

**Testimony of  
Michael Dega, Ph.D.  
Scientific Consultant Services, Inc. (SCS)  
SLUC Docket No. A10-787 Maui R&T Partners, LLC.**

In the Matter of the Petition of Maui R&T Partners, LLC. to Amend the State Land Use District Boundary of Lands Situated at Kihei, Island of Maui, State of Hawaii, Consisting of 253.05 Acres from the Agricultural District to the Urban District, Tax Map Key Nos. (2) 2-2-024: 016 and 017, and (2) 2-2-002: 054 (por.)

My name is Michael Dega and I am a principle investigator at Scientific Consultant Services (SCS). I supervised the *Archaeological Inventory Survey of Multiple Land Parcels Located within the Maui Research and Technology Park* (September 2008) (included as Appendix D in the Final Environmental Impact Statement). I have 20 years of archaeological experience in the Pacific Basin and have been involved in archaeological projects at SCS since 1997. A copy of my resume is attached.

The purpose of the Archaeological Inventory Survey (AIS) was to determine the presence/absence of surface architecture, midden deposits, and/or artifact deposits on the surface of the parcels through systematic pedestrian survey, to assess site functional and temporal affiliation through recordation and excavation (where possible), and to evaluate the significance of any identified historic properties. Previous archaeological investigations have been conducted on and in close proximity to the MRTP site (Hibbard 1994; Chaffee et al. 1997; McGerty et al. 2000; Sinoto et al. 2001; Tome and Dega 2002; Dega 2003; Monahan 2004). The previous AIS work in and around the MRTP, some of which included subsurface testing, have yielded a modest amount of evidence of historical and traditional human activity.

The MRTP site is located mauka of the Piilani Highway in an area of Kihei described as the "Barren Zone". The Barren Zone is an intermediary zone that provides access between coastline/beach areas to upland forests. Based on general archaeological and historical research, the Barren Zone was not subject to permanent or expansive population due to the lack of productive natural resources (water, soil, etc.). As such, previous work documented that architectural structures associated with permanent habitation sites and/or ceremonial sites are not often present in the area while temporary habitation-temporary use sites may be present in the Barren Zone.

We located a total of five (5) sites, three (3) on Parcel 17 and two (2) on the portion of Parcel 54. The State site identification numbers and descriptions of the sites follow below:

1. *Site 50-50-10-6239:* an historic modified outcropping
2. *Site 50-50-10-6240:* an historic modified outcropping
3. *Site 50-50-10-6241:* a traditional or historic boundary wall
4. *Site 50-50-10-6587:* an L-shaped military training feature
5. *Site 50-50-10-6588:* three (3) mounds which are traditional location markers

The following significance evaluations are criteria established for the State and National Register of Historic Places. These criteria are as follows:

Criterion A: Site is associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Site is associated with the lives of persons significant to our past.

Criterion C: Site embodies the distinctive characteristics of a type, period, or method of construction; or represents the work of a master; or possesses high artistic value; or represents a significant and distinguishable entity whose components may lack individual construction.

Criterion D: Site has yielded or has the potential to yield information important in prehistory or history.

Criterion E: Site has an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events, or oral accounts (State of Hawaii criterion only).

An archaeological site is still significant under Criterion D but should sufficient information be collected from the site during archaeological investigations, the site does not require any further mitigation.

All sites identified by the AIS have been assessed as significant under only Criterion D. Consistent with the Barren Zone model for pre-contact settlement in the Kihei area, the project's AIS yielded a very limited number of sites and therefore no further archaeological work is recommended for this project area.

Recommendations set forth by the AIS include the following:

1. Informally preserve the entirety of Site -6241 wall or portion thereof if given the opportunity.

2. Provide an orange protective fence to be placed along Site -6241 wall on northern ridgeline boundary of Parcel 17 to protect two undocumented rock shelters occurring off site below in Waipuilani Gulch.

In a letter dated October 27, 2008 the State Historic Preservation Division determined that the AIS was acceptable and recommended that Site -6241 should be bordered by a protective orange construction fencing prior to ground altering disturbance within TMK: (2) 2-2-024:017. Furthermore in letters dated August 27, 2012 and December 6, 2012 the State Historic Preservation Division determined that no historic properties will be affected by the proposed project.

**MICHAEL F. DEGA**  
**Curriculum Vitae**

**ADDRESS**

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**SUMMARY OF ARCHAEOLOGICAL EXPERIENCE**

Twenty years of archaeological experience in the Pacific Basin (Hawaiian Islands, Micronesia) SE Asia (Cambodia), S. Asia (India). Ph.D.: Prehistoric Circular Earthworks in Cambodia. Focus on archaeological methods, human-environmental interactions, soil and human dynamics, and historical ecology.

**ACADEMIC TRAINING**

2001	Ph.D. in Anthropology, University of Hawai'i-Manoa
1995	M.A. in Anthropology, University of Hawai'i-Manoa
1989	Italian Language Cert., Florida St. University in Florence, Italy
1989	B.A. University of Puget Sound, Tacoma, WA

**RECENT IN PRESS AND SELECTED PUBLICATIONS**

- 2013 Time Detectives: A Young Scholar's Guide to Hawaiian Archaeology (in press; August 2013 publication).
- 2012 A Brief Study of Cambodia Circular Earthworks as explained through EDXRF Analysis. *Bulletin of the Indo-Pacific Prehistory Association* Volume 31:63-74.
- 2010 The Social and Ecological Trajectory of Prehistoric Cambodian Earthworks in *Understanding Diverse Landscapes: Historical Ecology and Archaeology in Mainland Southeast Asia*. (In publication)
- 2008 *The Archaeology of Kula, Maui* (manuscript in production)
- 2004 Austronesian Colonization of the Mariana Islands: The Paleoenvironmental Evidence (with J. S. Athens and J. Ward). *Bulletin of the Indo-Pacific Prehistory Association* Vol. 24: 21-30.
- 2002 *Prehistoric Circular Earthworks of Cambodia*. BAR International, Oxford, United Kingdom.
- 2002 A Modified History of Anahulu Valley, Oahu, Hawaii and Its Significance for Hawaiian Prehistory (with P.V. Kirch). In *The Journal of the Polynesian Society* Volume 111(2):107-126.
- 2002 "VMS-6: A Vijayanagara Settlement" in *Vijayanagara Progress in Research 1993-1994*, edited by M.S. Nagaraja Rao, Mysore.
- 1999 Circular Settlements within Eastern Cambodia. *Bulletin of the Indo-Pacific Prehistory Association* (18):222-223.
- 1999 Results of the 1995-1996 Archaeological Field Investigations at Angkor Borei, Cambodia. *Asian Perspectives* 38(1):7-36 (co-authored by Stark *et al.*)
- 1997 Circular Earthworks in Kampong Cham: 1996 Archaeological Research (in English and Khmer). *Bulletin de L'Ecole Francaise D'Extreme Orient*. Phnom Penh, Cambodia.
- 1997 An Evaluation of Circular Earthworks in Kampong Cham, Cambodia. *International Southeast Asian Archaeology Newsletter*, ed. by Laura L. Junker, Vanderbilt University, Nashville, TN.
- 1996 "Features on the Angkor Borei Landscape: City Walls, Moats, and Bareys. In *Cultural Resource Management* 19(3):38-39.
- 1996 "Archaeology in Cambodia: Recent Research at Angkor Borei, Ba Phnom, and Kbal Romea. In *Proceedings of the 5th Annual East-West Center Centerwide Conference*, East-West Center, February 5- 9, 1996, pp. 81-89.

## TECHNICAL PUBLICATIONS

Over 500 Publications of Cultural Resource Management and Archaeological Reports within the Hawaiian Islands (Oahu, Maui, Kauai, Hawai'i, Molokai) and Micronesia (Guam, Saipan). Includes Archaeological Inventory Survey, Data Recovery, Burial Treatment Plan, Preservation Plan, Archaeological Monitoring Plan. Experienced with Section 106, NAGPRA, NEPA, ARPA, and other Federal requirements.

## SELECTED CONFERENCE PAPERS

- January, 2013** The Archaeology of Cheung Ek, Cambodia. In Symposium: The Potential of Archaeological Research in South Asia. The Seventh World Archaeological Congress, The Dead Sea, Jordan.
- April, 2012** The Social and Ecological Trajectory of Prehistoric Cambodian Earthworks. In the Symposium: "Landscape Archaeology in Southeast Asia." Society for American Archaeology, Memphis, TN.
- October, 2011** A Tale of Two *Heiau*: Maui and Hawaii Island. Paper to be Presented at the 24<sup>th</sup> meeting of the Society for Hawaiian Archaeology, Maui, Hawaii (October 1, 2011).
- October, 2010** From Pre-Contact to Polo Matches: A Case Study from Waipouli, Kauai. Paper Presented at the 23<sup>rd</sup> meeting of the Society for Hawaiian Archaeology, Kauai Island, Hawaii.
- November 2009** "Possible Production Centers of Cambodian Circular Earthwork Ceramics as explained through XRF Analysis" with D. Kyle Latinis. Paper Presented at the Indo-Pacific Prehistory Association, Hanoi, Vietnam.
- October 2009** "Southeast Asia: Current Issues" Society for Hawaiian Archaeology, Honolulu, Hawaii.
- July 2008** World Archaeology Congress, Dublin, Ireland: The Perception of Heritage Preservation in Cambodia." In the Symposium "Ethical Standards for Global Archaeologists."
- July 2008** World Archaeology Congress, Dublin, Ireland: The Middle Child: Hawaiian Archaeologists and Disparate Communities." In the Symposium "Ethical Standards for Global Archaeologists."
- March 2006** Indo-Pacific Prehistory Association, Manila, Philippines. "The Memotian Circular Earthworks of Eastern Cambodia." In the Symposium "New Insights into the Cambodian Past: Prehistory to the Decline of Angkor."
- March, 2006** Indo-Pacific Prehistory Association, Manila, Philippines. Chair: Symposium in Honor of P. Bion Griffin.
- October, 2005** Society for Hawaiian Archaeology, Lihue, Hawai'i. Chair: Professionalism in Hawaiian Archaeology.
- January, 2005** Center for Khmer Studies, Siem Reap, Cambodia (with M. Vannary and B. Davis). Excavations at Chamcar Andong, Kampong Cham.
- January, 2005** Center for Khmer Studies, Siem Reap, Cambodia (with multiple authors). Overview of the East Cambodia Archaeological Survey.
- November, 2004** Society for Hawaiian Archaeology, Hawai'i Island. Chair: Professionalism in Hawaiian Archaeology II.
- April, 2004** Society for American Archaeology, Montreal, Canada (with M. Vannary and B. Davis). Investigation of a Late Prehistoric Habitation Mound Site, Chamcar Andong Rubber Plantation, Kampong Cham, Cambodia.
- April, 2004** Society for American Archaeology, Montreal, Canada (with D. Kyle Latinis). Chair: Late Prehistory and Early History in Cambodia.
- October, 2003** Society for Hawaiian Archaeology, O'ahu, Hawai'i. Chair: Professionalism in Hawaiian Archaeology.
- September, 2002** Indo-Pacific Prehistory Association, "Prehistoric Community-level Adaptations: A Cambodia Case Study." Taipei, Taiwan, ROC.
- September, 2002** Indo-Pacific Prehistory Association, (with J.S. Athens and J. Ward). Austronesian Colonization of the Mariana Islands: The Paleoenvironmental Evidence. Taipei, Taiwan, ROC.
- September, 2002** Indo-Pacific Prehistory Association, Co-Chair with Joyce White, "The Missing Millennia in Southeast Asia" Taipei, Taiwan, ROC.
- March, 2002** Society for American Archaeology, Denver, Colorado (with J.S. Athens and J. Ward). Austronesian Colonization of the Mariana Islands: The Paleoenvironmental Evidence.
- October, 2001** Society for Hawaiian Archaeology Chair, Archaeological Methods Symposium, Maui, Hawaii.
- October, 2001** Society for Hawaiian Archaeology (with A. Buffum), Maui, Hawaii. Formation Processes in Coastal Settings: Characterizing a Buried Hawaiian Site.

**October, 2001** Society for Hawaiian Archaeology Chair, Greater Pacific Basin Symposium, Maui, Hawaii.

**April, 2000** Society for American Archaeology, Philadelphia, Pennsylvania (with P.V. Kirch). A Modified History of Anahulu Valley, Oahu, Hawaii and Comparisons with Upland Valley Studies.

**April, 2000** Society for American Archaeology, Philadelphia, Pennsylvania (with Lath Foch, Un Moninitha, and Soeum Un). The Timing of Cambodian Earthworks.

**November, 1999** Circular Earthwork Conference, Phnom Penh, Cambodia (with P. Bion Griffin). A Ministry of Culture-RUFA-UH Circular Earthwork Project, Kampong Cham, Cambodia 1995-1999.

**April, 1999** Society for Hawaiian Archaeology, Honolulu, Hawaii. The Prehistoric Temporal Patterns of Kawaiiloa: The Timings and Nature of Land Utilization Within Upper Anahulu, O'ahu.

**April, 1999** Society for Hawaiian Archaeology, Honolulu Hawaii. Geomorphological and Palynological Investigations on Kagman Peninsula, Saipan, Commonwealth of the Northern Mariana Islands.

**July, 1998** Indo-Pacific Prehistory Association, Malaka, Malaysia. "Prehistoric Earthworks in Eastern Cambodia" in Late Prehistory of Southeast Asia symposium.

**April, 1998** Society for Hawaiian Archaeology, Kona, Hawaii. "Chronology of Hawaiian Fishponds and Prehistoric Environments: A Case Study from the Nu'upia Fishpond Complex, Kane'ohē Bay, O'ahu.

**March, 1998** Center for Southeast Asian and Pacific Studies Conference, Honolulu, HI: "Chronology of Hawaiian Fishponds and Prehistoric Hawaiian Environments: A Case Study from the Nu'upia Fishpond Complex, Kane'ohē Bay, O'ahu.

**March, 1997** Society for Hawaiian Archaeology, Lihue, Kauai, Hawaii. Co-author A View from the Top: Anahululuna and the KATA in General Hawaiian Archaeology symposium.

**February, 1997** East-West Center Participant Conference, Honolulu, Hawaii: The Archaeology of Circular Earthworks in Kampong Cham Province, Cambodia in Southeast Asia symposium.

**August, 1996** International Conference on Khmer Studies, Phnom Penh, Cambodia. "Archaeological Investigations in Angkor Borei, Takeo Province, Kingdom of Cambodia" in Archaeology symposium.

**April, 1996** Society for Hawaiian Archaeology, Kihei, Maui, Hawaii. "The Material Culture of Angkor Borei and Funan" in Symposium in Honor of Dr. Wilhelm G. Solheim II.

**April, 1996** Society for American Archaeology Meetings, New Orleans, LA. "Early State Formation and Political Economy in the Lower Mekong of Cambodia" in Production and Exchange in Southeast Asian Complex Societies symposium.

**April, 1996** Society for American Archaeology Meetings, New Orleans, LA. "Recent Archaeological Investigations in the Lower Mekong of Cambodia" in Old World Archaeology symposium.

**April, 1996** Annual East Asian Archaeology Network Meeting, Honolulu, HI. "A Brief Introduction to Funan and the Material Culture of Angkor Borei" in Archaeology of the Lower Mekong symposium.

**April, 1996** Annual East Asian Archaeology Network Meeting Honolulu, HI. Co-author "Funan as Center or Funan as Periphery? Explaining State Formation in Mainland Southeast Asia" in Centers and Peripheries in East and Southeast Asia symposium.

**October, 1995** 24th Annual Conference on South Asia, Madison, Wisconsin: "VMS-6: A Vijayanagara Settlement" February, 1996 East-West Center Participant Conference, Honolulu, Hawaii: "Archaeology in Cambodia: Recent Research at Angkor Borei, Ba Phnom, and Kbal Romea.

## **SAMPLE OF GRANTS, SCHOLARSHIPS, AND AWARDS**

2009-present US Army Garrison, Hawaii: Book, Video, Brochure (\$500,000)

2004 Soil Science-Geomorphology Grant, National University of Singapore (\$2,000)

2003 Teaching Grant for Khmer Archaeological Research (\$15,000)

2002 Center for Khmer Studies-Rockefeller Foundation Fieldwork Grant (\$20,000)

2002 Center for Khmer Studies-Rockefeller Foundation Workshop Grant (\$5,000)

2001 SCS Grant for Fieldwork, Kampong Cham and Kratie, Cambodia (\$20,000)

1999 SCS Radiocarbon Award for Fieldwork in Southeast Asia (\$3,000 Stipend)

1998 College of Arts and Sciences Advisory Council Award, IPPA Malaysia

1997 Graduate Assistanship/Teaching Assistant, Univ. Of Hawai'i and East-West Center

1997 College of Arts and Sciences Advisory Council Award-Cambodian Research

1996 GSO Travel Grant Award, University of Hawaii-Manoa

1996 College of Arts and Sciences Advisory Council Award-Cambodian Research

1995-96 Univ. of Hawai'i Foreign Language Area Scholarship, SE Asian Studies

1995-96 Graduate Assistant ship, Univ. of Hawai'i/East-West Center

1994 Research Fellowship, American Institute of Indian Studies, New Delhi, India

1993-96 Tuition Waivers, Department of Anthropology, University of Hawaii-Manoa

**PROFESSIONAL MEMBERSHIP**

Society for Hawaiian Archaeology (SHA) Former Standards and Ethics Committee Chairman; Society for American Archaeology (SAA), Indo-Pacific Prehistory Association (IPPA), Center for Southeast Asian Studies, (Univ of Hawaii), Bernice Pauahi Bishop Museum, Historic Preservation Society, Kaua'i Museum.

**LANGUAGES**

English (native language); Med. Cambodian (Khmer), Med. French