

**MEMORANDUM OF AGREEMENT
BETWEEN THE US ARMY GARRISON, HAWAII,
THE HAWAI'I STATE HISTORIC PRESERVATION OFFICER, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING VEGETATION MANAGEMENT IN VARIOUS ARCHAEOLOGICAL
SITES IN
MAKUA MILITARY RESERVATION, O'AHU, HAWAI'I**

Whereas, US Army Garrison, Hawaii (USAG-HI) plans to carry out vegetation management (Project) at Makua Military Reservation (MMR); and

Whereas, MMR is an area made up of lands owned by the US Army, lands ceded to the US Government, and lands leased from the State of Hawaii, and is operated by USAG-HI as a federal facility; and

Whereas, USAG-HI plans to carry out the Project pursuant to Army Regulation, thereby making the Project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 USC § 470f, and its implementing regulations, 36 CFR Part 800; and

Whereas, the undertaking consists of the use of gas powered trimmers, hand tools, chainsaws, and herbicide and is further explained in Appendix A; and

Whereas, USAG-HI has defined the undertaking's area of potential effect (APE) as areas where vegetation was previously managed and as areas that may undergo vegetation management in the future (Appendix B and D); and

Whereas, USAG-HI has determined that the cumulative effects of the undertaking may have an adverse effect on historic properties at MMR, which are listed in or eligible for listing in the National Register of Historic Places (NRHP) including many archaeological sites (Appendix D), and has consulted with the Hawai'i State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800; and

Whereas, all cultural sites are being treated as eligible for listing in the NRHP until a formal determination of eligibility is completed in consultation with the SHPO; and

Whereas, USAG-HI has consulted with Native Hawaiian Organizations (NHOs), that attach religious and cultural significance to historic properties that are affected by this undertaking, and Waianae Coast community members and other individuals who have demonstrated interest in undertakings occurring in MMR (listed in Appendix C), on the development of this Memorandum of Agreement (MOA); and

Whereas, USAG-HI has been consulting with the Waianae Coast Community and the general public for nearly two decades on MMR related undertakings through various public meetings, open houses, educational accesses and outreach, and the individuals and groups identified have come forward as NHOs and interested public who wish to participate in consultations concerning MMR; and

Whereas, through consultation, the NHOs, ‘Aha Kūkaniloko Ko‘a Mana Mea Ola Kanaka Mauli, Hui Mālama O Mākua, Ko‘a Mana, the Office of Hawaiian Affairs, ‘Ohana Keaweamahi, Mālama Mākua, and the Wai‘anae Military Civilian Advisory Council, have been invited to sign this MOA as concurring parties; and

Whereas, in accordance with 36 CFR § 800.6(a)(1), USAG-HI has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation, and the ACHP has chosen to participate in the consultation pursuant to 36 C.F.R. § 800.6(a)(1)(iii); and

Whereas, the adverse effects of vegetation management on historic properties was taken into account through two preceding, expired Programmatic Agreements (PA), signed into effect in 2000 and 2009; and

Whereas, the expiration of the 2009 PA required USAG-HI to reassess the vegetation management undertaking under 36 CFR §§ 800.3-4, resulting in this MOA; and

Now, therefore, USAG-HI, SHPO, and ACHP agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

USAG-HI shall ensure that the following measures are carried out:

1. Vegetation Management

a. An archaeologist or archaeological team from the USAG-HI Cultural Resources Program (CRP) will be on site to monitor the initial vegetation clearance of sites previously managed for access as shown in Appendix D. USAG-HI shall make a reasonable effort to accomplish the initial cut within sixty (60) days of the signing of the MOA. USAG-HI CRP personnel will create a ten (10) foot buffer around known petroglyph features, identified in Appendix B, by installing physical markers, such as capped rebar to identify the sensitive areas. Vegetation management within two (2) feet of petroglyph features within the buffers will be accomplished by utilizing hand tools (i.e. sickles, grass hooks).

b. USAG-HI CRP personnel will give all personnel who will perform vegetation management duties a Cultural Resources Awareness brief prior to the initial cut. This will be repeated semi-annually or whenever new maintenance personnel are hired. The brief will inform vegetation management personnel that they are performing work on sensitive archaeological features and sites. They will be educated on the locations of petroglyph buffered areas, the limitations of herbicide use, the cultural significance of the project area, and the importance of respecting cultural sensitivities.

c. USAG-HI CRP will develop a monitoring plan to assess the condition of each petroglyph feature that is located within vegetation management areas. A monitoring plan will be finalized within sixty (60) days of this MOA going into effect. All site monitoring will be documented on standardized monitoring forms. Sketch maps and/or photographs showing changes in site conditions will be included in the monitoring documentation record. For particular sites, it may be advantageous to establish photographic vantage points, with photographs taken during each monitoring episode. Monitoring will specifically assess the efficacy of vegetation management restrictions (hand cutting) in designated zones. An annual status report on monitoring will be provided to the signatories and consulting parties. The first report will be provided sixty (60) days from the one (1) year anniversary of which this MOA is signed and annually thereafter.

d. All monitoring reports will be completed in accordance with the Secretary of Interior's (SOI) Standards and Guidelines for Archaeological Documentation.

e. If at any time damage to archaeological features within the vegetation management area is observed, USAG-HI CRP personnel will report the damage to the Cultural Resource Manager (CRM) within forty-eight (48) hours of discovery. The CRP's report will include to the extent possible (1) the circumstances of the site damage such as how and when the damage occurred and who was responsible; (2) assessment of the nature and extent of site damage including first-hand observations made by the CRP, with reference to site conditions documented prior to the damage; and, (3) suggestions to avoid damage to other sites potentially threatened by similar circumstances. Acting as the Garrison Commander's representative, the CRM will notify the SHPO within five working days of the discovery. In addition, a status report documenting the site damage will be provided to signatories and consulting parties within ten (10) days of the discovery. Together, the signatories and consulting parties will consult about the treatment of the damaged resource.

2. Amendment

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP. Other known archaeological sites within Makua Military Reservation not previously managed for access may be added to the areas managed through an amendment.

3. Dispute Resolution

All signatories and concurring parties shall strive to address and resolve disagreements informally. Should any signatory or concurring party to this PA object at any time to any actions proposed or the manner in which the terms of this PA are implemented, USAG-HI shall consult with such party to resolve the dispute within thirty (30) days of receiving a written objection.

a. If the objection cannot be resolved within thirty (30) days, USAG-HI shall:

1) Forward all documentation relevant to the dispute, including USAG-HI's proposed resolution, to the ACHP. The ACHP shall provide USAG-HI with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, USAG-HI shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring parties, and provide them with a copy of this written response. USAG-HI will then proceed according to its final decision.

2) If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, USAG-HI may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, USAG-HI shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories or concurring parties of this MOA, and provide them and the ACHP.

USAG-HI responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

4. Termination

If any signatory determines that the terms of the MOA will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation 2. If within thirty (30) days an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories. Once the MOA is terminated, and prior to work continuing on the undertaking, USAG-HI must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. USAG-HI shall notify the signatories as to the course of action it will pursue.

5. Anti-Deficiency Act

The stipulations of the MOA are subject to the provisions of the Anti-Deficiency Act (31 USC § 1341). USAG-HI will make reasonable and good faith efforts to secure the necessary funds to implement this MOA in its entirety. If compliance with the Anti-Deficiency Act alters or impairs USAG-HI's ability to implement the stipulations of this MOA, USAG-HI will consult with the SHPO and the ACHP in accordance with the amendment and termination procedures outlined in Stipulations 2 and 4.

6. Duration and Renewal of the Memorandum of Agreement

This MOA shall take effect on the date it is signed by the last Signatory and will remain in effect unless terminated pursuant to Stipulation 4. If not renewed or extended, this MOA will expire ten (10) years after the date of the last signature to this MOA. No extension or modification will be effective unless all Signatories have agreed in writing.

Execution of the MOA by USAG-HI, SHPO, and the ACHP and implementation of its terms evidences that USAG-HI has taken into account the effects of this undertaking on historic properties and afforded the ACHP opportunity to comment.

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SITES IN
MAKUA MILITARY RESERVATION, O'AHU, HAWAII

Signatory:

US Army Garrison, Hawaii



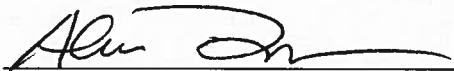
Richard A. Fromm
Colonel, US Army
Commanding

13 Aug 15
Date

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MAKUA MILITARY RESERVATION, O'AHU, HAWAII

Signatory:

Hawaii State Historic Preservation Officer



Alan Downer

Deputy State Historic Preservation Officer


9.8.15

Date

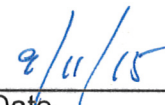
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SITES IN
MAKUA MILITARY RESERVATION, O'AHU, HAWAII

Signatory:

Advisory Council on Historic Preservation



John Fowler
Executive Director



Date

Concurring Parties:

'Aha Kūkaniloko Ko'a Mana Mea Ola Kanaka Maui

Tom Lenchanko

Date

Hui Mālama O Mākua

William Aila

Date

Ko'a Mana

Glen Makakauali'i Kila

Date

Office of Hawaiian Affairs


Kamana Opono Crabbe

10/13/15
Date

'Ohana Keaweamahi

Paulette Ka'anohiokalani Kaleikini

Date

Mālama Mākua

Fred Dodge

Date

Wai'anae Military Civilian Advisory Council

Rocky Naeole

Date

Concurring Parties:

with reservations

'Aha Kūkaniloko Ko'a Mana Mea Ola Kanaka Maui
Thomas Joseph Lenchanko *Kingdom of Hawaii* *burgin National & Private Citizen*
Kahuna Ola Ko'a Mana Mea Ola Kanaka Maui *September 30, 2015*
Tom Lenchanko *mea ola kanaka maui* Date

Hui Mālama O Mākua

William Aila
William Aila

11/3/15
Date

Ko'a Mana

Glen Makakauali'i Kila
Glen Makakauali'i Kila

10/8/2015
Date

Office of Hawaiian Affairs

Kamana'opono Crabbe

Date

'Ohana Keaweamaahi

Paulette Ka'anohiokalani Kaleikini
Paulette Ka'anohiokalani Kaleikini

10/27/2015
Date

Mālama Mākua

Fred Dodge
Fred Dodge

09/30/2015
Date

Wai'anae Military Civilian Advisory Council

Rocky Naeole
Rocky Naeole

09/30/2015
Date

Appendix A

Vegetation Management in Archaeological Sites in Makua Military Reservation

The US Army Garrison, Hawaii (USAG-HI) will be managing vegetation through contract or federal personnel, at various archaeological sites within MMR. Vegetation management includes the use of gas powered weed trimmers, hand tools, chainsaws, and herbicide where necessary. Maintaining the vegetation via grass cutting and tree trimming ensures that safety risks are maintained at a low level. A low safety risk level is required to allow the public to access these areas.

Vegetation management of these areas will occur on previously landscaped archaeological sites throughout MMR as well as sites identified as high priority for cultural access. In addition to site areas, previously maintained walking trails and areas adjacent to sites will be managed. All archaeological sites deemed safe for public access have been previously cleared of unexploded ordnance (UXO). Additional sites clearances may occur in the future. Once these sites are cleared of UXO, the vegetation at these sites will also be managed.

Crews will utilize the existing Range road network, as well as trails in order to access site areas for vegetation management. Vehicles will not be permitted into archaeological site areas. Seibert stakes, markers that indicate restricted areas, are placed around archaeological site buffers to identify where vegetation management personnel vehicles are prohibited.

1. Gas powered trimmers

The primary tools used for vegetation management are gas powered weed trimmers. The trimmers are equipped with heavy-duty nylon line. Vegetation management personnel will transport the trimmers into the sites on-foot.

2. Hand tools

Hand tools, such as sickles, grass hooks, and loppers will be used to manage vegetation within petroglyph buffer areas. Hand tools will be used within 2 feet of petroglyph features.

3. Chainsaws and handsaws

Chainsaws and handsaws will only be used in order to trim large tree limbs or to remove trees that cannot be cut using hand tools such as loppers. Coordination with the Cultural Resources program will be required prior to using these tools in archaeological sites in order to ensure that damage to features do not occur.

4. Herbicide use

The utilization of herbicide as a means of controlling grasses in archaeological sites is not permitted. However, it may be necessary to use herbicide to control or eradicate problem trees or shrubs. Applications shall be limited. Other ways to reduce growth of vegetation (e.g. weed cloths or salt-water sprays) may be utilized.

Appendix B
Vegetation Management in Archaeological Sites at MMR MOA

Site #50-80-03-xxxx	Description	Source	Previously managed?	Petroglyph feature(s)?
177	Kaneana	McAllister 1933	no	no
178	Kumuakuopio Heiau	Thrum 1906	yes	no
179	Koa fishing shrine	McAllister 1933	no	no
180	Kaahihi Heiau	Thrum 1906	no	no
181	Ukanipo Heiau	Thrum 1906	yes	no
182	Swimming Pool	McAllister 1933	no	no
183	Koa fishing shrine	McAllister 1933	no	no
4536	Walls/well	Eble et al. 1995	yes	yes
4537	Complex	Eble et al. 1995	yes	no
4538	Complex	Eble et al. 1995	yes	no
4539	Wall Section	Eble et al. 1995	yes	no
4540	Complex	Eble et. al 1995	no	no
4541	Complex	Eble et al. 1995	yes	
4542	Complex	Eble et al. 1995; Zulick & Cox 2001	yes	no
4543	Complex	Eble et al. 1995; Williams et al. 2002	yes	no
4544	Complex	Eble et al. 1995; Williams et al. 2002	yes	yes
4545	Complex	Eble et al. 1995	yes	no
4546	Complex	Eble et al. 1995; Williams and Patolo 2000	yes	no
4547	Complex	Eble et al. 1995; Williams et al. 2002	yes	no
4627	Complex	Carlson et al. 1996	no	no
4628	Mound	Carlson et al. 1996	no	no
4629	Mounds	Carlson et al. 1996	no	no
4630	Complex	Carlson et al. 1996	no	no
5456	Imu complex	Williams and Patolo 2000	yes	no
5587	Complex	Williams and Patolo 2000	no	no
5588	Terrace	Williams and Patolo 2000	no	no
5589	Terrace-platform	Williams and Patolo 2000	no	no
5590	Complex	Williams and Patolo 2000	no	yes
5595	Wall complex	Williams et al.	no	no

Appendix B

Vegetation Management in Archaeological Sites at MMR MOA

		2002		
5734	Enclosure	Williams et al. 2002	no	no
5735	Lithic scatter	Williams et al. 2002	no	no
5775	Complex	Cleghorn et al. 2000	no	no
5776	Complex	Cleghorn et al. 2000	no	no
5777	Mound	Cleghorn et al. 2000	no	no
5778	Complex	Cleghorn et al. 2000	no	no
5920	Complex	Zulick and Cox 2001	no	yes
5921	Complex	Zulick and Cox 2001	no	no
5922	Complex	Zulick and Cox 2001	no	no
5923	Complex	Zulick and Cox 2001	no	no
5924	Complex	Zulick and Cox 2001	no	no
5925	Complex	Zulick and Cox 2001	no	no
5926	Complex	Zulick and Cox 2001	yes	yes
5927	Retaining wall	Zulick and Cox 2001	no	no
5928	Retaining wall	Zulick and Cox 2001	no	no
5929	Bunker/gun emplacement	Zulick and Cox 2001	no	no
5930	Platforms	Zulick and Cox 2001	no	no
5931	Wall	Zulick and Cox 2001	no	no
5932	Path	Zulick and Cox 2001	no	no
9518	Trail	Rosendahl 1977	no	no
9520 (reassigned to 5775-5778 in Robins et al. 2005)	See above	Rosendahl 1977	no	
9521 (reassigned to 6607 in Robins et al. 2005)	See below	Rosendahl 1977	no	
9522 (reassigned to 6601, 6596,	See below	Rosendahl 1977	no	

Appendix B

Vegetation Management in Archaeological Sites at MMR MOA

6598 in Robins et al. 2005)				
9523 (reassigned to 4627-4629,5920 in Robins et al. 2005)	See above	Rosendahl 1977	no	
9524 (reassigned to 4542, 4547, 5923 in Robins et al. 2005)	See above	Rosendahl 1977	no	
9525	Wall	Rosendahl 1977	no	no
9526	Complex	Rosendahl 1977	no	no
9533	Terrace	Rosendahl 1977	no	no
6499	Complex	Robins et al. 2005	no	no
6500	Complex	Robins et al. 2005	no	no
6501	Complex	Robins et al. 2005	no	no
6502	Mound	Robins et al. 2005	no	no
6503	Complex	Robins et al. 2005	no	no
6504	Complex	Robins et al. 2005	no	no
6505	Complex	Robins et al. 2005	no	no
6506	Complex	Robins et al. 2005	no	no
6507	Wall	Robins et al. 2005	no	no
6508	Complex	Robins et al. 2005	no	no
6509	Complex	Robins et al. 2005	no	no
6510	Complex	Robins et al. 2005	no	no
6511	Complex	Robins et al. 2005	no	no
6512	Complex	Robins et al. 2005	no	no
6513	Complex	Robins et al. 2005	no	no
6514	Enclosure	Robins et al. 2005	no	no
6525	Complex	Robins et al. 2005	no	no
6526	Complex	Robins et al. 2005	no	no
6527	C-shape	Robins et al. 2005	no	no
6528	Complex	Robins et al. 2005	no	no
6593	Complex	Robins et al. 2005	yes	yes
6594	Mound	Robins et al. 2005	no	no
6595	Complex	Robins et al. 2005	no	no
6596	Complex	Robins et al. 2005	yes	yes
6597	Complex	Robins et al. 2005	yes	yes
6598	Complex	Robins et al. 2005	no	no
6599	C-shape	Robins et al. 2005	no	no
6600	Complex	Robins et al. 2005	no	no
6601	Enclosure	Robins et al. 2005	no	no
6602	Complex	Robins et al. 2005	no	no
6603	Complex	Robins et al. 2005	yes	yes
6604	Complex	Robins et al. 2005	no	no
6605	Complex	Robins et al. 2005	no	no
6606	Complex	Robins et al. 2005	no	no
6607	Complex	Robins et al. 2005	no	no

Appendix B

Vegetation Management in Archaeological Sites at MMR MOA

6608	Enclosure	Robins et al. 2005	no	no
6609	Wall	Robins et al. 2005	no	no
6610	Complex	Robins et al. 2005	no	no
6611	Complex	Robins et al. 2005	no	no
6612	Complex	Robins et al. 2005	no	no
6613	Complex	Robins et al. 2005	yes	yes
6614	Terraces	Robins et al. 2005	no	no
6615	Complex	Robins et al. 2005	no	no
6616	Complex	Robins et al. 2005	no	yes
6617	Complex	Robins et al. 2005	no	no
6618	Complex	Robins et al. 2005	no	no
6619	Complex	Robins et al. 2005	no	no
6620	Complex	Robins et al. 2005	no	no
6621	Complex	Robins et al. 2005	yes	yes
6622	Mound	Robins et al. 2005	no	no
6623	Complex	Robins et al. 2005	no	no
6624	Complex	Robins et al. 2005	no	no
6625	Complex	Robins et al. 2005	no	no
6626	Complex	Robins et al. 2005	no	no
6627	Gun emplacement	Robins et al. 2005	no	no
6628	Complex	Robins et al. 2005	no	no
6629	Complex	Robins et al. 2005	no	no
6630	Complex	Robins et al. 2005	no	no
6631	Wall	Robins et al. 2005	no	no
DPW32	Terrace	DPW 2005	no	no
DPW33	Alignment- enclosure	DPW 2005	no	no
Unrecorded site identified during 2006 DPW-ENV subsurface survey	Terraces and Mounds	DPW 2007	no	no
Unrecorded site identified during 2006 DPW-ENV subsurface survey	Terraces and Mounds	DPW 2007	no	no
Unrecorded site identified during 2006 DPW-ENV subsurface survey	Historic kiawe fence posts and wire fencing	DPW 2007	no	no

Appendix C

Signatories

State Historic Preservation Officer
Mr. William Aila, Jr., Chairman

Advisory Council on Historic Preservation
Mr. John M. Fowler, Executive Director

Native Hawaiian Organizations

Office of Hawaiian Affairs
Dr. Kamanaʻopono Crabbe, Chief Executive Officer

Oahu Island Burial Council
Ms. Hinaleimoana Wong-Kalu, Chairperson

Hui Mālama I Na Kupuna O Hawaiʻi Nei
Mr. Edward Ayau, Poʻo
Mr. Kihei Nahale-a, Kahu, President Board of Directors

ʻAha Kūkaniloko Koʻa Mana Mea Ola
Kanaka Mauli
Mr. Tom Lenchanko, Hawaiian National, Kahuakai Ola Ko Laila Waha Olelo

Koʻa Mana
Mr. Glen Makakaualiʻi Kila, Kahu Kulāiwi, Kupukaʻāina O Waiʻanae Moku, Oʻahu
Mr. Alike Poe Silva, Kahu Kulāiwi, Kupukaʻāina O Waiʻanae Moku, Oʻahu
Mr. Henry Kila Hopfe, Kahu Kahakai, Kupukaʻāina O Waiʻanae Moku, Oʻahu
Mr. Clarence Haʻo DeLude, Kahu Kulāiwi, Kupukaʻāina O Waiʻanae Moku, Oʻahu
Mr. Christophor Oliveira, Kupukaʻāina O Waiʻanae Moku, Oʻahu

Mālama Mākua
Dr. Fred Dodge
Mr. Sparky Rodrigues
Ms. Leandra Wai
Ms. Paulette Kaʻanohiokalani Kaleikini

Hui Malama O Makua
Ms. Melva Aila

ʻOhana Hoʻohuli
Mr. William A. Hoʻohuli

ʻOhana Kapu
Mr. JR Keonekapu Williams

ʻOhana Keliinoi
Mr. Kalahikiola Keliinoi

ʻOhana Huihui
Mr. Norman Mana Kaleilani Cáceres

Waianae Coast Community Organizations and Interested Individuals

Kaʻala Farms Cultural Education Center
Mr. Eric Enos, Executive Director

Waiʻanae Military Civilian Advisory Council
Mr. Rocky Naeole, President
Mr. Albert Silva

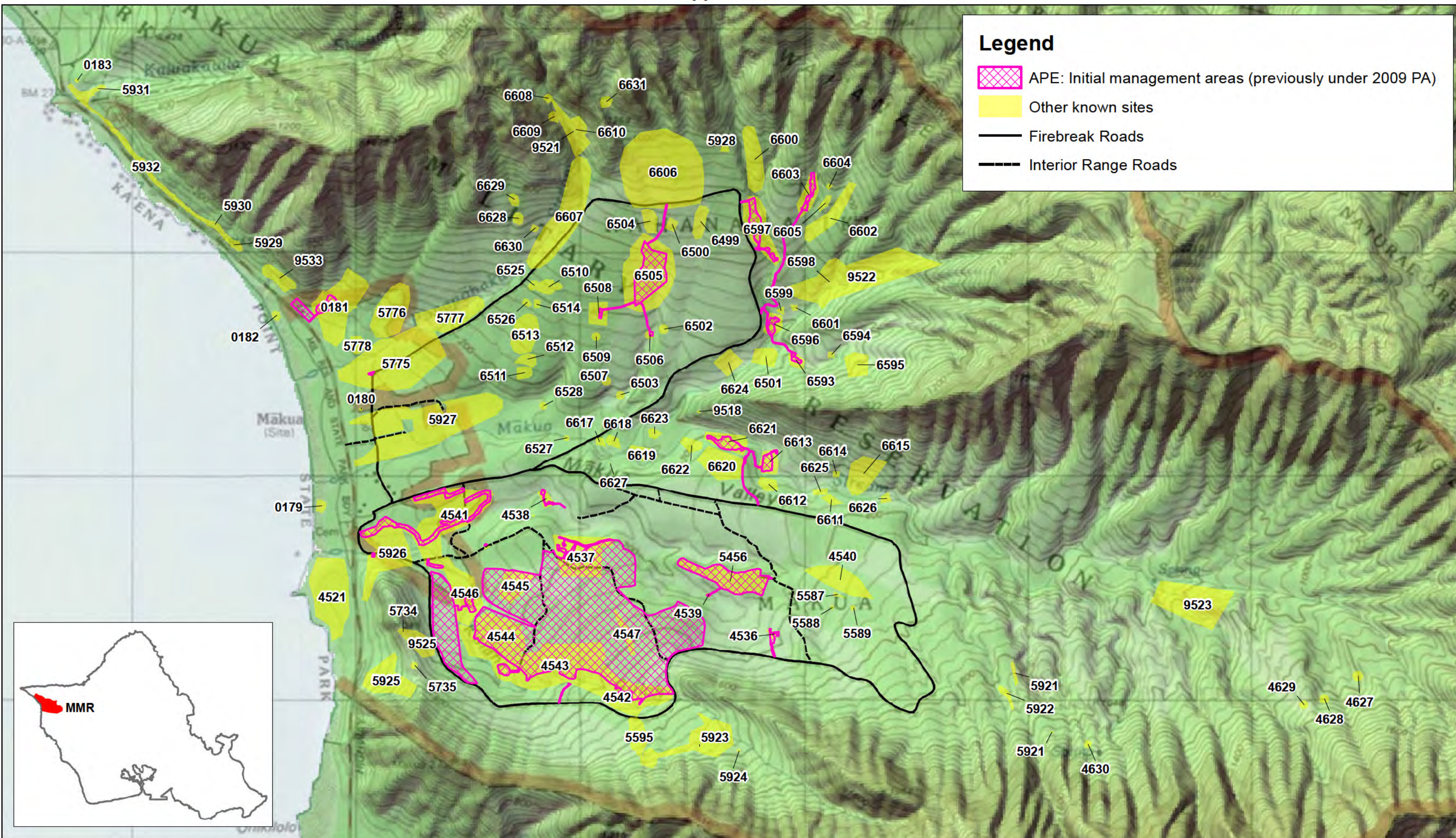
Earthjustice-Mid-Pacific Regional Office
Mr. David Henkin

Mrs. Leimaile Quitevis

Ms. Kēhaulani Souza

Mr. Harry Wasson

Appendix D



Vegetation Manangement Areas Within and Adjacent to Archaeological Sites Makua Military Reservation (MMR)

