

Memorandum of Agreement (MOA) Section 106 Consultation Meetings  
Stipulations 10B-Underpass Feasibility Study; 12-Ahupua'a Markers; and 15-Terrain Model;  
Queen Ka'ahumanu Highway Phase 2  
Kailua-Kona, Hawai'i

Natural Energy Laboratory of Hawaii Authority (NELHA)  
Hale Iako Building, Ocean View Conference Room 208  
73-987 Makako Bay Dr., Kailua-Kona, HI 96740  
Thursday, December 7, 2017, 9:00 am – 3:30 pm

Attendees

**Hawai'i Department of Transportation (HDOT)**

Donald Smith, P.E., Hawai'i District Engineer

Natasha Soriano, P.E., Project Manager

**R. M. Towill Corp. (RMTC)**

Jason Tateishi, P.E., Project Manager

Brian Takeda, Planning Project Coordinator

Herb Lee, Facilitator, Malama Waiwai

**National Park Service (NPS)**

**Kaloko-Honokohau National Historic Park**

Jeff Zimpfer, Environmental Protection Specialist

**Ala Kahakai National Historic Trail**

Aric Arakaki, Superintendent

Rick Gmerkin, Community Archaeologist

**Native Hawaiian Organizations (NHOs) and  
Consulting Parties**

Hannah Kihalani Springer, Kama'aina, Ka'upulehu

Fred Cachola, Makani Hou

Bo Kahui, La'i'Opua 2020

Alan Haun, Ph.D., Archaeologist

Amy Rubingh, State Historic Preserv. Div., Kona

Tina Clothier, People's Advocacy Trails Hawai'i

Marcie Davis, E Mau Na Ala Hele

Barbara Schaefer, E Mau Na Ala Hele

Deborah L. Chang, E Mau Na Ala Hele

Agenda

1. Morning Session: Stipulation 12, Ahupua'a Signs
2. Morning Session: Stipulation 15, Terrain Model
3. Afternoon Session: Stipulation 10B, Underpass Feasibility Study

Handouts – Development of Design Guidelines (Stipulation 10B)

**Stipulation 12, Ahupua'a Signs**

1. D. Smith opened the meeting and thanked everyone for making the time to attend today's session. The task of completing the MOA stipulations will be tough and the HDOT appreciates all of the work put in by the group to assist in the process. H. Lee next provided the pule and aloha protocols to help guide the discussion.
2. D. Smith discussed Stipulation 10B and noted that the boundaries for the location of ahupua'a markers are defined by the U. S. Geological Survey (USGS), and how and where the signs are placed are based on design guidance from the Manual on Uniform Traffic Control Devices or MUTCD.

- The placement of any sign should be considered temporary, e.g., the signs can be relocated as needed to address community input or concerns.
  - The ahupua'a signs are classified as a sign conveying information about an area. The placement of signs would therefore be constrained by restrictions that involve the need to maintain roadway safety and address state design requirements (for the physical dimensions of signs).
3. R. Gmerkin said the NPS is working with NHOs on the placement of park service signage. The general process used is to first review old maps, prepare handouts, and discuss the location of sites based on the use of the handouts; and, second, they present the collected information back to the community to show where they understand the historical site boundaries are located. This takes time to get community input, but is a worthwhile step as NPS feels it leads to less disagreement. A. Arakaki noted this was in Hōnaunau and that the Keoua Canoe Club was a participant. R. Gmerkin added that the signage contemplated by the NPS in its work with the canoe club, however, might differ from how HDOT would use the state's Ahupua'a marker program.
  4. D. Smith said that the placement of the ahupua'a markers has flexibility so that the state can consider community input. He further asked the group if the effort was to raise awareness, or if it was to identify where the ahupua'a boundary is. F. Cachola said that it does both. H. Springer said that that if it is to raise awareness, that it should be done with accuracy. At the same time, accuracy might interfere with where the signs could be placed.
  5. B. Kahui recommended that samples be provided for the group to look at, to gain understanding and agreement, and then to go out to the community to see what they have to say. D. Smith responded that he wants to make sure that the group understands the process of discussing the signs with the community. If the community wants to take on the role to help identify where the markers should go, the HDOT would be ok with the discussion. However, if the process is to leave the state to identify the marker locations, that this could take a long time.
  6. F. Cachola said he feels that if the state only wants the community to identify the sites where the markers should go, then the state is not fulfilling the MOA and would not learn something about where the ahupua'a are located. D. Smith responded that the HDOT will continue to be involved in the process, and clarified that the work to identify the ahupua'a marker locations needs to have a "champion." This effort will take both the state and the community's involvement. F. Cachola responded that in looking at the past, that there is no one here from when the MOA was written and feels the HDOT must be the champion, not the NHOs. This is because if the HDOT is the champion, then this would address the delays and problems of the past.
  7. B. Kahui added that while the accuracy of the boundaries is important, that it is not as important as knowing the significance of the place. He suggested that options be considered so that the group can clarify what it can do. F. Cachola added that the actual placement of the signs can vary and that it is more important to have a sense of place. The identification of the moku boundaries is not part of the MOA, but is of political importance.

8. After further discussion the group determined:

- The state has an existing set of guidelines for the placement and design of ahupua'a markers. The guidelines are intended to incorporate community input.
- The project limits for the placement of the ahupua'a markers should be within the Queen Ka'ahumanu Highway, Phase 2, from the Kona International Airport to the area of O'oma. This area covers the boundaries of five ahupua'a within an approximate distance of 2.5 miles.
- O'oma is important because it is the place where King Kamehameha III was raised for the first five years of his life. There is also a rock wall that serves as a boundary that separates O'oma from the other ahupua'a.
- Once the group decides on the location of the ahupua'a boundaries, the information should be placed in a public notification in West Hawai'i Today to ask for public input into helping address the terms of the MOA Stipulation 12. A field visit by van coinciding with the public notification should be considered.
- All MOA signatories should be notified as part of the process.

HDOT Action Items:

- RMTC to prepare a map showing the ahupua'a boundary locations where the five ahupua'a boundary markers can be placed. The map will be distributed to the group when it is completed.
- The next steps to take following the identification of the boundary locations is to:  
(1) prepare a public notification for publication in West Hawai'i Today. The public notification will ask the community for its review and comment, and ask the public to RSVP its attendance on a field trip to the ahupua'a boundary locations;  
(2) provide the group with a sample of the signage that is planned to be used; and  
(3) confirm the locations based on step 1.

**Stipulation 15, Terrain Model**

1. F. Cachola asked the group to read the stipulation noting that Makani Hou initiated the terrain model to preserve the ancient landscape and to serve as a "living" classroom. He added:
  - In the first Terrain Model meeting the group initiated the information to be included in the model. He recalled that Francis Choy, Archaeologist, was important to the record of history of the area.
  - Interpretive signage should be considered as additional data.
2. D. Smith noted that the options for information to be included would depend on where the model is housed. One option is to build and house the approximately 3.5' by 5' model, but the state doesn't know where the model will be placed, i.e., per Stipulation 15, the model may be housed at the Kaloko-Honokohau National Historical Park under the auspices of the Hawai'i Pacific Parks Association (HPPA). However, according to the NPS the space is too small for the model.

3. The following responses were provided:

- B. Schaefer said that the prior consideration for placement at the airport is not a good idea.
- F. Cachola said that there is a record of HPPA identified to accept the model but that because of space limitations at Kaloko-Honokōhau this would not be a good idea. Margo Griffith is the current Director of HPPA.

The work on the terrain model should also be part of a University of Hawai'i (UH) scholarship in archaeology or other field of study; maybe also Kamehameha Schools.

The MOA should also be extended by the HDOT and Federal Highway Administration (FHWA) because the terms would end in 2020. This is to address the time needed to decide on the location of the model.

- B. Kahui said that the Queen Lili'uokalani Trust has a digital presentation at its facility. Both the Queen Lili'uokalani Trust and Kamehameha Schools are also considering venues to showcase Hawaiian history on their respective properties in the Kailua-Kona and Keauhou areas.
  - R. Gmerkin agreed that the group should work with the UH and a higher education program.
  - The UH, Hawai'i Community College, Pālanui campus might also be a prospect for housing the terrain model, but this could take up to five years before being ready.
4. D. Smith said that the group can work toward obtaining information on giving the model to the UH, but that it is likely that the UH will want additional monies for the cost of administration, curation, and other expenses.
5. D. Smith and N. Soriano noted that the model can be made to show different time eras, but that this is not determined yet. B. Takeda noted the two options available: a color projection onto a single color terrain model with vertical relief; and a high-density foam or fiberglass reinforced multicolor model with vertical relief that does not require a projector. D. Smith and N. Soriano asked that the group consider:
- A projected model is more complex to operate and will require technical set-up, power supply, and maintenance, to replace worn parts like projector lamps. A technician would be needed to help set-up the model when it is installed. Due to these constraints this is less likely to be viable.
  - A foam/fiberglass model is more robust and would be more easily transportable in keeping with the intent of the stipulation (e.g., "The model shall be of such scale that it can be transported to other locations and be used as a teaching tool").

6. After further discussion the group determined:

- By January 2018 the final draft of the terrain model map would be completed and distributed to the group for their review and comment. The map should have all of the known information about the area and any revisions could be made at that time.
- The HDOT will speak with the UH about the possibility of housing the model at the Pālanui campus site. F. Cachola volunteered to accompany HDOT as a

representative of the HPPA to hand over the model to the UH if an agreement can be reached.

HDOT Action Items:

- RMTC to distribute the terrain model map to the group upon completion in January 2018 for review and comment. The terrain model map will be revised to reflect the comments.
- The HDOT to initiate discussion with UH Pāalamanui to inquire concerning the placement of the terrain model.

**Stipulation 10B, Underpass Feasibility Study**

1. D. Smith started the discussion and provided the Development of Design Guidelines presentation.
2. F. Cachola noted that all those who initiated the MOA from the HDOT and FHWA are no longer here and reminded the group that the reason for his participation was to be able to “walk in the footsteps of our ancestors” and that there should be at least one, uninterrupted trail. He became involved to save the trail to Kaloko-Honokōhau. The idea for an underpass started to maintain connectivity with the ancient Hawaiian trail system. He feels that if one were to read the entirety of Stipulation 10B that it is technical in its description, but for him it’s more than that, its emotional.
3. D. Smith responded that he does read the intention of the MOA as an emotional response to mitigating the impact of Phase 2, of the Queen Ka’ahumanu Highway project. In good faith, the HDOT wants to pursue the design guidelines so that future roadway projects can be more considerate.
4. T. Clothier asked if other options to an underpass, such as overpasses, are considered. H. Springer asked if drain culverts can be used? D. Smith responded that drainage culverts are intended to serve a drainage and not a pedestrian function, and more importantly that there are no monies available for construction of an underpass or overpass.
5. B. Schaefer asked if this [work on the stipulation] is for other areas of the project only and not part of this project [Phase 2]. D. Smith responded yes, adding that the work on this stipulation is intended to involve future construction projects and that any input the group provides would be of use.
6. H. Springer asked if the use of the drainage culverts could be provided in the future. F. Cachola said he wants the drainage culverts to be addressed now, including at-grade and overpass considerations. He said to see the MOA and added that on Page 3 of the presentation, that he wants to point out that another purpose of the underpass is to restore the integrity and purpose of ancient and historic Hawaiian trails and routes that were bisected by HDOT. He wants this added to the guidelines.
7. H. Springer said that access to the underpass needs to be wheelchair accessible. D. Smith responded that whenever there are federal expenditures used on a project that it must meet these types of requirements, i.e., Americans with Disabilities Act. F. Cachola

added that all these guidelines are for pedestrian crossings. The HDOT should add that this is also for “cultural preservation.”

8. D. Smith cited the use of Context Sensitive Design or CSD. The HDOT cannot design a project without taking into consideration the background and cultural use of the site. Future designs, such as for future development of new phases of the Queen Ka’ahumanu Highway or other highway project, would need to take this into consideration.
  - CSD considers cultural preservation, equestrian use, connectivity (multiple modes) and a more holistic approach versus how highways are being defined now. Continuity of cultural practices and sensitivity to the cultural landscape are also important factors to consider in the context sensitive design approach.
  - The use of CSD for this project would consider cultural uses and provide a way to move toward what is desired by the group. Applying CSD would also be consistent with the FHWA requirement that it be considered as a part of the project design process.
  - If CSD focusses on pedestrian use so that if an underpass is designed and wheelchair access is not possible, and only pedestrians and not others are allowed to walk through the underpass, it would still be considered as CSD.
  - This focus could be used in the title for all or a part of the Underpass Feasibility Study as “Context Sensitive Design for Historic Hawaiian Trails.”
9. R. Gmerkin responded that the study should not lose its focus on pedestrian design. H. Springer added that mauka-makai travel across the highway should also be addressed. D. Smith added that he understands that the trail system can help serve as a means of “cultural rejuvenation” to capture the next generation of youth.
10. F. Cachola noted that on Page 10 [?] of the presentation that the management of use of the underpass by a third party is used arbitrarily by HDOT to avoid taking responsibility. For the Underpass Feasibility Study there is no discussion that the use of the underpass shall be managed by a third party.

F. Cachola also questioned HDOT’s employment of R. M. Towill Corporation to assist with the completion of MOA stipulations due to the volume of work they appear to be doing for the Queen Ka’ahumanu Highway, Phase 2, project.

#### HDOT Action Items:

- HDOT to develop the Design Guidelines for the Underpass Feasibility Study using the CSD approach. The status of the Draft Underpass Feasibility Study will be reported to the group in January 2018.
- The HDOT to respond to F. Cachola concerning the use of RMTC to assist with the completion of the MOA stipulations.

11. Adjournment: The meeting concluded at 3:25 pm.



## Agenda

### MORNING SESSION

MOA Stipulation 15 – Terrain Model  
Queen Kaahumanu Highway Widening, Phase 2  
Kailua-Kona, Hawaii

Natural Energy Laboratory of Hawaii Authority (NELHA)  
Hale Iako Building, Room 208 Ocean View Conference Room  
73-987 Makako Bay Dr., Kailua-Kona, HI 96740  
Thursday, December 7, 2017, 9:00 – 11:30 am

1. Introduction 9:00 – 10:15 am
  - A. Welcome/Pule: Herb Lee
  - B. Status and Review of Work to Date:
    - a. Physical Model and Digital Model – Dimensions of physical model 3.5' x 5', and scale information for physical and digital model at 1:25,000
    - b. Source Information for trails and landmarks – historical data as inventoried by the State Historic Preservation Division, DLNR. CSH preparation of trail locations, Dr. Alan Haun, Ph.D. to assist group with review of content and discussion
    - c. Present revised hard copy of digital model
    - d. Process for review and acceptance of model information
  - C. Additional Comments and Questions
  
2. Responsible Party to Accept Model (Don/Natasha) 10:15 – 10:45 am

Hawai'i Pacific Parks Assn., UH West Hawaii, Location for model to be determined by Terrain Model participants
  
3. Model Fabrication (Physical and Digital) (Brian) 10:45 – 11:15 am

Materials and Schedule
  
4. Summary/Next Steps 11:15 – 11:30 am