welding work.

3.03 INSTALLING NOSINGS

A. Center nosings on tread widths unless otherwise indicated.

B. For nosings embedded in concrete steps or curbs, align nosings flush with riser faces and level with tread surfaces.

C. Seal thresholds exposed to exterior with elastomeric sealant complying with Section 07920 - SEALANTS to provide a watertight installation.

3.04 GRATING INSTALLATION

A. General: Install gratings to comply with recommendations of ANSI / NAAMM Metal Bar Grating Manual as applicable to grating types and bar sizes indicated, including installation clearances and standard anchoring details.

B. Attach removable units to supporting members with type and size of clips and fasteners indicated or, if not indicated, as recommended by the referenced metal bar grating standards for type of installation conditions shown.

C. Attach non-removable units to supporting members by welding where both materials are same; otherwise, fasten by bolting as indicated above

3.05 ADJUST AND CLEAN

A. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

B. For Galvanized Surfaces: Clean field welds, bolted connections and abraded areas and apply galvanizing repair paint to comply with ASTM A 780.

END OF SECTION

SECTION 10440 - SIGNAGE

PART 1 - GENERAL

1.01 SUMMARY

A. Provide all signage as specified herein, including the following:

1. Cutout dimensional characters.

B. Sign Locations: Every room shall receive one identifying sign, additional signs include entry and building sign.

C. Work Includes the following:

1. Project channel letter building sign

2. Main entry Identification signs.

3. Vehicular directional & regulatory signs (excluding standard MUTCD signs.

4. Pedestrian directional & regulatory signs.

5. Interior room identification and code required signs.

6. ADA signs.

1.02 SUBMITTALS

A. Submit in accordance with DHHL General Conditions.

B. Manufacturer's Data: Include manufacturer's construction details relative to materials, dimensions of individual components, profiles, and finishes for each type of sign required.

C. Shop Drawings: Provide shop drawings for fabrication and erection of signs. Include plans, elevations, and large-scale sections of typical members and other components. Show anchors, grounds, reinforcement, accessories, layout, and installation details.

1. Provide message list for each sign required, including large-scale details of wording and layout of lettering.

2. For signs supported by or anchored to permanent construction, provide setting drawings, templates, and directions for installation of anchor bolts and other anchors to be installed as a unit of work in other sections.

3. Furnish full-size spacing templates for individually mounted dimensional letters and numbers.

D. Samples: Provide the following samples of each sign component for initial selection of color, pattern and surface texture as required and for verification of compliance with requirements indicated:

1. Samples for verification of color pattern, and texture selected, and compliance with requirements indicated:

a. Dimensional Characters: Full-size Samples of each type of dimensional character (letter, number, and graphic element).

b. Aluminum: For each form, finish, and color, on 6-inch long sections of extrusions and squares of sheet at least 4 by 4 inches.

c. Warranty: Special warranty specified in this Section.

E. Sign Submittals:

1. One Sign Standard room identification: TYPE 1

2. One Sign Bathroom Identification for each sex: TYPE 2

3. One Sign Standard Back of House room: TYPE 3

4. One Sign ADA landscape sign for direction: TYPE 4

5. Building Names Sign: 3" raised pin mounted channel letters: Type 5

1.03 QUALITY ASSURANCE

A. Single-Source Responsibility: For each separate type of sign required, obtain signs from one source from a single manufacturer.

1.04 PROJECT CONDITIONS

A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication to ensure proper fitting. Show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay.

1.05 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Deterioration of metal and polymer finishes beyond normal weathering.

2. Warranty Period: Five years from date of project acceptance.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Aluminum Sheet and Plate: ASTM B 209 (ASTM B 209M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.

B. Anchors and Inserts: Use nonferrous metal or hot-dipped galvanized anchors and inserts for installations as required for corrosion resistance. Use toothed steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

2.02 DIMENSIONAL CHARACTERS

A. Cutout Characters

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following

   a. A.R.K. Ramos Architectural Signage Systems

   b. ASE, Inc.

   c. Brandy

   d. Mathews Bronze

   e. Supersine Company

   f. Approved equal

2. Character Material: Sheet or plate aluminum

3. Character Height: 5-½”

4. Thickness: ½”

5. Finishes:

   a. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard, in color matching owner provided sample.

6. Mounting: Projecting studs

7. Typeface: Contractor shall match owner provided font sample.

2.03 ACCESSORIES

A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signage, noncorrosive and compatible with each material joined, and complying with the following:

1. Use concealed fasteners and anchors unless indicated to be exposed.

2. Exposed Metal-Fastener Components, General:

a. Fabricated from stainless-steel.

3. Sign Mounting Fasteners:

a. Projecting Studs: Threaded studs with sleeve spacer, welded or brazed to back of sign material, screwed into back of sign assembly, or screwed into tapped lugs cast integrally into back of cast sign material, unless otherwise indicated.

b. Through Fasteners: Exposed metal fasteners matching sign finish, with type of head indicated, installed in predrilled holes.

2.04 MISCELLANEOUS METAL MESSAGE SIGNS

A. Shape, color, dimensions, symbols, wording, and lettering shall be as shown on drawings.

B. Signs shall be made of white aluminum sheets, the minimum thickness shall be 0.063-inch. Aluminum sheet shall conform to ASTM B 209, alloy and temper 6061-T6 flat sheet.

C. Message shall be silk screened on the face of the white finished aluminum. Match message color to sample provided by owner.

D. Fasteners shall be one-way tamper-proof stainless steel.

2.05 FINISHES

A. Colors and Surface Textures: For exposed sign material that requires selection of materials with integral or applied colors, surface textures or other characteristics related to appearance, provide color matches indicated, or if not indicated, as selected by the Project Manager from the manufacturer’s standards.

B. Metal Finishes: Comply with NAAMM “Metal Finishes Manual” for finish designations and applications recommendations.

PART 3 - EXECUTION

3.01 INSTALLATION

A. General:

1. Installation of all signage shall be in strict accordance with manufacturer's printed instruction and approved shop drawings. Installation shall be accomplished by experienced mechanics and in a workmanlike manner.

2. Locate sign units and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.

3. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.

4. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.

5. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

B. Dimensional Lettering Signage

1. Projecting Studs: Using a template, drill holes in substrate aligning with studs on back of sign. Remove loose debris from hole and substrate surface.

a. Masonry Substrates: Fill holes with adhesive. Leave recess space in hole for displaced adhesive. Place spacers on studs, place sign in position, and push until spacers are pinched between sign and substrate, embedding the stud ends in holes. Temporarily support sign in position until adhesive fully sets.

C. Post Mounted Signs: Attach panel signs to posts using one-way, tamper-proof fasteners. Shields shall be provided as required to suit the mounting conditions. Double-stick tape of adhesives shall not be used.

3.02 CLEANING AND PROTECTION

A. Remove and replace damaged or deformed characters and signs that do not comply with specified requirements. Replace characters with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures. All removal or replacement to be at no cost to the owner.

B. Remove temporary protective coverings and strippable films as signs are installed.

C. At completion of the installation, clean soiled sign surfaces in accordance with the manufacturer's instructions. Protect units from damage until acceptance by the Project Manager. Remove all tools, equipment, debris, and surplus materials.

END OF SECTION

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

CONSTRUCTION PLANS FOR

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

HOOLEHUA, MOLOKAI, HAWAII

TAX MAP KEY: (2) 5-2-15: 53

GENERAL NOTES

1. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE BASED ON AVAILABLE "AS-BUILT" OF RECORD CONSTRUCTION PLANS AND ARE APPROXIMATE ONLY AND THEIR ACCURACY IS NOT GUARANTEED.
2. EXISTING CONTOURS AND FEATURES ARE BASED ON "TOPOGRAPHIC SURVEY MAP MOLOKAI LANIKEHA/HOOLEHUA COMMUNITY CENTER, HOOLEHUA-PALAAU HOMESTEADS" PREPARED BY CONTROL POINT SURVEYING INC. DATED AUGUST 21, 2016.
3. ELEVATIONS SHOWN WERE ESTABLISHED ONSITE USING GPS OBSERVATIONS AND ARE BASED HORIZONTAL DATUM: NAD 83 HI ZONE 2 STATE PLANE COORDINATES, U.S. FEET.
4. EXISTING GRADES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE PROCEEDING WITH GRADING WORK. SHOULD ANY DISCREPANCIES BE DISCOVERED IN THE EXISTING GRADES OR DIMENSIONS GIVEN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER BEFORE PROCEEDING ANY FURTHER WITH THE WORK, OTHERWISE HE WILL BE HELD RESPONSIBLE FOR ANY COST INVOLVED IN THE CORRECTION OF CONSTRUCTION PLACED DUE TO SUCH DISCREPANCIES.
5. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES WITHIN PROJECT LIMITS BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
6. THE CONTRACTOR SHALL REPORT ANY INCONSISTENCIES WITH THE PROPOSED PLAN TO THE OWNER'S REPRESENTATIVE AND SHALL DEMOLISH, REMOVE, OR RELOCATE ALL EXISTING UTILITIES, IMPROVEMENTS, ETC. INCONSISTENT WITH THE PROPOSED PLAN AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND AT THE CONTRACTOR'S EXPENSE.
7. THE LATEST REVISIONS OF THE "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION," SEPTEMBER 1984 AND THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," 2005 SHALL BE INCLUDED AS PART OF THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL OBTAIN THE LATEST REVISIONS BEFORE COMMENCING CONSTRUCTION.
8. SHOULD HISTORIC SITES SUCH AS WALLS, PLATFORMS, PAVEMENTS AND MOUNDS, OR REMAINS SUCH AS ARTIFACTS, BURIALS, CONCENTRATION OF CHARCOAL OR SHELLS BE ENCOUNTERED DURING CONSTRUCTION WORK, WORK SHALL CEASE IN THE IMMEDIATE VICINITY OF THE FIND AND THE FIND SHALL BE PROTECTED FROM FURTHER DAMAGE. THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE STATE HISTORIC PRESERVATION DIVISION (PH: 243-1285 OR 243-4640), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND MITIGATION MEASURES, IF NECESSARY.
9. PURSUANT TO CHAPTER 6E OF THE HAWAII REVISED STATUTES, ALL CONTRACTORS SHALL ENSURE THAT IN THE EVENT THAT ANY HUMAN SKELETAL REMAINS ARE INADVERTENTLY DISCOVERED DURING CONSTRUCTION, THE REMAINS SHALL NOT BE MOVED AND ANY ACTIVITY IN THE IMMEDIATE AREA THAT COULD DAMAGE THE REMAINS OR THE POTENTIAL HISTORIC SITE SHALL CEASE AND THE DEPARTMENT OF LAND AND NATURAL RESOURCES' HISTORIC PRESERVATION DIVISION (PH: 243-1285 OR 243-4640), THE APPROPRIATE MEDICAL EXAMINER OR CORONER, AND THE POLICE DEPARTMENT (TELEPHONE: 244-6400), SHALL BE CONTACTED. ALL LESSEES USING EXISTING DIRT ROADS TO ACCESS THEIR PROPERTY SHALL CONTINUE TO BE PROVIDED ACCESS TO THEIR PROPERTY AT ALL TIMES DURING CONSTRUCTION ACTIVITIES BY THE CONTRACTOR.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND COUNTY LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE COUNTY MAY REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.
3. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

ARCHAEOLOGICAL NOTE

IN THE EVENT THAT ANY HISTORICAL RESOURCES, INCLUDING HUMAN SKELETAL REMAINS, STRUCTURAL REMAINS, CULTURAL DEPOSITS, OR LAVA TUBES ARE IDENTIFIED DURING CONSTRUCTION ACTIVITIES, CEASE WORK IN THE IMMEDIATE VICINITY OF THE FIND, PROTECT THE FIND FROM DISTURBANCE, AND CONTACT THE STATE HISTORIC PRESERVATION DIVISION AT (808) 243-1285.

ABBREVIATIONS

∠	ANGLE
A	AREA
AC	ASPHALT CONCRETE OR ACRE
ACS	ACRES
A/C	AIR CONDITIONING
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ARV	AIR RELEASE VALVE
ATT	AT&T CABLE
AVE	AVENUE
℄	BASELINE
BC	BOTTOM OF CURB
BFP	BACK FLOW PREVENTER/(ASSEMBLY)
BLDG	BUILDING
BOT	BOTTOM
BW	BOTTOM OF WALL
C&C	CITY AND COUNTY OF HONOLULU
℄	CENTERLINE
C	CHORD
CATV	CABLE TELEVISION
CB	CATCH BASIN
CHWS	CHILL WATER SERVICE
CHWR	CHILL WATER RETURN
CF	CURB FACE
A.L.	CHAIN LINK
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMM	COMMUNICATION
CONC	CONCRETE
CONN	CONNECTION
CRM	CONCRETE RUBBLE MASONRY
CW	COLD WATER
COTG	CLEAN OUT TO GRADE
D	DIAMETER, DEPTH OR DRAIN
DI	DRAIN INLET
DIA, ø	DIAMETER
DCV	DETECTOR CHECK VALVE
DEFL	DEFLECTION
DET	DETAIL
DMH	DRAIN MANHOLE
D.P.P	DEPT OF PLANNING AND PERMITTING
DS	DOWNSPOUT
DSP	DRY STAND PIPE
DWGS	DRAWINGS
DWY	DRIVEWAY
E,ELEC	ELECTRIC
ELEV, EL	ELEVATION
EG	EXISTING GROUND
EOP	EDGE OF PAVEMENT
EP	ELECTRICAL POLE
EX, EXIST, (E)	EXISTING
FA	FIRE ALARM
FDC	FIRE DEPT CONNECTION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FM	FORCE MAIN
FS	FINISH SURFACE
FT	FEET
G	GAS
GB	GRADE BREAK
GI	GRATED INLET
GMH	GAS MANHOLE
GND	GROUND
GP	GUARD POST/GUY POLE/GATE POST
GV	GATE VALVE
GW	GUY WIRE
H, HT	HEIGHT
HB	HOSE BIBB
HECO	HAWAIIAN ELECTRIC COMPANY
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
HW	HOT WATER
ICV	IRRIGATION CONTROL VALVE
INV	INVERT
IRR	IRRIGATION
JTS	JOINT TRUNKING SYSTEM
JKT	JACKET
L	LENGTH OR LENGTH OF CURVE
LID	LOW IMPACT DEVELOPMENT
LP	LAMP OR LIGHT POLE
LPT	LOW POINT
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL AND PLUMBING
MB	MAILBOX OR METER BOX
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT
M/N	METER NUMBER
NO.	NUMBER
NON-POT	NON-POTABLE
O.C.	ON CENTER
OH, O/H	OVERHEAD
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIVC	POINT OF INTERSECTION ON VERTICAL CURVE
PM	PARKING METER
POC	POINT ON CURVE
POT	POTABLE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PRV	PRESSURE REDUCING VALVE
PSL	PEDESTRIAN SIGNAL LIGHT
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE OR POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
REF, REFL	REFLECTOR
ROW, R/W	RIGHT-OF-WAY
S	SEWER, SLOPE OR SPREAD
SC	SIGNAL CORPS
SCH 40	SCHEDULE 40
SCH 80	SCHEDULE 80
SCMH	SIGNAL CORPS MANHOLE
SDMH	STORM DRAIN MANHOLE
SF	SQUARE FOOT, SQUARE FEET
SL	STREET LIGHT
SLB	STREET LIGHT BOX
SMH	SEWER MANHOLE
SPR	SPRINKLER
ST	STREET
STA	STATION
STD	STANDARD
STRUCT	STRUCTURAL
SW, S/W	SIDEWALK
TC	TOP OF CURB
TDC	TOP OF DROPCURB
T	TANGENT OR TELEPHONE
TEL	TELEPHONE
TG	TOP OF GRATE
THRU	THROUGH
TMK	TAX MAP KEY
TP	TOP OF PIPE
TRC	TOP OF ROLLED CURB
TS	TOP OF STEM
TSL	TRAFFIC SIGNAL LIGHT
TSLB	TRAFFIC SIGNAL LIGHT BOX
TV	TOP OF VALVE
TW	TOP OF WALL
TYP	TYPICAL
UP	UTILITY POLE
UP/SL	UTILITY POLE WITH STREET LIGHT
VAR	VARIES OR VARIABLE
VB	VALVE BOX
W	WATER
WL	WATER LINE
WM	WATER METER
WMB	WATER METER BOX
WMH	WATER MANHOLE
WSE	WATER SERVICE ELEVATION
WV	WATER VALVE
X-WALK	CROSSWALK

APPROVED:

CHAIR, HAWAIIAN HOMES COMMISSION — DATE
STATE OF HAWAII

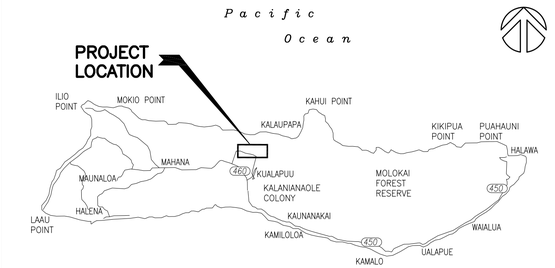
DIRECTOR, DEPARTMENT OF PUBLIC WORKS — DATE
COUNTY OF MAUI
(APPROVAL GRANTED FOR GRADING ONLY)

~~DEPARTMENT OF WATER SUPPLY~~ — DATE
~~COUNTY OF MAUI~~

CHIEF, ENVIRONMENTAL MANAGEMENT DIVISION — DATE
STATE DEPARTMENT OF HEALTH

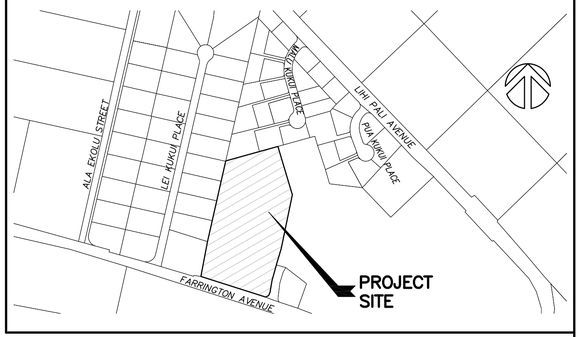
INDEX TO DRAWINGS

LOCATION MAP



MOLOKAI

VICINITY MAP



REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 - REMOVED SIG LINE	G70	

PAUL T. MATSUDA
LICENSED PROFESSIONAL ENGINEER
No. 10901-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. (OBSERVATION OF CONSTRUCTION AS DEFINED IN SECTION 16-115-2 OF THE STATE OF HAWAII DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS 8/29/94).

SIGNATURE

LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
JOB NO.

TITLE SHEET

DESIGNED BY: PLM | CHECKED BY: PLM | DRAWN BY: PLM

G70
111 S. KING STREET, SUITE 170
HONOLULU, HAWAII 96813
808.523.5866
WWW.G70.DESIGN

MAY 2018

DWG. NO. C001
SHEET 27 OF 57

ADD. 2

FILE	POCKET	FOLDER	NO.

FILE: 21050-01 27 C001 TITLE SHEET_BP.dwg
DATE REV.: 3/07/2019

LEGEND

- PROPERTY LINE
- LOT LINE
- EASEMENT
- D6 — EXISTING DRAINLINE
- W6 — EXISTING WATER LINE
- S6 — EXISTING SEWER LINE
- OH — EXISTING OVERHEAD ELECTRICAL

FARRINGTON AVENUE (STATE)

R/W

EPISCOPAL CHURCH
T.M.K. 5-2-15: 47

T.M.K. 5-2-30: 54

T.M.K. 5-2-30: 55

T.M.K. 5-2-30: 56

T.M.K. 5-2-30: 57

T.M.K. 5-2-30: 58

T.M.K. 5-2-15: 30

T.M.K. 5-2-15: 17

Easement A-37 for Flowage

PROPERTY LINE

EXISTING CONCRETE SWALE TO REMAIN

EXISTING LEECH FIELD TO REMAIN

DISPOSE OF
REMOVE AND ~~RELOCATE OR REPLACE~~ EXISTING TREES (2). ~~DHHL TO CONFIRM LOCATION. SEE SITE PLAN, DWG C200~~

REMOVE EXISTING PICNIC TABLES

LIMIT OF DISTURBANCE

PROPERTY LINE

LIMIT OF GRADING

EXISTING GRASS FIELD

EXISTING LIGHT POLE TO REMAIN

REMOVE EXISTING CRM WALL (47± LF)

EXISTING UTILITY POLE AND GUY WIRE TO REMAIN

REMOVE EXISTING CHAIN LINK FENCE (16± LF)

REMOVE EXISTING CRM WALL (24± LF)

T.M.K. 5-2-15: 53
LANIKEHA COMMUNITY CENTER AND PARK
(C.S.F. 24,295)
5.638 (Ac.)

CLEAR AND GRUB WITHIN LIMITS OF ~~DISTURBANCE~~/GRADING, TYP.

EXISTING ___" WATER METER WITH TYPE "X" METER BOX
WM# _____
TO REMAIN

EXISTING 2 1/2" WATERLINE TO REMAIN

DISPOSE OF
REMOVE AND ~~RELOCATE OR REPLACE~~ EXISTING TREE. ~~DHHL TO CONFIRM LOCATION SEE SITE PLAN DWG C200~~

EXISTING LIGHT POLE TO REMAIN

EXISTING 6" WATERLINE TO REMAIN

EXISTING GUARDRAIL TO REMAIN

KEENA PLACE
(STATE-DHHL)

PROPERTY LINE

EXISTING UTILITY POLE AND GUY WIRE TO REMAIN

EXISTING UTILITY POLE TO REMAIN

KEENA PLACE
(STATE-DOE)

EXISTING UTILITY POLE AND GUY WIRE TO REMAIN

HOOLEHUA FIRE SUB-STATION SITE
T.M.K. 5-2-15: 51
(C.S.F. 17,041)

DEMOLITION PLAN

30 15 0 30 60

SCALE IN FEET

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 - REVISED LABELS, LIMIT OF DISTURBANCE, AND LIMIT OF GRADING	G70	

PAUL T. MATSUDA
LICENSED PROFESSIONAL ENGINEER
No. 10901-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION AS DEFINED IN SECTION 16-115-2 OF THE STATE OF HAWAII, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS 8/29/94).

SIGNATURE

LICENSE EXP. DATE: APRIL 30, 2020

DWG. NO.
C100
SHEET 4 OF 14

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

JOB NO.

DEMOLITION PLAN

DESIGNED BY: CM CHECKED BY: PLM DRAWN BY: CM

G70
111 S. KING STREET, SUITE 170
HONOLULU, HAWAII 96813
808.523.5866
WWW.G70.DESIGN

MAY 2018

ADD. 2

FILE	POCKET	FOLDER	NO.

FILE: 217050-01 29 C100 DEMOLITION PLAN.dwg
DATE REV.: 3/08/2019

LEGEND

- PROPERTY LINE
- LOT LINE
- EASEMENT

ACCESS DRIVEWAY CURVE DATA

CURVE NO	Δ	Δ/2	R	T	C	Lc
(1)	87°57'57"	43°58'58"	40.00	38.60	55.56	61.41
(2)	98°08'17"	49°04'08.5"	20.00	23.06	30.22	34.26
(3)	79°23'10"	39°41'35"	20.00	16.60	25.55	27.71

EPISCOPAL CHURCH
T.M.K. 5-2-15: 47

T.M.K. 5-2-30: 54

T.M.K. 5-2-30: 55
Easement A-6 for Drainage

T.M.K. 5-2-30: 56

T.M.K. 5-2-30: 57
Easement A-39 for Flowage

Easement A-37 for Flowage

PROPERTY LINE

Easement A-38 for Flowage

T.M.K. 5-2-15: 30

T.M.K. 5-2-15: 53
...TY CENTER AND PARK
24,295)
...8 (Ac.)

KEENA PLACE
(STATE-DHHL)

KEENA PLACE
T.M.K. 5-2-15: 54

KEENA PLACE
(STATE-DOE)

PROPERTY LINE

1 *APPROXIMATE LOCATION OF RELOCATED TREES (2) DHHL TO CONFIRM EXACT LOCATION*

APPROXIMATE LOCATION OF RELOCATED TREE. DHHL TO CONFIRM EXACT LOCATION.

CONCRETE WALKWAY
SEE DET DWG C600

CONCRETE WHEEL STOP, TYP
SEE DET DWG C600

4" SOLID WHITE PARKING STRIPE, TYP

GREASE INTERCEPTOR

COTG A-6

COTG A-7

SIGN AND POST, TYP
SEE DET DWG C600

ACCESSIBLE PARKING STALLS
SEE DET DWG C600

COTG A-5

COTG A-3

COTG A-4

SMH A-3

SMH "A-2"

SMH "A-1"

NEW HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
AREA = 6,816 SQ. FT.
FINISH FLOOR = 798.53
(FOR BUILDING LAYOUT SEE ARCHITECTURAL PLANS)

(18 STALLS AT 8' EACH)

(9 STALLS AT 8' EACH)

(4 STALLS AT 8' EACH)

STA 32
IRON PIPE
EL=794.49

22' WIDE AC
PAVEMENT DRIVEWAY
SEE DET DWG C600

LIMIT OF
DISTURBANCE

EXISTING GRASS FIELD

BL NEW ACCESS
DRIVEWAY

@ STA 0+00
BEGIN NEW
ACCESS DRIVEWAY

TEMP BENCHMARK
STA 25
MAG NAIL
EL=803.00

HORIZONTAL CONTROL TIE
(STA. 25 TO 0+00 ACCESS DRIVEWAY)

HORIZONTAL CONTROL TIE
(STA. 25 TO BLDG. CORNER)

HORIZONTAL CONTROL TIE
(STA. 25 TO STA. 32)

BACKSIGHT (STA. 25 TO STA. 32)

PT 3+61.03

SCALE IN FEET
20 10 0 20 40

SITE PLAN

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 – REVISED LABELS, LIMIT OF DISTURBANCE, AND UTILITY LABELS	G70	

PAUL T. MATSUDA
LICENSED PROFESSIONAL ENGINEER
No. 10901-C
HAWAII, USA.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION, (OBSERVATION OF CONSTRUCTION AS DEFINED IN SECTION 16-115-2 OF THE STATE OF HAWAII, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS 8/29/94).

SIGNATURE
LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

JOB NO.

SITE PLAN

DESIGNED BY: PLM CHECKED BY: PLM DRAWN BY: CM

G70
111 S. KING STREET, SUITE 170
HONOLULU, HAWAII 96813
808.523.5866
WWW.G70.DESIGN

MAY 2018

DWG. NO.
C201
SHEET 6 OF 14

ADD. 2

FILE	POCKET	FOLDER	NO.

FILE: 217050-01 33 C201 SITE PLAN.dwg
DATE REV.: 3/08/2019

LEGEND

- PROPERTY LINE
- LIMIT OF GRADING
- LIMIT OF DISTURBANCE
- X.XX EXISTING GROUND ELEVATION
- XXX.XX FINISH GRADE ELEVATION
- XX EXISTING GROUND CONTOUR
- XX FINISH GRADE CONTOUR
- PROPOSED DRAINAGE FLOW

EARTHWORK SUMMARY

(FOR PERMIT PURPOSES ONLY)

EXCAVATION	623 CY
EMBANKMENT	613 CY
GRADED/DISTURBED AREA	0.95 AC

NOTES:

1. THE CONTRACTOR, AT HIS OWN COST, SHALL VERIFY THE ACCURACY OF ALL EXISTING GRADES PRIOR TO ANY DEMOLITION, EXCAVATION, ROAD SCARIFICATION OR GROUND DISTURBING WORK AND NOTIFY THE ENGINEER, IN WRITING, OF ANY DISCREPANCIES.
2. SEE TYPICAL SECTIONS ON DWG C200.

EPISCOPAL CHURCH T.M.K. 5-2-15: 47

T.M.K. 5-2-30: 54

T.M.K. 5-2-30: 55

Easement A-6 for Drainage

T.M.K. 5-2-30: 56

T.M.K. 5-2-30: 57

Easement A-39 for Flowage

Easement A-43 for Drainage

Easement A-37 for Flowage

Easement A-38 for Flowage

T.M.K. 5-2-15: 30

PROPERTY LINE

TOE OF FILL

LIMIT OF GRADING

LIMIT OF DISTURBANCE

LIMIT OF GRADING AND DISTURBANCE

GREASE INTERCEPTOR

COTG A-6 TOP=795.37

COTG A-7 TOP=795.80

COTG A-5" TOP=796.49

COTG A-4 TOP=796.24

COTG A-3 TOP=795.25± MATCH EXIST

COTG A-2 TOP=795.41

COTG A-1 TOP=793.81

NEW HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
AREA = 6,816 SQ. FT.
FINISH FLOOR = 798.53
(FOR BUILDING LAYOUT SEE ARCHITECTURAL PLANS)

±794.80 MATCH EXIST

795.2± MATCH EXIST

EXISTING GRASS FIELD

MATCH EXISTING GRADE PROVIDE SMOOTH-RIDING CONNECTION

EDGE AC PAVEMENT

PROPERTY LINE

KEENA PLACE (STATE-DHHL)

KEENA PLACE (STATE-DOE)

KEENA PLACE T.M.K. 5-2-15: 53

CENTER AND PARK (24,295) (Ac.)

FINISH GRADE PLAN

20 10 0 20 40

SCALE IN FEET

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 – REVISED LIMIT OF GRADING, LIMIT OF DISTURBANCE, UTILITY LABELS	G70	

PAUL T. MATSUDA
LICENSED PROFESSIONAL ENGINEER
No. 10901-C
HAWAII, USA

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SIGNATURE

LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

JOB NO.

FINISH GRADE PLAN

DESIGNED BY: PLM CHECKED BY: PLM DRAWN BY: CM

G70
111 S. KING STREET, SUITE 170
HONOLULU, HAWAII 96813
808.523.5866
WWW.G70.DESIGN

MAY 2018

DWG. NO. C300 SHEET 7 OF 14

ADD. 2

FILE	POCKET	FOLDER	NO.

FILE: 217050-01 34 C300 FINISH GRADE PLAN.dwg
DATE REV.: 3/08/2019

BEST MANAGEMENT PRACTICE (BMP) NOTES

1. REFER TO NPDES AND BMP NOTES AND EROSION CONTROL DETAILS ON DWG C303.
2. THE BMP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS AND SHALL BE UPGRADED DURING THE CONSTRUCTION PERIOD AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN RUNOFF DOES NOT LEAVE THE WORK SITE.
3. ALL POINTS OF INGRESS AND EGRESS TO THE SITE SHALL BE PROTECTED WITH A STABILIZED CONSTRUCTION ENTRANCE.
4. PROVIDE INLET FILTER (TRUE DAM ® INLET PROTECTION OR APPROVED EQUAL) FOR ALL CATCH BASIN OPENINGS.
5. DUST CONTROL SHOULD BE APPLIED TO REDUCE DUST EMISSIONS. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES: CHAPTER 11-60, "AIR POLLUTION CONTROL".
6. SEDIMENT SILT FENCES OR BARRIERS (FILTER SOCKS) SHALL BE USED DOWN SLOPE OF ALL DISTURBED AREAS AND ALONG THE PERIMETER OF THE PROJECT AREA.
7. ALL STORM DRAIN INLETS ON SITE AND THOSE OFFSITE WHICH MAY RECEIVE RUNOFF FOR THE SITE SHALL USE AN INLET PROTECTION DEVICE.
8. CONSTRUCTION VEHICLES AND/OR EQUIPMENT UTILIZED DURING THE GRADING WORK WILL BE KEPT ONSITE OR LOADED TO A TRAILER TO BE TRANSPORTED OFFSITE.

LEGEND

- PROPERTY LINE
- LIMIT OF GRADING
- LIMIT OF DISTURBANCE
- SILT FENCE
- TEMPORARY STABILIZED CONSTRUCTION INGRESS/EGRESS
- EXISTING SURFACE DRAINAGE FLOW
- EXISTING CONCRETE SWALE FLOW

EPISCOPAL CHURCH T.M.K. 5-2-15: 47

T.M.K. 5-2-30: 54

T.M.K. 5-2-30: 55

Easement A-6 for Drainage

T.M.K. 5-2-30: 56

T.M.K. 5-2-30: 57

Easement A-59 for Flowage

Easement A-43 for Drainage

Easement A-37 for Flowage

T.M.K. 5-2-15: 30

PROPERTY LINE

TEMPORARY MIRAFI GEOTEXTILE FABRIC FOR GRATED DRAIN INLETS, TYP. SEE DETAIL ON DWG C303

SILT FENCE, TYP SEE DET DWG C303

EXISTING GRASS FIELD

TEMPORARY 10'x10' CONC WASHDOWN BASIN SEE DET DWG C303

LIMIT OF GRADING

LIMIT OF DISTURBANCE

SILT FENCE SEE DETAIL ON DWG C303

TEMPORARY 20'x50' CONSTRUCTION ROAD FOR INGRESS/EGRESS. SEE DET DWG C303

PROPERTY LINE

KEENA PLACE (STATE-DHHL)

KEENA PLACE (STATE-DOE)

KEENA PLACE T.M.K. 5-2-15: 53

T.M.K. 5-2-15: 53 CENTER AND PARK (4,295) (Ac.)

EROSION CONTROL PLAN

20 10 0 20 40

SCALE IN FEET

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 - REVISED LIMIT OF GRADING, LIMIT OF DISTURBANCE, AND SILT FENCE LOCATION	G70	

PAUL T. MATSUDA LICENSED PROFESSIONAL ENGINEER No. 10901-C HAWAII, U.S.A.

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SIGNATURE

LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

JOB NO.

EROSION CONTROL PLAN

DESIGNED BY: PLM CHECKED BY: PLM DRAWN BY: CM

G70

111 S. KING STREET, SUITE 170
HONOLULU, HAWAII 96813
808.523.5866
WWW.G70.DESIGN

MAY 2018

DWG. NO. C301
SHEET 8 OF 14

ADD. 2

FILE	POCKET	FOLDER	NO.

FILE: 217050-01 35 C301 EROSION CONTROL PLAN.dwg
DATE REV: 3/08/2019

LEGEND

- PROPERTY LINE
- LOT LINE
- EASEMENT
- D18 EXISTING DRAINLINE
- W8 EXISTING WATER LINE
- S6 EXISTING SEWER LINE
- W4 NEW WATER LINE
- S6 NEW SEWER LINE

WASTEWATER DESIGN

MAXIMUM DAILY FLOW	USERS	FLOW PER USER (GPD)	TOTAL FLOW (GPD)	MIN REQ TANK SIZE (GAL)	SEPTIC TANK DESIGN SIZE (GAL)
	200	15	3,000	3,750	4,000
ABSORPTION AREA	FROM PERCOLATION TEST: PERCOLATION RATE = 17.1 MIN/IN → 18.0 MIN/IN PER HAR 11-62, APPENDIX D, TABLE III: REQ ABSORPTION AREA = (202 SF/200 GPD)x(3,000 GPD) = 3,030 SF DESIGN ABSORPTION AREA = 5,050 SF TRENCH WIDTH = 3 FT MAX TRENCH LENGTH = 100 FT MAXIMUM TRENCH AREA = 300 SF MINIMUM NO. OF TRENCHES = 5,050 SF/300 SF = 16.83 TRENCHES → 18 TRENCHES				

EPISCOPAL CHURCH
T.M.K. 5-2-15: 47

T.M.K. 5-2-30: 54

T.M.K. 5-2-30: 55
Easement A-39 for Flowage

T.M.K. 5-2-30: 56

T.M.K. 5-2-30: 57
Easement A-39 for Flowage

Easement A-37 for Flowage

PROPERTY LINE

REPAIR EXISTING CONCRETE SWALE (BY OTHERS)

PROPERTY LINE

Easement A-39 for Flowage

T.M.K. 5-2-15: 30

RELOCATED TREES (2)

4+36.49 SL "A"
COTG A-6
TOP=795.37
INV=791.37

5.5'x10' CONCRETE PAD WITH 4" ø @ 3' o.c. FOR LP TANK SEE MECH DWGS

LIMIT OF DISTURBANCE

6' TYP

100' MAX. TYP

NEW GREASE INTERCEPTOR SEE MECH DWGS

4+36.49 SL "A"
(o/s 33.0'± RT.)
COTG A-7
TOP=795.80
INV=792.03
SEE MECH DWGS FOR CONTINUATION

NEW HO'OLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER
AREA = 6,816 SQ. FT.
FINISH FLOOR = 798.53
(FOR BUILDING LAYOUT SEE ARCHITECTURAL PLANS)

3+83.49 SL "A"
(o/s 41.0'± RT.)
COTG A-5
TOP=796.49
INV=791.87
SEE MECH DWGS FOR CONTINUATION

3/4" HOSE BIB (5), TYP.

4+16 WL "A"
NEW FH CONN
1 - 6" GV
1 - VALVE BOX
1 - FH (HT=4'-0")
1 - FH EXTENSION PIECE
1 - CONC BLOCK
SEE DWS STD DETAIL FH-6

PROPOSED LEACH FIELD, SEE DET DWG C503

EXISTING GRASS FIELD

NEW DISTRIBUTION BOX, SEE DET DWG C503

NEW JENSEN PRECAST CONCRETE SEWER SEPTIC TANK (MODEL J24000-EE-ST), SEE DET DWG C503

3+63.49 "A"
6" SEWER LATERAL
TOP=795.90
INV=791.05
SEE DET DWG C601

2+82.21 SL "A"
SMH A-3
TOP=795.64
INV=790.47

2+35.43 SL "A"
SMH A-2
TOP=795.41
INV=790.18

0+00 SL "A"
CONNECT S6 TO EXIST. SMH
TOP=792.23
INV=788.61
RE=CHANNELIZE BOTTOM OF SMH
SEE DET DWG C600

0+51.62 SL "A"
SMH A-1
TOP=793.81
INV=789.07

TYPE "A" SERVICE LATERAL SEE BWS STD DETAILS L23, L24, L25 AND L26

3+48.49 SL "A"
COTG A-4
TOP=796.45
INV=790.84

3+91 WL "A"
1 - 4" 1/4 BEND
1 - CONC BLOCK

3+61 WL "A"
1 - 4" 1/4 BEND
1 - CONC BLOCK

2+87 WL "A"
1 - 6" 1/8 BEND
1 - CONC BLOCK

3+45 WL "A"
1 - 4" 1/4 BEND
1 - CONC BLOCK

2+24.89 WL "A"
1 - 6" 1/8 BEND
1 - CONC BLOCK

0+00 WL "A"
CONNECT TO EXIST 6" WL SEE SCHEMATIC CONNECTION DIAGRAM ON DWG C601

0+55.73 WL "A"
1 - 6" 1/8 BEND
1 - CONC BLOCK

0+20 WL "A"
1 - 6" 1/8 BEND
1 - CONC BLOCK

EXIST ELEC POLE AND GUY WIRE TO REMAIN

PROPERTY LINE

KEENA PLACE
(STATE-DHHL)

KEENA PLACE
T.M.K. 5-2-15: 54

KEENA PLACE
(STATE-DOE)

T.M.K. 5-2-15: 53
CENTER AND PARK
(4,295)
(Ac.)

UTILITY PLAN

20 10 0 20 40
SCALE IN FEET

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 - REVISED LIMIT OF GRADING, LIMIT OF DISTURBANCE, & SEWER SYSTEM	G70	

PAUL T. MATSUDA
LICENSED PROFESSIONAL ENGINEER
No. 10901-C
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SIGNATURE

LICENSE EXP. DATE: APRIL 30, 2020

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

JOB NO.

UTILITY PLAN

DESIGNED BY: PLM CHECKED BY: PLM DRAWN BY: CM

G70
111 S. KING STREET, SUITE 170
HONOLULU, HAWAII 96813
808.523.5866
WWW.G70.DESIGN

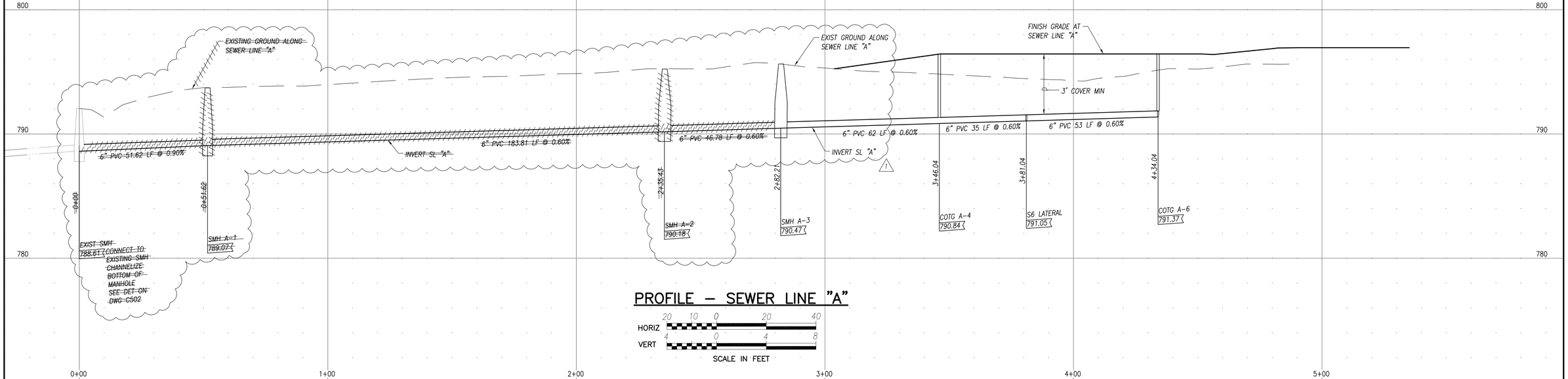
MAY 2018

DWG. NO.
C500
SHEET 10 OF 14

ADD. 2

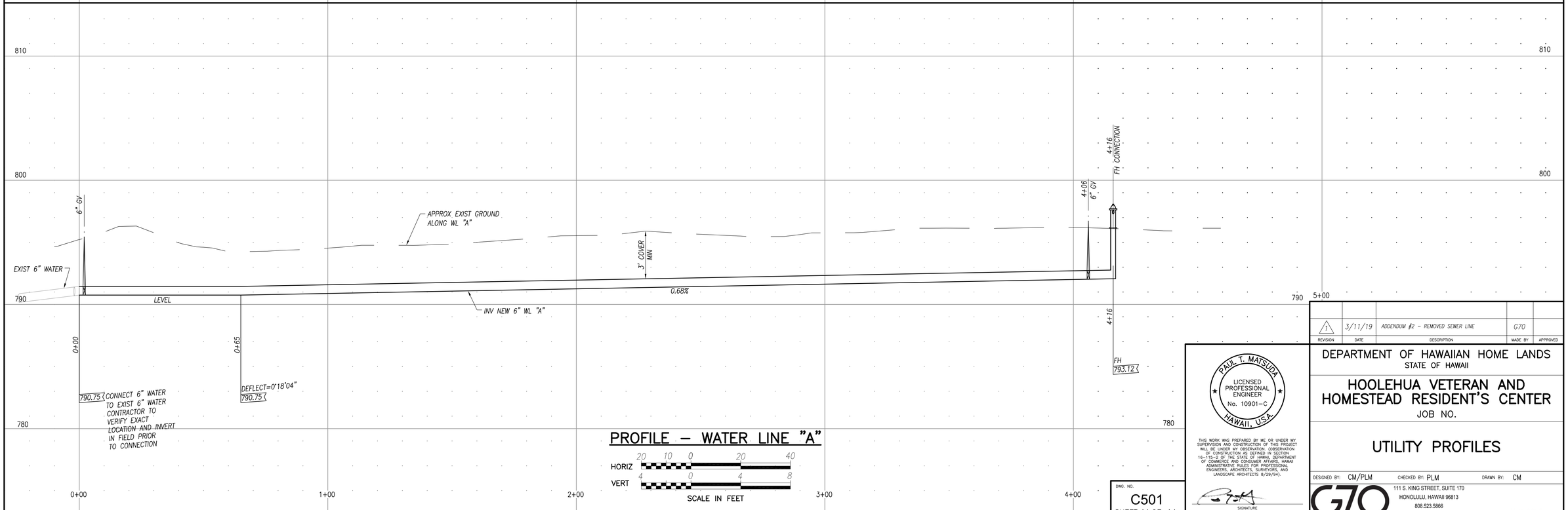
FILE	POCKET	FOLDER	NO.

FILE: 21050-01 37 C500 UTILITY PLAN.dwg
DATE REV.: 3/08/2019



PROFILE – SEWER LINE "A"

HORIZ 20 10 0 20 40
VERT 4 0 4 8
SCALE IN FEET



PROFILE – WATER LINE "A"

HORIZ 20 10 0 20 40
VERT 4 0 4 8
SCALE IN FEET

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 – REMOVED SEWER LINE	G70	

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SIGNATURE
LICENSE EXP. DATE: APRIL 30, 2020

DWG. NO.
C501
SHEET 11 OF 14

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

HOOLEHUA VETERAN AND HOMESTEAD RESIDENT'S CENTER

JOB NO.

UTILITY PROFILES

DESIGNED BY: CM/PLM CHECKED BY: PLM DRAWN BY: CM

G70
111 S. KING STREET, SUITE 170
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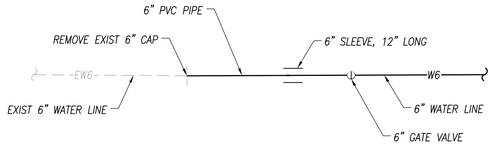
808.523.5866
WWW.G70.DESIGN

MAY 2018

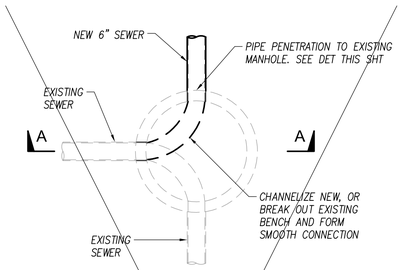
FILE	POCKET	FOLDER	NO.

ADD. 2

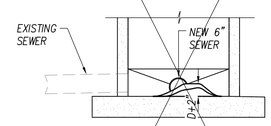
FILE: 217050-01 38 C501 UTILITY PROFILES.dwg
DATE REV.: 3/08/2019



WATER LINE "A"
SCHEMATIC CONNECTION DIAGRAM
NOT TO SCALE



PLAN

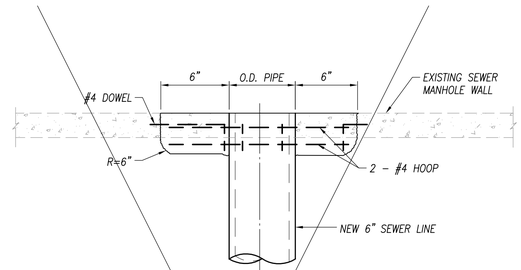


SECTION A–A

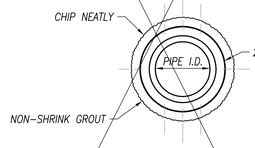
NOTES:

1. *UNLESS SPECIFIED OTHERWISE, ALL CONSTRUCTION SHALL BE PURSUANT TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1986 AND ITS REVISIONS.*
2. *FOR SEWER PIPES AND APPURTENANCES 12 INCHES AND SMALLER, PIPE MATERIALS SHALL BE PURSUANT TO "SECTION 21 – PVC SEWER PIPE AND APPURTENANCES" OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*
3. *SEWER PIPE CONNECTIONS SHALL BE PURSUANT TO "SECTION 22 – CONNECTION TO EXISTING SEWER" OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*

SEWER MANHOLE CHANNELIZATION N.I.C.
NOT TO SCALE



PLAN



ELEVATION

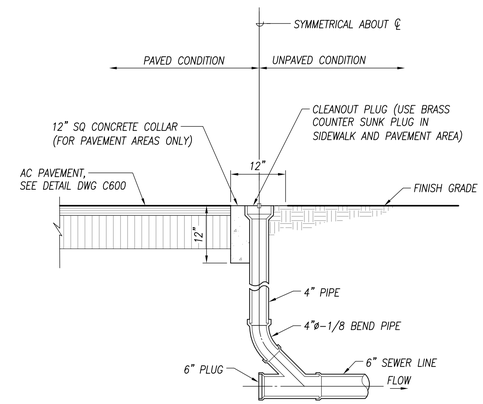
NOTE:

FOR HDPE AND PVC PIPE INSTALLATION CONNECT WITH WATERTIGHT GASKET PER MANUFACTURER'S RECOMMENDATIONS

NOTES:

1. *UNLESS SPECIFIED OTHERWISE, ALL CONSTRUCTION SHALL BE PURSUANT TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*
2. *FOR SEWER PIPES, PIPE MATERIALS SHALL BE PURSUANT TO "SECTION 21 – PVC SEWER PIPE AND APPURTENANCES" OF THE STANDARD SPECIFICATIONS FOR "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*

NEW PIPE CONNECTION TO EXISTING STRUCTURE N.I.C.
NOT TO SCALE



NOTES:

1. *UNLESS SPECIFIED OTHERWISE, ALL CONSTRUCTION SHALL BE PURSUANT TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*
2. *SEWER PIPES AND APPURTENANCES SHALL BE PURSUANT TO "SECTION 20 – CAST IRON AND DUCTILE IRON SEWER PIPE AND APPURTENANCES" OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*
3. *FOR SEWER PIPES AND APPURTENANCES 15 INCHES AND LARGER, PIPE MATERIALS SHALL BE PURSUANT TO "SECTION 19 – REINFORCED CONCRETE SEWER PIPE AND APPURTENANCES" OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND ITS REVISIONS.*

SEWER CLEANOUT–TO–GRADE
NOT TO SCALE

REVISION	DATE	DESCRIPTION	MADE BY	APPROVED
1	3/11/19	ADDENDUM #2 – REMOVED DETAILS	G70	

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UTILITY DETAILS

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WWW.G70.DESIGN

MAY 2018

DWG. NO.
C502
SHEET 12 OF 14

ADD. 2

FILE	POCKET	FOLDER	NO.

FILE: 217050–01 39 C502 UTILITY DETAILS.dwg
DATE REV.: 3/08/2019