

APPENDIX 6.7-1: PART 2

UPDATED CULTURAL RESOURCES INVENTORY, SEPTEMBER 17, 2006



Central Coast Division/Administration
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September 17, 2006

Joe Stenger, Project Director
TRC Solutions, Inc.
2666 Rodman Drive
Los Osos, California 93402

Re: Avenal Energy Project, Fresno and Kings counties (TRC Project No. 29031701)

Dear Mr. Stenger:

This report is prepared in response to a request from TRC Solutions to complete the following scope of work for cultural resources related to California Energy Commission (CEC) *Proposed List of Additional Information Needed to Bring the Avenal Energy Project Application for Certification Up to Date* (CEC Memorandum dated 31 July 2006 from Bill Pfanner to CEC Vice-Chair Boyd, Commissioner Geesman and Hearing Officer Fay). Per the Memorandum CEC staff request that Section 6.7 (Cultural Resources) of the October 2001 Application for the Avenal Project be refreshed and up-dated as follows.

- 1) State whether there have been any cultural resources identified by additional field surveys in the project area that are more recent than the surveys completed for the project approximately five years ago.
- 2) Provide statement confirming that the California Historical Information System has been contacted for an updated literature search for the project area and proposed transmission route.
- 3) Obtain a current list of Native American Contacts from the Native American Heritage Commission, and provide a statement confirming that all Native American contacts on the list have been informed of this project.
- 4) Evaluate the PG&E Gates-Arco 230-kV transmission line's eligibility for the California Register of Historical Resources (CRHR), or justify the absence of need for such evaluation. The evaluation or justification must be performed by a person who meets the Secretary of Interior's standards in architectural history.

In response to the CEC staff information requests Pacific Legacy,

- 1) completed a reconnaissance of the original project area and along a proposed 200-foot wide transmission line corridor that was not part of the Avenal Energy Project described in the October 2001 AFC;

- 2) conducted a records search at the California Historical Information System (CHRIS) Southern San Joaquin Valley Information Center at California State University, Bakersfield, to determine if any cultural resources studies or historical resources had been made in the original Avenal Project study area or along the proposed transmission line corridor from the proposed Avenal Project plant site to the PG&E Gates Substation;
- 3) contacted the Native American Heritage Commission (NAHC) to determine if the Commission has any record of cultural resources in the immediate project vicinity and to obtain a current listing of Native American Contacts for Fresno and King counties;
- 4) reviewed available data regarding the PG&E Gates-Arco transmission line that might contribute to its evaluation as a historical resource.

Conclusions of this study are

- 1) there are no cultural resources identified in the Avenal Power Project study area since the original studies conducted by Pacific Legacy and reported in the October 2001 AFC, and no cultural resources were found along the proposed transmission line during field studies conducted in August 2006;
- 2) review of CHRIS records indicates no other cultural resources studies have been completed since 2001 in the original study area or along the now proposed transmission line corridor from the Avenal Power plant site to Gates Substation;
- 3) the NAHC has no record of cultural resources in the project vicinity, including the area of the original project or along the length of the proposed transmission line corridor;
- 4) Native American contacts for Fresno and Kings counties identified by the NAHC were notified by certified mail of the project as were two other contacts known by Pacific Legacy to have cultural interests in the area near the Avenal Energy Project;
- 5) the PG&E Gates Substation and transmission lines have been substantially modified since the 1970s in the process of adding 500 kV capacity to the system, altering the original (mid-1950s) configuration and equipment of the original 230 kV Arco-Gates facilities, with additional modifications completed since 2002 for the Path 15 upgrade Project..

Cultural Resources Up-date

The Avenal Power Project description varies from that of the October 2001 AFC by changing the transmission line route, adding 5.1 miles of transmission line construction beyond that addressed in the 2001 AFC. The current proposal includes construction of an electrical transmission line that will span between the Project Site and the Gates electrical substation north of Jayne Avenue. For much of its length, the proposed transmission line would parallel the east side of three existing sets of PG&E transmission line. Transmission line construction will occur with a 120-foot wide easement.

A 200 foot wide study area corridor was established for the present study, providing an 80-foot buffer beyond the estimated right-of-way width. Figure 1 shows an overview map of the vicinity in which the Avenal Energy project will be carried out. Figure 2 depicts the project area

project. Notification letters were sent to the following contacts not listed by the NAHC,

- o Mr. Robert Duckworth (Salinan)
- o Salinan Nation.

Field Reconnaissance Methods and Personnel

The study area was reconnoitered on September 5, 2006 to locate any potentially historic structures and to evaluate both surface visibility and the feasibility of accessing privately held land parcels. The area of the proposed plant site and other areas previously investigated for the October 2001 AFC remain substantially as they were when cultural resource studies were completed in 2001 and there appeared to be no new opportunities to discover cultural resources.

Reconnaissance along the 200-foot wide transmission line study corridor was begun on September 5, 2006 and was completed on September 6, 2006.

Archaeological field investigations comprised an intensive pedestrian survey conducted by four persons traversing the 200 foot corridor using a survey interval of 10 meters between investigators. The entire length of the proposed transmission line corridor was surveyed with the exception of two segments that were designated as 'off-limits' due to crop-dusting activities. No other constraints were posed during survey.

The entirety of the survey area consists of agricultural land freshly tilled, given over to pistachio, almond, or citrus groves, or dominated by low-growing crops such as onion and melon. Visibility remained consistently good throughout the project area, save for one parcel segment that had been planted with cotton and was thus visually impenetrable (Figure 8).² Based upon the absence of any cultural materials noted adjacent to that segment, however, it is not anticipated that such materials would be encountered were the area examined directly.

All fieldwork was conducted by personnel who meet the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. Their roles and credentials are as follows,

- o Thomas Jackson, Ph.D., Principal Investigator- 35 years experience in California cultural resources management and archaeology;
- o Lisa A. Holm, Ph.D., Field Director- 14 years experience in California cultural resources management and archaeology;
- o Sidsel Millerstrom, Ph.D., Archaeologist- 24 years experience in California cultural resources management and archaeology;
- o Erika Cooper, M.A., Archaeologist- 3 years experience cultural resources management and archaeology in California.
- o Katherine Killackey, M.A., Archaeologist- 2 years experience in California cultural resources management and archaeology.

Resumes for the Principal Investigator and Field Director are provided in Attachment C.

Results of Field Reconnaissance

No cultural resources were discovered during this study. Twelve pieces of marine shell were found dispersed across a ½-mile wide area within the southern extent of the project area but their presence is interpreted to be associated with modern agricultural practices. No cultural remains were found associated with the shell pieces. The Avenal Cutoff Road, which bisects the proposed transmission line corridor would be spanned but not materially affected by construction of the electric transmission line

There appears to be little likelihood that obscured or buried archaeological resources occur within the proposed Avenal Energy transmission line corridor. Agricultural activities have remained ongoing within the project area for more than sixty years, and those activities have reportedly resulted in ground disturbance to a depth of five feet. Such disturbance would likely have brought to light any subsurface artifacts or cultural materials, or, if ever present, the integrity of buried resources would be destroyed. While buried archaeological sites have been reported on the Coalinga Fan (Atwater et al. 1990), these have largely been found adjacent to stream courses. The topographic setting of the project area and the lack of any neighboring natural drainages would suggest that the probability of finding comparable buried archaeological resources is minimal.

Segments of the proposed electrical transmission line remained unsurveyed as of September 6, 2006 due to crop dusting activities that prohibited access; a further portion remained obscured by cotton plants that prohibited surface visibility and the detection of potential cultural resources. Based on the information provided by the Southern San Joaquin Valley Information Center, the Native American Heritage Commission, and our pedestrian survey, however, Pacific Legacy expects that no other cultural resources would be found in these unsurveyed areas.

Gates-Arco 230-kV Transmission Line

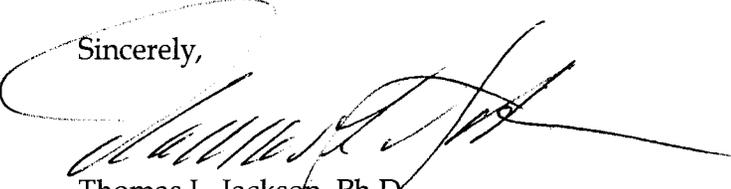
The proposed Avenal Energy Project would construct approximately 5 miles more transmission line compared to the transmission line addressed in the 2001 AFC. This additional 5 miles of transmission line would parallel the existing PG&E 230 kV and 500 kV transmission line corridor. The Avenal Project transmission line would not materially affect the existing transmission lines except to require the raising of two existing transmission linetowers to facilitate interconnection with the Gates Substation. In responses dated 25 February 2002 (01-AFC-20; Data Requests 35 and 36) major modifications to the transmission system in the area were detailed, including major modifications made in the 1970s to the transmission lines and the Gates Substation. The regional 230 kV transmission system was reconfigured. In addition, two 500 kV lines were added to the same right-of-way. Additional changes to the Gates substation and the regional 500 kV and 230 kV grids were recently completed as part of PG&E's Path 15 upgrade work. The 230 kV transmission line and Gates substation have existed in their current configuration only since the completion of Path 15 upgrade work in the last few years.

The Los Banos-Gates Transmission Project in the California Public Utilities Final SEIR (March 5, 2002) (<http://www.cpuc.ca.gov/Environment/info/aspen/path15/path15.html>) Final SEIR does not appear to even consider the electrical transmission system as a cultural resource.

Based on the up-dated cultural resources information above, Pacific Legacy concludes there are no archaeological resources known to be associated with the project and the potential to encounter such resources during construction is considered minimal. Information provided

previously to the CEC regarding major modification to the Gates-Arco system and information provided in the Los Banos-Gates Project Final SEIR indicates that the transmission system in the area does not have adequate integrity to be a potentially significant resource.

Sincerely,



Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachments: As Stated

Reference cited:

Atwater, B.F., D.A. Trumm, J.C.I. Tinsley, R.S. Stein, A.B. Tucker, D.J. Donahue and L.A. Payen (1990) Alluvial Plains and Earthquake Recurrence at the Coalinga Anticline. In, The Coalinga, California Earthquake of May 2, 1983, edited by M.J. Rymer and W. Ellsworth *U.S. Geological Survey Professional Paper 1487*.

in greater detail as it relates to the Huron and La Cima, USGS 7.5' Quadrangle maps. These investigations were completed in compliance with the California Energy Commission (CEC) guidelines as stated in the California Code of Regulations, Title 20, Chapter 5, Article 6, Appendix B: Information Requirements for an Application (Section (g) (2) Cultural Resources). There are no federally administered public lands in the project area and there are no federal actions anticipated that would require compliance with federal historic preservation law or regulation. The terms "project area" as used below includes the project area as defined for the October 2001 AFC but also includes the 200-foot wide transmission line corridor to the Gates Substation.

Archival Research

Prior to conducting field research, a records search was conducted at the Southern San Joaquin Valley Information Center of the California Historical Resources Inventory System at California State University, Bakersfield (Record Search #06-236) for known archaeological sites within the vicinity of the project area. Sources consulted include,

- Southern San Joaquin Valley Information Center site and study base maps;
- National Register of Historic Places (*Directory of Determinations of Eligibility* California Office of Historic Preservation, Volumes I and II, 1990);
- Office of Historic Preservation Computer Listing 1990 and updates);
- *California Historic Resources Inventory* (State of California 1976);
- *California Historical Landmarks* (State of California 1990);
- *California Points of Historical Interest* listing (May 1992).

According to the record search, no prehistoric or historic archaeological sites or Native American cultural resources had been recorded within the project area, nor had any been recorded within a ¼-mile radius of the proposed transmission line. No previous cultural resources studies are known to have been carried out within the project area, or within ¼-mile of the project area, apart from those already completed for the Avenal Energy project by Pacific Legacy in 2001.

Native American Heritage Commission Consultation

A request was submitted to the California Native American Heritage Commission to consult their Sacred Lands Files to identify any culturally significant properties. In a letter dated September 6, 2006, the NAHC reported that no sacred lands were known to the Commission within the immediate vicinity of the project area (see Attachment A). The NAHC provided a list of Native American contacts for Fresno and Kings counties. A letter was sent to the persons and organizations identified by the NAHC as well as others known to Pacific Legacy (see Attachment B). Persons or organizations contacted from the NAHC list are,

- o Chairman, Santa Rosa Rancheria
- o Chariman, Tule River Indian Tribe
- o Chair, Table Mountain Rancheria
- o Environmental Coordinator, Table Mountain Rancheria
- o Cultural Resources Director, Table Mountain Rancheria
- o Tribal Administrator, Table Mountain Rancheria.

Pacific Legacy is aware that other Native Americans have cultural interests in the area near the

Thomas L Jackson Ph.D.

Principal Investigator

Summary of Qualifications

Dr. Jackson has 30 years of experience in cultural resource management and has been involved in archeology for more than 33 years. He has extensive experience (since 1971) conducting archaeological studies throughout California for local, state and federal government and private clients. Projects completed under these contracts have included archeological survey, test excavations, data recovery excavations, National Register of Historic Places evaluations, Native American Graves Protection and Repatriation Act inventories, preparation of Cultural Resource Management Plans, Historic Preservation Plans, Programmatic Agreements, State Historic Preservation Officer and Advisory Council on Historic Preservation consultation. Dr. Jackson is a Principal of Pacific Legacy, Inc. (since 1994). He is certified for the courses *Federal Projects and Historic Preservation Law* (GSA/ ACHP) and *Native American Graves Protection and Repatriation Act* (Univ. of Nevada, Reno) and meets the Secretary of Interior's standards as an archeological Principal investigator.

Dr. Jackson's areas of expertise include:

- Cultural resources project scoping and management for hydroelectric, transportation, water storage, and linear facilities projects involving multiple local, state and federal agencies
- Compliance with Federal and State historic preservation laws and policies including the National Historic Preservation Act (Section 106, 110), Archeological Resource Protection Act, Native American Graves Protection and Repatriation Act, and American Indian Religious Freedom Act
- Development of archeological Research Designs, Historic Contexts and Property Types
- Archeological survey, resource documentation, National Register of Historic Places evaluations, data recovery and other treatment studies
- Historic Property Treatment Plans, Historic Preservation Plans and programs
- Obsidian hydration dating and geochemical sourcing of volcanic tool stone

Dr. Jackson's geographical experience in archeology includes California, the Hawaiian Islands (O`ahu and Maui), Wake Island, Isla de Pascua (Easter Island) and Mongolia; and technical research on archeological collections from Canada, Guatemala, Mexico and Peru. He has taught anthropology courses at San Jose State University and the University of California at Santa Cruz, as well as Cultural Resources Management at the University of California at Berkeley.

Education

Ph.D., Anthropology, Stanford University, Stanford, California, 1986
M.A., Anthropology, San Francisco State University, California, 1974
B.A., Anthropology (major), Geology (minor), San Francisco State University, California, 1971

**Recent Key
Projects**

- 1998-2004 Principal Investigator for on-call cultural resources studies for the University of California at Santa Cruz.
- 2002 Principal Investigator for cultural resources studies for 250 square-mile Monument 3D Seismic prospect near Los Banos, Merced County: cultural resources inventory, Native American consultation, US Army Corps of Engineers, US Fish and Wildlife Service, California Fish and Game consultation. Client: Black Coral, LLC.
- 2000-2004 Principal Investigator for cultural resources studies and historic preservation compliance for licensing the Southern California Edison Big Creek System (FERC Projects 67, 120, 2085, 2086, 2174 and 2175). Client: Southern California Edison.
- 2001-2002 Principal Investigator, Designated Cultural Resource Specialist (by California Energy Commission) for the Elk Hills Power Project, Kern County. Construction and operation of Elk Hills Power Plant and transmission line Elk Hills to Midway Substation. Client: Elk Hills Power.
- 1999-2002 Principal Investigator for archaeological studies for the Pajaro Valley Water Management Agency Local Water Supply Project. Client: Montgomery Watson and Pajaro Valley Water Management Agency.
- 1999-2001 Principal Investigator for cultural resources studies for the Monterey Peninsula Water Management District New Los Padres (Carmel River) Dam and Reservoir Project. Client: Monterey Peninsula Water Management District.
- 1999-2001 Principal Investigator for the cultural resources inventory for the Sunrise Power Project; preparation of the cultural resources element of the Application for Certification; testimony given before the California Energy Commission (CEC); designated project Cultural Resource Specialist approved by CEC. Client: Sunrise Power Company.
- 1998-2001 Principal Investigator/Contract Manager for California Department of Transportation multi-year, on-call cultural resources services contract (\$1.3 M) for Districts 5, 6, 9, and 10. Work involved Phase 1, Phase 1.5, Phase 2 archaeological studies, ethnographic, historical and ethnohistoric research, data analysis, National Register of Historic Places evaluations and reporting. Client: Caltrans.
- 1997-1999 Principal Investigator for prehistoric cultural resources management for Department of Energy (DOE) divestiture of

Naval Petroleum Reserve No. 1, Kern County, CA., the most valuable (\$3.65 billion) single divestiture of federal property in U.S. history. Dr. Jackson designed and implemented the Cultural Resource Management Plan covering all historic property types at NPR-1; prepared National Register of Historic Places eligibility assessments; directed archeological survey, test excavations, laboratory analyses and reporting for 91 prehistoric sites; drafted and assisted the DOE in successfully negotiating a Programmatic Agreement with the California State Historic Preservation Officer and the Advisory Council on Historic Preservation and continues to assist the DOE in implementing the PA. Client: ICF Resources, Inc.

1997-1999 Principal Investigator for archaeological data recovery excavations at 10 sites in the Rush Meadow Archeological District, Rush Creek Hydroelectric Project (FERC 1389) Inyo National Forest. Client: Southern California Edison Company.

Professional Experience

1974-1985 Principal/Senior Archaeologist. Archaeological Consulting and Research Services, Inc. Managed all phases and aspects of prehistoric and historic archaeological CRM projects throughout California. Geochemical sourcing and obsidian hydration specialist. Regulatory compliance specialist.

1985-1988 Senior Archeologist. Theodoratus Cultural Research. Directed prehistoric archaeological programs throughout California.

1988-1994 Senior Archaeologist/Cultural Resources Division Director/Principal. BioSystems Analysis, Inc. Directed all cultural resources management programs for three offices in California and one Hawaii office; Director of obsidian hydration dating and geochemical sourcing programs.

Selected Publications & Accomplishments

(M. Davis, T. Jackson, M. Shackley, T. Teague and J. Hampel) Factors Affecting the Energy-Dispersive X-Ray Fluorescence (EDXRF) Analysis of Archaeological Obsidian. In *Archaeological Obsidian Studies: Method and Theory*, edited by M.S. Shackley, pp. 159-180. Plenum Press, New York.

1994 (T. Jackson and J. Ericson) Prehistoric Exchange Systems in California. In *Prehistoric Exchange Systems in North America*, edited by T.G. Baugh and J.E. Ericson, pp.385-415. Plenum Press, New York.

1994 Estimation of [Obsidian] Hydration Rates from Chemical Composition: A Case Example from Xaltocan, Mexico (with C. M. Stevenson). Paper presented at the Annual Meeting of the Society for American Archaeology, Anaheim, California.

- 1993 Archaeological Monitoring, Reconnaissance and Test Excavations at Nu`upia Fishpond, Kane`ohe, O`ahu. Submitted to U.S. Army Corps of Engineers-Honolulu District.
- 1993 Archaeological Research Design for Bellows Air force Station and Windward Settings in the Hawaiian Islands (64 pages). In *Cultural Resources Management Plan for Native Hawaiian Archaeological Resources, Bellows Air Force Station*, prepared by J. Eidsness. Submitted to U.S. Army Corps of Engineers-Honolulu District.
- 1992 Small Scale World Systems in Prehistoric North America. Symposium organizer and presenter. with C. Chase-Dunn. Annual Meeting of the Society for American Archaeology, Pittsburgh.
- 1991 Pounding Acorn: Women's Production as Social and Economic Focus. In *Engendering Archaeology*, edited by M. Conkey and J. Gero, pp. 301-328. Basil Blackwell, Inc., Cambridge, England.
- 1991 A funny thing happened on the way from the quarry . . . Analysis of the Great Blades Cache of Northern California. In *Stone Tool Procurement, Production, and Distribution in California Prehistory* (with J. W. Rick). Edited by J. E. Arnold, pp. 5-66. Perspectives in California Archaeology, Volume 2, Institute of Archaeology, University of California, Los Angeles.

Additional Publications

Author, co-author, editor or contributor to more than 300 cultural resource reports, environmental impact statements, environmental impact assessments, California Environmental Quality Act documents, archaeological research designs, book reviews, professional presentations and obsidian hydration dating and source determination technical reports

Professional Affiliations & Memberships

Society for California Archaeology
Society for American Archaeology

Professional References

Thomas T. Taylor Environmental Affairs Division, Southern California Edison Company, P.O. Box 800, Rosemead, CA 91770. ☎ (626) 302-9540.

E. Grant Garrison ICF Consulting, 9300 Lee Highway, Fairfax, VA 22031 ☎ (703) 934-3003 or
c/o Naval Petroleum Reserve California, 1601 New Stine Road, Suite 240, Bakersfield, CA 93389 ☎ (661) 837-5060

Patti Johnson Environmental Division, US Army Corps of Engineers - Sacramento District, 1325 J Street, Sacramento, CA 95814-2922. ☎ (916) 557-6611.

Lisa Holm

Supervisor

Summary of Qualifications

Ms. Holm has fourteen years of archaeological experience in the United States, Great Britain, and Polynesia. She has been involved in archaeological field and laboratory research since 1992. She has conducted intensive archaeological surveys, test excavations, and data recovery efforts. She has over tens years experience in data collection, analysis, and presentation using global positioning systems (GPS), geographic information systems (GIS) and graphics/desktop publishing software and is also competent in the laboratory analyses of marine shell and lithic materials.

Education

Ph.D. University of California, Berkeley, Department of Anthropology, May 2006.

M.Sc. University of Southampton, April 1996.

B.A. University of California, Berkeley, Department of Anthropology, May 1993.

Recent Key Projects

Various projects, Pacific Legacy, Inc.

May 2006-Present

Participated in surveys investigating potential archaeological and historical resources in Coulterville, CA (the Baker Ranch Project) and in Buttonwillow, CA (the Orion 3D Project). Conducted test excavations at a San Joaquin shellmound site (SJ19) in Lathrop, CA. Completed cultural resource investigations in Fairfield and Oakland, CA for Shaw Environment and Infrastructure, Inc. in accordance with the *Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission*. Conducted a detailed GPS survey of the Dinky Creek Lumbar Mill site near Shaver Lake, CA and integrated survey results with existing GIS coverages for the region. Performed graphics design and output figures for more than 30 projects.

The Mahamenui and Manawainui Archaeological Project (MMAP), Kahikinui, Maui Island

January 2005; May-July 2002; June-July 2001

Directed field crews of 4-8 persons in the intensive survey, mapping, and test excavation of the Mahamenui and Manawainui *ahupua'a*, Kahikinui, Maui Island as a part of Ph.D. dissertation research. Conducted laboratory analysis on 69,000+ marine shell fragments and supervised analysis of 37,000+ pieces of lithic debitage. Constructed relational databases for all excavated materials and integrated them within wider project databases. Established GIS database encompassing spatial and attribute data pertaining to inventoried resources. Developed spatial analytic procedures to explore archaeological distributions and variability within project areas.

The 'Opunohu Valley Archaeological Project (OVAP), Mo'orea, French Polynesia

August 2001

Conducted cultural resources surveys and directed the GPS mapping of Polynesian sites in the 'Opunohu Valley, Mo'orea, French Polynesia.

The Kahikinui Archaeological Project (KAP), Maui Island

May 1999; May 1997

Participated in intensive survey and test excavations in Kipapa and Naka'ohu, Kahikinui, Maui Island under the direction of Professor Patrick Kirch, UC Berkeley.

Crickley Hill, Cheltenham, UK

May 1997

Assisted with data recovery efforts at a British Neolithic-Bronze Age settlement under the direction of Professor John Dixon, University of Nottingham.

various projects, Geoscan Research USA

March 1996; July 1994; December 1993

Conducted soil resistance, magnetometer, and radar surveys of Bent's Old Fort in La Junta, Colorado; processed and output survey results for private clients. Carried out magnetometer surveys of three prehistoric sites in the Fort Ross Region, California. Conducted soil resistance survey of the Native Alaskan Village Site, Fort Ross, California under the direction of Professor Lightfoot, UC Berkeley and in affiliation with Geoscan Research USA

The Fort Ross Archaeological Project (FRAP) field school

June 1992

Assisted with data recovery at the Native Alaskan Village Site (NAVS), Fort Ross, CA. Conducted laboratory analysis of finds from 1991-92 field seasons under the direction of Professor Kent Lightfoot.

Professional Experience

Graphics Supervisor/Archaeologist, Pacific Legacy, Inc.

June 2006 - Present:

Designed and produced report and presentation graphics for private, local, state, and federal clients. Performed surveys of historic, architectural, and archaeological resources throughout central California. Wrote, edited, and conducted archival research for select reports. Identified company-wide geospatial needs and plans for their implementation. Worked on various projects involving data collection, manipulation and output using GPS, GIS, and CAD.

Graduate Student Researcher for Professor Patrick Kirch, UC Berkeley

August 1999-December 2005

Constructed relational and Geographic Information System (GIS) databases incorporating archaeological survey and excavation data recorded in the

Kahikinui District, Maui Island between 1966-2005. Produced digital/analog cartographic products for publication and public outreach. Orthorectified aerial photographs and integrated cultural and natural resource data within wider GIS database. Designed graphics and conducted pre-press work for three academic monographs and various other projects based throughout Polynesia.

Graduate Student Instructor / Head Graduate Student Instructor, UC Berkeley

August 1999-December 2005,

Instructed undergraduate students in archaeological theory/methodology, materials analysis, and survey/excavation procedures. Developed curricula and exams for Introduction to Archaeology (Anth. 2) under Professor Kent Lightfoot.

Laboratory Manager, Archaeological Research Facility, UC Berkeley

September 1996-September 1998

Digitized and georeferenced cartographic data for projects based in Kahikinui, Maui Island, the Presidio, CA, and Catal Hyouk, Turkey. Designed and conducted pre-press and graphics work for an academic monograph. Created and maintained the Archaeological Research Facility's web site (sscl.berkeley.edu/~arf). Served as network administrator for teaching laboratory with 14 PC workstations; established and administrated multimedia teaching laboratory of 13 Macintosh workstations. Provided software and hardware support for archaeological faculty and administrators. Handled equipment operation, maintenance, and instruction for analytic, photographic, and microscope laboratories.

Research Assistant to Professor Kent Lightfoot, UC Berkeley

*October 1995 - September 1996; September 1993- September 1994;
August 1992 - January 1993*

Digitized cartographic products encompassing all architectural and archaeological data associated with the Fort Ross State Historic Park. Created over 50 maps/figures for an academic monograph and assisted with pre-press production. Processed and catalogued archaeological materials collected during the 1992-1995 excavations of Fort Ross, CA; designed materials database and completed all project data entry.

**Selected
Publications &
Accomplishments**

in press Holm, Lisa and Patrick Kirch
Up in Smoke: Assumptions of Survey Visibility and Site Identification.
Hawaiian Archaeology.

2006 Holm, Lisa. *The Archaeology and the Aina of Mahamenui and Manawainui, Kahikinui, Maui Island.* Unpublished Ph.D. dissertation on file at the University of California, Berkeley.

2004 P. Kirch A. Hartshorn, O. Chadwick, P. Vitousek, L. Holm, D. Sherrod, J.

Coil and W. Sharp. Environment, agriculture, and settlement patterns in a marginal Polynesian landscape. Proceedings of the National Academy of Sciences, U.S.A. 101:9936-9941.

2002 P. V. Kirch (ed.), J. Coil, L. Holm, J. Holson, S. Kailihiwa, K. Kawelu, S. Millerstrom, and S. O'Day. *From the 'Cliffs of Keolewa' to the 'Sea of Papaloa': An Archaeological Reconnaissance of Portions of the Kalaupapa National Historical Park, Moloka'i, Hawaiian Islands* UC Berkeley: Archaeological Research Facility, Oceanic Archaeology Laboratory Special Publication No. 2.

1997 Lightfoot, Kent G., Ann M. Schiff, and Lisa Holm. Archaeological Field Investigations at NAVS. In *The Native Alaskan Neighborhood: A Multiethnic Community at Colony Ross, vol. 2* Contributions of the University of California Archaeological Research Facility, no. 55, Berkeley.

1997 Lightfoot, Kent G., Ann M. Schiff, Antoinette Martinez, Thomas A. Wake, Stephen Silliman, and Lisa Holm. Culture Change and Persistence in the Daily Lifeways of Interethnic Households. In *The Native Alaskan Neighborhood: A Multiethnic Community at Colony Ross, vol. 2*. Contributions of the University of California Archaeological Research Facility, no. 55, Berkeley.

1995 Holm, Lisa. *A Predictive Model for the Fort Ross Region, California* M.Sc. thesis in computer applications in archaeology. On file at the University of Southampton, Southampton, UK.

Recent Presentations

2004 Holm, Lisa and Patrick Kirch. "Human-Landscape Interactions in Kahikinui, Maui: A Spatial Analytic Perspective." Paper presented at the Annual Meeting of the Society for Hawaiian Archaeology, Kailua-Kona, Hawai'i Island, Nov. 13-14.

2001 Holm, Lisa. "The Manawainui Archaeological Project." Paper presented at the Annual Meeting of the Society for Hawaiian Archaeology, Kahului, Maui Island, Oct. 5-7.

Affiliations & Memberships

- Affiliate of the Archaeological Research Facility, UC Berkeley
- Member of the International Webmasters Association

Professional Achievements

- Outstanding Graduate Student Instructor Award, May 2005.
- George Franklin Dales Memorial Scholarship, October 2002.
- The Robert W. Kiersted Memorial Award, June 1989.

Other Interests

Spatial analytic methods including GPS (Trimble/Garmin), GIS (ArcGIS 9.0/ ArcView 3.2), CAD (AutoCAD 2000), and photogrammetric software (Imagine 9.0); analog and digital cartographic production Pagemaker 6.5,

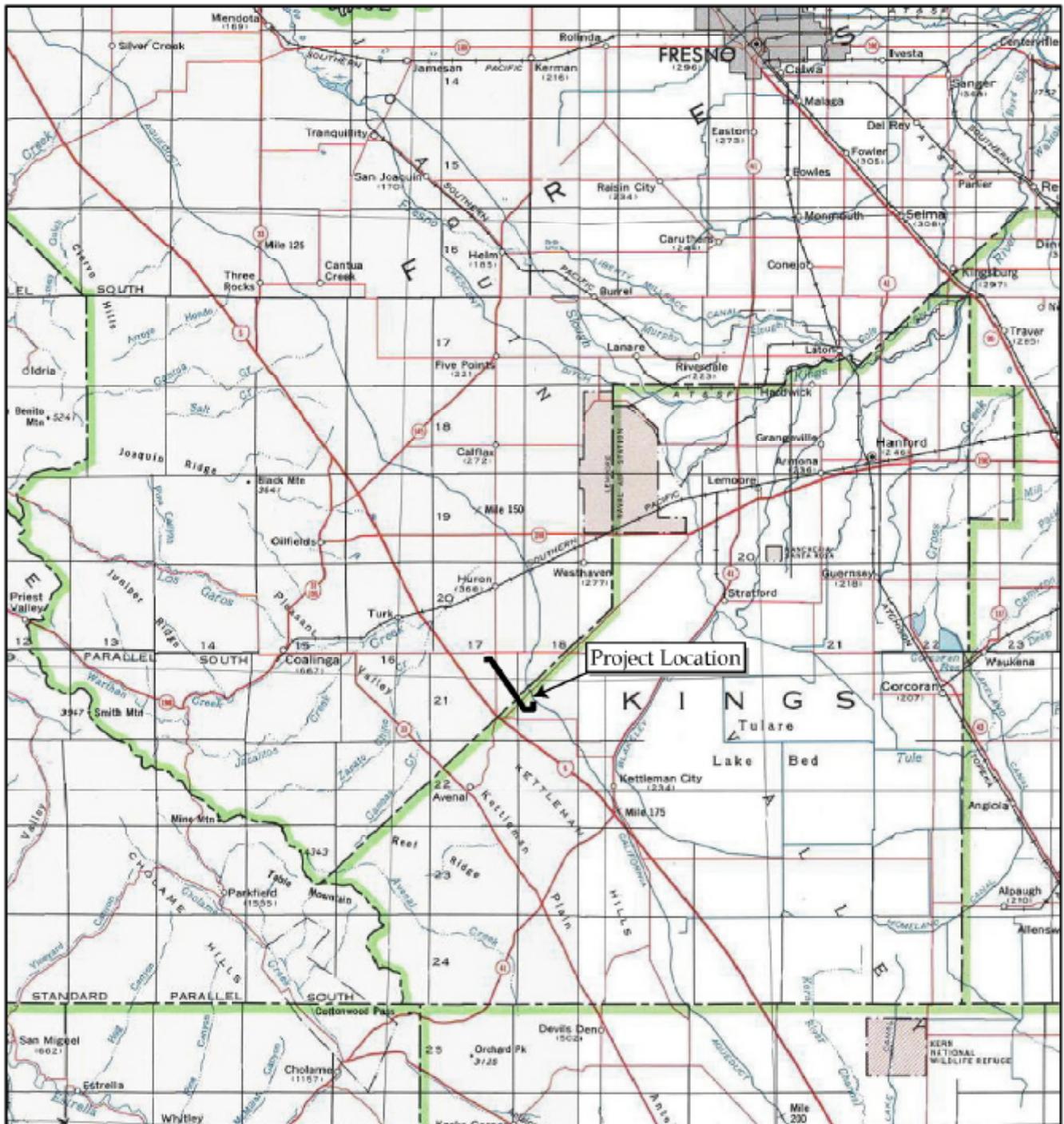
Photoshop 7.0, Illustrator 10, and Macromedia Freehand MX); academic and professional web design (Dreamweaver and Flash MX); 3D character/scene animation and rendering (Maya 4.5 and Matrix 4.0).

**Professional
References**

Professor Patrick Kirch
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Professor Kent Lightfoot
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Sherry Parrish, MSO
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(510) 643-5797



SOURCE: TOPO! National Geographic Holdings, California CD-ROM, USGS 7.5' Huron and La Cima, CA 1971.

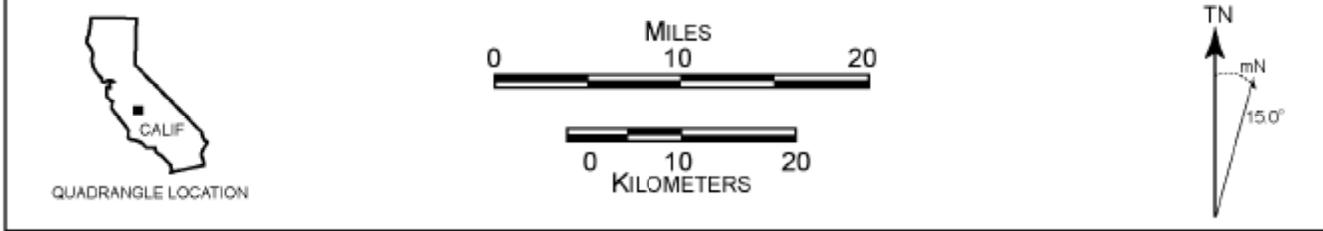
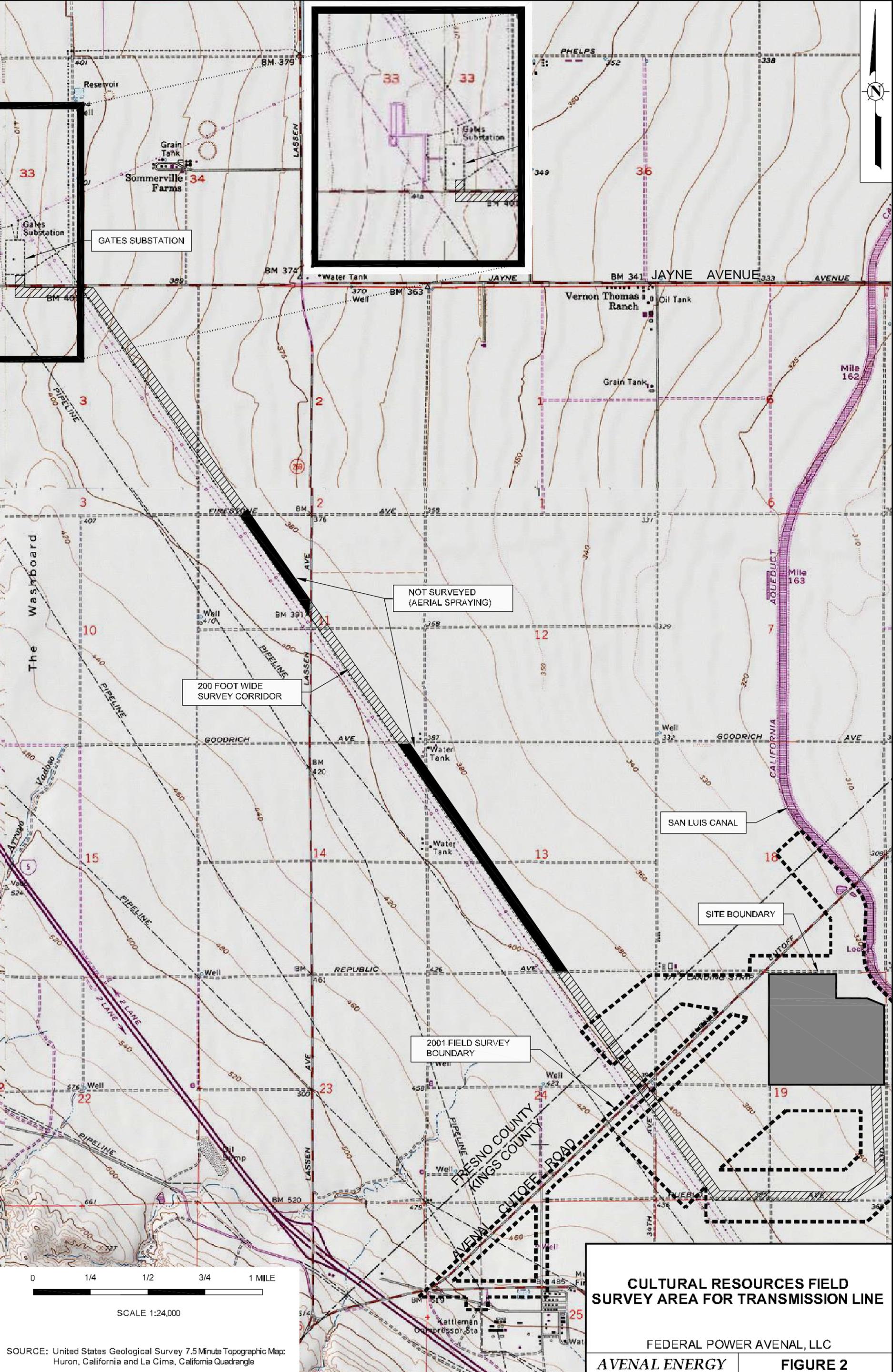


Figure 1. Project Vicinity.





CULTURAL RESOURCES FIELD SURVEY AREA FOR TRANSMISSION LINE

FEDERAL POWER AVENAL, LLC

AVENAL ENERGY | **FIGURE 2**

I:\DUKE\290317\AFC\Figure 2.dwg, Sep 23, 2006 - 12:20pm rhughes

SOURCE: United States Geological Survey 7.5 Minute Topographic Map: Huron, California and La Cima, California Quadrangle

STATE OF CALIFORNIAArnold Schwarzenegger Governor**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390
Web Site www.nahc.ca.gov



September 6, 2006

Thomas Jackson
Pacific Legacy

Sent by Fax: 831-423-0587
Number of Pages: 2

RE: Proposed Project #1586-01 (Avenal Energy) located near Avenal, Fresno and Kings Counties

Dear Mr. Jackson:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

Rob Wood
Environmental Specialist III

**Native American Contacts
Fresno and Kings Counties
September 6, 2006**

Santa Rosa Rancheria
Clarence Atwell, Chairperson
P.O. Box 8
Lemoore , CA 93245

(559) 924-1278

(559) 924-3583 Fax

Tache
Tachi
Yokut

Table Mountain Rancheria
Lee Ann Walker Grant, Chairperson
P.O. Box 410
Friant , CA 93626-0177

(559) 822-2587

(559) 822-2693 FAX

Yokuts

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville , CA 93258
chairman@tulerivertri
(559) 781-4271

(559) 781-4610 FAX

Yokuts

Table Mountain Rancheria
Michael Russell, Tribal Administrator
P.O. Box 410
Friant , CA 93626-0177

(559) 822-2587

(559) 822-2693 FAX

Yokuts

Table Mountain Rancheria
Bob Pennell, Cultural Resources Director
P.O. Box 410
Friant , CA 93626-0177

(559) 822-2587

(559) 822-2693 FAX

Yokuts

Table Mountain Rancheria
John Goodfellow, Environmental Coordinator
P.O. Box 410
Friant , CA 93626-0177

(559) 822-2587

(559) 822-2693 FAX

Yokuts

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the Project #1586-01 (Avenal Energy) located near Avenal, Fresno and Kings Counties.



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 21, 2006

Mr. Neil Peyron, Chair
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

US POSTAL CERTIFIED MAIL
#7000 0520 0022 1115 0602

Dear Mr. Hunter,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,

Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Mr. Jim Hunter
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2218

Dear Mr. Hunter,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

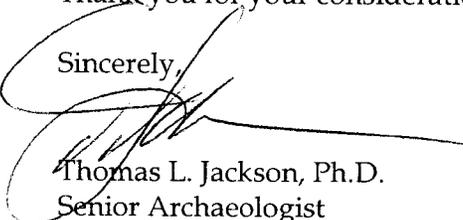
If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,



Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Ms. Lee Ann Walker Grant, Chair
Table Mountain Rancheria
P.O. Box 410
Friant, CA 93626-0177

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2201

Dear Ms. Grant,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,

Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Mr. John Goodfellow, Environmental Coordinator
Table Mountain Rancheria
P.O. Box 410
Friant, CA 93626-0177

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2195

Dear Mr. Godfellow,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

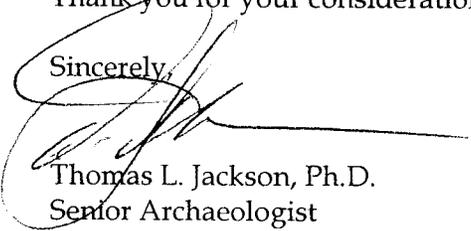
If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,



Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Mr. Clarence Atwell, Chair
Santa Rosa Rancheria
P.O. Box 8
Lemoore, CA 93245

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2188

Dear Mr. Atwell,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

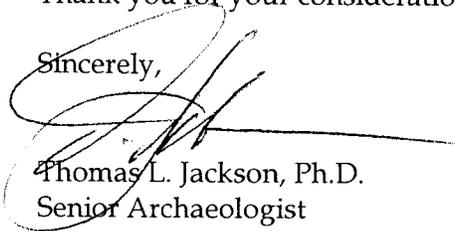
If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,



Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Mr. Robert Duckworth
Drawer 2447
Greenfield, CA 93927

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2164

Dear Mr. Duckworth,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

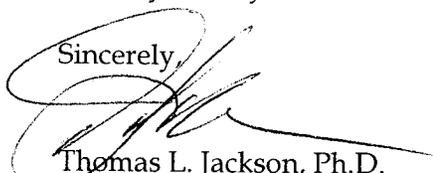
If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,



Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Mr. Bob Pennell, Cultural Resources Director
Table Mountain Rancheria
P.O. Box 410
Friant, CA 93626-0177

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2225

Dear Mr. Pennell,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

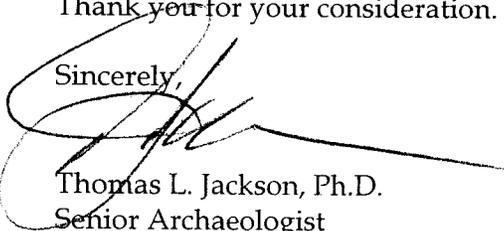
If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,



Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Mr. Michael Russell, Tribal Administrator
Table Mountain Rancheria
P.O. Box 410
Friant, CA 93626-0177

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2232

Dear Mr. Russell,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,

Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps



Central Coast Division/Administration
1525 Seabright Ave.
Santa Cruz, California 95062

Phone: 831.423.0588
Fax: 831.423.0587
www.pacificlegacy.com

September 15, 2006

Chair, Salinan Nation
P.O. Box 610546
San Jose, CA 94521

US POSTAL CERTIFIED MAIL
#7006 0810 0001 7667 2171

Dear Chairperson,

Federal Energy Avenal, LLC proposes to construct an electric power generating facility on an approximately 148 acre site in the City of Avenal in Kings County, CA, as shown on the attached maps. The plant would also require construction of gas and water lines, as well as approximately 6 miles of electric transmission line from the plant to the Gates substation in Fresno County.

An archaeological survey of the plant site and associated facilities has found no evidence of cultural resources. A letter from the Native American Heritage Commission dated 6 September 2006 has failed to indicate the presence of Native American cultural resources in the immediate project area.

We understand that members of your Tribe have cultural affiliation with the project area and may wish to express concerns or interests regarding the proposed project and its potential to affect cultural resources. If you or other members of your Tribe have information or concerns you wish to communicate we will ensure that such information is considered as part of project planning and regulatory compliance.

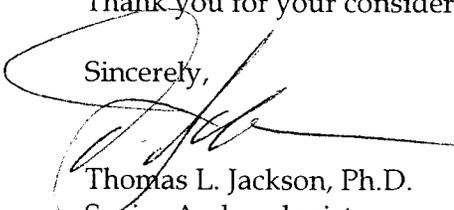
If you or other members of your tribe would like to respond to this letter, please provide written comments to:

Tom Jackson
Pacific Legacy, Inc.
1525 Seabright Avenue
Santa Cruz, CA 95062

Or, call (831) 423-0588 x 15; or e-mail: jacksontom@pacificlegacy.com.

Thank you for your consideration.

Sincerely,

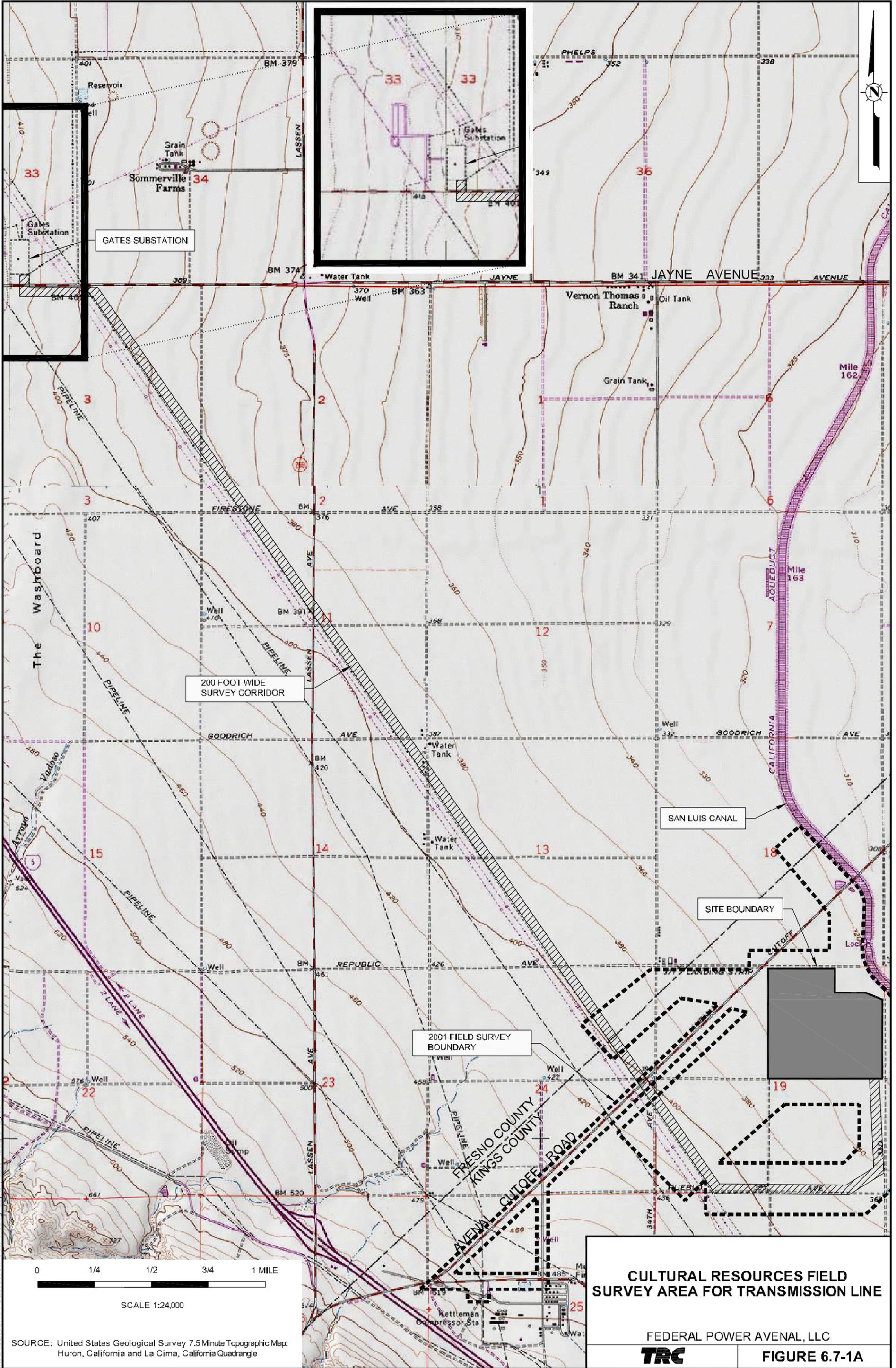


Thomas L. Jackson, Ph.D.
Senior Archaeologist

Attachment: project location maps

ATTACHMENT 6.7.2

New Figure 6.7-1A



GATES SUBSTATION

200 FOOT WIDE SURVEY CORRIDOR

SAN LUIS CANAL

SITE BOUNDARY

2001 FIELD SURVEY BOUNDARY

CULTURAL RESOURCES FIELD SURVEY AREA FOR TRANSMISSION LINE

FEDERAL POWER AVENAL, LLC



FIGURE 6.7-1A

SOURCE: United States Geological Survey 7.5 Minute Topographic Map: Huron, California and La Cima, California Quadrangle

I:\DUKE\290317\AFC\290317-AFC-6.7-1A.dwg Sep 21, 2006 - 12:20pm rhughes

ATTACHMENT 6.7.3

Updated Table 6.7-1

TABLE 6.7-1

CULTURAL RESOURCES LORS AND COMPLIANCE

JURIS-DICTION	LORS/AUTHORITY	ADMINISTERING AGENCY ⁽¹⁾	REQUIREMENTS/COMPLIANCE	APPROACH TO COMPLIANCE	AFC SECTION
Federal	None applicable.	None applicable.	None applicable.	None applicable.	Section 6.7 - Cultural Resources
State	California Environmental Quality Act (CEQA); PRC §2100; et seq., §21083.2; 14 CCR §15064.5, 15126.4, 15331, Appendix G.	Commission.	Requires findings by state lead agency regarding project-related effects to and mitigation for important cultural resources.	The Commission will evaluate the data presented as part of the AFC and make a specific finding regarding project-related effects to important cultural resources.	6.7.2, 6.7.2.1, 6.7.2.2, 6.7.2.3 Pages 6.7-9, 6.7-10, 6.7-11
	PRC §25523(a), 25527; 20 CCR §1752, 1752.5, 2300-2309; Chapter 2, Subchapter 5, Article 1, Appendix B, Part (i).	Commission.	Requires consideration of unique historical, archaeological and cultural sites.	The Commission will consider unique historical, archaeological and cultural sites as part of its AFC processing.	6.7.1.3, 6.7.2 Pages 6.7-4 through 6.7-12
	PRC §5097.94 and 5097.98.	NAHC.	Procedures for notification, disposition, mediation of disputes and identification of Most Likely Descendants of discovered Native American human remains.	In the event Native American human remains are found during the Project, Duke Avenal will immediately contact the Native American Heritage Commission. The Commission will mediate disputes and identify the most likely descendants of discovered Native American human remains.	6.7.1.5, 6.7.2.2 Page 6.7-9, 6.7-10, 6.7-11
	PRC §5097.99.	NAHC.	Establishes felony to remove or possess unauthorized native American remains or grave goods.	In the event Native American human remains are found during the Project, Duke Avenal will immediately contact the Native American Heritage Commission. The Commission will mediate disputes and identify the most likely descendants of discovered Native American human remains.	6.7.2.2 Pages 6.7-10, 6.7-11
	PRC §5024.1.	State Historical Resources Commission.	Establishes California Register of Historical Resources and procedures for nominating sites to the Register.	Any unrecorded cultural resource sites found during the Project will be recorded with the California Register of Historical Resources by the Project's professional archaeologist.	6.7.2.2 Pages 6.7-10, 6.7-11

⁽¹⁾ Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.

TABLE 6.7-1

**CULTURAL RESOURCES LORS AND COMPLIANCE
(Continued)**

JURIS-DICTION	LORS/AUTHORITY	ADMINISTERING AGENCY ⁽¹⁾	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE	AFC SECTION
State (Cont'd)	California Health & Safety Code §7050.5.	Kings County Coroner.	Determination of origin of human remains and coordination with County Coroner.	In the event human remains are found during the Project, Duke Avenal will immediately contact the County Coroner who will determine the origin of the human remains and if the remains are those of a Native American. If the human remains are determined to be Native American, Duke Avenal will immediately contact the Native American Heritage Commission (see above).	6.7.2.2 Pages 6.7-10, 6.7-11
	California Health & Safety code §7054, 7500, 10375, 7113, 7052; Government Code 27491.	Kings County Coroner.	Establish procedures for historic remains and coordination with County Coroner.	In the event human remains are found during the Project, Duke Avenal will immediately contact the County Coroner who will determine the origin of the human remains and if the remains are those of a Native American. If the human remains are determined to be Native American, Duke Avenal will immediately contact the Native American Heritage Commission (see above).	6.7.2 Pages 6.7-10, 6.7-11
	California Health and Safety Code §8101.	Office of District Attorney.	Establishes criminal penalties for disturbing a gravesite.	Established criminal penalties for disturbing a gravesite are in place and will be enforced by the Kings County District Attorney.	6.7.2.2 Pages 6.7-10, 6.7-11
	California Penal Code §622.5.	Office of District Attorney.	Establishes misdemeanor for willful damage to historic or archaeological object.	Established criminal penalties for disturbing a gravesite are in place and will be enforced by the Kings County District Attorney.	6.7.2.2 Pages 6.7-10, 6.7-11
	PRC §5020.1	Commission.	Defines several terms, including historical resource and substantial adverse change.	The Commission will consider unique historical, archaeological and cultural sites as part of its AFC processing.	6.7.1, 6.7.2.2, 6.7.2.3 Pages 6.7-1 through 6.7-11
	14 CCR §485(c)	California Historical Resources Commission.	States that a resource that has lost its historic character or appearance may still have sufficient integrity for the California Register of Historical Places.	Any unrecorded cultural resource sites found during the Project will be recorded with the California Register of Historical Resources by the Project's professional archaeologist.	6.7.2.2 Pages 6.7-10, 6.7-11

⁽¹⁾ Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.

TABLE 6.7-1

**CULTURAL RESOURCES LORS AND COMPLIANCE
(Continued)**

JURIS-DICTION	LORS/AUTHORITY	ADMINISTERING AGENCY(1)	REQUIREMENTS/COMPLIANCE	APPROACH TO COMPLIANCE	AFC SECTION
State (Cont'd)	PRC §5097.991	NAHC.	Provides for repatriation of Native American remains and grave artifacts.	In the event human remains are found during the Project, Duke Avenal will immediately contact the County Coroner who will determine the origin of the human remains and if the remains are those of a Native American. If the human remains are determined to be Native American, Duke Avenal will immediately contact the Native American Heritage Commission (see above).	6.7.2.2 Pages 6.7-10, 6.7-11
	PRC §21084.1	Commission.	Defines significant historic resource and significant effect on historic resource.	The Commission will evaluate the data presented as part of the AFC and make a specific finding regarding project-related effects to important cultural resources.	6.7.1, 6.7.2.2, 6.7.2.3 Pages 6.7-1 through 6.7-11
	PRC §5097.5	Office of District Attorney.	Any unauthorized removal or destruction of archaeological or paleontological resources on sites located on public land is a misdemeanor.	The Project will use employee training to minimize the potential for unauthorized handling of archaeological or paleontological resources, if found. Established criminal penalties for disturbing a gravesite are in place and will be enforced by the Kings County District Attorney.	6.7.2.2 Pages 6.7-10, 6.7-11
Local	City of Avenal, General Plan.	Commission.	Provides for protection of archaeological resources within the city, including survey reports, environmental assessments, and activity restrictions.	The Commission will evaluate the data presented as part of the AFC and make a specific finding regarding project-related effects to important cultural resources.	6.7.1, 6.7.2 Pages 6.7-1 through 6.7-14 Appendix 6.7-1
	Kings County General Plan Goal 26, Objectives 26.1, Policy 26a, Policy 26b, Policy 26c	Commission.	Established goals, policies and objectives to preserve significant historical and archaeological sites and structures important to Kings County.	The Commission will evaluate the data presented as part of the AFC and make a specific finding regarding project-related effects to important cultural resources.	6.7.2.1 Pages 6.7-9, 6.7-10 Appendix 6.7-1
	<u>Fresno County General Plan Goal OS-J, and Policy OS-J.1</u>	<u>Commission.</u>	<u>Assure cultural resources are addressed in CEQA reviews and identify, protect and enhance important cultural sites.</u>	<u>Cultural studies were performed and are incorporated in the AFC. Project is consistent with County goals and policies because cultural resources will not be impacted.</u>	<u>6.7.1, 6.7.2</u> <u>Pages 6.7-1 through 6.7.12</u>
Industry	None Applicable	None Applicable.	None Applicable	None Applicable	None Applicable

(1) Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.